

ERECTION OF NEW VISITOR HUT
AND EXTENSION TO EXISTING HA-HA,
JERVAULX ABBEY, EAST WITTON, NORTH YORKSHIRE

ARCHAEOLOGICAL OBSERVATION,
INVESTIGATION AND RECORDING

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On behalf of

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EXECUTIVE SUMMARY

In January 2020, Ed Dennison Archaeological Services (EDAS) Ltd were commissioned by Peter Gaze Pace (architect), on behalf of the owner, Mr Ian Burdon, to undertake a programme of archaeological and architectural observation, investigation and recording (a watching brief) during groundworks associated with the erection of a new visitor shelter and the re-excavation of the eastern end of a ha-ha ditch at Jervaulx Abbey, East Witton, North Yorkshire (NGR SE 17247 85712 centred). The work, which was made a condition of Scheduled Monument Consent and planning permission, was defined by an EDAS 'Written Scheme of Investigation'. The fieldwork was carried out in June and November 2020, and was funded by the site owner.

The watching brief encountered no archaeological deposits or remains which could be definitely dated to the functioning life of the abbey prior to the Dissolution, although the general lack of finds throughout the excavations made the close dating of any deposits difficult. Stratigraphically, the earliest activity recorded within the footprint for the new shelter was what appeared to be a surface of compacted stones and silt laid over two base or make-up layers. This surface is most convincingly interpreted as being the remains of a wide footpath shown running north-south across this area in 1892, forming part of a sunken garden compartment or parterre laid out across this area during the 19th century.

The earliest structural remains exposed within the re-excavated ha-ha were a 5.60m long section of the original 1809 retaining wall placed on the north side of the ditch. A truncated return of the wall to the east was also part of the original 1809 structure, and demonstrated that this once effectively closed off the east end of ha-ha, as illustrated in 1856. When first cut in 1809, the ha-ha ditch was c.0.95m deep against the retaining wall, and it sloped gently upwards to the south, giving a total width of c.3.80m-4.00m. It was backfilled only after 1929, probably in several phases; the presence of pockets of more recent disturbance and modern material within the general backfill was noted. When the remains of the 1809 ha-ha retaining wall were removed, the exposed deposits were mainly clean sandy silts and sandy clays; the lowest deposits exposed within the footprint of the shelter were also similar.

As a result of the previous English Heritage earthwork survey undertaken in 1999, it was proposed that a large 16th century house had been located partly within the area of the current works, extending both to the north and south of the later ha-ha. The lack of any obvious remains of this house, or debris from its demolition, in the excavations is therefore puzzling. It is of course entirely feasible that none of the excavations were deep enough to reveal such remains, or that any remains had previously been comprehensively robbed out prior to the late 1620s, by which time it had fallen into disuse and been abandoned. Nevertheless, it would surely be expected that some clearer archaeological remains or deposits would have survived, and so any evidence was presumably removed as a result of the 19th century landscaping of this area. Alternatively, it is possible that the house never extended to the north of the ha-ha, or perhaps it was in an entirely different location, although the associated earthworks of gardens and water features would seem to preclude this.

1 INTRODUCTION

- 1.1 In January 2020, Ed Dennison Archaeological Services Ltd (EDAS) were commissioned by Peter Gaze Pace (architect), on behalf of the owner, Mr Ian Burdon, to undertake a programme of archaeological observation, investigation and recording (a watching brief) during groundworks associated with the erection of a new visitor shelter and the re-excavation of the eastern end of a ha-ha ditch at Jervaulx Abbey, East Witton, North Yorkshire (NGR SE 17247 85712 centred). The archaeological fieldwork was carried out in June and November 2020, and was funded by the site owner.

2 BACKGROUND INFORMATION

Site Location and Designations

- 2.1 The Jervaulx Abbey complex is located on the southern side of Wensleydale, 5km south-east of Middleham, some 200m south of the River Ure (see figure 1). It is situated on raised level ground between the southern slope of the dale and the floodplain of the Ure. To the north of the abbey ruins there is a natural hill known as Mark Hill and to the east heavily undulating land formed by glacial action known as Wind Hills. The proposed visitor shelter lies in the south-east corner of the abbey complex, and the adjacent ha-ha runs broadly east-west, separating the abbey ruins from the adjoining park (see figures 2 and 3).
- 2.2 The ruins of Jervaulx Abbey are a Grade 1 Listed Building, first listed on 15th February 1967 (National Heritage List for England 1130961). The complex is also a Scheduled Monument, first scheduled on 8th February 1915 (NHLE 1020493).

Scheduled Monument Consent

- 2.3 Scheduled Monument Consent (SMC) for the proposed development was given by the Secretary of State for Digital, Culture, Media and Sport, advised by Historic England, on 27th January 2020 (ref S00233993).
- 2.4 A number of conditions were attached to the consent, some of which were relevant to the archaeological recording, as follows:
- (i) the works to which this consent relates shall be carried out to the satisfaction of the Secretary of State, who will be advised by Historic England. At least 2 weeks' notice (or such shorter period as may be mutually agreed) in writing of the commencement of work shall be given to Dr Keith Emerick, Inspector of Ancient Monuments, Historic England, 37 Tanner Row, York, YO1 6WP in order that an Historic England representative can inspect and advise on the works and their affect in compliance with this consent;
 - (iv) no ground works shall take place until the applicant has confirmed in writing the commissioning of a programme of archaeological work during the development in accordance with a written scheme of investigation which has been submitted to and approved by the Secretary of State advised by Historic England;
 - (vi) equipment and machinery shall not be used or operated in the scheduled area in conditions or in a manner likely to result in damage to the monument

or to ground disturbance other than that which is expressly authorised in this consent;

- (vii) any works to which this consent relates shall be carried out under the archaeological supervision of Mr Ed Dennison EDAS 18 Springdale Way, Beverley, East Yorkshire HU17 8NU who shall be given at least 2 weeks' notice (or such shorter period as may be agreed) in writing of the commencement of work. No works shall commence until Mr Ed Dennison has confirmed in writing to Historic England that he is willing and able to undertake the agreed supervision;
- (viii) the excavation of the ha-ha shall be restricted to a depth and width not exceeding the existing sections of ha-ha;
- (ix) a report on the archaeological recording shall be sent to: Peter Rowe, Principal Archaeologist, NYCC, Northallerton, N Yorks DL7 8AH (the County Historic Environment Record) and to Dr Keith Emerick, Inspector of Ancient Monuments at Historic England within 3 months of the completion of the works (or such other period as may be mutually agreed);
- (x) the archaeological contractor shall complete and submit an entry on OASIS (On-line Access to the Index of Archaeological Investigations - <http://oasis.ac.uk/england/>) prior to completion, and shall deposit any digital project report with the Archaeology Data Service, via the OASIS form, upon completion.

Planning Permission

- 2.5 Following consultation with the Principal Archaeologist of North Yorkshire County Council (ref 1090 PR CNY17973), full planning permission for the proposed development was approved by Richmondshire District Council on 8th January 2020 (application 19/000745/FUL). Condition 3 relates to archaeology, and states:

No demolition/development shall take place/commence until a Written Scheme of Investigation for archaeological mitigation has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include an assessment of significance and research questions, and:

- (a) the programme and methodology of site investigation and recording;
- (b) the programme for post investigation assessment;
- (c) provision to be made for analysis of the site investigation and recording
- (d) provision to be made for publication and dissemination of the analysis and records of the site investigation;
- (e) provision to be made for archive deposition of the analysis and records of the site investigation; and
- (f) nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation.

No demolition/development shall take place other than in accordance with the Written Scheme of Investigation approved in accordance with the above requirements.

The development shall not be first brought into use until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme of Investigation approved in accordance with the above requirements and the provision made for analysis, publication and dissemination of results and archive deposition has been secured.

Written Scheme of Investigation

- 2.6 In accordance with the conditions on the SMC and planning permission, a “Written Scheme of Investigation” (WSI) was produced by EDAS on 31st January 2020 (see Appendix 3). This was accepted by Historic England and the NYCC Principal Archaeologist on 5th February 2020, and it was formally approved by Richmondshire District Council on 16th March 2020 (application 20/00087/DIS).

Nature of the Development

- 2.7 Details of the proposed development works were itemised in a Design and Access Statement produced by the project architect (Pace 2019). The following provides a summary (see also figure 3).
- 2.8 One part of the development involved the demolition of a 19th century wooden shelter or gazebo located in the south-east corner of the abbey complex. This gazebo was a single storey wooden structure, measuring c.3.50m in diameter, with an irregular hexagonal plan form and roofed with shingles (see plate 1). Internally, the floor was formed by small square ceramic tiles taken from elsewhere on the abbey site, and had a large *ex situ* ribbed architectural fragment to the centre (see plate 2). After demolition, a new timber framed open-sided structure, measuring 6.30m north-south by 4.80m east-west, will be erected, in virtually the same position although with a slightly larger footprint. The new structure will be supported on eight staddle stones, set onto the existing ground surface on concrete footings.
- 2.9 The second part of the development involved the re-excavation of a ditch to continue the eastward line of the existing early 19th century ha-ha, to the east of an existing gateway entrance, which forms the southern boundary of the abbey complex (see plate 3). This section of the ha-ha had been infilled since 1929, a gateway created at its west end, and a metal post and rail fence erected along the top of the former wall line. The ditch will be re-excavated for a distance of c.15.30m, with a profile to match the existing ha-ha to the west, i.e. a vertical wall on the north side and a grassy downward slope to the south side. The new vertical wall face will be built of a combination of new and salvaged stone, and will be topped with park fencing to match that already existing to the west. Given that this section of the ha-ha had only been infilled within the last century, it was assumed that no historic or archaeologically significant deposits would be encountered within the fill, although the re-excavation might expose earlier features which had been disturbed by the construction of the ha-ha itself, while the infill material might contain *ex situ* historic fabric from the abbey. Some repairs to the adjacent existing boundary walls will also be made.

3 METHODOLOGY

Aims and Objectives

- 3.1 In accordance with the approved WSI (see Appendix 2), the aim of the archaeological watching brief was to monitor the groundworks associated with the proposed development, so that any exposed archaeological remains could be 'preserved by record'. More specific objectives were to:
- (i) identify and record all archaeological features and artefacts exposed during construction work;
 - (ii) determine the form and function of any archaeological features encountered;
 - (iii) recover dating evidence from the identified archaeological features;
 - (iv) establish the sequence of the archaeological remains present on the site;
 - (v) if appropriate, retrieve environmental evidence relating to the environment and economy of the site;
 - (vi) interpret the archaeological features and finds within the context of the known archaeology of the site and the surrounding area.
- 3.2 All archaeological recording work was undertaken in accordance with current Chartered Institute for Archaeologists guidelines (CIfA 2014), and followed current Historic England professional guidelines.

Documentary Research

- 3.3 No new documentary research was undertaken as part of the project. However, existing readily-available information, such as a detailed survey report produced by English Heritage (1999), was collated and summarised as appropriate, so as to provide a context for the project.

Fieldwork Methodology

- 3.4 The excavated groundworks were monitored either as they were being excavated, or immediately afterwards, so that any archaeological deposits that might be uncovered could be immediately identified and recorded. Where mechanical equipment was used for the excavations (e.g. JCB or mini-digger), the main contractor used a toothless bucket, to facilitate the archaeological recording. Spoil was also investigated where practicable in order to recover any artefacts that may have been exposed.
- 3.5 The excavation of the footings for the new shelter was monitored on the 9th June 2020, while the re-excavation of the ha-ha was undertaken on the 11th and 12th November 2020. A full written, drawn, electronic and photographic record (as appropriate) was made during the fieldwork. All areas of ground disturbance, and any features of archaeological interest within them, were accurately located on a general site plan and recorded by photographs (colour digital shots in jpeg format), scale drawings (plans and sections at 1:50, 1:20 and 1:10 scales as appropriate), and written descriptions. Appendix 2 provides the photographic catalogue.

- 3.6 Following standard archaeological procedures, each discrete stratigraphic entity (e.g. a cut, fill or layer) was assigned an individual three digit context number and detailed information was recorded on *pro forma* context sheets. A total of 28 archaeological contexts were recorded (see Appendix 1); in the following text, deposits or layers are identified by the use of round brackets while cuts are signified by square brackets. In-house recording and quality control procedures ensured that all recorded information was cross-referenced as appropriate. Given the nature of the works, and the expected archaeology, plans and sections were not levelled to an Ordnance Datum, but were levelled to the same notional height of 100m AD; this equated to a height set 0.10m above the surface of the concrete slab for the new shelter building. No artefacts were retained from the watching brief, and no specialist architectural or archaeological analyses, e.g. the analysis of paint, mortar, stucco etc and/or dendrochronological dating of timbers, radiocarbon dating etc, were carried out.

Reporting and Archive

- 3.7 This report forms a basic written record of the archaeological watching brief undertaken at the Abbey, prepared from the sources of information set out above, and analyses the results, placing them within their historical, archaeological and landscape contexts where possible. Copies of the final report were supplied for distribution to the owner, Historic England and the North Yorkshire HER, as pdf copies as required.
- 3.8 A further copy will be uploaded to Historic England's Online Access to the Index of Archaeological Investigation (OASIS) database.
- 3.9 It is planned to deposit the 'no finds' archive with the local registered museum (Richmondshire Museum), but at the time of writing this report, confirmation that they were willing to accept it had not been received. If not, the archive will be retained by EDAS (site code JHH 20).

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The Abbey Complex

- 4.1 The Scheduled Monument description (Historic England 2019) provides a good overall account of the history and importance of the abbey complex, as follows:

"The monument includes standing ruins, earthwork and buried remains of the Cistercian Abbey of Jervaulx. These include the core abbey buildings and the majority of the outer precinct in which remains of fishponds, water management features and further monastic structures survive. Also included in the monument are remains of pre-monastic agricultural activity, the site of a 16th century grand house with associated gardens, a 19th century ice house and designed landscape features, and World War II ammunition stores.

Jervaulx Abbey was originally founded at Fors, 20km further west in Wensleydale by a community of Savigniac monks who by 1149 had become members of the Cistercian order. The site at Fors proved unsuitable and was abandoned in 1154 and two years later the community was re-established at the current site on land donated by Conan son of Alan Earl of Brittany and Richmond. Few of the abbey's own records survive but it is known that, by the second half of the 13th century, the abbey had substantial economic interests in the region. These included at least 16

cattle ranches in Wensleydale and the Forest of Richmond, large flocks of sheep (possibly as many as 10,000 head) and the rights to free warrening of rabbits in East Witton. The abbey also had interests in the mining and smelting of iron ore and in the production of salt. In 1307 it was granted the right to hold a weekly market and a twice-yearly fair at East Witton and in 1535 had a fulling mill at East Witton. In 1380 there were 16 monks at Jervaulx and at the Dissolution in 1537 there were 25 or 26. Jervaulx Abbey was suppressed in 1537 after the then Abbot, Sedbergh, was arrested for involvement in the ill-fated Pilgrimage of Grace, which had attempted to reverse the religious and political changes of the Reformation.

Following the Dissolution, the buildings were stripped of anything of value and the church blown up. The estate was then leased to Lancelot Harrison for 21 years and in 1544 was granted to the Earl of Lennox who held it until the death of his wife in 1577. Recent survey work has indicated that during the tenure of the Lennoxes a grand house and ornate gardens were built partly into some of the standing abbey ruins. However, this house had a short life span and was no longer in existence by 1627. After 1577 the crown held the estate until 1603. The estate was then granted to the Bruce family, who later received the title of the Earldom of Ailesbury. Jervaulx seems to have been one of the Bruce family's lesser estates and a map dated 1627 shows that it was subdivided into a number of separate parcels of land and rented out. This seems to have remained the case until the early 19th century. In 1804 the old hall at Jervaulx was converted to be an occasional residence and administrative centre for the Ailesbury estates in west Yorkshire. In the years between 1805 and 1807 the abbey ruins were systematically cleared and exposed and, following the fashion of the time, became a central feature of a designed landscape laid out over the former abbey precinct and beyond.

The earliest remains currently identified in the monument are of pre-monastic agricultural activities. Earthwork remains of field boundaries and cultivation terraces have been identified in the western area of the monument and on Mark Hill. Two tracks pre-dating the abbey survive as terraces extending east to west across the south eastern part of the monument adjacent to the monastic precinct boundary. These are thought to be the remains of the early route from Masham to Middleham. Remains of a building, possibly a dwelling, have been identified 30m south-east of the monastic reservoir.

The monument is dominated by the standing ruins of the main abbey buildings some of which survive to their original height. The ruins are Listed Grade I. The remains demonstrate that Jervaulx followed the usual layout of a monastic house, with an east to west orientated church forming the north range of a four-sided complex known as the cloister, the remaining sides containing accommodation for lay and monastic brethren, and domestic and administrative functions. The east cloister range contained the chapter house and parlour, the south range kitchens and refectory, and the west side cellars and stores. On the first floor of the east and west sides of the cloister, and projecting to the south, were the dormitories for the monks and lay brothers respectively. Surrounding the cloister, in an area known as the inner court, was a further range of buildings essential for the economic and social functions of the abbey. These included an infirmary, abbots lodgings and a meat kitchen, all located to the south-east of the cloister and guest lodgings and lay brothers infirmary which lay to the west of the cloister.

The abbey church was comprehensively destroyed in 1537 and only the south western corner of the nave survives to any height. The remainder of the plan of the church is however clearly demonstrated by low walls made up of reused

decorated stonework which was piled up in the early 19th century as part of the clearance work. The south-western wall of the monks dormitory, the meat kitchen and parts of the infirmary complex still stand to their full medieval height. In these structures, the scale and detail of the windows and internal features such as fireplaces and roof and floor supports can be clearly seen. The remainder of the abbey ruins generally only survive to ground floor level. Throughout the ruins there is evidence of alterations and rebuilding that took place over the four centuries that the abbey was in use and of the modifications that took place as part of the 19th century landscaping.

Beyond the inner court lay the outer precinct which contained structures necessary for the wider economic functions of the abbey such as gardens, a bake house, workshops, smithies, stables and stores. The precinct was defined by a boundary which is identifiable along almost its entire course save the north-western corner. On the western and southern sides its line is followed by the modern A168 road, it then crosses the field south of Abbey Hill House and then extends northwards across Jervaulx Park to rise up over the northern side of Mark Hill. From here the precinct boundary extends west along the top of slope which extends down to the river flood plain to the north. In the north-western corner of the precinct, the line of the boundary has been disturbed by the construction of Jervaulx Hall and its survival is currently unknown. For most of its length the precinct boundary survives as an earthen bank which in places measures up to 10m in width and 1m in height. Along the northern stretch on Mark Hill and in the south eastern corner, south of Abbey Hill House, there are stone footings for a precinct wall visible in the ground surface. Although the original form of the boundary is currently unknown, in common with similar monastic houses elsewhere it is likely to have been a substantial wall or fence. This served to secure the monastic precinct but also clearly demonstrated the size and prestige of the abbey. Remains of at least nine monastic buildings have been identified within the outer precinct. These include three building platforms located on terraces cut into the rising ground in the western half of the precinct to the south of the building known as The Old Gatehouse but shown as 'The Monastery' on the Ordnance Survey Map. There are medieval ruins incorporated into The Old Gatehouse, but it is thought that the bulk of the medieval stonework was added to an existing ruin in the 19th century to create a landscape feature. The building is unlikely to have been a medieval gatehouse as it is in an inappropriate position although its original nature and function is currently unclear. The Old Gatehouse is a Listed Building Grade I and parts of it are in domestic occupation.

Although no evidence of gatehouses has yet been identified, the monastic road pattern suggests that the main entrance and gatehouse were located near the current entrance to Jervaulx Hall. There were likely to have been other entrances in the south east corner of the precinct south of Abbey Hill House and in the north east corner near the ice house. In common with other monastic houses, the abbey was served by a complex water management system. The water supply to the abbey complex was provided from a reservoir located in the south-west corner of the precinct. This was created by building a dam across a small natural valley. The dam still survives as a substantial earthwork 80m long, 18m wide and 3m in height. Water was fed to the inner court where it ran through a stone-lined conduit which passed the kitchens and ran below both the lay brothers and monks dormitories where it flushed the latrines. Water from the reservoir also supplied a set of at least three fishponds which were located to the south of the main claustral ranges.

To the north of the abbey there is the site of a mill which was fed by water from the reservoir and also from channels from the River Ure to the north-west, although no trace of these now survive. At the mill site there is a ruined structure of medieval appearance, however, it is thought that the bulk of the standing fabric was added to existing foundations of a medieval water mill as part of the 19th century landscaping. The outflow from the mill ran through a leat extending eastward along the southern edge of the flood plain. This joined with other channels in the area north of the ice house to carry water away from the abbey.

The post-Dissolution grand house was built in the south-eastern corner of the inner court and seems to have incorporated some of the standing abbey buildings. The southern part of the house survives as a series of earthworks defining a rectangle measuring 25m by 30m whilst remains of the northern part have been obscured by later landscaping. Detailed survey has identified that the house lay at the centre of a series of at least 14 formal garden compartments, some containing remains of internal features, and separated by terracing and paths. The monastic fishponds were modified and turned into a series of water features still supplied from the reservoir to the south-west. Earthwork remains of structures associated with the 16th century gardens, such as pavilions and gazebos positioned to afford views over the gardens, have also been identified. At the eastern side of the gardens, to the east of the monastic precinct boundary, there was an embankment to divide the formal area from the, presumably, wilder parkland to the east. Remains of further buildings of this period, tentatively interpreted as a coach house, survive as earthworks in the field to the south of Mark Hill. The house was demolished by 1627 and a map of that date shows the area of the precinct outside the core abbey buildings was divided into fields and enclosures, remains of which survive throughout the monument as low earthworks.

The 19th century landscaping started in the early part of the century with the clearing of the abbey ruins. Over the following years further works were undertaken including building a stock-proof ditch, known as a ha ha, along the southern and western sides of the abbey ruins, and the construction of various grottoes, a gazebo on Mark Hill and a decorative arched gateway leading from the Hall into the abbey ruins. Formal gardens were laid out to the north of the abbey ruins, a wide expanse of open sward replaced the former agricultural units, and The Old Gatehouse and the mill were romanticised by the addition of decorated medieval stonework. All of these improvements were in keeping with the fashion of the time. The mid-19th century also saw the building of the ice house although this was primarily as a functional element of the estate. The ice house is a brick-lined beehive shaped structure partly covered by an earthen mound and is located just within the eastern boundary of the monument. It is Listed Grade II.

In the 1940s a series of military stores for munitions or fuel were built along side the track crossing the parkland, hidden from enemy view by tree cover. These were small ditched enclosures supported by sandbags, which now only survive as earthworks. A brick building associated with these remains stands on the fence line south of Abbey Hill and footings for other structures have also been identified.

- 4.2 Much of the above information comes from a detailed survey report of the complex produced by English Heritage (1999). The Burdon family have instigated major repairs over many years, with some phases grant aided by English Heritage, and others financed by the family. This current scheme represents the latest phase of works designed to improve the visitor experience and provide a wedding venue.

- 4.3 Although much of the recent repair and consolidation work has been accompanied by archaeological and architectural surveys, primarily the production of rectified and photogrammetric surveys, the availability and apparent survival of the survey drawings is patchy. It is understood that a large body of material is held at Historic England archives, but this has not been catalogued and is not readily-available for consultation. However, as part of a previous scheme of works, EDAS have investigated those surveys currently held by Mr Burdon, previously held by Martin Stancliffe Architects, which date from between c.1984 to c.2002. The material consists of 12 rolls of drawings (both film and paper copies), housed in cardboard tubes.

The Development Site

- 4.4 The proposed development site lies at the south-east corner of the main grouping of surviving monastic ruins. Although there is no clear evidence that either buildings or associated enclosed spaces such as yards or gardens extended across this specific area during the functioning life of the Abbey prior to the Dissolution, it is known that the ha-ha disturbed such remains elsewhere. Excavations undertaken in 1905 uncovered the fragmentary remains of additional buildings along the southern and western sides of the ruins, cut through by the ha-ha. Unsuccessful efforts were made to trace a continuation of one of these truncated buildings - a possible kitchen block discovered at a skew angle south of the monks' reredorter or latrines (see figure 4) but, in the main, investigation seems to have been confined to within the area of the ha-ha itself and it was shown that the southern part of the building had been destroyed when the ha-ha was constructed (English Heritage 1999, 5; Hope & Brakspear 1911, 329). The position of this possible kitchen block lies just to the west of the proposed development site.
- 4.5 Earthwork evidence suggests that, in the post-Dissolution period, a large country house was erected to the immediate south-east of the monastic ruins, possibly incorporating parts of the monk's infirmary and adjacent buildings and bisected by the later ha-ha. The southern end of the house is suggested to be represented by a roughly rectangular area of amorphous mounds and hollows (BC14) to the immediate south of the infilled section of the ha-ha, which perhaps form the ruins of a large, robbed-out building (English Heritage 1999, 20-21) (see figure 5). The house lay at the centre of an extensive series of formal garden compartments and other ornamental features which extend for some distance to the north-east, south-east and south-west, the latter to the south of the existing ha-ha. However, it appears that both house and gardens had a very short period of use, and had been abandoned before William Senior undertook a detailed survey of the Jervaulx estate in 1627. It is likely that they were the work of the Earl of Lennox and his wife, who held the estate for a short time between 1544 and 1577. After the death of Margaret Lennox in 1577, the estate reverted to the Crown during the minority of the future James VI of Scotland/James I of England, and it is possible that further enhancements to house and gardens were undertaken during this period (English Heritage 1999, 8, 20-23 & 41).
- 4.6 On an estate map of c.1800, the proposed development site lay within an enclosure named as 'Bull Park', with the boundary between this enclosure and the monastic ruins set at a slight north-east/south-west angle some distance to the north of the line of the existing ha-ha (English Heritage 1999, 26 & figure 8). A second estate map of c.1800 (English Heritage 1999, 28 & figure 9) also shows no boundary on the line of the existing ha-ha. It is possible that some isolated ruins are indicated on the maps in the general area of the development site, and

perhaps even in the area marked by the earthworks suggested to represent the southern end of the large house (BC14), but this is not certain.

- 4.7 In 1804, the then owner Lord Ailesbury was persuaded by his agent John Claridge to convert the old hall at Jervaulx into an occasional residence and also to make it the administrative centre for the west division of the Ailesbury Yorkshire estates. In the following year Ailesbury authorised the clearance of the ruins, and in 1807 a park was laid out around the old hall to designs by Robert Menzies (English Heritage 1999, 8). A plan produced by Menzies in 1807 (English Heritage 1999, figure 10) shows the monastic ruins to be surrounded by a wall or fence, but the boundary to the south is almost certainly not the ha-ha, but a still extant scarp (FB2) which lies roughly parallel and approximately 20m to the south.
- 4.8 The ha-ha was dug in 1809, to prevent visitors taking away medieval floor tiles as souvenirs (English Heritage 1999, 30-31). It is clearly marked on the 1856 Ordnance Survey 6" map (sheet 85), and it runs unbroken from the south-west corner as far as a 'Grotto' at the south-east corner (see figure 6 top). This 'Grotto' is presumably in the same position as the gazebo due to be demolished as part of the current development, although its plan form is slightly different. The existing gazebo is identified as a 19th century garden structure (GS21) by English Heritage (1999, 32) (see plates 1 and 2). It lies in the south-east corner of a rectangular depression (GS28) defined by a very slight C-shaped scarp no more than 0.1m high running around the north, west and south sides (see figure 7). The earthwork suggests that it represents a small sunken garden compartment or parterre surrounded by terraces or paths and its location adjacent to the gazebo strongly suggests that it is part of the 19th century ornamental setting of the abbey ruins (English Heritage 1999, 33); the eastern terrace is shown on the 1892 Ordnance Survey 25" map (see figure 6 bottom). The creation of this compartment would have removed any surface earthworks and perhaps below-ground features relating to the north end of the large 16th century country house (BC14) which is suggested to have stood here. In 1856, both the grotto and suggested associated garden compartment have a wall to their east on the line of the existing boundary wall. The grotto and ha-ha are similarly depicted on the 1892, 1912 and 1929 Ordnance Survey 25" to 1 mile maps (sheet 85/1) (see figure 6 bottom). However, the eastern end of the ha-ha was backfilled after 1929, and a gateway built across it, to provide a farm and maintenance entrance, linking the monastic ruins to the parkland to the south. The remaining parts of the ha-ha around the south and west sides of the ruins appear to have been either rebuilt or significantly repaired within the last 50 years.

5 RESULTS OF THE WATCHING BRIEF

- 5.1 In the following text, reference should be made to the various plans and section drawings which appear as figures 8 to 10, and the accompanying plates; the photographic catalogue appears as Appendix 2 and digital photographs are referenced in the following text in italics and square brackets, the number before the stroke representing the date on which the photograph was taken and the number after indicating the image number, e.g. [2/032]. As noted in Chapter 3 above, archaeological deposits or layers are identified by the use of round brackets, e.g. (020), while cuts are signified by square brackets, e.g. [003].

The New Shelter (see figure 8)

- 5.2 The excavation of the footings for the new shelter was monitored on the 9th June 2020, the day after they had been excavated. The excavation was sub-rectangular

in plan, measuring 6.30m north-south by 5.00m east-west, lying in the inner angle of two stone walls which form the boundary of the abbey ruins here [1/603, 1/604] (see plate 4). The eastern boundary wall is earlier and more substantial, and is butted by the southern boundary wall. The ground level across the entire footprint of the shelter was reduced by 0.30m below ground level (BGL), with deeper trenches (averaging between 0.70m to 0.90m in width) excavated around all four sides. These reached a maximum depth of 0.80m BGL at the south-east corner, although the average depth was closer to 0.55m BGL [1/605-1/607].

- 5.3 A similar sequence of deposits was observed across the excavated area [1/612]. A layer of compacted dark brown/black topsoil (001) extended to an average depth of 0.10m BGL; it contained frequent fragments of red handmade brick and tile, pieces of angular stone, some flecks of lime mortar but no pottery or glass. This topsoil (001) overlay two apparent cuts, both running north south. The eastern cut [003] extended 1.35m to the west of the eastern boundary wall, and could be seen running across the whole of the excavated footprint, although it was not always well-defined. There was a sharp break of slope at the top of the cut, and the side sloped very steeply downwards almost vertically, and continued below the base of the trench (see Section 1). The cut was filled with a clean compacted dark brown/black sandy silt (002), with much evidence for tree root disturbance at the northern end. The eastern boundary wall had spread footings, extending up to 0.25m from the wall face itself, and comprised roughly squared stone blocks; the base of the footings was set at 0.35m BGL [1/609, 1/610]. The fill (002) of cut [003] appeared to extend beneath the footings [1/608] (see plate 5). It is assumed that the wall is that shown on this line on the early Ordnance Survey maps (see figure 6). The western possible cut was poorly defined, and was most clearly visible as a lack of the well stratified deposits further to the east (see below); for this reason, the cut was not given a specific context number. It appeared to extend for 1.25m to the east of the western limit of the shelter footprint, but was not clearly visible in plan. The possible cut may have been associated with a shallow, poorly defined, linear depression visible to the immediate north of the excavated footprint. This depression ran north for c.4m, along the east side of a row of pine trees here, which are depicted on the 1892 Ordnance Survey map (see figure 6 bottom). The possible cut was filled with a compacted dark brown sandy silt (008), containing infrequent inclusions of angular stones (up to 300mm across) and the occasional lens of lime mortar; this deposit was 0.30m thick and extended to 0.40m BGL.
- 5.4 Between these two apparent cuts, there was an undisturbed area of earlier stratigraphy. The topsoil (001) overlay a shallow, level layer of compacted/hard mid-brown sandy silt (004), up to 0.10m thick, which contained frequent inclusions of angular stones up to 100mm across. This sandy silt (004) was almost laminated in places, and it appeared to have been laid down and compacted to form a level surface. Beneath this, there was a deposit of compacted angular and rounded stones (up to 0.1m across), with occasional fragments of red handmade brick (005); this was on average 0.20m thick and extended to 0.40m BGL. The stoney deposit (005) overlay a compacted mid-brown sandy silt (006), with an average depth of 0.10m, which sloped gently downwards from west to east. It had some orange staining and contained the occasional piece of angular stone up to 100mm across. Beneath the sandy silt (006), there was a compacted dark brown sandy silt (007) with infrequent inclusions of angular stone up to 200mm-300mm across. In most parts of the shelter footprint, this dark brown sandy silt (007) formed the lowest visible deposit, and it continued below the base of the excavations, although it was cut by the more definite cut [003] noted above. However, in the south-east corner of the excavations, at 0.55m BGL, it was seen to overlie a clean, compacted

mid-orange/brown sandy clay (009), which continued below the base of the trench - this is probably a natural deposit.

- 5.5 The southern boundary wall was observed to have much less substantial footings compared to the eastern boundary wall, and they extended to a maximum of 0.25m BGL and comprised rubble and lime mortar [1/611].
- 5.6 No finds were observed in any part of the excavations. The spoil heap was examined, and only a small amount of probable 19th or early 20th century glass was noted. There were also two small square red handmade tiles, of the same form as those forming the floor of the now-demolished gazebo; it is believed that the majority of these tiles were retained for use elsewhere on the abbey site. None of these finds were retained. The *ex situ* stone fragment formerly located within the demolished gazebo, also retained by the owners, was in two parts [1/613] (see plate 6). The upper surface of one part had much carved graffiti, mostly initials. Some of these may have been associated with the possible date '1946', suggesting that the stone fragment had been *ex situ* and visible since at least that time [1/614] (see plate 7).

The Re-Excavation of the Ha-Ha (see figures 9 and 10)

- 5.7 The re-excavation of the ha-ha was monitored on the 11th and 12th November 2020, whilst it was taking place. The work took place in several stages.
- 5.8 Prior to this stage of the works, the 4.00m length of the southern boundary wall had been taken down and the stones stored for subsequent re-use. The section of the eastern boundary wall behind the new shelter was also repaired and rebuilt as necessary. In terms of the actual groundworks, the turf and topsoil were removed over the area to be excavated [2/573-2/575] (see plate 8). The post-1929 infill of the ha-ha ditch was then removed in a series of spits, until the resulting profile either matched the existing earthwork to the west or confirmed through the deposits that the later infill had been removed. The ha-ha ditch was re-excavated to a maximum depth of 0.90m BGL, and this exposed surviving sections of the original 1809 retaining or revetment wall and part of a later repair; these were archaeologically recorded (see Section 2). The line of the ha-ha was later extended by a further 0.50m to the north in order to remove the earlier retaining wall remains. A 0.90m wide trench was then dug along the base of the north side of the re-excavated ha-ha, to a maximum depth of 1.15m BGL, in order to allow footings for a new retaining wall to be built. The new northern section (Section 3) thus created was again archaeologically recorded, as were the returns at either end (Sections 4 and 5). The total area of ground disturbance had maximum dimensions of 15.30m east-west by 4.40m north-south.
- 5.9 The uppermost deposit exposed during the re-excavation of the ha-ha was the same dark brown sandy silt topsoil (001) seen in the excavations for the new shelter described above (see Section 2). This topsoil varied in depth between 0.08m and 0.24m, and was present in all of the recorded sections. In the north section (Section 2), the topsoil (001) was disturbed in a number of places by the concrete footings of the existing metal post and rail fence; they extended to depths of up to 0.40m BGL and there were eight in total - they were not given context numbers. In the western 4m of the section, below the topsoil (001), there was a very mixed layer (010) of clean orange sand, mid-brown sandy silt with a high frequency of small angular stones, and sandy clays which extended below the base of the excavation [2/577]. This deposit also included modern material such as plastic, and so probably relates to an episode of modern disturbance and/or

dumping here. There was a similar apparent area of modern disturbance (013), evidenced as a compacted dark brown sandy silt at least 0.65m thick and 1.40m wide, at the east end of the section, which had cut into the remains of the ha-ha retaining wall (012) to the west, but it may have been contemporary with that seen to the east (014) [2/591, 2/592]. This c.3m long surviving section of ha-ha retaining wall (014) was at least 0.80m high, continuing below the base of the excavation; it was faced with coursed and squared stone, mostly long rectangular blocks, thickly pointed with lime mortar [2/593-2/595] (see plate 9). In appearance, it strongly resembled the surviving visible sections of ha-ha wall along the south and west sides of the abbey ruins, both of which have been re-built and repaired since the 1970s. It is therefore likely that this eastern section of ha-ha wall (014) also represents a largely modern repair or rebuilding. It clearly disturbed a short 0.65m long section of earlier retaining wall (015) to the immediate east, which was also overlain by the former angular stone footings (016) of the eastern boundary wall here.

- 5.10 Although in poor condition, the short section of the earlier retaining wall (015) was of the same construction as the other seen to the west (012), and it preserved evidence for a short return to the south, measuring 0.60m wide and with a base set 0.70m BGL [2/578]. This almost certainly represents a fragment of the original 1809 ha-ha retaining wall, which effectively closed off the east end of the ha-ha (as shown on the 1856 Ordnance Survey map, see figure 6 top). The return fragment overlay a stiff grey-brown clay (017). The other, more extensive, part of the original 1809 retaining wall (012) was exposed in the central part of the section, underlying a compacted black sandy silt (011), on average 0.25m thick (see Section 2). The surviving section of wall measured a total of 5.60m long and was composed of coursed and squared sandstone blocks surviving to a maximum height of 0.45m, with little evidence for any mortar; the top was set on average at 0.40m BGL, and the wall continued below the base of the excavation [2/582] (see plate 10). The western part was built from (dry stone?) coursed and squared sandstone blocks, with up to three courses being visible [2/583]. The coursing became less regular to the eastern part, but this may have been due to later disturbance, principally from the concrete footings of the post and rail fence [2/584-2/586, 2/588-2/590] (see plate 11). In at least two places, the remains of rotten wooden posts were set immediately to the front of the stone work - they may perhaps have been hammered in at a later date to stop the wall leaning to the south.
- 5.11 When the remains of the ha-ha retaining wall were removed, it was found to be on average 0.40m wide; the stonework behind what facing remained was very rough and largely comprised rubble [3/599-3/601] (see plate 12). The footings were visible for the full length of the lower trench excavated along the north side of the ha-ha, and it is assumed that these represent the base of the original 1809 ha-ha retaining wall. They continued below the base of the trench (i.e. beyond 1.15m BGL) and were set with a lime mortar, unlike the apparent dry stone structure above. A vertical construction cut [023] for the 1809 wall was visible running parallel to the north side, but set back by a further 0.10m to the north (see section 4); it was essentially on the same line as the completed northern section (Section 3) for the new retaining wall. The gap between the cut [023] and the remains of the original retaining wall (012) was backfilled with a mixed deposit of dark brown and black sandy silts (022).
- 5.12 The fully excavated northern section, against which the new replacement retaining wall was to be built, preserved a relatively simple sequence of deposits (see Section 3). In the western part of the section, beneath the topsoil (001), there was a relatively level layer of clean orange sand (018), on average here 0.15m thick;

this deposit was not visible in the central part of the section. This overlay a dark brown-black sandy silt (019), on average 0.30m thick, clayey in parts and relatively clean, with a single piece of red handmade brick noted towards the base. This deposit extended on average to 0.50m BGL, although towards the western end of the section there was a lower part perhaps representing either a former north-south aligned linear depression or a small sub-circular depression, but this was not certain. In the eastern part of the section, the brown-black sandy silt (019) overlay a deposit of orange-brown sandy clay (020), which increased to a maximum depth of 0.46m from west to east. Beneath this was the lowest visible layer, a similar stiff orange-brown sandy clay (021) but containing very frequent inclusions of rounded stones up to 0.10m across, which extended throughout and beyond the base of the trench - this is probably a natural deposit [3/607-3/610, 3/625-3/628] (see plate 13). The east end of the section was formed by the shuttering for the recently constructed base of the visitors' shelter to the immediate north [3/598].

- 5.13 As noted above, the exposed sections at either end of the excavated ha-ha were also recorded. In the western section (Section 4), the uppermost deposit was the same topsoil (001) as seen elsewhere, and it overlay the clean orange sand (018) which carried round from the northern section (Section 3). The base of the northern end of the sand dipped sharply, and it is possible that this might represent a cut associated with the large area of disturbance (010) seen at the west end of the earlier northern section (Section 2). The sand (018) overlay a black sandy silt (024), which increased in depth from south to north but was up to 0.50m thick, and which in turn overlay a deposit of stone rubble (025), comprising angular pieces up to 0.40m across, in a compacted black sandy silt. These three deposits of sand, black sandy silt and angular stone rubble (018, 024 and 025) formed the backfill of the majority of the re-excavated length of the ha-ha; the stone rubble (025) contained occasional pockets of ashy silt with modern items such as plastic and wire. All three deposits could be seen to butt up against the fragmentary remains of the original ha-ha retaining wall (012) visible in the section. The base of this wall was cut into a clean dark brown silty clay (026). The smoothed shelving top of this clay must represent the original profile of the ha-ha ditch when first cut in 1809, showing that it was c.0.95m deep against the northern retaining wall (012); it sloped gently upwards to the south, giving the ditch a total width of between c.3.80m to 4.00m [2/576, 2/587] (see plate 14).
- 5.14 In the eastern section (Section 5), the uppermost deposit was again the topsoil (001), but the sequence below was somewhat different to that noted in Section 4. The topsoil (001) overlay a mid-brown sandy silt (027), which had an average depth of 0.45m. Towards its base, visible in the section, was a 0.08m diameter cast-iron pipe (028); no cut for this pipe was visible. This had once run east-west along the approximate base of the ha-ha ditch, close to the retaining wall, with a second branch running into it from the south-west. The sandy silt (027) overlay the stiff grey-brown clay (017) which had been visible in the northern section (Section 2), which continued below the base of the excavation. The original profile of the ha-ha was not clearly visible in this section, because excavation lay just beyond its former east end [2/596, 2/597] (see plate 15)
- 5.15 No finds, other than modern material, were recovered from the re-excavation of the ha-ha. A single architectural fragment was recovered from the lower levels of the stoney backfill (025) in Section 4, apparently a piece of tracery from a large window of at least two arched lights [2/579-2/581] (see plate 16). This was separated out from the remainder of the recovered rubble stone which was to be re-used, and has been stored on site by the owner, Mr Ian Burdon.

6 DISCUSSION AND CONCLUSIONS

- 6.1 The watching brief encountered no *in situ* archaeological deposits or remains which could be definitely dated to the functioning life of the abbey prior to the Dissolution, although the virtual lack of finds throughout the excavations made the close dating of any deposits difficult.
- 6.2 Stratigraphically, the earliest activity recorded within the footprint for the new shelter was what appeared to be a surface of compacted sandy silt (004) laid over two base or make-up layers (005 and 006). The upper of the two layers (005) was formed from compacted angular and rounded stones, and had occasional fragments of red handmade brick within it. They probably define the line of a wide footpath shown running north from the grotto in 1892 (see figure 6 bottom), and the most likely interpretation is that they are the remains of the footpath's surface. If this is the case, then they are unlikely to be any earlier than the early 19th century, and they form part of the sunken garden compartment or parterre suggested to be present here (GS28; English Heritage 1999, 33; see figure 7). These deposits were all cut by two linear cuts, both running north-south (see Section 1). The fill (002) of the eastern cut [003] appears to run beneath the footings of the eastern boundary wall here. The fact that this wall was apparently extant by 1856 suggests that the cut is earlier than this, although it might just be an overly large construction trench for the wall itself. If the latter was the case, then it would imply that the footpath and garden compartment were laid out before the wall was built. Alternatively, the wall may have been rebuilt on the same alignment since 1856, damaging the earlier garden features. The western cut and fill (008) may have been associated with a shallow, poorly defined linear depression visible to the immediate north of the shelter footprint. This depression ran north for c.4m, along the east side of a row of pine trees here; the pine trees are marked on the 1892 Ordnance Survey map (see figure 6 bottom).
- 6.3 Within the re-excavated ha-ha, the earliest structure exposed was the 5.60m long section (012) of the original 1809 retaining wall (see Section 2). This survived to a maximum visible height of 0.45m, and was built from (dry stone?) coursed and squared sandstone blocks, with up to four courses being visible. A truncated return (015) to the east was also part of the original 1809 structure, and demonstrated that this once returned to the south along the eastern end of ha-ha, as shown on the 1856 map. The other part of the exposed retaining wall (014) is likely to be a modern rebuild, and is probably broadly of the same date as the other rebuilt/repared sections of the ha-ha wall which remain visible along the south and west sides of the monastic ruins. When first cut in 1809, the ha-ha ditch was c.0.95m deep against the retaining wall on the north side and sloped gently upwards to the south, with a total width of c.3.80m-4.00m. The backfilling that had taken place since 1929 was probably done in several phases, although it is not certain by how long these phases were separated. The earliest phase comprised angular stone rubble (025), within which a single piece of probable tracery was recovered (see Section 4). This was overlain by a black sandy silt (024) and then a clean orange sand (018), the latter probably representing post-1929 backfill. The presence of pockets of more modern disturbance within the general backfill was noted, some of which contained plastic and wire.
- 6.4 When the remains of the ha-ha retaining wall (012 and 014) were removed, the deposits exposed behind were mainly clean sandy silts and sandy clays (see Section 3); the lowest deposits exposed within the footprint of the new shelter were also similar. It is possible that one of the deposits (019) seen in Section 3 may

also have related to the 19th century garden compartment, perhaps incorporating the remains of a linear or sub-circular garden feature.

- 6.5 However, the lack of more substantial remains in the excavations is slightly puzzling given that a large 16th century country house was thought to have stood in this general area, either side of the later ha-ha, as evidenced by the previous English Heritage earthwork survey (BC14, see figure 5). It is of course possible that none of the excavations were deep enough to uncover the remains of this house, or that its remains were comprehensively robbed out after abandonment prior to Senior's 1627 survey. Nevertheless, in the latter case, it would surely be expected that some clearer archaeological trace would remain of these activities and indeed of the former presence of a house of this size. The lack of evidence therefore suggests that the part to the north of the ha-ha was swept away as a result of the 19th century landscaping of this area. Alternatively, perhaps the large 16th century house never extended to the north of the ha-ha, or perhaps it was not actually sited here but placed somewhere else within the abbey site and surrounding parkland. However, if the latter is the case, another explanation for the presence of the extensive gardens, water features and other structures either side of the later ha-ha (see figure 5) needs to be forthcoming.

7 REFERENCES

Primary Sources

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- 1892 Ordnance Survey 25" to 1 mile map Yorkshire sheet 85/1 (surveyed 1891)
- 1912 Ordnance Survey 25" to 1 mile map Yorkshire sheet 85/1 (revised 1911)
- 1929 Ordnance Survey 25" to 1 mile map Yorkshire sheet 85/1 (revised 1927)

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English Heritage 1999 *Jervaulx Abbey, North Yorkshire: Survey Report* (English Heritage Archaeological Investigation Report Series AI/4/1999)

Historic England 2019 *Jervaulx Cistercian Abbey, site of post-Dissolution grand house and gardens and World War II storage structures* (NHLE 1020493) (Scheduled Monument Description)

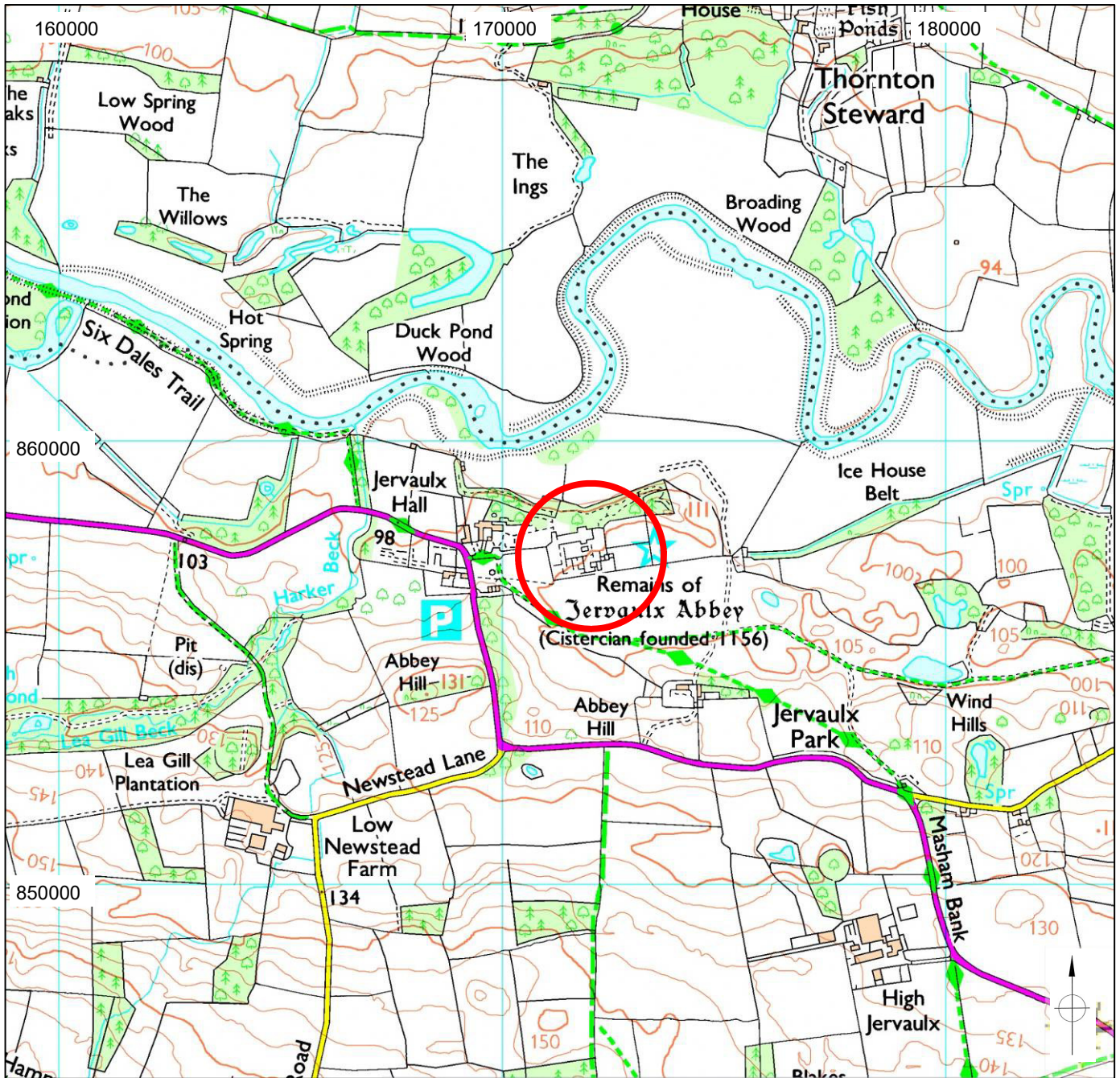
Hope, W H St J & Brakspear, H 1911 'Jervaulx Abbey', *Yorkshire Archaeological Journal* vol 21, 303-344

Pace, P 2019 *Jervaulx Abbey: Design and Access Statement* (unpublished report for Ian Burdon)

8 ACKNOWLEDGEMENTS

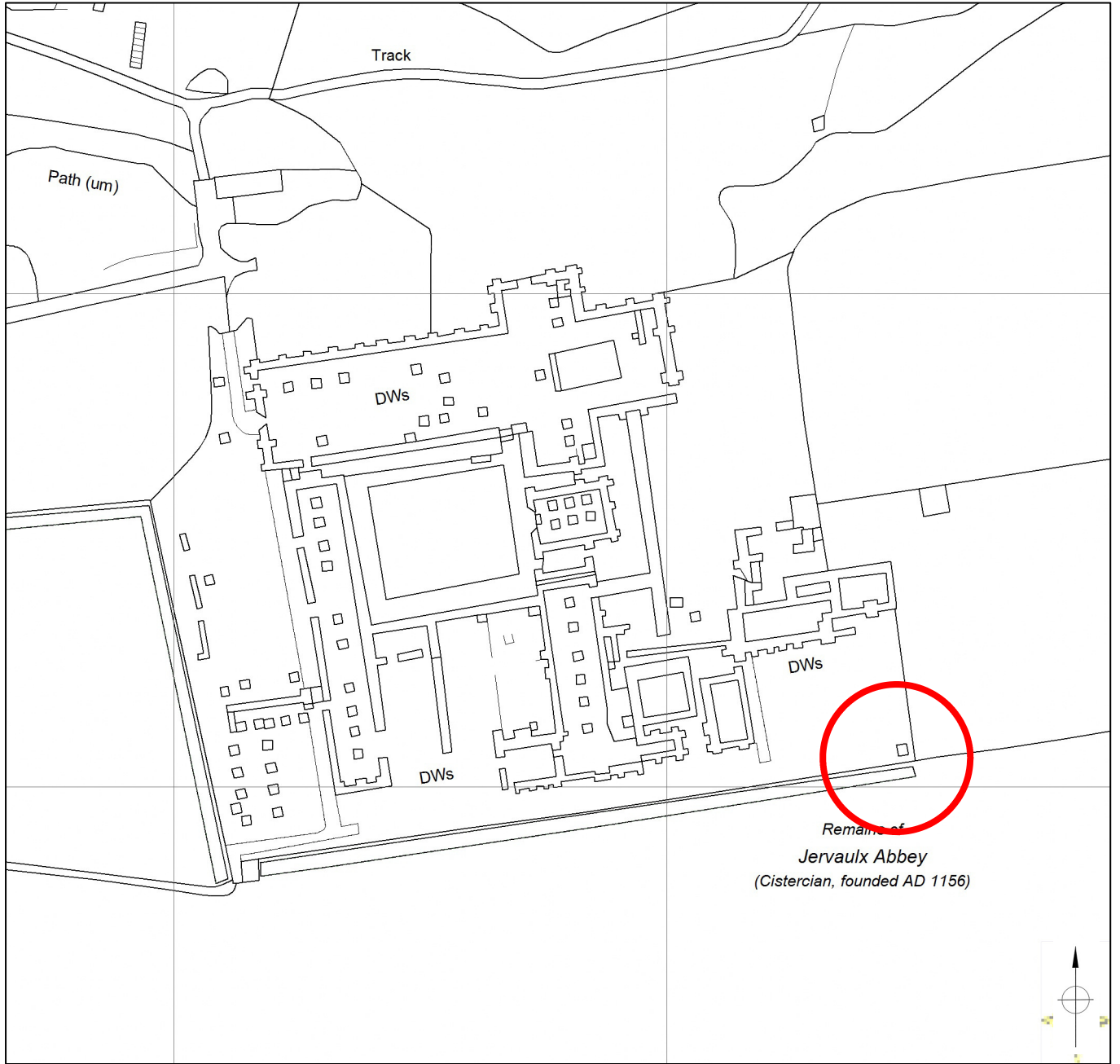
- 8.1 The archaeological watching brief was commissioned by project architect Peter Gaze Pace, on behalf of the owner, Mr Ian Burdon. EDAS would like to thank all individuals and organisations for their help and co-operation in carrying out the

work, particularly Ian and Anna Burdon. The archaeological recording was undertaken by Shaun Richardson of EDAS, and the final report and other drawings were produced by Ed Dennison, who retains responsibility for any errors or inconsistencies.



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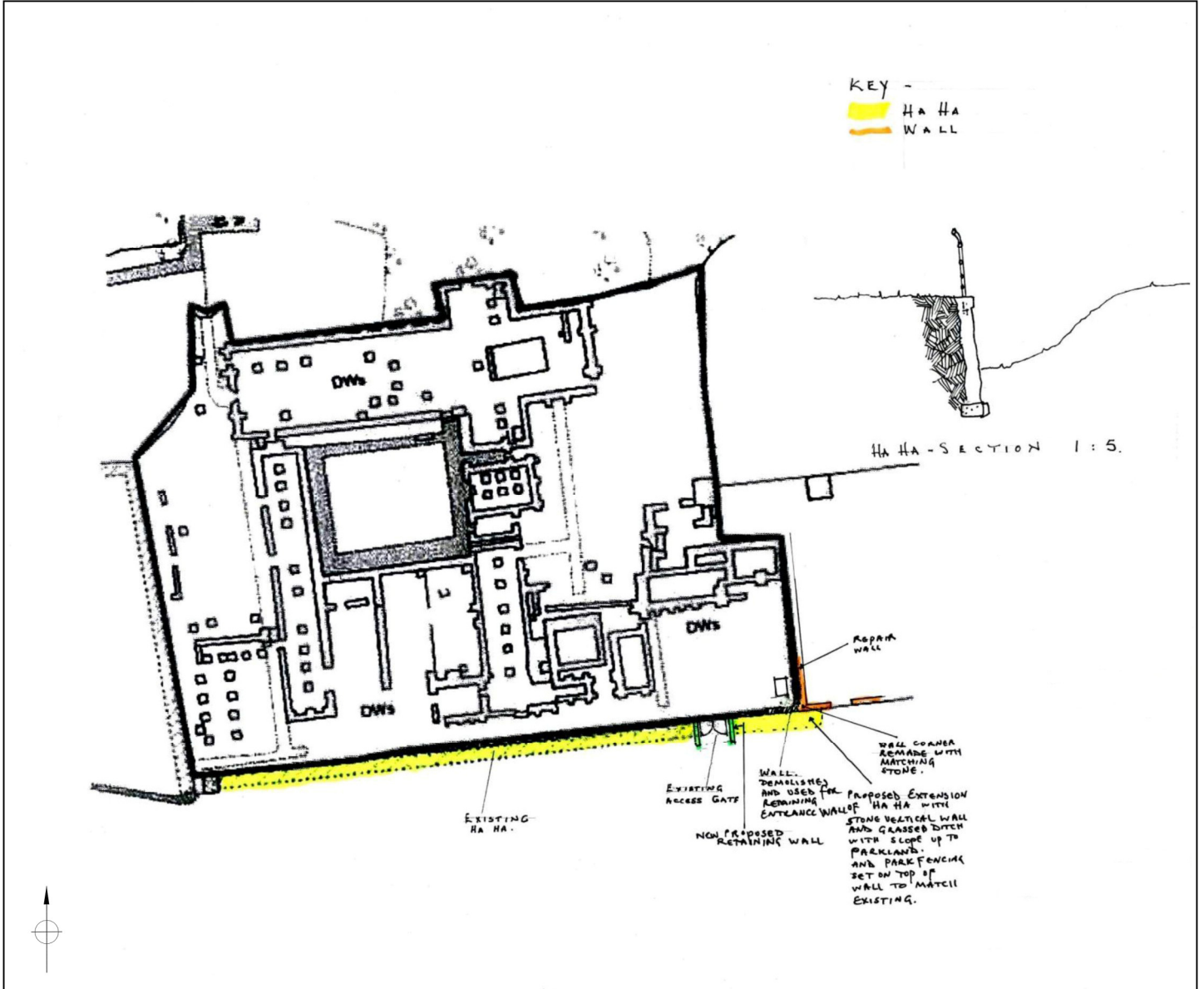
PROJECT		JERVAULX ABBEY HA-HA	
TITLE		GENERAL LOCATION	
SCALE	AS SHOWN	DATE	DEC 2020
EDAS		FIGURE	1



0 50m

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PROJECT		JERVAULX ABBEY HA-HA	
TITLE		DETAILED LOCATION	
SCALE	AS SHOWN	DATE	DEC 2020
EDAS		FIGURE	2



Drawing provided by Peter Pace Architect, reproduced with permission.

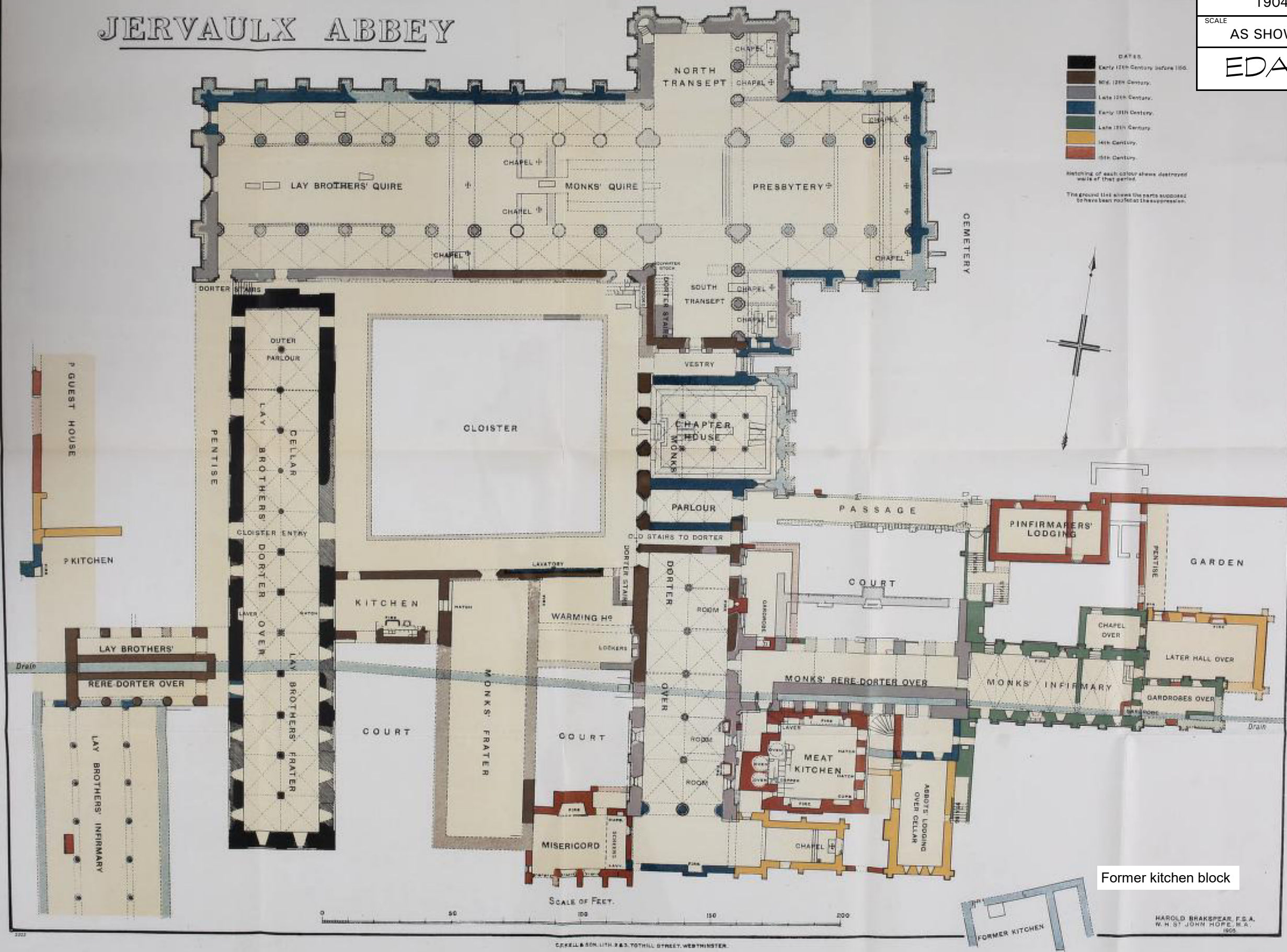
PROJECT		JERVAULX ABBEY HA-HA	
TITLE		PROPOSED WORKS	
SCALE	NTS	DATE	DEC 2020
EDAS		FIGURE	3

JERVAULX ABBEY

PROJECT		JERVAULX ABBEY HA-HA	
TITLE		1904 EXCAVATION PLAN	
SCALE	AS SHOWN	DATE	DEC 2020
	EDAS	FIGURE	4

- DATES**
- Early 12th Century before 1160.
 - Mid 12th Century.
 - Late 12th Century.
 - Early 13th Century.
 - Late 13th Century.
 - 14th Century.
 - 15th Century.

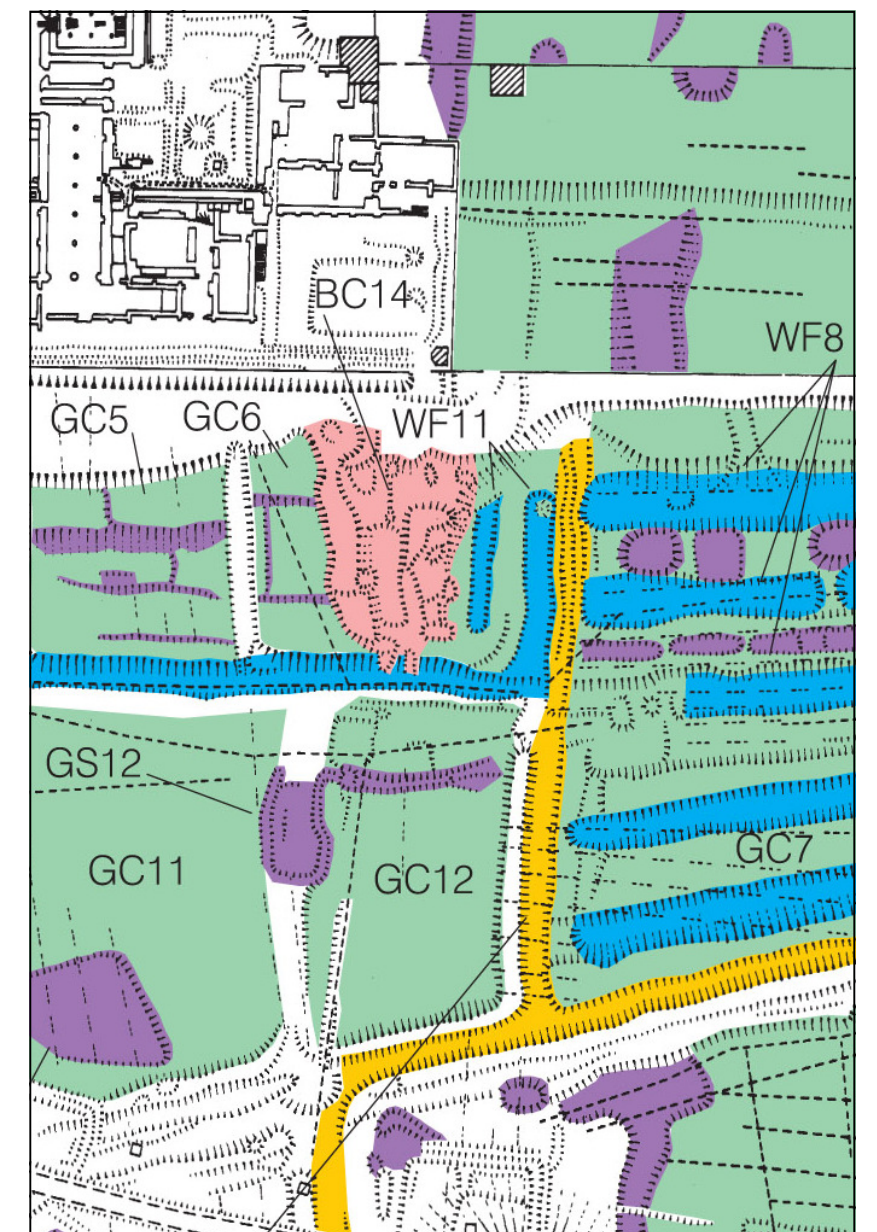
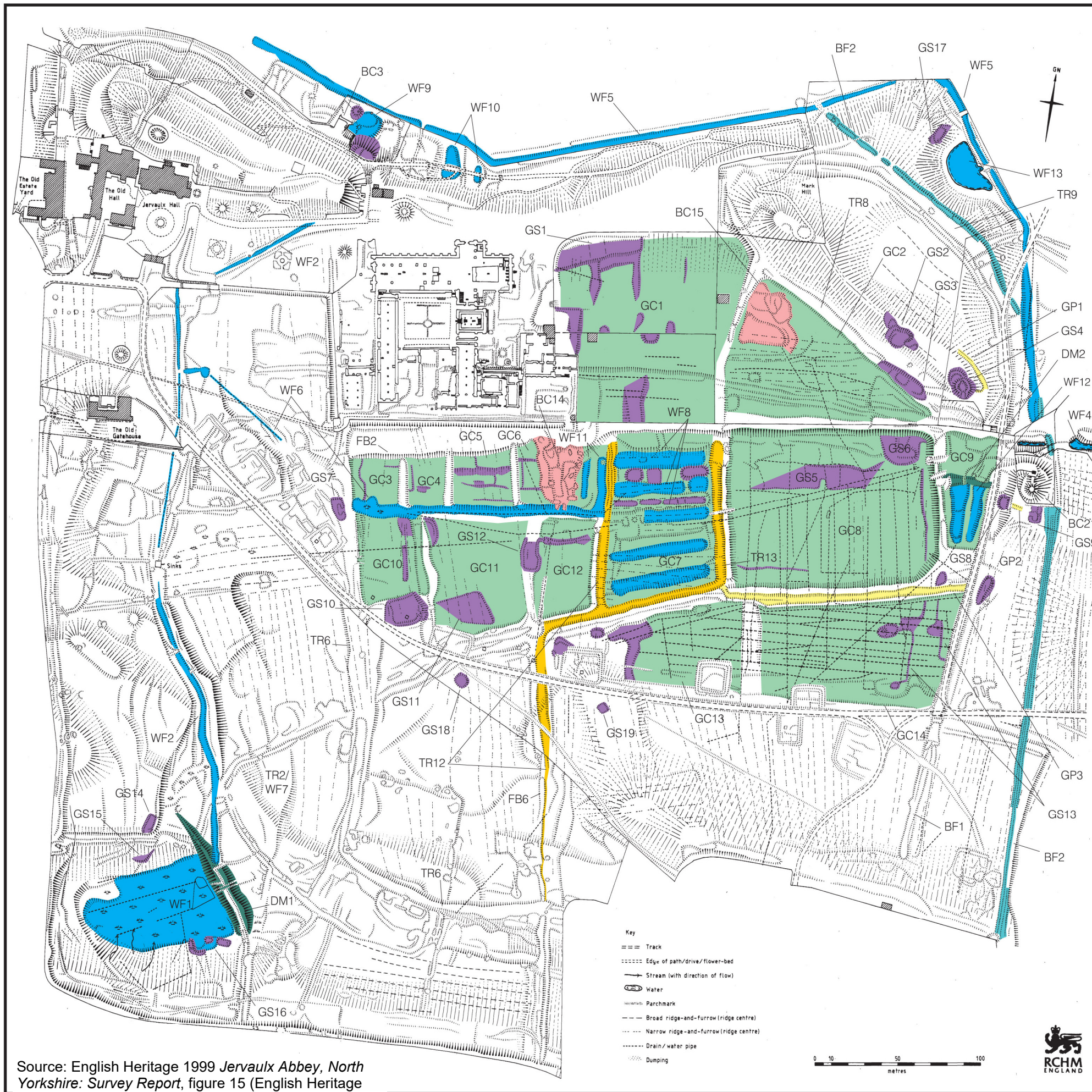
atching of each colour shows destroyed walls of that period.
The ground line shows the parts supposed to have been ruined at the suppression.



Former kitchen block

HAROLD BRAKSPEAR, F.S.A.
W. H. ST JOHN HOPE, R.A.
1905

Source: Hope, W H St J & Brakspear, H 1911 'Jervaulx Abbey',
Yorkshire Archaeological Journal vol 21, 303-344.

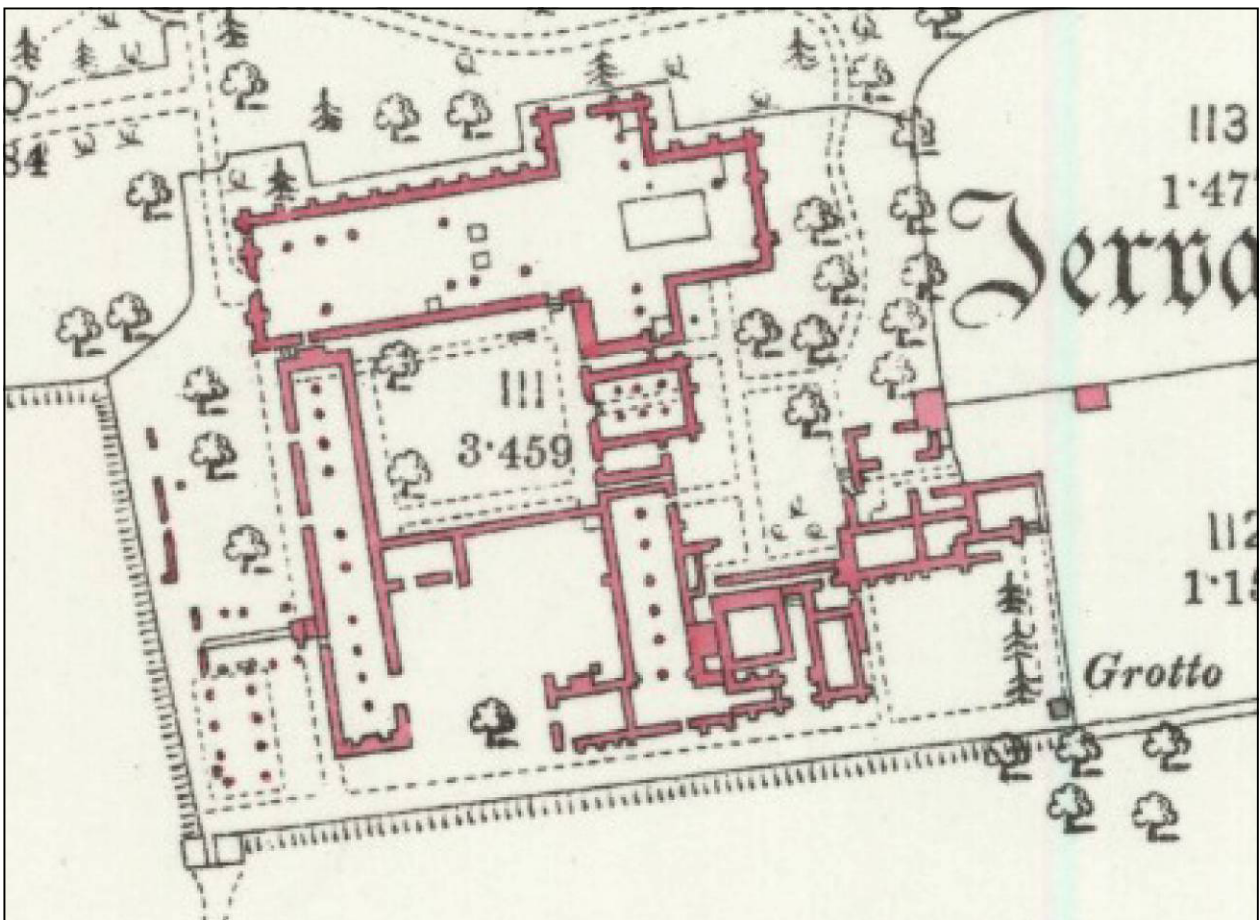


Interpretative diagram of Period 3 features: post-Dissolution house and gardens, 1537-1627.

- BC14 & BC15 (pink) = building complexes
- GC1-GC14 (green) = garden compartments
- GS1-GS19 (purple) = green structures
- GP1-GP3 (light yellow) = garden paths
- BF2 (light blue) = boundary feature
- WF9-WF13 (blue) & DM2 (dark green) = water features and dams
- TR12-TR13 (orange) = tracks

Source: English Heritage 1999 *Jervaulx Abbey, North Yorkshire: Survey Report*, figure 15 (English Heritage Archaeological Investigation Report Series AI/4/1999).

PROJECT		JERVAULX ABBEY HA-HA	
TITLE		ENGLISH HERITAGE PERIOD 3 LANDSCAPE INTERPRETATION	
SCALE	AS SHOWN	DATE	DEC 2020
EDAS		FIGURE	5

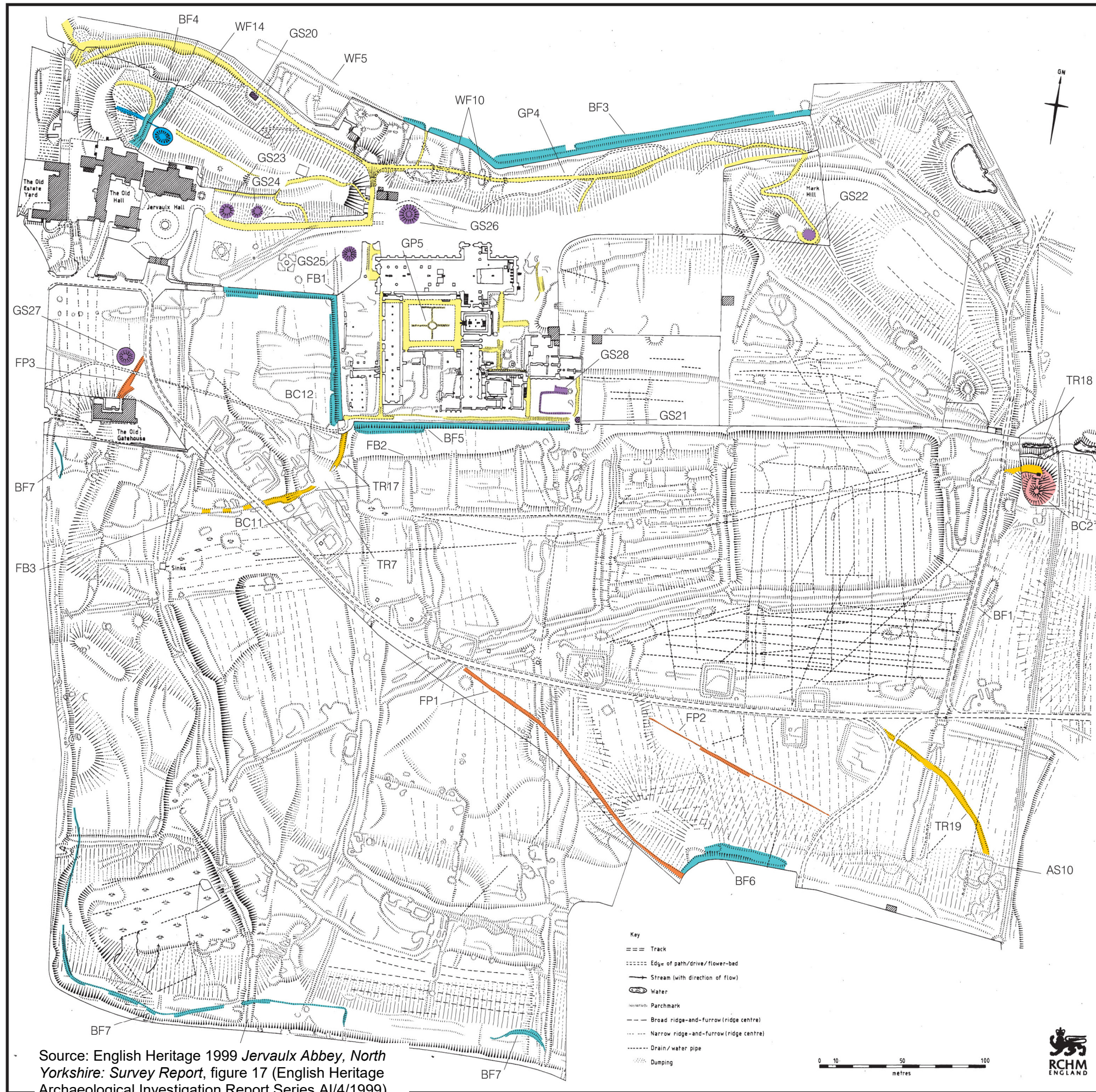


Sources:
 Top - Ordnance Survey 1856 6" map
 Yorkshire sheet 85, surveyed 1853.

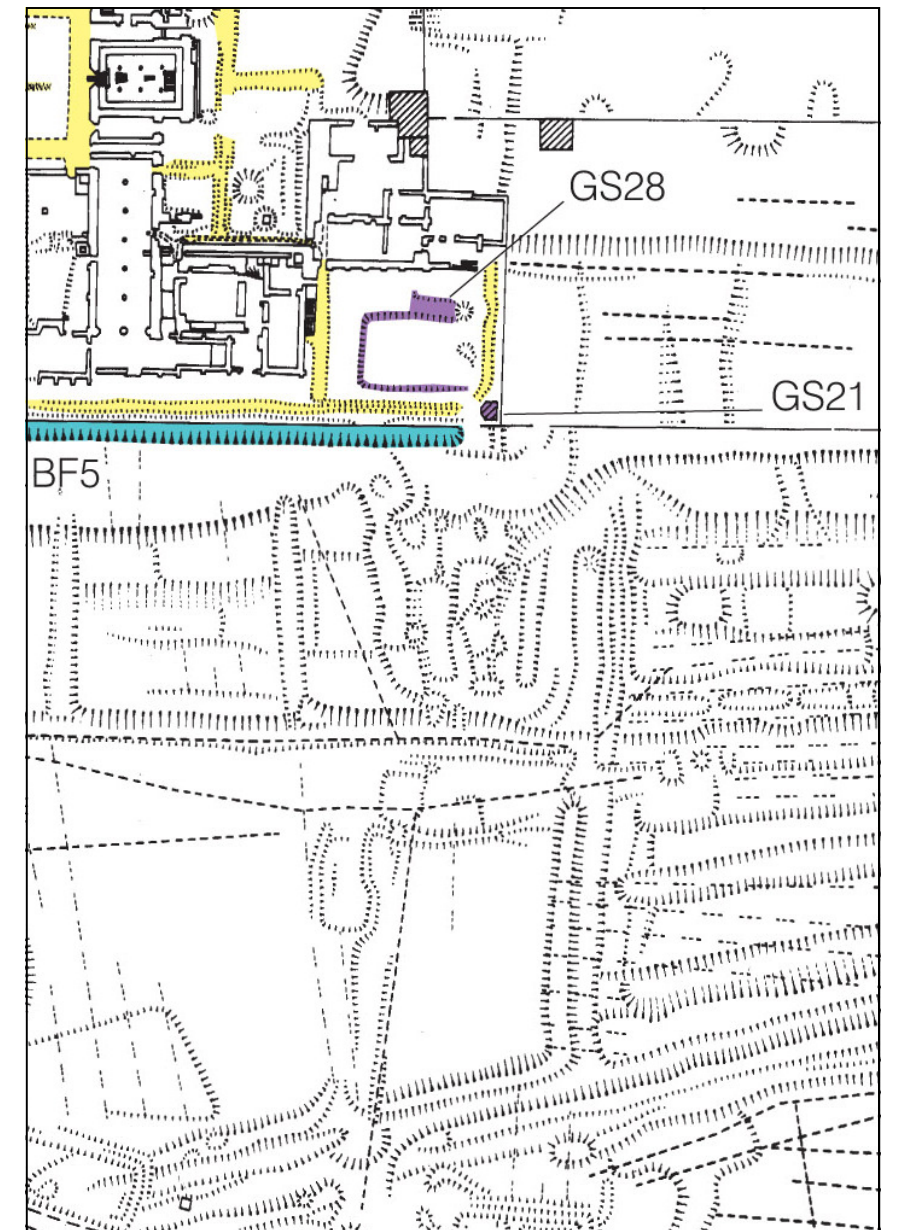
Bottom - Ordnance Survey 1892 25" map
 Yorkshire sheet 85/1, surveyed 1891.



PROJECT		JERVAULX ABBEY HA-HA	
TITLE			
SCALE		DATE	
NTS		DEC 2020	
EDAS		FIGURE	
		6	



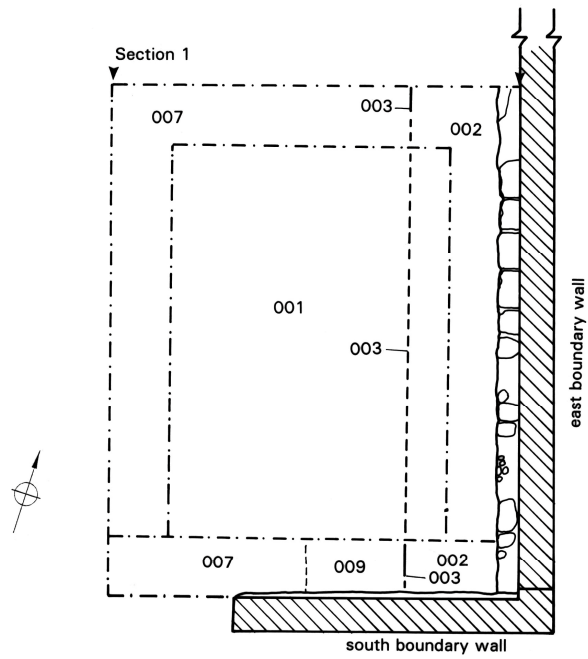
Source: English Heritage 1999 *Jervaulx Abbey, North Yorkshire: Survey Report*, figure 17 (English Heritage Archaeological Investigation Report Series AI/4/1999).



Interpretative diagram of Period 5 features: Jervaulx Hall and park, c.1805-1939.

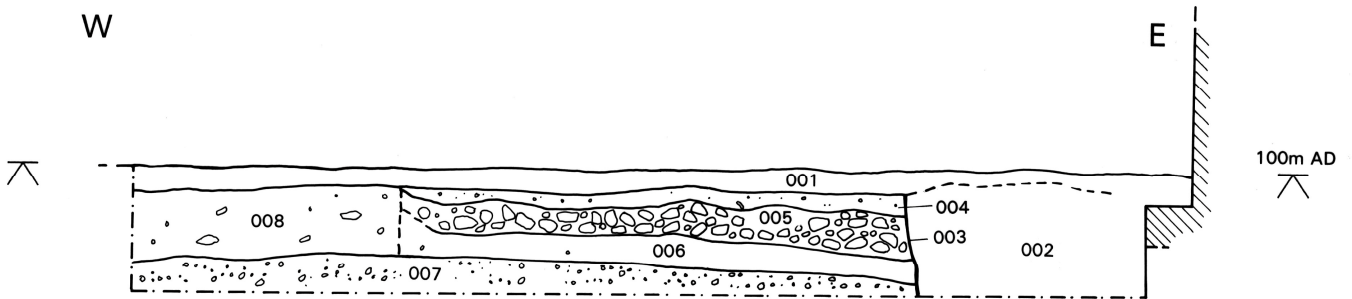
- BF3-BF7 (blue) = boundary features
- BC21 (pink) = building complex
- GS20-GS28 (purple) = garden structures
- GP4 & GP5 (light yellow) = garden paths
- FP1-FP3 (orange) = footpaths
- TR17-TR19 (dark yellow) = tracks
- WF14 (dark blue) = water feature

PROJECT		JERVAULX ABBEY HA-HA	
TITLE			
ENGLISH HERITAGE PERIOD 5		LANDSCAPE INTERPRETATION	
SCALE	AS SHOWN	DATE	DEC 2020
EDAS		FIGURE	7



Plan of shelter excavations

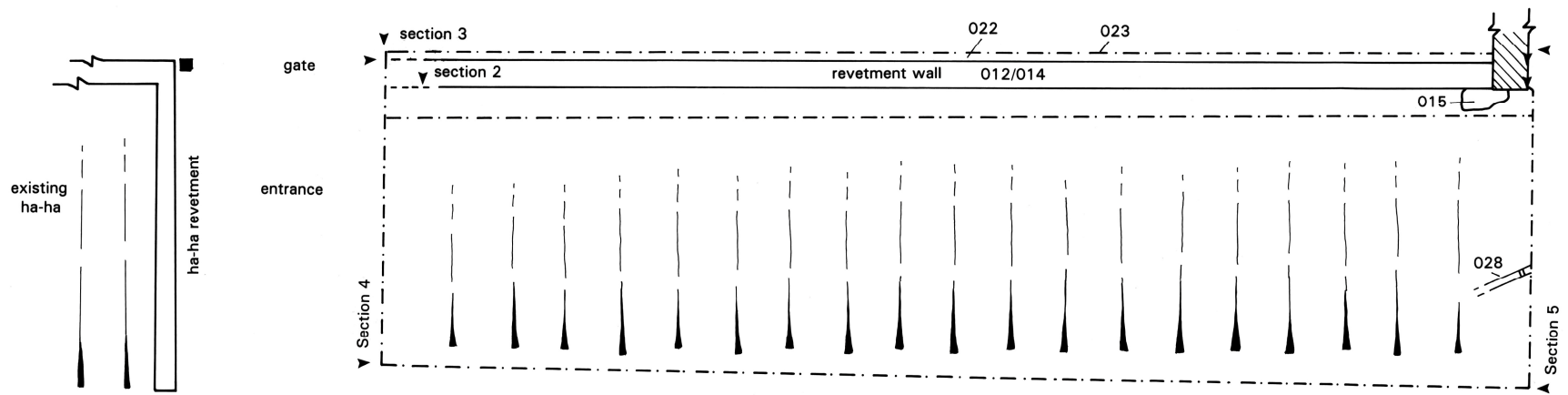
0 3m



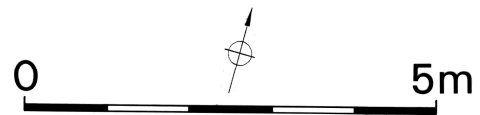
Section 1: north side of foundation trench

0 3m

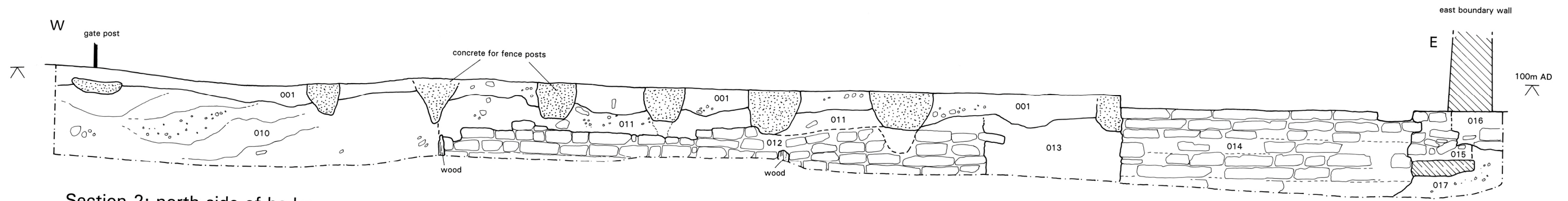
PROJECT		JERVAULX ABBEY HA-HA	
TITLE		SHELTER EXCAVATIONS	
SCALE	AS SHOWN	DATE	DEC 2020
EDAS		FIGURE	8



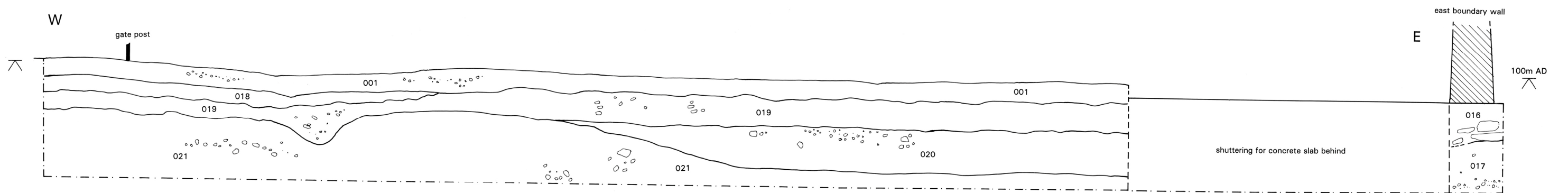
Plan of ha-ha excavations



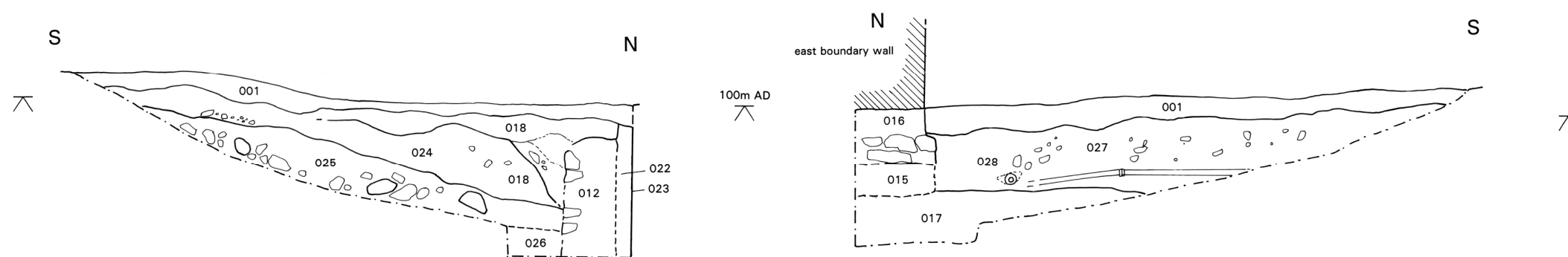
PROJECT		JERVAULX ABBEY HA-HA	
TITLE		HA-HA EXCAVATIONS - PLAN	
SCALE	AS SHOWN	DATE	DEC 2020
EDAS		FIGURE	9



Section 2: north side of ha-ha



Section 3: north side of ha-ha after removal of stonework



Section 4: west end of ha-ha

Section 5: east end of ha-ha



PROJECT		JERVAULX ABBEY HA-HA	
TITLE		HA-HA EXCAVATIONS - SECTIONS	
SCALE	AS SHOWN	DATE	DEC 2020
EDAS		FIGURE	10



Plate 1: General view of existing shelter or gazebo, prior to demolition, looking SE (photograph courtesy Peter Pace, reproduced with permission).



Plate 2: Existing shelter or gazebo, prior to demolition, with central *ex situ* architectural fragment, looking S (photograph courtesy Peter Pace, reproduced with permission).



Plate 3: Existing ha-ha with gated entrance and infilled section to east, looking E (photograph courtesy Peter Pace, reproduced with permission).



Plate 4: General view of excavations for new shelter, looking NE (photo 1/605).



Plate 5: Footings to east boundary wall, looking S (photo 1/608).



Plate 6: *Ex situ* architectural fragments formerly within demolished shelter or gazebo (photo 1/613).



Plate 7: *Ex situ* architectural fragments formerly within demolished gazebo, graffiti to upper surface (photo 1/614).



Plate 8: Topsoil stripping for ha-ha excavations, looking E (photo 2/573).



Plate 9: Ha-ha excavation, Section 2, later ha-ha retaining wall (014), looking NW (photo 2/593).



Plate 10: Ha-ha excavation, Section 2, general view, looking NE (photo 2/582).



Plate 11: Ha-ha excavation, Section 2, original ha-ha retaining wall (012), east end, looking N (photo 2/589).



Plate 12: Ha-ha excavation, Section 3, remains of original ha-ha retaining wall (012) being removed, looking NE (photo 3/600).



Plate 13: Ha-ha excavation, Section 3, completed excavation, looking N (photo 3/609).



Plate 14: Ha-ha excavation, Section 4, looking W (photo 2/576).



Plate 15: Ha-ha excavation, Section 5, looking E (photo 2/596).



Plate 16: Ha-ha excavation, Section 4, *ex situ* tracery fragment from (025) (photo 2/580).

APPENDIX 1
LIST OF CONTEXTS

APPENDIX 1: LIST OF CONTEXTS

<i>Context</i>	<i>Description and Interpretation</i>	<i>Area of Site</i>
001	Compacted dark brown/black sandy silt, 0.10m-0.24m thick, with frequent fragments of red handmade brick and tile, angular stone, some lime mortar flecks. Topsoil.	All
002	Clean compacted dark brown/black sandy silt. Fill of 003.	Shelter
003	Linear vertical-sided cut, aligned north-south, partly poorly defined, continues below base of trench.	Shelter
004	Compacted/hard mid-brown sandy silt with frequent inclusions of angular stones up to 100mm across, up to 0.10m thick, almost laminated in places. Level surface for 19th century footpath.	Shelter
005	Compacted rounded and angular stones up to 0.1m across, with occasional red handmade brick fragments, average 0.20m thick. Bedding surface for 004.	Shelter
006	Compacted mid-brown sandy silt with some orange staining, average 0.10m thick.	Shelter
007	Compacted dark brown sandy silt with infrequent inclusions of angular stone 200mm-300mm across, at least 0.18m thick and mostly continues beyond base of trench.	Shelter
008	Compacted dark brown sandy silt - possible fill of poorly defined north-south linear cut.	Shelter
009	Compacted clean mid-orange/brown sandy clay. Natural deposit.	Shelter
010	Mixed layer of clean orange sand, mid-brown sandy silt with high frequency of small angular stones, and sandy clays, with modern material. Recent disturbance, dumping to infill of ha-ha.	Ha-ha S2
011	Compacted black sandy silt with infrequent angular stones less than 0.10m across, on average 0.25m thick.	Ha-ha S2
012	Retaining wall, of coursed and squared sandstone blocks, maximum 0.45m high, three or four courses remaining, with little evidence for mortar. Original 1809 ha-ha revetment wall.	Ha-ha S2 & S4
013	Compacted dark brown sandy silt, at least 0.65m thick and 1.40m wide. Area of probable recent disturbance to ha-ha walls either side?	Ha-ha S2
014	Retaining wall, of long rectangular courses and squared stone blocks set in and thickly repointed with a lime mortar. Rebuilt section ha-ha retaining wall.	Ha-ha S2
015	Short isolated section of retaining wall, similar to 012, 0.65m long, 0.40m wide and 0.7m deep. Original east end and south return of 1809 ha-ha retaining wall.	Ha-ha S2 & S5
016	Angular stone rubble foundation, 0.5m deep. Footings of the east boundary wall.	Ha-ha S2, S3 & S5
017	Clean stiff grey/brown clay, at least 0.5m thick.	Ha-ha S2, S3 & S5

018	Clean compacted orange sand, variable depth but maximum 0.60m thick. Backfill of ha-ha, post 1929.	Ha-ha S3 & S4
019	Compacted dark brown/black sandy silt, clayey in parts, average 0.30m thick, with one fragment of red handmade brick. Possibly relating to the 19th century garden compartment?	Ha-ha S3
020	Stiff clean orange-brown sandy clay, maximum 0.60m thick.	Ha-ha S3
021	Stiff clean orange-brown sandy clay with very frequent inclusions of rounded stones up to 0.10m across, maximum 1.0m thick, continuing below base of trench. Natural deposit.	Ha-ha S3
022	Mixed deposit of compacted dark brown/black sandy silt. Fill of 023.	Ha-ha S3 & S4
023	Near-vertical construction cut, at least 1.00m deep and continues below base of the trench. For original 1809 revetment ha-ha wall.	Ha-ha S3 & S4
024	Compacted black sandy silt, increasing in depth from south to north, maximum 0.50m thick. Part of backfill of ha-ha ditch, post 1929.	Ha-ha S4
025	Compacted black sandy silt containing very frequent pieces of angular stone rubble, maximum of 0.40m thick. Lowest backfill of ha-ha ditch, post 1929.	Ha-ha S4
026	Firm dark brown silty clay, extending below base of excavation. Natural deposit, top surface represents cut for 1809 ha-ha ditch.	Ha-ha S4
027	Compacted clean mid-brown sandy silt, average 0.45m thick. Contains pipe 028.	Ha-ha S5
028	Cast iron pipe, 0.08m diameter within 027 but no obvious cut.	Ha-ha S5

APPENDIX 2
EDAS PHOTOGRAPHIC CATALOGUE

APPENDIX 2: PHOTOGRAPHIC CATALOGUE

Film 1: Colour digital photographs taken June 9th 2020

Film 2: Colour digital photographs taken November 11th 2020

Film 3: Colour digital photographs taken November 12th 2020

<i>Film</i>	<i>Frame</i>	<i>Subject</i>	<i>Scale</i>
1	603	Shelter footprint after excavation, looking SE	1m
1	604	Shelter footprint after excavation, looking E	1m
1	605	Shelter footprint after excavation, looking NE	1m
1	606	Shelter footprint after excavation, looking S	1m
1	607	Shelter footprint after excavation, looking NE	1m
1	608	Footings to east boundary wall, looking S	1m
1	609	Footings to east boundary wall, looking S	1m
1	610	Footings to east boundary wall, looking S	1m
1	611	Footings to south boundary wall, looking SE	1m
1	612	Shelter footprint, trench to N side, looking NE	1m
1	613	<i>Ex situ</i> architectural fragments formerly within gazebo	1m
1	614	<i>Ex situ</i> architectural fragments formerly within gazebo, graffiti to upper surface	-
2	573	Topsoil stripping for ha-ha excavations, looking E	1m
2	574	Topsoil stripping for ha-ha excavations, looking E	1m
2	575	Topsoil stripping for ha-ha excavations, looking E	1m
2	576	Ha-ha excavation, Section 4, looking W	1m
2	577	Ha-ha excavation, Section 2, mixed deposit (010) at west end, looking N	1m
2	578	Ha-ha excavation, Section 2, earlier retaining wall (015) at east end, looking N	1m
2	579	Ha-ha excavation, Section 4, <i>ex situ</i> tracery fragment from (025)	1m
2	580	Ha-ha excavation, Section 4, <i>ex situ</i> tracery fragment from (025)	1m
2	581	Ha-ha excavation, Section 4, <i>ex situ</i> tracery fragment from (025)	1m
2	582	Ha-ha excavation, Section 2, general view, looking NE	1m
2	583	Ha-ha excavation, Section 2, original ha-ha retaining wall (012), west end, looking N	1m
2	584	Ha-ha excavation, Section 2, original ha-ha retaining wall (012), looking NE	1m
2	585	Ha-ha excavation, Section 2, original ha-ha retaining wall (012), east end, looking N	1m
2	586	Ha-ha excavation, Section 2, original ha-ha retaining wall (012), east end, looking N	1m
2	587	Ha-ha excavation, Section 4, looking W	1m
2	588	Ha-ha excavation, Section 2, original ha-ha retaining wall (12), east end, looking NE	1m
2	589	Ha-ha excavation, Section 2, original ha-ha retaining wall (012), east end, looking N	1m
2	590	Ha-ha excavation, Section 2, original ha-ha retaining wall (012), east end, looking NW	1m
2	591	Ha-ha excavation, Section 2, east end, looking E	1m
2	592	Ha-ha excavation, Section 2, later ha-ha retaining wall (012), east end, looking N	1m
2	593	Ha-ha excavation, Section 2, later ha-ha retaining wall (014), looking NW	1m
2	594	Ha-ha excavation, Section 2, later ha-ha retaining wall (014), looking N	1m
2	595	Ha-ha excavation, Section 2, later ha-ha retaining wall (014), looking N	1m
2	596	Ha-ha excavation, Section 5, looking E	1m
2	597	Ha-ha excavation, Section 5, looking E	1m
3	598	Ha-ha excavation, Section 3, shuttering at east end, looking N	1m

3	599	Ha-ha excavation, Section 3, remains of original ha-ha retaining wall (012) being removed, looking NW	1m
3	600	Ha-ha excavation, Section 3, remains of original ha-ha retaining wall (012) being removed, looking NE	1m
3	601	Ha-ha excavation, Section 3, remains of original ha-ha retaining wall (012) being removed, looking N	1m
3	607	Ha-ha excavation, Section 3, completion of excavation, looking NW	2 x 1m
3	608	Ha-ha excavation, Section 3, completion of excavation, looking NE	1m
3	609	Ha-ha excavation, Section 3, completion of excavation, looking N	2 x 1m
3	610	Ha-ha excavation, Section 3, completion of excavation, looking NE	2 x 1m
3	625	Ha-ha excavation, Section 3, completion of excavation, looking NW	2 x 1m
3	626	Ha-ha excavation, Section 3, completion of excavation, looking NW	2 x 1m
3	627	Ha-ha excavation, Section 3, completion of excavation, looking NE	2 x 1m
3	628	Ha-ha excavation, Section 3, completion of excavation, looking E	2 x 1m

APPENDIX 3
EDAS WRITTEN SCHEME OF INVESTIGATION

WRITTEN SCHEME OF INVESTIGATION FOR A PROGRAMME OF ARCHAEOLOGICAL OBSERVATION, INVESTIGATION AND RECORDING DURING ERECTION OF NEW VISITOR HUT AND EXTENSION TO EXISTING HA-HA, JERVAULX ABBEY, EAST WITTON, NORTH YORKSHIRE

1 INTRODUCTION

- 1.1 This Written Scheme of Investigation (WSI) details the work required to undertake a programme of archaeological observation, investigation and recording (a watching brief) during groundworks associated with the erection of a new visitor hut and an extension to the existing ha-ha ditch at Jervaulx Abbey, East Witton, North Yorkshire (NGR SE 1716 8573 centred) (see figure 1). This written scheme has been produced by Ed Dennison Archaeological Services Ltd (EDAS), at the request of the project architect, Peter Gaze Pace, on behalf of the owner, Mr Ian Burdon.
- 1.2 This document forms the 'Written Scheme of Investigation' required under Condition 3 of the planning permission (application 19/00745/FULL), approved by Richmondshire District Council on 8th January 2020, and also condition (iv) of the Scheduled Monument Consent granted on 27th January 2020 (ref S00233993).

2 SITE LOCATION AND DESIGNATIONS

- 2.1 The ruins of Jervaulx Abbey are a Grade 1 Listed Building, first listed on 15th February 1967 (National Heritage List for England 1130961). The complex is also a Scheduled Monument, first scheduled on 8th February 1915 (NHLE 1020493). The dual designation means that the SM legislation takes precedence.
- 2.2 The abbey complex is located on the southern side of Wensleydale, 5km south-east of Middleham, some 200m south of the River Ure. It is situated on raised, level ground between the southern slope of the dale and the floodplain of the Ure. To the north of the abbey ruins there is a natural hill known as Mark Hill and to the east heavily undulating land formed by glacial action and known as Wind Hills.

3 PLANNING BACKGROUND

- 3.1 Full planning permission for the proposed development was approved by Richmondshire District Council on 8th January 2020 (application 19/000745/FUL). Condition 3 relates to archaeology, and states:

No demolition/development shall take place/commence until a Written Scheme of Investigation for archaeological mitigation has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include an assessment of significance and research questions, and:

- (a) the programme and methodology of site investigation and recording;
- (b) the programme for post investigation assessment;
- (c) provision to be made for analysis of the site investigation and recording;
- (d) provision to be made for publication and dissemination of the analysis and records of the site investigation;
- (e) provision to be made for archive deposition of the analysis and records of the site investigation; and
- (f) nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation.

No demolition/development shall take place other than in accordance with the Written Scheme of Investigation approved in accordance with the above requirements.

The development shall not be first brought into use until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme of Investigation approved in accordance with the above requirements and the provision made for analysis, publication and dissemination of results and archive deposition has been secured.

Reason for Condition

This condition is imposed in accordance with Section 16 of the National Planning Policy Framework as the site is of archaeological interest.

4 SCHEDULED MONUMENT CONSENT

4.1 As noted above, Jervaulx Abbey is a Scheduled Monument, and Scheduled Monument Consent for the current phase of work was given by the Secretary of State for Digital, Culture, Media and Sport, advised by Historic England, on 27th January 2020 (ref S00233993).

4.2 A number of conditions were attached to consent; those most relevant to this WSI are as follows:

- (i) the works to which this consent relates shall be carried out to the satisfaction of the Secretary of State, who will be advised by Historic England. At least 2 weeks' notice (or such shorter period as may be mutually agreed) in writing of the commencement of work shall be given to Dr Keith Emerick, Inspector of Ancient Monuments, Historic England, 37 Tanner Row, York, YO1 6WP in order that an Historic England representative can inspect and advise on the works and their affect in compliance with this consent;
- (iv) no ground works shall take place until the applicant has confirmed in writing the commissioning of a programme of archaeological work during the development in accordance with a written scheme of investigation which has been submitted to and approved by the Secretary of State advised by Historic England;
- (vi) equipment and machinery shall not be used or operated in the scheduled area in conditions or in a manner likely to result in damage to the monument or to ground disturbance other than that which is expressly authorised in this consent;
- (vii) any works to which this consent relates shall be carried out under the archaeological supervision of Mr Ed Dennison EDAS 18 Springdale Way, Beverley, East Yorkshire HU17 8NU who shall be given at least 2 weeks' notice (or such shorter period as may be agreed) in writing of the commencement of work. No works shall commence until Mr Ed Dennison has confirmed in writing to Historic England that he is willing and able to undertake the agreed supervision;
- (viii) the excavation of the ha-ha shall be restricted to a depth and width not exceeding the existing sections of ha-ha;
- (ix) a report on the archaeological recording shall be sent to: Peter Rowe, Principal Archaeologist, NYCC, Northallerton, N Yorks DL7 8AH (the County

Historic Environment Record) and to Dr Keith Emerick, Inspector of Ancient Monuments at Historic England within 3 months of the completion of the works (or such other period as may be mutually agreed);

- (x) the archaeological contractor shall complete and submit an entry on OASIS (On-line Access to the Index of Archaeological Investigations - <http://oasis.ac.uk/england/>) prior to completion, and shall deposit any digital project report with the Archaeology Data Service, via the OASIS form, upon completion.

5 ARCHAEOLOGICAL INTEREST

- 5.1 The Scheduled Monument description for Jervaulx Abbey provides a good overall account of the history and importance of the complex, as follows:

“The monument includes standing ruins, earthwork and buried remains of the Cistercian Abbey of Jervaulx. These include the core abbey buildings and the majority of the outer precinct in which remains of fishponds, water management features and further monastic structures survive. Also included in the monument are remains of pre-monastic agricultural activity, the site of a 16th century grand house with associated gardens, a 19th century ice house and designed landscape features, and World War II ammunition stores.

Jervaulx Abbey was originally founded at Fors, 20km further west in Wensleydale by a community of Savigniac monks who by 1149 had become members of the Cistercian order. The site at Fors proved unsuitable and was abandoned in 1154 and two years later the community was re-established at the current site on land donated by Conan son of Alan Earl of Brittany and Richmond. Few of the abbey's own records survive but it is known that, by the second half of the 13th century, the abbey had substantial economic interests in the region. These included at least 16 cattle ranches in Wensleydale and the Forest of Richmond, large flocks of sheep (possibly as many as 10,000 head) and the rights to free warrening of rabbits in East Witton. The abbey also had interests in the mining and smelting of iron ore and in the production of salt. In 1307 it was granted the right to hold a weekly market and a twice-yearly fair at East Witton and in 1535 had a fulling mill at East Witton. In 1380 there were 16 monks at Jervaulx and at the Dissolution in 1537 there were 25 or 26. Jervaulx Abbey was suppressed in 1537 after the then Abbot, Sedbergh, was arrested for involvement in the ill-fated Pilgrimage of Grace, which had attempted to reverse the religious and political changes of the Reformation.

Following the Dissolution, the buildings were stripped of anything of value and the church blown up. The estate was then leased to Lancelot Harrison for 21 years and in 1544 was granted to the Earl of Lennox who held it until the death of his wife in 1577. Recent survey work has indicated that during the tenure of the Lennoxes a grand house and ornate gardens were built partly into some of the standing abbey ruins. However, this house had a short life span and was no longer in existence by 1627. After 1577 the crown held the estate until 1603. The estate was then granted to the Bruce family, who later received the title of the Earldom of Ailesbury. Jervaulx seems to have been one of the Bruce family's lesser estates and a map dated 1627 shows that it was subdivided into a number of separate parcels of land and rented out. This seems to have remained the case until the early 19th century. In 1804 the old hall at Jervaulx was converted to be an occasional residence and administrative centre for the Ailesbury estates in west Yorkshire. In the years between 1805 and 1807 the abbey ruins were systematically cleared and exposed and, following the fashion of the time, became

the central feature of a designed landscape laid out over the former abbey precinct and beyond.

The earliest remains currently identified in the monument are of pre-monastic agricultural activities. Earthwork remains of field boundaries and cultivation terraces have been identified in the western area of the monument and on Mark Hill. Two tracks pre-dating the abbey survive as terraces extending east to west across the south eastern part of the monument adjacent to the monastic precinct boundary. These are thought to be the remains of the early route from Masham to Middleham. Remains of a building, possibly a dwelling, have been identified 30m south-east of the monastic reservoir.

The monument is dominated by the standing ruins of the main abbey buildings some of which survive to their original height. The ruins are Listed Grade I. The remains demonstrate that Jervaulx followed the usual layout of a monastic house, with an east to west orientated church forming the north range of a four-sided complex known as the cloister, the remaining sides containing accommodation for lay and monastic brethren, and domestic and administrative functions. The east cloister range contained the chapter house and parlour, the south range contained kitchens and refectory, and the west range contained the cellars and stores. On the first floor of the east and west sides of the cloister, and projecting to the south, were the dormitories for the monks and lay brothers respectively. Surrounding the cloister, in an area known as the inner court, was a further range of buildings essential for the economic and social functions of the abbey. These included an infirmary, abbots' lodgings and a meat kitchen, all located to the south-east of the cloister and guest lodgings and lay brothers infirmary which lay to the west of the cloister.

The abbey church was comprehensively destroyed in 1537 and only the south western corner of the nave survives to any height. The remainder of the plan of the church is however clearly demonstrated by low walls made up of reused decorated stonework which was piled up in the early 19th century as part of the clearance work. The south-western wall of the monks dormitory, the meat kitchen and parts of the infirmary complex still stand to their full medieval height. In these structures, the scale and detail of the windows and internal features such as fireplaces and roof and floor supports can be clearly seen. The remainder of the abbey ruins generally only survive to ground floor level. Throughout the ruins there is evidence of alterations and rebuilding that took place over the four centuries that the abbey was in use and of the modifications that took place as part of the 19th century landscaping.

Beyond the inner court lay the outer precinct which contained structures necessary for the wider economic functions of the abbey such as gardens, a bake house, workshops, smithies, stables and stores. The precinct was defined by a boundary which is identifiable along almost its entire course save the north-western corner. On the western and southern sides its line is followed by the modern A168 road, it then crosses the field south of Abbey Hill House and then extends northwards across Jervaulx Park to rise up over the northern side of Mark Hill. From here the precinct boundary extends west along the top of the slope which extends down to the river flood plain to the north. In the north-western corner of the precinct, the line of the boundary has been disturbed by the construction of Jervaulx Hall and its survival below ground is currently unknown. For most of its length the precinct boundary survives as an earthen bank which in places measures up to 10m in width and 1m in height. Along the northern stretch on Mark Hill and in the south eastern corner, south of Abbey Hill House, there are stone footings for a precinct

wall visible in the ground surface. Although the original form of the boundary is currently unknown, in common with similar monastic houses elsewhere it is likely to have been a substantial wall or fence. This served to secure the monastic precinct but also clearly demonstrated the size and prestige of the abbey. Remains of at least nine monastic buildings have been identified within the outer precinct. These include three building platforms located on terraces cut into the rising ground in the western half of the precinct to the south of the building known as The Old Gatehouse but shown as 'The Monastery' on the Ordnance Survey Map. There are medieval ruins incorporated into The Old Gatehouse, but it is thought that the bulk of the medieval stonework was added to an existing ruin in the 19th century to create a landscape feature. The building is unlikely to have been a medieval gatehouse as it is in an inappropriate position although its original nature and function is currently unclear. The Old Gatehouse is a Listed Building Grade I and parts of it are in domestic occupation.

Although no evidence of gatehouses has yet been identified, the monastic road pattern suggests that the main entrance and gatehouse were located near the current entrance to Jervaulx Hall. There were likely to have been other entrances in the south east corner of the precinct south of Abbey Hill House and in the north east corner near the ice house. In common with other monastic houses, the abbey was served by a complex water management system. The water supply to the abbey complex was provided from a reservoir located in the south-west corner of the precinct. This was created by building a dam across a small natural valley. The dam still survives as a substantial earthwork 80m long, 18m wide and 3m in height. Water was fed to the inner court where it ran through a stone-lined conduit which passed the kitchens and ran below both the lay brothers and monks dormitories where it flushed the latrines. Water from the reservoir also supplied a set of at least three fishponds which were located to the south of the main claustral ranges.

To the north of the abbey there is the site of a mill which was fed by water from the reservoir and also from channels from the River Ure to the north-west, although no trace of these now survive. At the mill site there is a ruined structure of medieval appearance, however, it is thought that the bulk of the standing fabric was added to the existing foundations of a medieval water mill as part of the 19th century landscaping. The outflow from the mill ran through a leat extending eastward along the southern edge of the flood plain. This joined with other channels in the area north of the ice house to carry water away from the abbey.

The post-Dissolution grand house was built in the south-eastern corner of the inner court and seems to have incorporated some of the standing abbey buildings. The southern part of the house survives as a series of earthworks defining a rectangle measuring 25m by 30m whilst remains of the northern part have been obscured by later landscaping. Detailed survey has identified that the house lay at the centre of a series of at least 14 formal garden compartments, some containing remains of internal features, and separated by terracing and paths. The monastic fishponds were modified and turned into a series of water features still supplied from the reservoir to the south-west. Earthwork remains of structures associated with the 16th century gardens, such as pavilions and gazebos positioned to afford views over the gardens, have also been identified. At the eastern side of the gardens, to the east of the monastic precinct boundary, there was an embankment to divide the formal area from the, presumably, wilder parkland to the east. Remains of further buildings of this period, tentatively interpreted as a coach house, survive as earthworks in the field to the south of Mark Hill. The house was demolished by 1627 and a map of that date shows that the area of the precinct outside the core

abbey buildings was divided into fields and enclosures, remains of which survive throughout the monument as low earthworks.

The 19th century landscaping started in the early part of the century with the clearing of the abbey ruins. Over the following years further works were undertaken including building a stock-proof ditch, known as a ha ha, along the southern and western sides of the abbey ruins, and the construction of various grottoes, a gazebo on Mark Hill and a decorative arched gateway leading from the Hall into the abbey ruins. Formal gardens were laid out to the north of the abbey ruins, a wide expanse of open sward replaced the former agricultural units, and The Old Gatehouse and the mill were romanticised by the addition of decorated medieval stonework. All of these improvements were in keeping with the fashion of the time. The mid-19th century also saw the building of the ice house although this was primarily as a functional element of the estate. The ice house is a brick-lined beehive shaped structure partly covered by an earthen mound and is located just within the eastern boundary of the monument. It is Listed Grade II.

In the 1940s a series of military stores for munitions or fuel were built along side the track crossing the parkland, hidden from enemy view by tree cover. These were small ditched enclosures supported by sandbags, which now only survive as earthworks. A brick building associated with these remains stands on the fence line south of Abbey Hill and footings for other structures have also been identified”.

- 5.2 Much of the above information comes from the detailed survey report of the complex produced by English Heritage (1999).
- 5.3 The Burdon family have instigated major repairs to the site and monument over many years, with some phases grant aided by English Heritage. This current scheme represents the latest phase of works designed to improve access and enhance visitor experience.

6 NATURE AND IMPACTS OF THE DEVELOPMENT

- 6.1 Details of the proposed development are itemised in a Design and Access Statement produced in October 2019 by the project architect (Pace 2019).
- 6.2 In summary, the proposed development involves the demolition of an existing 19th century wooden shelter or gazebo located in the south-west corner of the abbey complex (see figure 1). The existing structure is basically square in plan, measuring c.3.48m square, but with the north-west and south-west corners angled off at 45 degrees to create an irregular hexagon (see figure 2). This building will be replaced by a slightly larger timber framed open-sided structure, measuring 6.30m north-south by 4.80m east-west, in virtually the same position. The new structure will be supported on eight staddle stones, set onto the current ground surface on square concrete footings c.0.40m square (see figure 3). The floor of the new structure will be of York stone flags set on sand and compacted hardcore, which will require the excavation of a depth of 0.15m into the existing ground surface. In addition, a short length of excavated drain running off the north-east corner of the new structure will take rainwater to a new round soakaway measuring 2.00m in diameter and 0.50m deep.
- 6.3 The existing structure is shown on the 1856 Ordnance Survey map, marked as a ‘Grotto”, and is identified as a 19th century garden structure (GS21) in the English Heritage survey report of the abbey (English Heritage 1999, 32). It lies in the south-east corner of a rectangular depression (GS28) defined by a very slight C-

shaped scarp no more than 0.1m high. The form of the earthwork suggests that it is a small sunken garden compartment or parterre surrounded by terraces or paths and, although not depicted on any Ordnance Survey map, its location adjacent to the gazebo strongly suggests that it is part of the 19th century ornamental setting of the abbey ruins (English Heritage 1999, 33).

- 6.4 The other element of the scheme involves the excavation of a ditch to continue the eastward line of the existing early 19th century (1809) ha-ha (which forms the southern boundary of the abbey complex), to the east of an existing gateway and in front of an existing part walled and part railed boundary (see figure 4). The new ditch will be excavated for a distance of 18.0m, with a profile to match the existing, i.e. a vertical wall on the north side and a grassy slope into the parkland to the south. The vertical wall face will be built of a combination of new and salvaged stone and will be topped with park fencing to match that existing to the west. The 1856 Ordnance Survey map shows that the ha-ha originally continued along this section, so it has presumably been infilled, suggesting that the excavation will be through previously disturbed ground.

7 FIELDWORK METHODOLOGY

- 7.1 The aim of the archaeological watching brief is monitor the groundworks associated with the proposed development, to preserve by record any exposed archaeological remains. More specific objectives are to:
- (1) identify and record all archaeological features and artefacts exposed during construction work;
 - (2) determine the form and function of any archaeological features encountered;
 - (3) recover dating evidence from the identified archaeological features;
 - (4) establish the sequence of the archaeological remains present on the site;
 - (5) if appropriate, retrieve environmental evidence relating to the environment and economy of the site;
 - (6) interpret the archaeological features and finds within the context of the known archaeology of the site and the surrounding area.
- 7.2 All archaeological work will be undertaken in accordance with Chartered Institute for Archaeologists guidelines (CIfA 2014), and following current Historic England professional guidelines.
- 7.3 Reasonable prior notice (minimum two weeks) of the commencement of development will be given to EDAS, who will then liaise with Historic England and the Heritage Officer of North Yorkshire County Council, so that they may attend or monitor the site work if required.
- 7.4 EDAS will view and monitor the groundworks as they are being excavated. Where mechanical equipment is to be used for the excavations (e.g. JCB or mini-digger), the main contractor will use a toothless bucket, to facilitate the archaeological recording. Spoil will also be investigated where practicable in order to recover artefacts.
- 7.5 If it becomes clear during the monitoring work that little of archaeological interest is likely to survive in the site, the recording work may be halted, in consultation with Historic England and the Heritage Officer of North Yorkshire County Council.
- 7.6 However, if structures, features, finds or deposits of archaeological interest are exposed or disturbed, EDAS will be allowed adequate time to clean, assess, and hand excavate, sample and record the archaeological remains, as necessary and

appropriate according to the nature of the remains, to allow the archaeological material to be sufficiently characterised. Mechanical excavators will not be operated in the immediate vicinity of any archaeological remains until those remains have been recorded, and EDAS has given explicit permission for operations to recommence at that location.

- 7.7 The archaeological recording work should not cause undue delay to the overall programme of site works, and there needs to be efficient liaison and co-operation with the main contractor. However, the main contractor and client will ensure that EDAS have sufficient time and resources to ensure compliance with all elements of this WSI. It is likely that the archaeological recording will be accomplished through a number of separate site visits, the number and duration of which will be determined by the speed of the development and/or excavations. Access to the site will therefore be afforded to EDAS at all reasonable times.
- 7.8 A full written, drawn, electronic and photographic record (as appropriate) will be made of all archaeological material revealed during the course of the fieldwork. All areas of ground disturbance, and any features of archaeological interest within them, will be accurately located on a general site plan and recorded by photographs (colour digital shots in jpeg format), scale drawings (plans and sections at 1:50, 1:20 and 1:10 scales as appropriate), and written descriptions, using appropriate proforma record sheets and standard archaeological recording systems.
- 7.9 If, in the professional judgement of the archaeologist on site, unexpectedly significant or complex discoveries are made that might warrant more recording than is covered by this WSI, immediate contact would be made with the client, Historic England the Heritage Officer of North Yorkshire County Council. This would allow discussion and agreement to be made regarding the scope of any proposed additional recording work. These amendments might, for example, allow for the detailed excavation of specific structures, and sufficient time and resources would have to be made available to ensure that proper recording is made prior to any removal. The possibility of temporarily halting work for unexpected discoveries will be discussed with the client in advance of the development.
- 7.10 A finds recovery and conservation strategy will be agreed with the client prior to the start of site work, to include contingency arrangements for artefacts of special significance. Local and regional type series (e.g. for pottery) will be used by pottery specialists where appropriate, and the relevant fabric codes cited.
- 7.11 If considered appropriate by the archaeologist on site, securely stratified archaeological deposits and contexts would, if agreed by all parties, be sampled for their bio-archaeological or palaeo-environmental potential. Provision would have to be made for the assessment and analysis of the samples as necessary, including provision for scientific dating. A strategy for the recovery and sampling of environmental remains from the site would include a reasoned justification for the selection of deposits for sampling, and would be developed in conjunction with an environmental consultancy and the Historic England Science Advisor, following regional and national guidelines.
- 7.12 If human remains are encountered during the course of the groundworks, and if they are required to be removed to facilitate the development, they will be removed under the conditions of a Ministry of Justice burial licence, to ensure that they are treated with due dignity. The preferred option would be for them to be adequately recorded before lifting, and then carefully removed for scientific study, and long-

term storage with an appropriate museum; however, the burial licence may specify reburial or cremation as a requirement.

- 7.13 The terms of the Treasure Act (1996) will be followed with regard to any finds which might fall within its purview. Any such finds will be removed to a safe place, and reported to the local coroner as required by the procedures laid down in the Code of Practice. Where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.
- 7.14 EDAS also subscribe to English Heritage's OASIS (Online Access to Index of Archaeological Investigations) project, and all EDAS projects are fully OASIS compliant. Prior to the start of any fieldwork, an OASIS online record will be initiated and key fields completed on Details, Location and Creators forms. All parts of the OASIS online form will subsequently be completed; this will include an uploaded pdf version of the entire report.
- 7.15 The programme of site recording work outlined above may be modified in accordance with EDAS's professional judgement, insofar as the overall provisions and objectives of this WSI would not be changed. Any variations in the fieldwork methodology would be discussed and agreed with all parties prior to their implementation.

8 REPORTING AND ARCHIVING

- 8.1 On completion of the archaeological fieldwork, any samples taken will be processed and any finds will be cleaned, identified, assessed, spot dated, marked (if appropriate) and properly packaged and stored in accordance with the requirements of national guidelines. The level of post-excavation analysis would be appropriate to the quality and quantity of the finds recovered, and specialists would be consulted as necessary.
- 8.2 A fully indexed and ordered field archive will be prepared, following the guidelines produced by Historic England. The archive will comprise primary written documents, plans, sections and photographs, and an index to the archive will also be prepared. Subject to the agreement of the landowner, the non-digital site archive will be deposited with the local registered museum (Richmondshire Museum). The museum will be contacted at the beginning of the project, and a site code obtained. EDAS will also adhere to any specific archive requirements imposed by the museum, including charges for the storage and long-term curation of the site archive.
- 8.3 In accordance with condition (x) of the Scheduled Monument Consent, the digital elements of the site archive (likely to be just photographs in unprocessed RAW format and converted to TIFFs) will be collated and deposited with the Archaeology Data Service in York (via ADS easy). EDAS will also adhere to any specific requirements relating to file formats, metadata and associated catalogues which ADS might impose, including charges for the storage and long-term curation of the site archive.
- 8.4 A copy of the Archive Index and the name of the recipient museum will also be sent to the North Yorkshire Historic Environment Record.
- 8.5 With the exception of human remains, and finds of treasure (as defined under the 1996 Treasure Act - see above), all finds are the property of the landowner.

Subject to the agreement of the client (landowner), the finds will be deposited with the site archive. Any recording, marking and storage materials will be of archival quality, and recording systems will be compatible with the recipient museum.

8.6 EDAS will produce a report detailing the results of the watching brief within six weeks of the completion of the archaeological site work. This report will include the following (as appropriate):

- A non-technical summary;
- Site code/project number;
- Planning reference number;
- Dates of fieldwork visits;
- National grid reference;
- Fieldwork methodology;
- A location plan(s) at appropriate scales;
- A plan showing the areas subject to archaeological monitoring;
- Sections and plan drawings with ground level, Ordnance Datum and vertical and horizontal scales, at appropriate scales (e.g. 1:500, 1:50, 1:20 and/or 1:10) and tied into published Ordnance Survey boundaries;
- General site photographs, as well as photographs of any significant archaeological deposits or artefacts that are encountered;
- A written description and analysis of the methods and results of the watching brief, including the sequence and depth of exposed subsoil deposits, in the context of the known archaeology of the area;
- Specialist artefact and environmental reports, as necessary;
- The destination of the site archive and timetable for deposition;
- A copy of the OASIS recording form, including unique OASIS reference number.

Appropriate drawn records would be produced as reduced A4 or A3 size paper copies within the body of the report; full scale drawings would be included within the site archive.

8.7 Electronic copies (in pdf format) of the final report will be supplied to the client, the North Yorkshire Historic Environment Record, Historic England and the Archaeology Data Service. A copy of the final report will also be included within the site archive.

8.8 If a significant discovery is made, consideration will be given to the preparation of a short note for inclusion in a local archaeological journal.

8.9 Copyright of the completed archaeological report will be assigned to the North Yorkshire Historic Environment Record, although EDAS, as the originating body, will retain the right to be identified as the originators of the work.

9 MONITORING

9.1 Reasonable prior notice (minimum two weeks) of the commencement of development will be given to EDAS, who will then inform the relevant authorities so they may attend or monitor the site work if required.

10 HEALTH AND SAFETY, AND INSURANCE

10.1 All recording work on site will be carried out with due regard for all Health and Safety considerations, and Health and Safety will take priority over archaeological matters. As some of the recording work will be carried out at the same time as the

main contractor's work, EDAS and their sub-contractors will also have regard for any constraints or restrictions imposed by the main contractor.

- 10.2 EDAS will comply with the Health and Safety at Work Act of 1974 while undertaking the archaeological recording work, and Health and Safety issues will take priority over archaeological matters. The site is privately owned and EDAS will indemnify the landowners in respect of their legal liability for physical injury to persons or damage to property arising on site in connection with the survey, to the extent of EDAS's Public Liability Insurance Cover (£5,000,000).

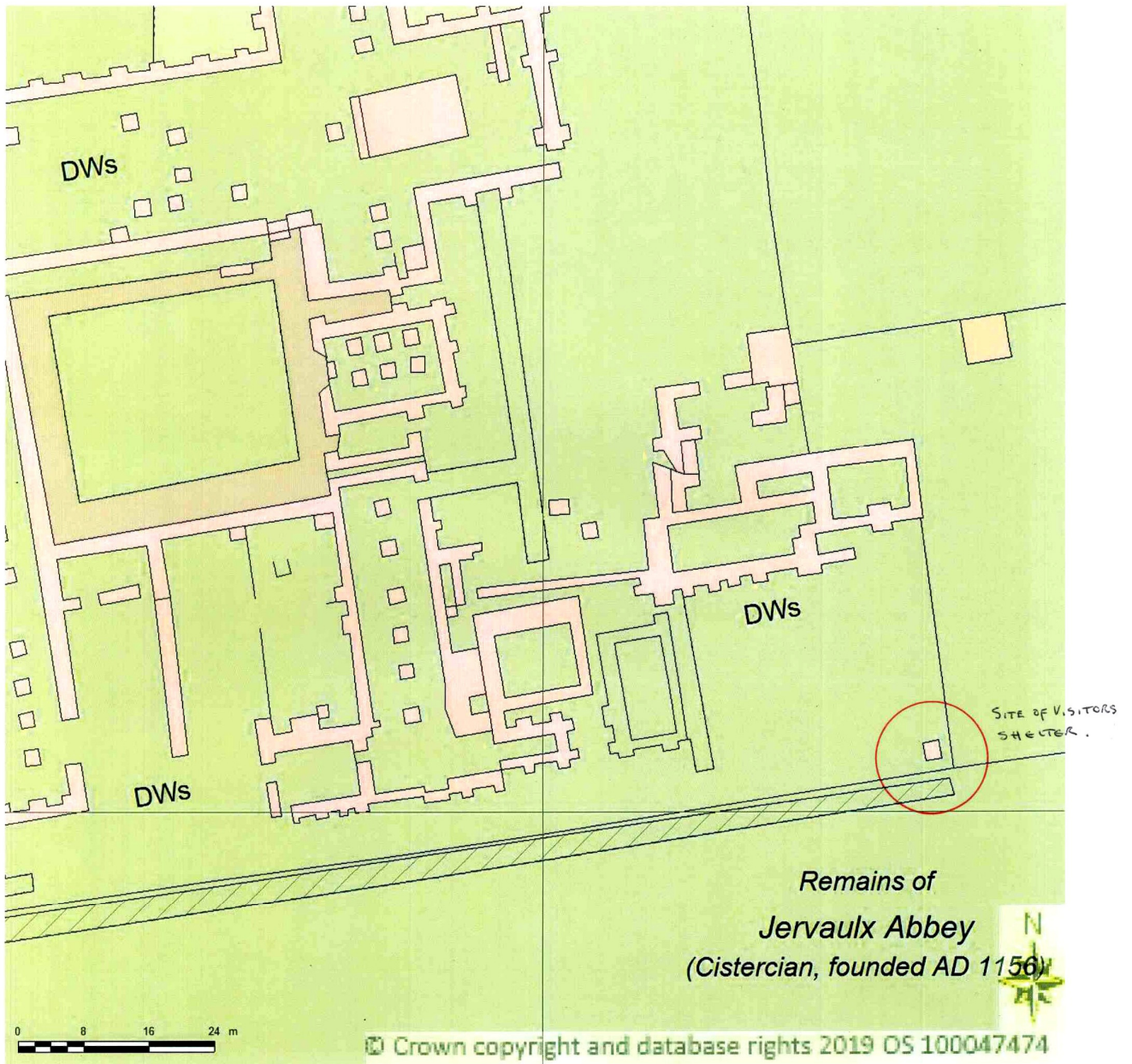
11 REFERENCES

CIFA (Chartered Institute for Archaeologists) 2014 *Standard and Guidance: Archaeological Watching Brief*

English Heritage 1999 *Jervaulx Abbey, North Yorkshire: Survey Report* (English Heritage Archaeological Investigation Report Series AI/4/1999)

Pace, P G 2019 *Jervaulx Abbey: Design and Access Statement* (unpublished report for Ian Burdon)

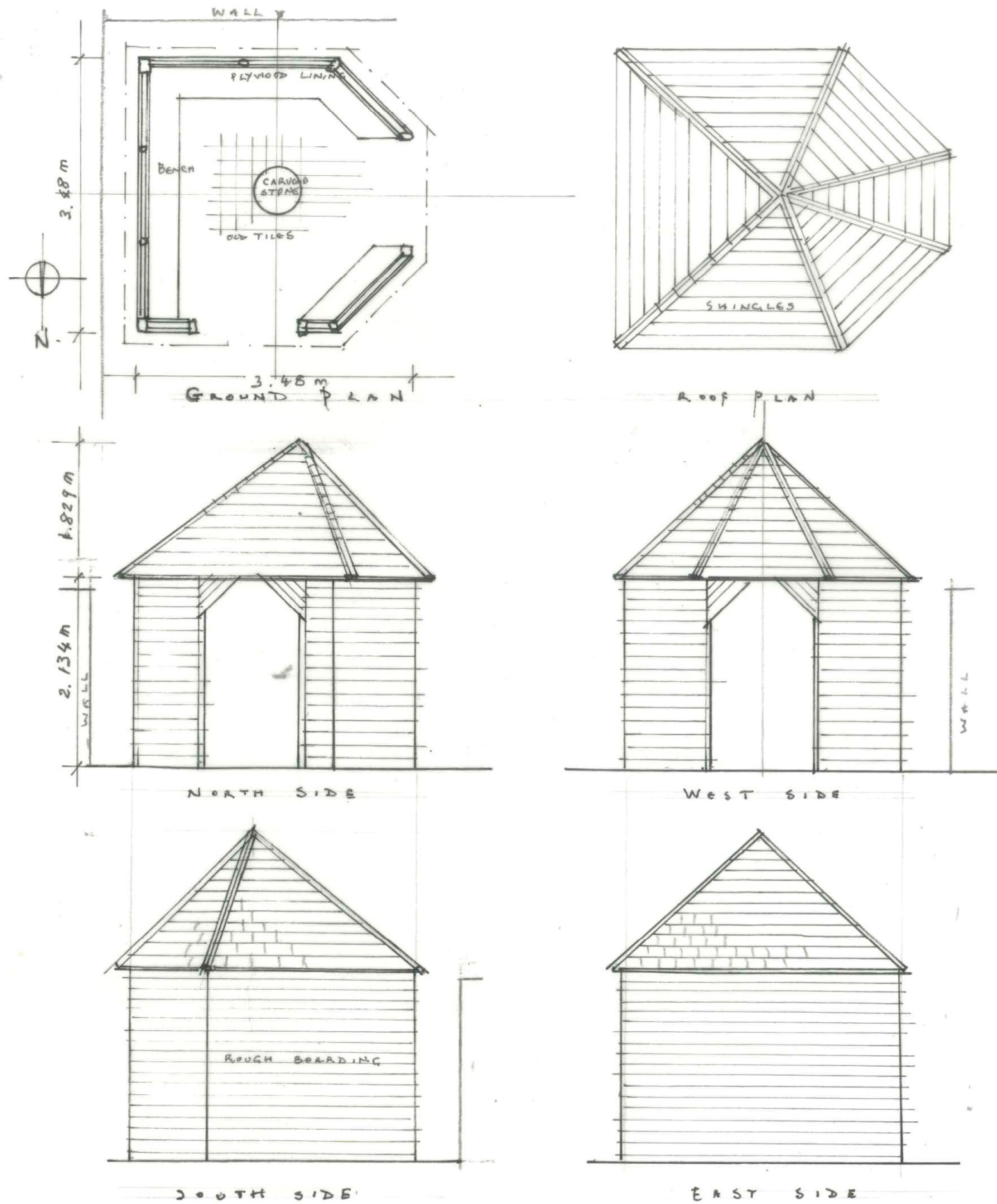
E Dennison, EDAS
31st January 2020



JERVAULX ABBEY	
Peter Pace Architect The Old Rectory Scrayingham Tel. 01759 371 771 email peter@peterpace.co.uk	
Site Plan	
Scale 1: 500	
Oct. 2019	Dwg. 2

FIGURE 1: SITE LOCATION
 (plan provided by Peter Pace Architect
 (reproduced with permission))

FIGURE 2: EXISTING VISITOR SHELTER
 (drawing provided by Peter Pace Architect
 (reproduced with permission))



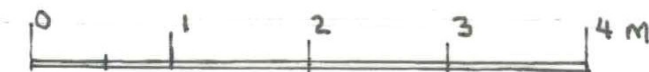
JERVAULX ABBEY

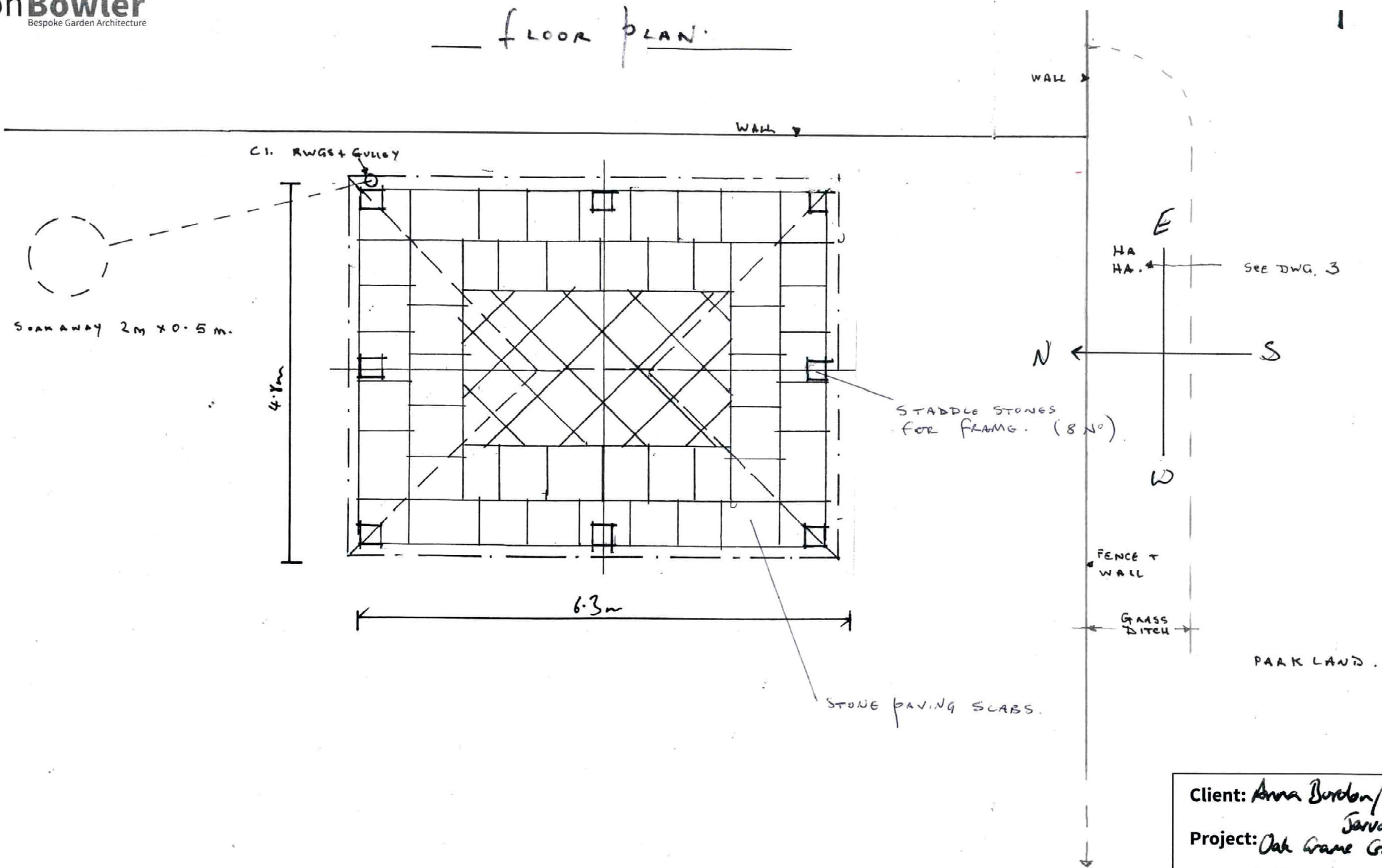
Peter Pace Architect
 The Old Rectory Scrayingham
 Tel. 01759 371 771
 email peter@peterpace.co.uk

Visitor Shelter

As Existing Scale 1 : 50

Oct 2019	Dwg. 3
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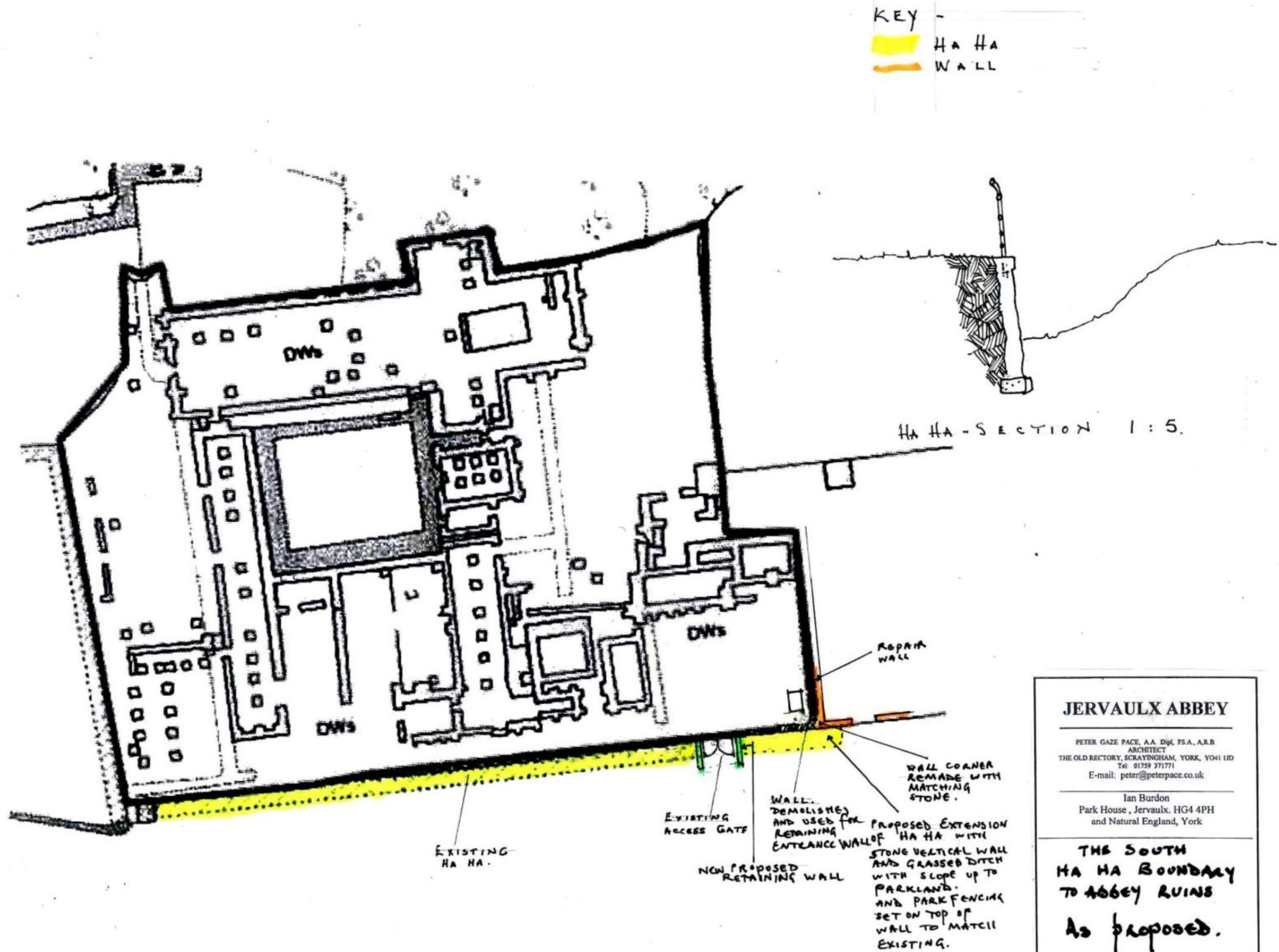




Client: Anna Burdon/
Sarvaux Abbey
Project: Oak Grove Gates
Scale: 1:50 @ A3
Date: 16th June 2018
REVISED OCT 2019
Drawn by: S.B BY PGP.
Revision: # 1 / 2.



FIGURE 4: EXTENSION TO HA-HA
 (drawing provided by Peter Pace Architect
 (reproduced with permission))



JERVAULX ABBEY

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 and Natural England, York

**THE SOUTH
 HA HA BOUNDARY
 TO ABBEY RUINS
 As proposed.**

AUG. 19 dwg. 36.