Appendix 5: 19/2624M

Contents

Planning and Heritage Statement

S73 application to vary conditions 3, 5, 6, 11 and 41 of planning permission 08/0791P for *Demolition of all buildings except the mill. Conversion of mill to 24 no. apartments and erection of 24 no. apartments and 18 no. townhouses with associated landscaping and car parking* – Ingersley Vale Works, Ingersley Vale, Bollington, Macclesfield, Cheshire, SK10 5BP

for Brinkley Bollington Limited

Emery Planning project number: 18-395

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Project	: 18-395
Site address	: Ingersley Vale Works, Ingersley Vale, Bollington, Macclesfield, Cheshire, SK10 5BP
Client	: Brinkley Bollington Limited
Date	: 23 May 2019
Author	: Jill Naylor
Approved by	: Caroline Payne

Contents:

1. Introduction

1.1 This application is submitted on behalf of Brinkley Bollington Ltd, under s73 of the Town and Country Planning Act 1990 (as amended), for the variation of conditions attached to planning permission 08/0791P. The effect of the variations sought is to permit the demolition and rebuilding of the spinning block of Ingersley Mill, to the same design as the apartment building approved by planning permission 08/0791P. The approved development includes conversion of the building as opposed to its rebuilding.

1.2 The current application provides for retention of the wheelhouse which adjoins the former spinning mill.

1.3 Planning permission 08/0791P was obtained by a previous owner of the site, and the approved development had been commenced by demolition of various buildings. Brinkley Bollington Ltd acquired the site at the end of 2018, after it had lain vacant for many years. The permission is for:

> *Demolition of all buildings except the mill. Conversion of mill to 24 no. apartments and erection of 24 no. apartments and 18 no. townhouses with associated landscaping and car parking at Ingersley Vale Works, Ingersley Vale, Bollington, Macclesfield Cheshire SK10 5BP.*

1.4 The permission was granted on 30 December 2009, and is subject to a s106 obligation. A deed of variation would be required, should the council resolve to approve the current application.

1.5 On 08 December 2010 a minor amendment was granted (permission ref 10/3279M) to the above development by way of variation of a number of pre-commencement conditions. The effect of this was to permit the demolition of all buildings except the mill prior to submission of various other details for approval by the council. As amended the conditions now require various details to be submitted "*prior to the commencement of development, excluding demolition……*"

1.6 The approved development has been commenced by demolition of all buildings on the site with the exception of the mill.

1.7 The mill building referred to in the planning permission is the former Ingersley Mill (originally Clough Mill) which dates from the nineteenth century and was originally a cotton mill. The

remains of Ingersley Mill stand in the centre of the former Ingersley Vale Works site. The mill comprises two distinct elements: the main 4 storey spinning mill building, incorporating various later extensions and a 5 storey stair tower; and an attached former wheelhouse which originally contained a waterwheel to power the mill.

1.8 Ingersley Mill is not statutorily listed and does not appear in the Cheshire East Local List of Historic Buildings. However, the building has some local historic interest as the earliest surviving cotton mill in Bollington, and the wheelhouse contained the second largest water wheel in 19th century Britain (University of Manchester Archaeological Unit 2004)

1.9 Overall the structure, has massively deteriorated (partly due to fire, vandalism and theft) since it became disused around 20 years ago, but the wheelhouse element is in a better condition than the main mill building. The main building is only a partial shell: it has no roof or internal floors; the majority of the east gable has already collapsed. On the other hand the wheelhouse element has four intact walls and a partial roof structure. The structural report accompanying this application provides a detailed assessment of the structure of the building and its condition. The report concludes that the majority of the building is in a very poor state of repair and close to collapse in several areas.

1.10 The building poses a significant health and safety risk in its current condition. The effect of the current application is to seek permission to dismantle the majority of the existing building as soon as possible, whilst retaining the wheelhouse; and to construct a new apartment building the same design as the building conversion already approved.

1.11 The condition of what remains of the mill building has deteriorated significantly since the planning application was made in 2008, and the structure is now in real danger of collapse; posing a serious health and safety risk with danger of death to any potential trespasser or worker on the site. The structural report concludes that the condition of the main shell of the mill has deteriorated to such an extent that the building should be urgently dismantled, to avoid further damage and uncontrolled collapses which could make re-use of the existing materials impossible. It is imperative that this part of the building is dismantled with care to enable salvage of as many of the existing materials and artefacts as possible, in particular the date stone. The report comments that the wheelhouse can be confidently retained subject to structural support of the east elevation.

2. The application

2.1 As stated above this s73 application is submitted to vary planning conditions in order to seek amendments to the scheme approved by planning permission 08/0791P. Specifically the amended proposals comprise the demolition of the former spinning block and construction of a new apartment building providing 24 apartments, as opposed to the approved conversion of the existing building, also to provide 24 apartments. The application proposes no change to any other element of the approved development. The wheelhouse element would be retained and converted.

2.2 The amended plans show that the building would be reconstructed to the same design and external appearance as the previously approved development. We also confirm that the existing structure would be dismantled with care and in so far as possible, materials salvaged for re-use in the proposed new building.

2.3 The application comprises:

- Plans prepared by MSA, as follows:
  - 1693 PL 202A – Front and Rear Elevation
  - 1693 PL 203A – Side Elevation
  - 1693 PL 201 – Demolition Plan
- A structural survey report by Bell Munro Consulting Ltd, dated May 2019
- An archaeological report by Oxford Archaeology North, (to follow)
- A letter by BSG Ecology confirming progress with bat emergence surveys that are ongoing at the site, dated 15 May 2019 (further reports to follow).

2.4 The above should also be read in the context of other submissions made at the time of the previous application (in particular the archaeological reports by the University of Manchester and Oxford Archaeology North) which are attached as Appendices to this statement.

2.5 The application proposes to vary/remove conditions as listed below. For ease of reference the proposed changes are identified by the striking out of existing wording and the use of bold text for the proposed new wording:

- Condition 3: The materials to be used in the construction of all external surfaces of the **apartment building to replace the former Ingersley** Mill ~~conversion~~ hereby permitted shall match those of the existing building, unless otherwise first approved in writing by the Local Planning Authority.

- Condition 5: All ~~brickwork~~ **stonework** to the external elevations of the ~~proposed Mill conversion~~ **apartment building to replace the former Ingersley Mill** shall be constructed with bonding to match the existing building.

- Condition 6: All mortar used in construction of the **external elevations of the** ~~'Mill~~ **'wheelhouse** conversion '~~ elevations of the proposed development~~ shall be of a mix cement: lime: sand, to a ratio of 1:1:6.

- Condition 11: ~~Prior to commencement of development, excluding demolition, a scheme of sound insulation shall be submitted to and approved by the Local Planning Authority. The scheme shall include details of the building including windows, openings and ventilation. The approved details shall be implemented in full before the building is first occupied and shall be retained at all times thereafter.~~ (Remove condition)

- Condition 41: The development hereby approved shall be carried out in total accordance with the approved plans numbered L033_dwg001, 002, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 022, 023, 024, 025, 026, 027, 028, 029, 030, ~~031, 032,~~ 033, 034, 035, 036, 037, 038, 039, 040, 041, 043, 044, 045 dated 03.04.2008 drawings M1577.03, 04, 050, 06, 07, 08, and 09received by the Local Planning Authority on 4 April 2008 and drawing numbers L033_dwg - 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, and the 1:1250 location plan received by the Local Planning Authority on1 May 2008 **and 1693 PL 202A** , **1693 PL 203A**, **and 1693 PL 201 received on 24 May 2019**.

2.6 The reason for, and the effect of, the variations proposed above is to permit the dismantling of what remains of the existing mill building, to salvage the materials and artefacts, and to rebuild a new building containing 24 apartments, having exactly the same appearance as the building approved under planning permission 08/0791P.

3. Context

Site location and description

3.1 The application site is located within the settlement boundary of Bollington, and within the Bollington Conservation Area, although the site is within the parish of Rainow.

3.2 The site is to the southeast of Bollington and is on the east side of Ingersley Vale, an unadopted highway which gives access to the site from Lord Street/High Street. Ingersley Vale is a no-through road which is also a public footpath.

3.3 The site is on the edge of the town and adjoins countryside that is designated Green Belt to the south, west and east.

3.4 The site has been cleared of all buildings with the exception of the remnants of the nineteenth century mill.

Relevant planning history

3.5 As referred to in the introduction to this statement, there is an extant planning permission on the site (08/0791P) and Conservation Area Consent (08/0879P). The decision notices are dated 30 December 2009 and 04 March 2010 respectively.

3.6 The above planning permission was subject to variation by planning permission 10/3279M (dated 07 September 2010) which allowed rewording of 'pre-commencement' conditions to enable demolition works to be undertaken before submission of various details relating to the construction stage of the development.

3.7 Also on 07 September 2010 Cheshire East Council issued a letter confirming that a submitted programme of archaeological works adequately met the requirements of (pre-commencement) condition 30 of permission 08/0791P .

3.8 Two subsequent applications which were submitted in 2012 have not received decisions from the council. The documentation accompanying those applications confirmed that the approved development had been commenced by the demolition of certain buildings.

3.9 The first of the above applications, 12/0515M, sought to make changes to the approved plans and received a committee resolution to approve on 22 March 2012. However, we understand that no deed of variation to the s106 agreement was completed and therefore a decision on the application has not been issued.

3.10 The second application, 12/2113M, sought variations to the approved plans. However, the LPA declined to validate the application as a 'minor material amendment' as the effect of the proposal would be to uplift the number of units on the site by 20%. This was considered to require a full planning application. No further applications were submitted.

4. Legislative and policy context

4.1 The site is within the settlement boundary of the town of Bollington, where in principle, the redevelopment of previously developed land is supported, and the redevelopment of the site (with the exception of the mill building), has already been approved. The design and visual appearance of the development proposed in this application would not differ from the development that has already been approved, so there is no need to revisit design policies in this application.

4.2 Nevertheless the site is within the Bollington Conservation Area and therefore consideration must be given to the impact that the proposed demolition and rebuilding of the mill may have on the significance of the CA in comparison with the approved proposal for the residential conversion of the existing building.

Planning (Listed Buildings & Conservation Areas) Act 1990 (LBCAA)

4.3 When exercising any powers under the provisions of the planning Acts, section 72 of the Planning (Listed Buildings & Conservation Areas) Act 1990 requires the decision maker to pay special attention to the desirability of preserving or enhancing the character and appearance of the conservation area (CA).

Development plan context

Cheshire East Local Plan Strategy (CELPS)

4.4 Relevant policies in the Cheshire East Local Plan Strategy, 2017 are listed below:

- Policy MP1 – Presumption in Favour of Sustainable Development
- Policy PG2 – Settlement Hierarchy
- Policy PG7 – Spatial Distribution of Development
- Policy SD1 – Sustainable Development in Cheshire East
- Policy SD2 - Sustainable Development Principles
- Policy SE1 Design
- Policy SE7 – The Historic Environment

4.5 Given that there is an extant permission for the site development as a whole, this statement focuses on the variations to the proposals that are sought in this application. Therefore, of the above, policy SE7, relating to the historic environment, is the most relevant policy.

4.6 Nevertheless, we emphasise that this application is a now key element of the redevelopment scheme as a whole, which would deliver housing in the Local Service Centre of Bollington in accordance with Policy PG7 of the CELPS relating to the spatial delivery of housing in the Borough.

Macclesfield Borough Local Plan

4.7 Pending examination and adoption of the forthcoming Cheshire East Site Allocations and Development Policies Document, the saved policies of the Macclesfield Borough Local Plan 2004 remain part of the development plan for the purposes of decision making in this part of the borough.

4.8 Relevant saved policies are listed below:

- BE1 – Design Guidance
- BE2 – Historic Fabric
- BE3 – Conservation Areas
- BE4 – In Conservation Areas

4.9 Again, because of the nature of this application, this statement focuses on policies BE2 – BE4 relating to the historic environment.

National planning policy and guidance

National Planning Policy Framework (NPPF)

4.10 Chapter 16 of the National Planning Policy Framework 2019 sets out government policy on *Conserving and enhancing the historic environment*. It includes sections relating to *Proposals affecting heritage assets* and *Considering potential impacts* that are relevant to this application. The application of government policy is discussed in the *planning considerations* section of this statement. Paragraphs 195 to 199 are of particular relevance in this case.

National Planning Practice Guidance (PPG)

4.11 The PPG provides guidance on the interpretation of government planning policy, of particular relevance in this case is guidance in the section on *Conserving and enhancing the historic environment.*

4.12 Specifically it provides guidance on decision taking, including that "substantial harm" is a high test, so it may not arise in many cases. It is the degree of harm to the assets' significance that is to be assessed, not the scale of the development. (Paragraph: 017 Reference ID: 18a-017-20140306). If a building in a conservation area is important or integral to its character or appearance then demolition is more likely to amount to substantial harm to the conservation area, engaging the tests in paragraph 195 of the National Planning Policy Framework. However, the justification for its demolition will still be proportionate to the relative significance of the building and its contribution to the significance of the conservation area as a whole (Paragraph: 018 Reference ID: 18a-018-20140306).

4.13 Paragraph: 020 Reference ID: 18a-020-20140306 confirms public benefits may include heritage benefits, such as:

- sustaining or enhancing the significance of a heritage asset and the contribution of its setting
- reducing or removing risks to a heritage asset
- securing the optimum viable use of a heritage asset in support of its long term conservation

Other material considerations

Bollington Conservation Area Appraisal 2006 (CAA)

4.14 The CAA identifies a number of character areas within the Bollington and Kerridge CAs. It identifies the notable landscape setting of hills and river valleys, and the impact of 19th century industrial development which has given rise to rows of workers cottages built in local Kerridge sandstone with stone slab or Welsh slate roofs, as important characteristics. These building materials are almost universally used for residential, commercial and community buildings throughout the CA.

4.15 The application site lies within the River Dean character area, which is noted to be a rural area with few buildings. The River Dean provides an important feature given its role in the cotton spinning industry of the 19th century. The survival of mill leats, mill ponds and various bridges is noted.

4.16 Paragraph 4.9 of the CAA states:

> *Only one mill remains of any significance, Ingersley Mill, but the older parts of this building are roofless and the modern sheds that lie within the same complex appear to be no longer in use.*

4.17 The CAA document features a photograph of Ingersley Mill at Figure 7, however the mill is identified as being derelict at the time of the appraisal and it is not identified as a being a building of townscape merit, or locally listed.

5. Planning considerations

5.1 This application proposes to vary conditions on planning permission 08/0791P to allow for demolition of the remnants (with the exception of the wheelhouse) of the former spinning mill known as Ingersley Mill.

5.2 A new building would be constructed to the same architectural design as shown on the plans approved for conversion of the mill building, approved by 08/0791P. Like the approved conversion scheme, the redevelopment proposal contain 24 apartments.

5.3 The reason for seeking to demolish and redevelop what remains of the building is entirely as a result of its very poor structural condition.

5.4 The site is within the settlement boundary of Bollington, benefits from an extant planning permission for redevelopment, including conversion of Ingersley Mill to 24 apartments and is within the Bollington Conservation Area.

5.5 The primary consideration in this application is whether the proposed development would have an acceptable impact on the character and appearance of the CA and its significance as a designated heritage asset. The decision making procedure in such cases is set out in the judgment in *Dorothy Bohm & Ors v SSCLG & Ors* [2017] EWHC 3217 (Admin).

5.6 Notwithstanding that Ingersley Mill is not statutorily or locally listed, it may be considered to be a non-designated heritage asset (NDHA) in its own right. If so, the test outlined in paragraph 197 of the NPPF is relevant in addition to the tests at paragraphs 195/196 which relate to the impact on the significance of the CA.

5.7 CELPS policy SE7 – The Historic Environment, requires applications affecting designated heritage assets to provide justification for any harm to significance, including assessing the level of harm against public benefits and potentially using planning obligations to secure those benefits. The policy also sets out requirements for proposals affecting NDHAs. This identifies a presumption that NDHAs would be retained and re-used where practicable.

5.8 Saved policies in the MBLP also seek to protect both designated and non-designated heritage assets. Policy BE2 seeks to preserve and enhance the historic fabric of the environment (although this phrase is not defined) and states that development that would adversely affect

historic fabric will not normally be permitted. Policies BE3 and BE4 require new development within a CA to preserve or enhance its character or appearance; and consent will not be granted for the demolition of buildings that make a positive contribution to that character or appearance.

5.9 In this case permission is sought to dismantle a dilapidated and unsafe partial shell of a building.

Structural condition of the building

5.10 Planning permission was granted for redevelopment of the former Ingersley Vale Works site (including conversion of Ingersley Mill) in 2009, following a long application process. At that time the premises had already been vacant for approximately 10 years, and had been subject to vandalism, theft and fire.

5.11 Following the grant of planning permission, although site clearance work (building demolition) was undertaken to commence the development, for various reasons the owners of the time did not proceed with the construction work and the site subsequently was acquired by the Homes and Communities Agency (HCA). The site has remained dormant for almost a decade. The applicant purchased the site from Homes England (formerly the HCA) in late 2018, and amongst other things, has sought professional advice from a structural engineer regarding the perilous condition of the remaining parts of the mill building.

5.12 A structural report is included with this application.

5.13 The report concludes that the majority of the former spinning mill has deteriorated to such an extent that parts are in danger of collapse. The east gable, interior floors and entire roof structure have already collapsed. Substantial steel beams that were installed to provide support to the front and rear (north and south) walls of the building have buckled due to significant movement of the external walls. The structure is a health and safety risk.

5.14 The report concludes that the remaining walls should be dismantled carefully to enable salvage of undamaged materials, although it is noted that a number of stone lintels have already failed and would therefore be unsuitable for re-use. If the building is allowed to deteriorate further the report concludes that it is unlikely it could be taken down in a controlled manner, diminishing the prospect of re-using the stonework. It also concludes that the structural integrity of the walls

of the spinning block has already degraded to such an extent that the walls would be likely to collapse during attempted restoration work.

5.15 However, the report recommends retention and renovation of the wheelhouse on the west elevation, which is stated to be in a more sound condition.

Impact on the significance of the Bollington Conservation Area

5.16 The main consideration in the determination of this application is the impact that the demolition and rebuilding of the former mill building would have on the character and appearance of the Bollington Conservation Area, in the context of the test established in s72 of the LBCCA. The mill itself is neither statutorily nor locally listed, and it does not form part of a scheduled monument.

5.17 Ingersley Mill is mentioned in the Bollington Conservation Area Appraisal, and contributes to the significance of the CA as part of the industrial heritage of the town of Bollington. A study undertaken by the University of Manchester on behalf of a previous owner of the site identified that Ingersley Mill is the earliest surviving cotton mill in Bollington; and as the wheelhouse contained the second largest water wheel in 19th century Britain, is a structure of exceptional use.

5.18 Whilst the loss of the former spinning block would be regrettable, we conclude that overall the proposal would result in no harm to the significance of the CA as a designated heritage asset. This is because:-

- the significance of the CA is comprised of many different elements to which Ingersley Mill is a minor contributor; the loss of the original fabric of the spinning block to Ingersley Mill would have some impact on this; however
- planning permission has already been granted to change the use and visual appearance of the mill to 24 apartments. Even when approved in 2009, this conversion would have involved considerable additions to and renewal of the original fabric of the building, and a significant change for the better to the current appearance and use of the building;
- the approved change of use and refurbishment scheme would have resulted in an outcome of very similar external and internal appearance, and an identical use to what would result from this application;
- the building is in a dangerous condition and a report by a structural engineer submitted with this application states that it cannot safely be restored. This is the only reason why permission is being sought to replace the mill in this application;

- given that the mill cannot now be restored, dismantling and salvaging as much as possible of the original materials for use in a new building of very similar appearance to what has already been approved is the best way of preserving the original features of the building for the future;

- the only alternative is for the building to deteriorate further and ultimately collapse due to the worsening structural defects. This has health and safety risks that the applicant must address as a matter of urgency – and the only feasible way to do so is to demolish what remains of the building;

- the wheelhouse would be saved from further deterioration and restored as part of this application, as this has not yet deteriorated to the same extent as the spinning block;

- the redevelopment of the mill building would replace a derelict and dangerous structure, that currently detracts from the character and appearance of the CA with a new building in a landscaped setting, that would make a positive visual contribution.

5.19 In the judgment *Dorothy Bohm & Ors v SoSCLG* [2017] EWHC 3217(Admin) the decision making process for the demolition of a NDHA within a CA, and redevelopment of the site, was considered. It was held:

- Where designated heritage assets are in issue, here the impact on the Conservation Area, the decision maker should give considerable importance to the preservation or enhancement of the asset (para 23).

- In considering the application [the Inspector] had to consider two relevant tests. Firstly by s.72 LBCAA she had to pay special attention to the desirability of preserving or enhancing the CA. As is set out in *Forge Field* (another judgment on the issue) there is a strong statutory presumption against granting planning permission which does not so preserve or enhance (para 32).

- However, (when considering the above) it is the impact of the **entire proposal** which is in issue. In other words the decision maker must consider not merely the removal of the building which made a positive contribution, but also the impact on the CA of the building which replaced it. She must then make a judgement on the overall impact on the Conservation Area of the entire proposal before her.

5.20 The second test in *Dorothy Bohm* related to considering the impact of the proposal on the significance of a NDHA, which is considered later in this statement.

5.21 Based on the above the overall conclusion in this case, is that the proposal would enhance the character and appearance of the CA (in the context of the test at paragraph 72 of the LBCAA and the judgment in *Dorothy Bohm)* and would not harm the significance of the CA as a whole, in the context of chapter 16 of the NPPF.

5.22 Should the council conclude that the proposal would cause less than substantial harm to the significance of the CA, the harm should be weighed against the public benefits of the proposal. This includes where appropriate, securing its optimum viable use (para 196 of the NPPF).

5.23 The current applicant has recently purchased the site with the intention of completing the development approved in 2009. Nevertheless, with the passage of time prior to the applicant's purchase of the site, it is apparent that the mill structure has deteriorated beyond a point where it could be restored.

5.24 If permission is not granted for the replacement of the mill, this could place the wider development in jeopardy since a derelict and dangerous building would remain in the centre of the development site. Undoubtedly, the wheelhouse would eventually suffer the same fate. This would be to the detriment of the character and appearance of the CA.

5.25 The optimum viable use for the site is to develop it for housing purposes. However, this optimum viable use now involves redeveloping the site of the mill with a new building that replicates the character and appearance of the development already approved. This would also allow for the retention and refurbishment of the original fabric and structure of the wheelhouse; the salvage and re-use of the original materials from the mill; and secure the long term future of the overall character of this part of the CA. These are public benefits in favour of the proposal.

5.26 The delivery of a mix of new dwellings, including affordable units to contribute to the housing supply of Bollington would be an additional public benefit. The purchase of the site by a new developer is a clear signal of the intention to complete the development, which will be an improvement to the character and appearance of the area, as compared with the past two decades during which the site has lain vacant.

5.27 If the decision maker concludes that less than substantial harm would arise from the loss of the original spinning block and its replacement with a new building of very similar design, we consider that the above public benefits would outweigh that harm. Accordingly the proposal would meet the test of paragraph 196 of the NPPF, and similarly, the above provides the justification required by CELPS policy SE7. Whilst there may be some perceived conflict with MBLP policies BE2 and BE4, we would comment that these policies are not fully consistent with the NPPF. They set out a presumption against harm to historic fabric or the loss of any building that makes a positive contribution to the character (or appearance) of a CA; but do not allow

for the weighing of public benefits against the harm that would be perceived to arise. Therefore these policies should be given little weight in the decision making process.

5.28 In the very unlikely event that the LPA considers that the redevelopment of the mill building would give rise to substantial harm to the significance of the CA, the tests set out in paragraph 195 of the NPPF would apply. These are addressed as follows:-

a) The condition of the remains of the existing building prevents all reasonable uses without redevelopment of the structure as proposed in this application.

b) The site has been marketed by Homes England, and before that the Homes and Communities Agency, for more than 5 years, without success.

c) The structural report submitted with this application explains why the external walls of the majority of the building must be taken down and rebuilt. This would apply no matter who undertook works to put the building to any productive use.

d) The existing structure will ultimately (and shortly) collapse of its own accord if there is no intervention. Whilst some materials and artefacts (such as window lintels) have already suffered irreparable damage; many of the materials that remain standing can be re-used if the structure is dismantled in a controlled manner. Therefore, what is proposed in this application would provide a far greater opportunity to preserve and re-use the original fabric of the building than if no immediate action is taken. Consequently any harm that would result from this application is outweighed by the avoidance of greater harm that would arise without urgent intervention to dismantle the structure. This is a significant benefit of the application.

5.29 As stated above, the applicant has purchased the site with the intention of carrying out the development, and commencing as soon as possible.

5.30 Detailed archaeological studies of the site were undertaken by the University of Manchester Archaeological Unit in 2004 and Oxford Archaeology North (OAN) in 2011. The OAN study also included a watching brief during the demolition works of the buildings that were to be cleared, following the grant of planning permission. Additionally, OAN undertook a level II-type survey of the original spinning block, wheelhouse and mill leat. The scope of works was specified in a Project Design prepared by OAN in 2009, and the report of the Archaeological Building

Investigation (including the demolition watching brief) was made in February 2011. These reports are attached at Appendices EP1 and EP2 respectively. The recent structural report by BMC has been forwarded to OAN for comment, in the context of the known archaeology of the site. OAN's comments are attached at Appendix EP3.

5.31 Therefore, in accordance with NPPF paragraph 199, there is already a detailed record of the site, which could be further enhanced by additional recording during the dismantling of the former spinning block.

5.32 In the unlikely event that the council concludes that substantial harm would arise, it is clear from the above that the tests at paragraph 195 of the NPPF are met.

Effect on the significance of the non-designated heritage asset (NDHA)

5.33 The significance of Ingersley Mill as a NDHA is as the oldest surviving cotton mill in the town of Bollington with its attached wheelhouse having contained the second largest water wheel in 19th century Britain (University of Manchester Archaeological Unit, 2004).

5.34 As stated above, the building is in an extremely dilapidated condition, and was so when acquired by the applicant at the end of last year.

5.35 Even at the time that planning permission was granted for a development to convert the building to 24 apartments the building was in a derelict condition and had lost its roof and internal floors in a fire. Nevertheless, at that time it was considered that the building could be saved and stabilised. Notwithstanding this, the building would have required very significant alteration and replacement of a significant proportion of the original fabric to bring about its re-use.

5.36 As a result of the proposed development the remaining original structure would be entirely dismantled, with the exception of the wheelhouse. As a complete entity, the original mill would be lost; however, it has reached such a poor condition that it is no longer feasible to retain it as part of a new development. In the context of policy SE7, it is no longer practicable to retain that part of the NDHA that is the spinning block.

5.37 In '*Dorothy Bohm'* it was held in relation to the policy test relating to NDHAs at paragraph 135 (now 197) of the NPPF, (as the second test which the Inspector had to consider after the test at s.72 of the LBCAA):

- Unsurprisingly, given that a NDHA does not itself have statutory protection, the test in para [197] is different from [those for] designated heritage assets. Paragraph [197] calls for weighing "applications" that affect a NDHA, in other words the consideration under that paragraph must be of the application as a whole, not merely the demolition but also the construction of the new building.

5.38 In this case, the new building would include salvaged materials and would, consequently, very closely resemble the appearance of the building conversion scheme that has already been approved. The building conversion scheme, even at the time it was approved would have required considerable new-build elements, and in terms of the ultimate visual appearance of the finished development, there would be little difference between the two. Whilst the mill building would be lost, the wheelhouse would be saved and original materials re-used. In the context of *Dorothy Bohm,* CELPS policy SE7 and the test at paragraph 197 of the NPPF, the application should be approved based on the benefits arising from the development when taken as a whole, including provision of new housing in accordance with the spatial distribution of development in policy PG7; improvements to the CA; bringing the site back into viable use whilst it is still possible to salvage and re-use original historic materials and artefacts.

Other considerations

Ecology and trees

5.39 There are no trees within the vicinity of the mill building.

5.40 It is known from the previous ecological studies of the site that the mill building has good potential as a bat habitat. Emergence surveys are ongoing as summarised in the letter from BSG Ecology attached at Appendix EP4 to this statement.

5.41 A full Ecological Report, including recommendations and proposed mitigation as necessary, will be submitted for the council's consideration prior to the due date for determination of this application.

Conditions

5.42 The amendments to the wording of the conditions of the extant planning permission are listed in section 2 of this statement. The effect of the variations are as follows:

Condition 3: Amend to replace reference to the mill conversion with reference to a new apartment building.

Condition 5: Correct reference to stonework, rather than brickwork, and replace reference to the mill conversion with reference to a new apartment building.

Condition 6: Amend to refer to the wheelhouse only, as the spinning block would be replaced with a new building.

Condition 11: Omit as there are no extraneous noise sources that would give rise to any requirement beyond compliance with the Building Regulations for new-build development.

Condition 41: The application seeks substitution of plan references as follows:

- L033_dwg031 (site c mill conversion, front & rear elevation) by **1693 PL 202A – Front and Rear Elevation**
- L033_dwg032 (site c mill conversion, side elevation) by **1693 PL 203A – Side Elevation**
- L033_dwg003 (demolition plan) by **1693 PL 201 – Demolition Plan**

Plans as listed above are included within this application; all other plan references would remain as already approved and listed in condition 41.

6. Summary and conclusions

6.1 This s73 application seeks variation and removal of planning conditions attached to planning permission 08/0791P, which provides for residential development comprising 48 apartments and 18 townhouses. Development has commenced by the demolition of all buildings that previously existed on the site, with the exception of the mill.

6.2 The approved proposals are for conversion of the mill to provide 24 apartments. The development proposed in this application differs in that it is proposed to dismantle the Ingersley Mill spinning block and rebuild it, but also to provide 24 apartments (including retention and conversion of the wheelhouse as already approved).

6.3 The accompanying structural report by BMC Consulting Ltd concludes that it is no longer feasible to attempt to repair the remaining external walls of the spinning block. The structural report recommends that these should be dismantled in a controlled manner to allow the re-use of as many of the existing materials as possible within a new building. Nevertheless, it is noted that some features have already suffered irreparable damage due to the partial collapse and movement of the structure.

6.4 It is acknowledged that the loss of the original building is regrettable; however, when considered as a whole, the development would preserve or enhance the character and appearance of the CA in accordance with the statutory test at s72 of the LBCAA. It is considered that the character and appearance of the CA would ultimately benefit from the demolition and rebuilding of the mill; because no viable alternative is possible. The alternative would be for the building to continue to deteriorate and suffer further uncontrolled collapses, resulting in the loss of the building fabric as well as the entire structure itself.

6.5 Redevelopment of the building would allow delivery of new housing to meet the housing needs of the Borough. In particular it would contribute to provision within the Local Service Centre of Bollington in accordance with the Spatial Distribution of Development in Policy PG7 of the Cheshire East Local Plan Strategy.

6.6 Therefore, granting planning permission for replacing the spinning mill block with a new building of the same design as already approved (using original materials as far as possible), and converting the wheelhouse, would accord with the statutory tests at s72 of the LBCAA and the

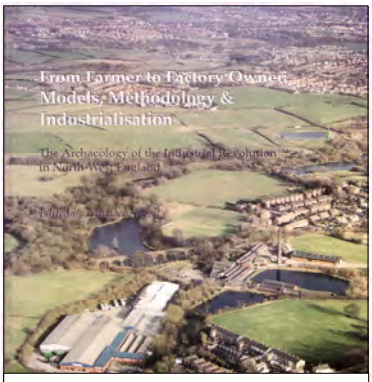
policy tests set out CELPS policy SE7 and chapter 16 of the NPPF relating to conserving and enhancing heritage assets

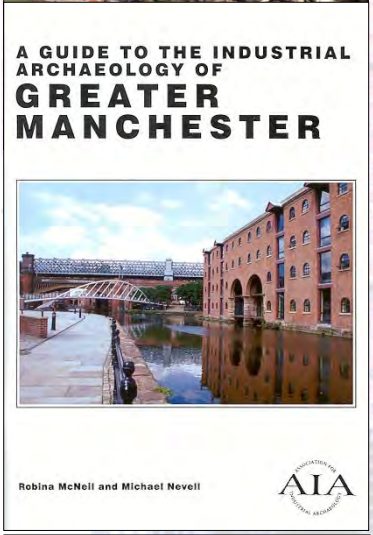
6.7 Accordingly, planning permission should be granted for the variation or removal of conditions as set out in this statement.

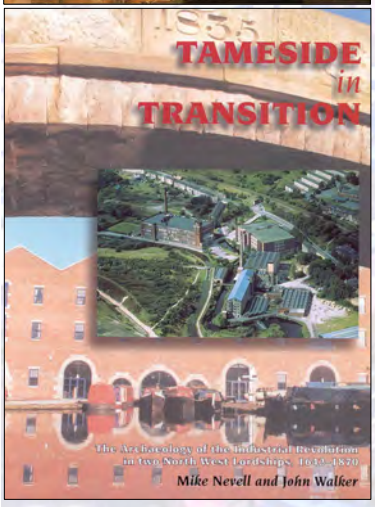
7. Appendices

EP1. University of Manchester Archaeology Unit Report (2004)
EP2. Oxford Archaeology North Report (2011)
EP3. Oxford Archaeology North update (2019) (TO FOLLOW)
EP4. BSG Ecology update (2019)

EP1

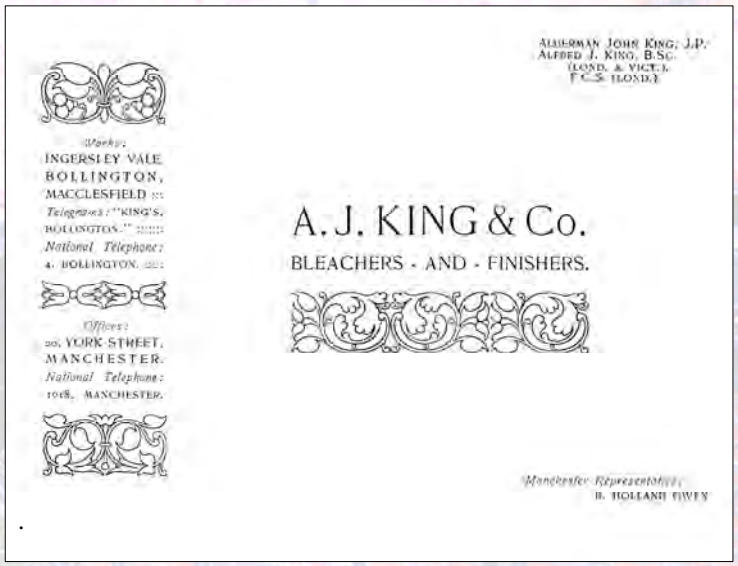






Ingersley Vale Mill, Rainow, Cheshire

An Archaeological Desk-based Assessment of a 19th and 20th century Textile Finishing Complex


ALDERMAN JOHN KING, J.P.
ALFRED J. KING, B.Sc.
(LOND. & VICT.),
F.C.S. (LOND.)

Works:
INGERSLEY VALE,
BOLLINGTON,
MACCLESFIELD.
Telegrams: "KING'S, BOLLINGTON."
National Telephone:
4, BOLLINGTON.

A. J. KING & Co.
BLEACHERS - AND - FINISHERS.

Offices:
201, YORK STREET,
MANCHESTER.
National Telephone:
1048, MANCHESTER.

Manchester Representative:
B. HOLLAND IVEY.

The frontis piece of the 1900 company brochure for A J King of Ingersley Vale Mill.

A report by Dr Michael Nevell

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UMAU May 2004 (19)

THE UNIVERSITY of MANCHESTER

Contents

Summary

This report presents the results of an archaeological desk-based assessment of a proposed development at Ingersley Vale Mill, Rainow, Stockport (centred SJ 942 773; CSMR 2612/1/2), carried out by the University of Manchester Archaeological Unit and commissioned by Seddon Homes Ltd. During the period 1793/4 to 1999 Inglersley Vale was a water-powered cotton spinning mill, then a print works, and finally a bleach works. It is one of 21 cotton and woollen mills within the Bollington and Rainow area. Of the 59 textile mills known to be founded before 1800 in Cheshire 13 lie in Bollington and Rainow and Ingersley Vale is amongst this group. Most of the standing buildings are not particularly rare types. The exceptions are; the c 1809 cotton spinning mill block which is the earliest surviving mill in Bollington and amongst the earliest textile mills to survive in eastern Cheshire; and the wheel house which contained the second largest water wheel in 19th century Britain and is thus a structure of exceptional use. Surviving below-ground remains relating to the early weaving shed, and the mid-19th century print works would also be of rarity, especially where these include evidence for power-systems or processes. The embanked mill leat is not uncommon in the North West, although its early date of c 1800 and the completeness of this original system are unusual. The survival of its later cast-iron trough at roof height is also an unusual and rare feature of the site.

1. Introduction

1.1 The University of Manchester Archaeological Unit was commissioned by Seddon Homes Ltd, to carry out an archaeological desk-based assessment of a proposed development at Ingersley Vale Mill, Rainow, Macclesfield, Cheshire (centred SJ 942 773; CSMR 2612/1/2). The aim was to identify as far as possible the nature of the archaeological resource to enable informed recommendations to be made for the future treatment of any remains.[1]

1) The assessment was carried out by Dr Michael Nevell, UMAU. Thanks are due to the staff of Quarry Bank Mill for their assistance with the Bleachers' Association Archives, to the Cheshire Archaeology Service for supplying information on Ingersley Vale Mill and to the Local Studies Library staff in Macclesfield.

2. Methodology Statement

2.1 The assessment consisted of a desk-top study and a site inspection. The desk-top study consulted the following sources:

- Cheshire Sites and Monuments Record (SMR) held by the Cheshire Archaeology Service.
- Printed and manuscript maps and plans
- Published and unpublished documentary sources
- Photographic sources

The following documentary archives were consulted:

- Cheshire Record Office
- East Cheshire Textile Survey Archive (Silk Mill, Macclesfield)
- Manchester Central Library Archives
- Macclesfield Local Studies Library
- Bleachers' Association Archives, Quarry Bank Mill, Styal

2.2 The aim of the site inspection was to relate the findings of the desk-top study to the existing topography and land-use and to recover evidence not available from the desk-top sources.

The site inspection included the interior of selective buildings, principally to confirm or clarify their date and function. These were buildings 1, 3, 5 and 12, first floor only (see section 5, Gazetteer of Sites and **Fig 18 & 19**). Health and safety considerations prevented entry to the wheelhouse and the ruinous spinning mill block.

3. The Setting

3.1 Location

3.1.1 The study area comprises the empty and partially ruinous buildings of the Ingersley Vale Mill (centred SJ 942 773; **Fig 1**). It is bounded on the north by the River Dean, on the west by a trackway and cliff edge, on the east by the valley sides of Ingersley Clough and in the south by the River Dean again.

3.2 Land-use

3.2.1 The buildings of the Ingersley vale Mill complex were occupied until recently by a variety of small firms, principally associated with the textile industry. However, the buildings are now all vacant.

The main works' buildings, that is the cotton spinning block and to the north and south of this block finishing and preparation building, are bounded on the west by a roughly metalled trackway which cuts into the western side of the valley exposing the bedrock as a cliff of up to 5m height. To the north of the works buildings, adjacent to the access road, are the remains of Rainow Mill, now occupied by a range of light industrial buildings straddling the River Dean. Immediately east of the study area is a zone of light woodland and pastureland.

3.3 Topography

3.3.1 The study area occupies the bottom of the steeply-sided Dean Valley, which at this point in its course is known as Ingersley Vale Clough. This rises from a height of 161m AOD to 200m AOD in the east and to 277m in the west which is bounded by the Kerridge Ridge. The valley is roughly 110m wide at this point.

Within the area of the works building, immediately north of the cotton spinning block the ground level slopes down sharply towards the late 20th century office buildings, a height of 161m AOAD. There is also a noticeable variation in ground level in the buildings around the cotton spinning block which straddles the River Dean, where internal floors lie c 3m below the external ground surface on the south and west, so that the western end of the mill appears to be terraced into the hillside.

3.4 Geology

3.4.1 ***Solid***

The solid geology of the study area, as mapped by the OS Geological Survey, comprises west of the River Dean coal measures and to the east the Millstone grit series. The coal measures are exposed along the western side of the study area.

3.4.2 *Drift*

Most of the study area lies over exposed bedrock, although there are shallow glacial sand and gravel deposits south of the spinning mill block according to the OS Geological Survey.

3.5 Designated Sites

There are no designated sites within the study area, although Savio House, formerly Ingersley Hall, located c 200m east of the study area, is a Grade II Listed Building built around 1775 by John Gaskell and rebuilt and extended around 1833 for John Upton Gaskell. The mill race for Ingersley Vale Mill, which enters the wheelhouse at roof level, runs from a Grade II listed weir further up the valley, which was built for Edward Collier in 1800, according to an inscription.

4. Archaeological and Historical Background

4.1 Owners, Occupants and Use

4.1.1 The Early Occupiers of Ingersley Vale Mil, 1792-1821

References to the copyhold estate of Little Ingersley occur in the 17th and 18th century, from 1684 onwards (CRO DDS/368, 369, 475). In this period this land formed just one part of the Downes family lands in the Macclesfield area (Earwaker 1880). The Downes continued to own Ingersley into the early 19th century (ie CRO DDS/454 from 1810), although there is no indication that the family were involved in industrial activity.

The earliest reference to a mill at Ingersley occurs in an account of mills in the Bollington and Rainow area by a William Richardson, millwright in August 1806 (Longden 2002, 40). Richardson gives a date of 792 or 1793 for the origin of the cotton spinning mill. He states that originally it had a very small reservoir, which wouldn't hold the water for more than a few hours (Longden 2002, 40). This was probably located immediately south of the current spinning block but nothing survives today above ground. Who occupied this earliest mill is unclear for the Rainow Land Tax returns do not mention any textile mills at all (CRO Rainow Land Tax Returns). However, it seems likely that Ingersley Vale Mill was held by the occupiers of land described as 'Lower Ingersley'. In 1793-4 this was Thomas Snelson, between 1795 and 1800 it was Edward Sharpley, and from 1801 Edward Collier.

Edward Collier is the first occupier directly associated with the mill. His initials and the date of 1800 are carved on the parabolic weir (now a Grade II Listed Structure) constructed across the River above Waulkmill Farm. This weir created Clough Pool, with a depth of roughly seven feet, from which water was brought to Ingersley Vale Mill via a leat terraced into the western side of the valley.

This new water system is mentioned by Richardson although he states that the pool was built in 1803 suggesting that the system may have take a few years to finish. Richardson noted that the new reservoir and leat provided water for two water wheels at the mill, "the one being placed above the other, and the water which turns the uppermost empties into and turns the lower one." There was also an 18hp steam engine (possibly a mistake; see newspaper article below) for use "when the water is scarce and the reservoir replenishes." It is not clear whether this engine directly drove machinery or was only used to pump water into the reservoir during dry spells (Longden 2002, 40).

The stair tower on the southern elevation o f the main spinning block bears an inscription ‘E 1809 C’, suggesting that much of this structure was built around this date. However, by 1811 Collier was bankrupt, perhaps because of the expense of all these works (Longden 2002, 40).

The Commercial Directory for 1814-15 and 1816-17 recorded an Edward Collier of Ingersley under its list of cotton spinners and manufacturers, despite his bankruptcy in 1811. However, by the time of the fire of 1819 the Macclesfield Courier records that the mill had been latterly occupied by Messrs Chadwick, Clogg & Co of Manchester. This fire occurred on the night of Thursday 29 April 1819 although it is unclear fromt he

newspaper account whether this fire destroyed the whole mill or just part of it (*Macclesfield Courier*, 1 May 1819). The sale of household furniture and other effects from the premises adjoining the mill the following moth provides another account of the extent of the complex at this date. The site included the manufacturer's house, a warehouse, a smithy, and an apprentice house for at least 30 pauper apprentices (Longden 2002, 41; *Macclesfield Courier,* 22 May 1819).

4.1.2 The Swindells Era, 1821-42

By August 1821 the mill had been rebuilt for in that month Thomas Gaskell of Tower Hill, who then owned the site, leased the mill for 21 years to the partnership of Martin Swindells I (the founder of one of the great textile mill families of Bollington) and Thomas and John Fernley, who were already renting the nearby Rainow Mill, for £450 per annum (Wilmslow Historical Society 1973, 35). The lease included references to a steam engine, engine house and dwelling houses (ECTMS). Thomas Fearnley was replaced in the partnership in 1825 by James Fearnley and according to reports in the Macclefield Courier (6 May 1826) by 1826 this new partnership had installed 330 power looms for weaving cotton at Ingersley Clough. At this date one of the Fernley brothers was living at Clough House (Longden 2002, 41).

The partnership between Martin Swindells I and the Fernleys was dissolved in 1830 (Wilmslow Historical Society 1973, 35), Swindells taking over complete control of both Ingersley Vale and Rainow Mills. On October 1832 he also leased Higher Mill, Lower Mill and new Lower Mill for 15 years. His son Martin was a partner by this time and in 1834 Joseph Brooke also became a partner in Ingersley Vale Mill. According to Pigot's 1834 Directory of Cheshire Brooke was living at Ingersley Clough House - presumably Clough House, although by 1841 Martin Swindells II was resident at Ingersley Clough House (Pigot & Slater Cheshire Directory 1841).

The Swindells & Brooke partnership did not renew their leases on Ingersley Vale and Rainow Mills, which expired at the end of December 1842. By 1844 both mills were occupied by James Leigh, a cotton spinner (Longden 2002, 41).

4.1.3 The Printworks, 1842-78

By 1848 the mill was in dual occupation by John Brier & Co, calico printers, and Ludwig Dyhrenfurth, also a calico printer (Slaters Directory of Cheshire 1848). However by 1850 only John Brier is still as a calico printer (Bagshaw's Directory of Cheshire 1850). In 1856 Brier expanded his business by building the nearby Oak Bank print works in 1856 (Longden 2002, 41).

It is probably to John Brier that the building of the new wheel house and the installation of the suspension water wheel should be attributed. The map evidence suggests this was the case (see below) and a view supported elsewhere (CSMR; ECTMS).

Brier was still at the mill in 1860, when it was described as the Ingersley Vale Printworks (Whites Directory of Cheshire 1860). However, he appears to have transferred his business to the oak bank Printworks soon after. Little seems to be known about the immediate successors of Brier at Ingersley Vale Mill but in 1874 the mill was occupied by Anthony Scott & Co, dyers and yarn polishers (Longden 2002, 42).

4.1.4 The Bleachworks and AJ King 1878-1929

By 1878 the mill had been taken over by the firm of Bates and King in 1878 (Kelly's Directory of Cheshire 1878), who are also attested here in 1883 (Slaters Cheshire Directory 1883). In 1887-88 William King & Co were occupying the site (Woorall 1888); and A J King & Co from 1892 (Kelly's Cheshire Directory 1892). The firm merged with 53 other finishing companies in 1900 to become part of the Bleachers' Association. Their headquarters were in Manchester but individual sites such as Ingersley retained their existing name and management.

4.1.5 The Later 20th Century

A J King & Co, as part of the Bleachers' Association, remained at Ingersley Vale Mill until 1929, when the mill appears to have been sold to the new firm of Messrs Slater, Harrison & Company manufacturers of 'plain and coated pasteboards for litho and letterpress printing, showcard embossing, ticket writing and printing, and numerous other uses' (Longden 2002, 42). Slater Harrison moved to Lowerhouse Mill, Bollington, in 1937. There after the mill complex was often in multiple occupancy. Eric Britton Ltd, manufacturer of bias binding, corded piping, and other edgings and tapes for the clothing industry, used the mill from 1946 to 1954. From 1952 W & A E Sheratt, dyers and printers, occupied part of the complex. In the 1970s and 1980s Astrand Printing Ltd, screen printers of warp knitted and woven fabrics, was based at the mill. In the 1990s the site was also used by 'Chameleon Dyers Ltd, Bleachers Dyers and Finishers' and by Deepcourt Ltd.

The destruction of the interior of the early 19th century cotton spinning block on Wed 17th November 1999 appears to have brought an end to textile finishing production on this site.

4.2 Building Development

Documentary evidence for the development of the buildings on the site is patchy throughout the 19th century. The deposition of William Richardson of Rainow, millwright, states that the first mill on this site was built in either 1792 or 1793 (Longden 2002, 40). According to Richardson this first cotton spinning mill powered by two wheels, piggy-back style, with an auxiliary steam engine. It is not clear precisely where these earliest wheels were located, although the fact they were run from the leat, weir and reservoir system built in 1800 by Edward Collier suggests that they lay on the western side of the river dean in the vicinity of the present wheelhouse. It is not known where the steam engine was on the site.

The earliest detailed description of this complex, however, comes from an advert for the sale of Ingersley Vale Mill in the *Macclesfield Courier* for 2nd March 1811 (quoted in Longden 2002, 40). This states that the mill was 4 storeys high, exclusive of the attics, and the interior 45 yards (41.15m) long and 12 yards (10.97m) wide. This is not too dissimilar from the present spinning mill block which is 38.5m long and 11m wide. In 1811 the mill was heated by steam. There were two waterwheels, 24 feet and 32 feet in diameter, and both five feet wide. There were two reservoirs and a steam engine of 20hp. Next to the mill were a dwelling house (occupied by Edward Collier and presumably Clough House, Gazetteer Site No 21), a warehouse and five cottages (site No 22) for workers at the factory. These three buildings are probably the structures shown on the 1875 OS

map of the area (Fig 19, sites 21 and 22) which included Clough House. A datestone of 1809 on the southerly stair tower gives a date for that features construction.

The mill was burnt down in April 1819 (*Macclesfield Courier* 1st May 1819), although how much of the structure was destroyed is unclear the newspaper article states that the machinery was totally destroyed, but since the dimensions of the current spinning mill block are very similar to those quoted in 1811 it must be suspected that the present structure was rebuilt at least on the foundations of the first mill, if not using much of the surviving walls. The difference in length is perhaps the result of rebuilding after the 1819 fire and the rebuilding of the wheelhouse in the 1850s (see below). This newspaper article also mentions the existence of an apprentice house at Ingersley Vale Mill, although whereabouts within the complex is unclear.

The earliest known cartographic depiction of the works appears on the Ordnance Survey First Edition One Inch map for the area, sheet 81, surveyed 1840-42 and published in 1842 (**Fig 3**). This shows a rectangular-plan building, its western end extending over the River Dean. Abutting the northern elevation of the mill, and centrally placed is a square wing. A rectangular building lies to the south-east of the mill block, and is presumably the site of Clough House, whilst to the north is an L-shaped small range of buildings. The line of the least is probably shown as a linear boundary to the south-west of the complex.

The complex is omitted from the 1850 Rainow tithe map (**Fig 4**) so that the next detailed cartographic plan of the complex occurs on the First edition 25 Inch Ordnance Survey map survyed in 1870-1 and published in 1875 (**Fig 5**). This large scale maps indicates that the mill underwent considerable expansion between 1842 (the year the Swindells family gave up the lease) and 1871, seven years before the King family became involved with the mill site. This period is the most obscure in the history of the complex, yet it saw substantial additions to the site. The main mill block is shown, and named at 'Clough Mill (cotton)'. It now has a western wing projecting to the south of the wall line of the mill and with a leat entering the south-western corner of the mill above the road. This mirrors the current arrangement of the mill complex and shows that the wheelhouse and its cast-iron trough leat were installed between 1842 and 1871. To the north-west of the mill range is a two roomed rectangular block, whilst the L-shaped range north of the mill visible on the 1842 map is also shown, although this time with additions at their eastern end. There is also a small rectangular two roomed structure at the north-eastern end of the site. South-east of the mill is the site of Clough House, name don this map, whilst four cottages are shown due south of the mill with their gardens running down to the River Dean. There is a building in the south-eastern corner of the study area which is probably the stable block mentioned later. Most of the course of the River Dean was still exposed through the study at site at this date.

Ingersley Vale Mill underwent substantial expansion during the period 1895-1900. There are three sources for this expansion. First a newspaper article, secondly the archives of the Bleachers association and thirdly the Ordnance Survey.

In 1895 a series of articles in the Macclesfield Courier recorded the building of substantial additions to the site. These consisted of a one storey shed, 82 feet square, to "accommodate a number of calendars used in the process of bleaching", and a two storey warehouse, 40 feet by 25 feet. These were built south of the mill, across and to the east of the river and represent the northern end of the block of buildings which can be seen today (Gazetteer site No 11). The shed occupied the site of the lawn of Clough House. This house was demolished, with Arthur King moving to the nearby Rock Bank House. It was

decided to drive the new machines by electricity, generated by the suspension water wheel, and use electricity to light the whole works (*Macclesfield Courier* 23rd March 1895, 22 June 1895, 5th October 1895; **Figs 10, 11, 13 & 16**).

The best source for this expansion, however, comes from a company brochure produced in for the Paris exhibition of 1900 (BAA/101). This contains a suite of photographs showing the exterior and interior of the complex in that year. These are shown in the present report as **Fig 8 to Fig 16**. As well as detailing the bleaching process on the site, they demonstrate that the expansion recorded in the Macclesfield Courier in 1895 included the construction of gazetteer buildings No 3 (Grey Room), 4 (Small Finishing Shed), 7, 10, 11 (Finishing Shed and Warehouse), 14 (offices), 15 (Grey Room), 16 (machines shop?) and 24 (Packing and Stamping Shed; **Fig 19**). Most of these were associated with the newly enlarged finishing processes, the actual bleaching process being located on the ground floor of the textile mill. Judging by the 1900 photograph of the interior of the mill this conversion process involved the removal of the first floor in order to allow the installation of the tall bleaching kiers or vats (**Fig 11**).

The expansion involved the demolition of Clough House (No 20 & 21), the cottages (No 22) and the stables (No 25) as well as buildings 17, 19 and 24 (**Fig 20**).

The 1909 Ordnance Survey map of the Ingersley vale area shows these extensions with the addition of what was probably the site of the Ingersley Vale Institute, built in 1902. According to Longden (2002, 42) at the suggestion of Alderman King of Manchester, the head of the firm, it was decided to spend £1,000 out of the money paid by the Bleachers' Association to build for the benefit of the people of Bollington an Institute. Just before the formal opening in May 1903, the institute was described as follows in the local paper: "The building is erected near the works, and is substantially built of dressed stone taken from the quarries of Kerridge. Its approximate dimensions are 36 feet long, 24 feet wide and 30 feet high, and inside it is admirablv fitted for the purpose for which it has been built. There are two stories with one room on each. Each room is fitted up with bentwood chairs and small tables for games such as chess, drafts, dominoes, etc. The walls are ornamented with pictures, and various papers and magazines are supplied. There is also a library of books of the best authors, which may be borrowed by the workpeople at the modest rate of one halfpeny per week. Cooking apparatus is fitted up in the lower room…' (**Fig 20**, Building number 10).

The Bleachers Association Archive also contains details of the valuation for the Ingersley Vale Bleach Works, at the time of the creation of the association in July 1900 (BAA/359, 87-88). This describes the site as follows:

> 'Messrs A J King & Co Ltd
> Ingersley Vale Bleach Works,
> Bollington
>
> | | |
> |---|---|
> | The Leasehold Interest in land, water Rights, Buildings, Cottages and Lessors Plant | £3,665 |
> | The Tenants Buildings | £826 |
> | The Effluent Works | £250 |

The Coal Wharf	£100	
		£4841
The Fixed Plant and Machinery	£13,276.17.6	
The Loose Plant and Loose Articles	£2,841.2.6	
The Cloth Marking Stamps	£1,800	
The Packing Boards, Sheets etc	£129.16.0	
The Horses	£520	
The Carts, Lurries and Gears	£267.15.0	
The Manchester Office Furniture	£36.12.0	
		£18,872.3.0
		£23,713.3.0

The Premises are on Lease for 23 years and 3 months from 25th march 1895, at a rent of £552. 10. 0 per annum and water Rent of £1 per annum.

The Lease includes:

Land about 5 acres

Water Rights viz:

The River Dean is impounded and a large pool or Reservoir formed from which the Water is conveyed by a long Goit to the Works, where it drives a large Water Wheel and Water for Bleaching is drawn off from the pen trough. Water is also obtained from some springs and the surface water of surrounding lands.

Works Buildings:

4 Stone Built Cottages at Waulk Mill, let in 3 tenements, one at 2/6, one at 2/-, and one at 5/-.
3 Boilers, Steam Engine, Set Economisers, Water Wheel.
Stable, Weigh office and Portion of Canal Wharf at Heaton Norris, held from quarter to quarter at a rent of £40 per annum.
Coal Wharf on Peak Forest Canal held on yearly tenancy at £5 per year.
Stables on yearly tenancy at £6. 10. 0.
£2 a year is paid to Miss Gaskill for right of Spring Water.

Between the OS mapping of 1909 and that of 1955 the site underwent no major changes (**Fig 7**), despite the fact that this period saw the end of the Bleachers' Association link with the site in 1929.

However, map analysis of the site indicates that between 1955 and the Ordnance Survey map

of 1993 (**Fig 2**) there were some major changes to the complex. These changes coincided with the splitting of the complex into several separate work units, although until 1999 the site was still involved with textile finishing. These changes saw the extensive rebuilding of several structures, including the Grey Rooms to the north and the Finishing sheds to the south, to be replaced by Buildings 1, 3 and 12, the construction of Buildings 2 and 8, whilst Building No 16 was demolished. The final addition to the site, between 1993 and 1999 was a lean-to single storey shed (Building 9) between Buildings 7 and 11. Since the 1999 fire the site has lain empty.

4.4 Power Systems and Water Supply

The Bleaching Process

Ingersley Vale Mill was originally built as a cotton spinning mill, was converted between 1842-8 into a calico print works and then during the 1870s converted again into a calico bleach works. Each of these branches of the textile industry had their own distinctive production processes. However, of the primary manufacturing process at Ingersley only the shell of the early 19th century spinning block now survives. Likewise little survives of the print works phase of the site, other than the still impressive wheelhouse with its high level cast iron trough for the now missing suspension water wheel.

The most extensive remains on the site relate to the bleaching process. Most of the purpose built bleaching structures were erected between 1895 and 1900, which when combined with the 1900 brochure of the complex provides a snap shot of the bleaching processes on this site at their height. A key factor on any textile finishing site was the need for storage, and warehousing usually accounted for a quarter to a half of the floor space on sites in the North West. At Ingersley vale there appear to have been warehousing both to the north of the early 19th century mill, for cloth entering the site, and to the south for the finished bleached product.

The process began with the arrival of the unbleached yarn or cloth. At Ingersley Vale the site appears to have specialised in the bleaching of cloth and this was initially stored in the Grey Rooms, so-called because of the colour of the unbleached fabric. These lay next to the chemical room, presumably the store for the bleaching chemicals. In the Grey Rooms the cloth was sorted according to the differing bleaching processed required, dependant upon the quality of the cloth; and then pieces were rolled and sown together as part of the continuous belt process (Nevell et al 2003).

The bleach vats or kiers were the heart of the process and in 1900 this was located in the old textile mill. As has already been noted the lower two floors of the spinning mill block were converted in the years 1878-1900 into a bleaching croft by the removal of the first floor. This was to allow the installation of high pressure kiers or vats for the bleaching process itself and the installation of a continuous belt system linking the kiers to washing machines via pot eyes; ceramic rings fixed to the ceiling. The attic space appears to have been re-roofed and window lights introduced along the northern ridge, suggesting this area may have been used for storage.

The sheds adjoining the mill contained finishing mangles, drying machines and beetling machines for beating the surface of the cloth into a smooth finish. South of the mill the large finishing shed contained plaiting and measuring machines, and a large area for making-uop packing and stamping prior to the finished goods leaving the factory.

Water Power and Supply

Ingersley Vale Mill was a water powered textile site throughout the 19th century and for much of the first half of the 20th century. Throughout its life the water for the mill was provided from a system built around 1800 by Edward Collier.

This involved constructing a weir up stream across the River Dean above Waulkmill Farm. This weir created Clough Pool, with a depth of roughly seven feet, from which water. William Richardson noted that the new reservoir and leat provided water for two water wheels at the mill, "the one being placed above the other, and the water which turns the uppermost empties into and turns the lower one." The earliest details of these wheels, however, comes from an advert for the sale of Ingersley Vale Mill in the *Macclesfield Courier* for 2nd March 1811 (quoted in Longden 2002, 40). This states that there were two waterwheels, 24 feet and 32 feet in diameter, and both five feet wide. The location of these wheels must have been on the site of the later wheel house in order to access the leat system.

Ingersley Mill is best known, perhaps, for its large mid-19th century suspension wheel which replaced this dual water wheel system. It is not clear when this wheel was installed by it was probably during the 1850s and was fed via a cast-iron trough that entered the new wheelhouse a roof height from the leat. The wheel itself was demolished in the mid 20th century (ECTMS). However, a number of descriptions survive of the wheel. The publicity material produced in 1929 by Slater, Flarrison & Co, who had just taken over the mill, described the wheel as 56 feet in diameter, and "the largest iron waterwheel in the country" (Longden 2002, 41). A newspaper article in 1935 added that the width across the buckets was 10 feet 6 inches, and claimed that the wheel was then "the largest working water wheel in the country" (*Macclesfield Courier,* 20th Sept 1935).

The most reliable description is that from the archives of industrial archaeologist George Watkins, who visited and photographed the wheel (**Fig 17**) in 1938. According to his description the wheel was 57 feet in diameter, 7 feet wide. The gearing ring was 54 feet in diameter and the pinion five feet in diameter. From 1895 it used to drive a dynamo via a belt from the third motion shaft, but originally drove long shafting runs. The arms of the wheel were fitted with threads and nuts at the end, and the rim was in 28 sectors, one per arm. The buckets were not ventilated, but the hatch to feed the water was curved, and fed the water over the top to use the highest head (Watkins 2002, 156).

It is not known who designed and built the suspension water wheel but it seems likely that it was from the Manchester engineering works of William Fairbairn, a noted improver of suspension water wheels and their gearing in textile mills.

Steam and Electric Power

There are a number of documentary references to steam power at Ingersley Vale Mill, although no physical evidence was found during the current study. The first is an 1803 reference to an 18hp engine running in conjunction with the two early water wheels. According to William Richardson this was used "when the water is scarce and the

reservoir replenishes." It is not clear whether this engine directly drove machinery or was only used to pump water into the reservoir during dry spells (Longden 2002, 40).

A newspaper article from the *Macclesfield Courier* for 2nd March 1811 (quoted in Longden 2002, 40) refers to a 20hp steam engine.

A third reference occurs in a newspaper add for the mill from August 1821. This included references to a steam engine and engine house although it is unknown where this engine lay (ECTMS).

Finally, the valuation of 1900 (see above) records the presence of three boilers, a steam Engineand a set Economisers,

It seems likely that Ingersley Vale Mill was built with a duel power system; both water and steam power, with the steam acting as the secondary drive system. By 1900 steam was needed for the high pressure kiers, but not it seems for the rest of the machinery, since this was run from the water wheel and later from the dynamo installed in 1895. This was run from the water wheel.

5. Gazetteer of Sites

The following gazetteer gives details of those sites within the study area identified by the archaeological assessment (see also **Figs 15 & 16**).

Standing Buildings

1) Offices, post-1955
Two storey, machine brick built rectangular range with a corrugated roof. Built on earlier stone foundations. These are particularly visible in the northern elevation. The Northern gable and eastern elevation has the following signs; 'Chameleon Dyers Ltd. Bleachers, Dyers and Finishers'.; 'Astrand Textiles'. Built after the 1955 OS map on the site of earlier buildings.

2) Tanks, post-1955
Steel oil tanks. Built after OS 1955 map.

3) Grey Rooms, 1842-71
Two storey, machine brick built rectangular range with a corrugated roof. Built on earlier stone foundations. Internally the wooden upper floor is supported by steel girders. Each floor comprises a small room at the northern end and a larger room occupying three-quarters of the floor space. First shown on OS 1875 map. Described in the 1900 brochure as the Grey Rooms (**Fig 8**).

4) Finishing shed, c 1895
A single storey stone and machine brick built range abutting the northern elevation of the mill range (site no 6). Corrugated roof supported by steel lattice trusses. First shown on OS 1909 map, where it has two internal divisions. Described as a Finishing Shed in the 1900 brochure (**Fig 8**).

5) Boiler House? 1842-71
A single storey stone built, slate-roofed, structure abutting the wheel house (site no 6a). First shown on the OS 1875 map. Described as a boiler house in 1900, but that may not have been its original function.

6) Ingerlsey Vale Spinning Mill, c 1809
Four storey, stone built, rectangular cotton spinning block, 12 x 4 bays, with rectangular window openings with stone sills and lintels (CSMR 2612/1/2). Attached to the western end is that later wheelhouse (site 6a). Internally it has one surviving wooden floor supported by cast-iron columns. The first floor is of double height, indicating that it has been rebuilt. Currently roofless, although this is shown as largely glazed in 1900. The first mill was erected around 1792/3, but much of the present structure would appear to date from a major rebuild of 1809. There is an inscription on the stair tower on the southern elevation which reads 'E 1809 C' for this phase. A description of the mill from an advert in the Macclesfield Courier of 2/03/1811 describes it as a cotton spinning mill having four storeys, exclusive of attic, and being 45 yards long and 12 yards wide. The current mill is 38.5m x 11m. There were two waterwheels, two reservoirs on the site and a 20hp steam engine. The mill was partially rebuilt after a fire in 1819. In 1900 the mill block was described as the Bleaching Croft. It was damaged by fire on 17th November 1999, which destroyed the roof and upper internal storeys. First shown on the OS 1842 map (**Figs 3, 8 & 9**).

6)a Wheel House, 1850's
A tall stone built structure with long semi-circular arched windows, now blocked. Built in the period 1842-71, but probably in the 1850s, to house a 56 ft diameter suspension water wheel (since removed; Ashmore 1982, 57; **Fig 17**). First shown on the OS 1875 map.

6b) Cast Iron Trough and Leat, 1850's
A cast iron trough runs across the access road to the Ingersley site and enters the wheel house from the west at roof height. This brought the

water from Clough Pool via a 300 yard (383m) long leat which was terraced into the western flank of the valley from Clough Pool, to drive the suspension wheel. It is contemporary with the wheel house. First shown on the OS 1875 map (Ashmore 1982, 57).

7) Small Finishing Shed c 1895
A one storey stone range with a corrugated roof. Formerly two storeys. According to the 1900 brochure this was built around 1895 (**Fig 9**). First shown on the OS 1909 map.

8) Lean-to Shed, Late 20th century
Single storey wooden shed with corrugated roof. First shown on the OS 1993 map.

9) Lean-to shed, 1993-99
Single storey wooden shed with a plastic corrugated roof. Not shown on any of the maps, but present in 1999.

10) Institute, 1903
Two storey stone built structure with a slate roof. The roof has a glazed pitch and is supported by King Post trusses. First shown on the 1909 OS map.

11) Large Finishing Shed & Warehouse, 1895
Two storey, two bay, stone built structure with a two pitch roof. The gable ends which face west-east are coped. According to the 1900 brochure these structures were built in 1895 (**Figs 9, 13 & 14**). First shown on the OS 1907 map.

12) Storage Shed, 1955-93
Single storey, 12 bay, stone and steel framed shed with a corrugated single pitched roof supported by steel trusses. There is a loading bay two bays from the southern end. Rebuilt in the late 20th century on the site of an earlier finishing shed. First shown on the OS 1993 map.

13) Building, 1842-75
Two storey rectangular stone building with a slate roof. Its use it unclear but it may have been one of the warehouses to the north of the mill mentioned in the 1900 brochure. First shown on the OS 1875 map (**Fig 5**) .

Demolished Buildings

14) Offices Late 19th century
Two storey, stone built, slate roofed offices, first shown on the 1909 map (**Figs 6 & 8**). Aligned north-south. Described as offices in the 1900 brochure. Demolished between 1955 and 1993.

15) Mechanics Shop, Late 19th century
Single storey stone built rectangular building with a slate roof with glazing at the pitch. Aligned north-south (**Figs 6 & 8**). Described as a mechanics shop in the 1900 brochure. First shown on the OS 1907 map. Demolished between 1955 and 1993.

16) Building
Stone built, rectangular, building aligned north-south. First shown on the 1909 map (**Fig 6**). Demolished between 1955 and 1993. Function unknown.

17) Grey Rooms, 1842-71
Tow storey stone built rectangular structure with a slate roof (**Fig 8**). First shown on the OS 1875 map (**Fig 5**). Described in the 1900 brochure as a Grey Room. Demolished and replaced by building No 3 in the period 1955-93.

18) Building, pre-1842
L-shaped building first shown on the OS 1842 map. Demolished and built over by Building No 13 by 1875. Function unknown.

19) Building, pre-1842
Square-shaped building first shown on the OS 1842 map. Demolished and built over by Building No 4 by 1875. Function unknown.

20) Extension to Clough House, 1842-71
Rectangular structure abutting Clough House to the north. First shown on the OS 1875 map (**Fig 5**). Demolished and built over by Building 10 & 11 around 1895-1903. Function unknown.

21) Clough House, c 1811
A rectangular two storey stone built house, first shown on the OS 1842 map (**Fig 3**)., but

referred to in the documentary sources as early as 1811 (see above section 4). Called Clough House on the OS 1875 map (**Fig 5**). Demolished c 1895 to make way for building No 11.

22) Cottages, c 1811
Stone built, two storey, rectangular cottages to the south of the mill and west of Clough House. First shown on the OS 1842 map (**Fig 3**) but referred to in the documentary sources as early as 1811 (see above section 4). Demolished c 1895 to make way for building No 11.

23) Building, 1842-71
Small rectangular building to the south of Clough House. Only shown on the OS 1875 map (**Fig 5**). Demolished c 1895 to make way for building No 11. Function unknown.

24) Finishing Sheds: Packing and Warehousing, c 1895
Large single storey, five bay, stone built, multi-pitch roof structure. Roof supported by wooden King Posts. Described in the 1900 brochure as packing and warehousing building (**Fig 9**). First shown on the OS 1907 map (**Fig 6**). Demolished and rebuilt as building 12 in the period 1955-93.

25) Stables, c 1842-71
Rectangular stone built building first shown on the OS 1875 map (**Fig 5**). Probably stables mentioned as being demolished to make way for Building No 12 in 1895.

6. Significance of the Remains

6.1 The Criteria

6.1.1 Although there are a wide number of methodologies for assessing archaeological significance, that with the greatest legal standing is the Secretary of State's criteria for the scheduling of ancient monuments, outlined in Annex 4 of PPG16 (*Planning Policy Guidance 16: Archaeology and Planning*, DoE 1990). In the following the known or possible remains in the study area are assessed using these criteria.

6.1.2 *Period*

During the period 1793/4 to 1999 Inglersley Vale was a water-powered cotton spinning mill, then a print works, and finally a bleach works. It is one of 21 cotton and woollen mills within the Bollington and Rainow area. Of the 59 textile mills known to be founded before 1800 in Cheshire 13 lie in Bollington and Rainow and Ingersley Vale is amongst this group. The oldest standing structures on the site are the spinning mill block (Building No 6) which is probably early 19th century in date and the embanked leat (Building No 6b) which dates from around 1800. The cast-iron trough or laid and the tall wheel house (Building No 6a) at the western end of the spinning block date from the 1850s when the site was converted to a print works. Building No 13 may also belong to this print works phase, and was erected sometime in the period 1842-71. Most structures on the site belong to the period when the site was a bleach works under A J King & Co (c1878-1929). These include building Nos 3, 4, 7, 10 & 11. The rest of the standing structures are post-1955 buildings (Nos 1, 2, 8, 9 & 12) associated with the final phase of textile use when the site was in multiple occupancy.

6.1.3 *Rarity*

Most of the standing buildings are not particularly rare types. The exceptions are; the c 1809 cotton spinning mill block which is the earliest surviving mill in Bollington and amongst the earliest textile mills to survive in eastern Cheshire; and the wheel house which contained the second largest water wheel in 19th century Britain and is thus a structure of exceptional use. Surviving below-ground remains relating to the early weaving shed, and the mid-19th century print works would also be of rarity, especially where these include evidence for power-systems or processes. The embanked mill leat is not uncommon in the North West, although its early date of c 1800 and the completeness of this original system are unusual. The survival of its later cast-iron trough at roof height is also an unusual and rare feature of the site.

6.1.4 *Documentation*

The historical development of the study area can be traced reasonably well from the cartographic evidence and documentary sources. Further details, including more precise dating of the construction and function of buildings within the study area, could undoubtedly be extrapolated from more detailed examination of primary documentary sources but are unlikely to modify significantly the outline given in this report.

6.1.5 *Group Value*

The remains within the study area can be seen as forming part of a group of local sites which historically have been closely interdependent. These include the site of Rainow Mill, Higher Mill, and Lower Mill, further up the Dean valley and all of which were rented by the Swindells family in the 1830s. Closer to the study area, Ingersley Hall, now Savio House, a Grade II Listed late 18th and early 19th century mansion, was the home of the Gaskell family, the owners of the land upon which Ingersley Vale Mill stands. Immediately outside the study area, the embanked course of the leat, which runs southwards from the mill, can be traced to the Grade II Listed parabolic weir and iron sluice at Clough Pool. This system was built around 1800.

6.1.6 *Survival/condition*
The buildings that survived on the site at the time of the present study varied in completeness. Most of the structures were complete and safe to enter. However, the spinning mill block, but not the wheel house, was damaged by fire in 1999. This resulted in the lost of its roof and upper internal storeys, although the exterior walls survive intact.

6.1.7 *Fragility*
See 8.2.

6.1.8 *Diversity*
The diversity of the known sites within the study area is considered to be low.

6.1.9 *Potential*
It is not anticipated that the study area will contain remains other than those noted within this report.

6.2 Significance

6.2.1 On the criteria above there are no remains of national importance within the study area.

6.2.2 However, the study area contains remains of regional rarity, such as the wheelhouse, cast-iron trough, embanked leat and the remains of the early 19th century spinning mill block. There may also be below ground remains relating to the early steam engine sites and the print works phase of the site.

6.2.3 Other sites identified within the study area are considered to be of lesser significance.

7. Impact of the Development on the Remains

7.1 The archaeological impact of redevelopment on a site can be identified as follows.

Direct

This would involve an alteration to the physical condition of the site. The alteration might be either positive or negative. A positive effect might, for example, remove possible threats to its survival eg causes of erosion. A negative effect would involve damage or destruction to a site. These impacts can be refined by assessing the likely extent of the alteration to the site.

Indirect

This would involve an alteration to the setting of a site. Indirect impacts can be positive or negative, ie they can improve or detract from the appearance, understanding or appreciation of a site. Indirect impacts may be either temporary (ie lasting during the groundworks or other works for a development) or permanent.

7.2 Development within the study area may have a direct impact by damaging or destroying below-ground archaeological remains by the reduction or other disturbance of ground levels, including deep piling, and the digging of foundation or service trenches.

Development within the study area may have a direct impact on the standing structures by altering or demolishing existing buildings.

8. Archaeological Mitigation

8.1 PPG 16 draws a distinction between remains of national importance and other remains. In the case of the former, the presumption should be in favour of preservation in situ; in the case of the latter, where this is warranted by their significance, remains may undergo preservation by record; that is the making of an appropriate record by the use of survey, photography, excavation or other methods.

8.2 The following recommendations are suggested as the way to mitigate the impact on the above and below ground archaeology of any development on this site. The details of these recommendations should be discussed with the County Archaeologist for Cheshire and the Macclesfield Conservation Officer prior to any development work commencing on the site. The suggested mitigation measures for the archaeology at Ingersley Vale Mill are as follows;

- An archaeological photographic survey of all of the standing buildings prior to redevelopment work commencing.

- An archaeological building survey of c 1809 cotton mill spinning block, the wheel house and iron trough, prior to redevelopment as health and safety allows.

- Watching brief during ground disturbance by any redevelopment both within and immediately to the north and south of the early cotton mill spinning block. The aim would be to recover any remains relating to the position of the early water features, steam engines and the print works on the site.

Sources

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ECTMS – East Cheshire Textile Mill Survey archive, Silk Museum, Macclesfield.
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OS 1:2500 series, Sheet SJ 94 77, published 1993.

OS 1:10560 series, First Edition, Sheet 81, surveyed 1840-42, published 1842.

PS 1:10000 series, sheet 94 77, published 1955.

OS 1:10000 series, Sheet SJ 97 NW, published 1993.

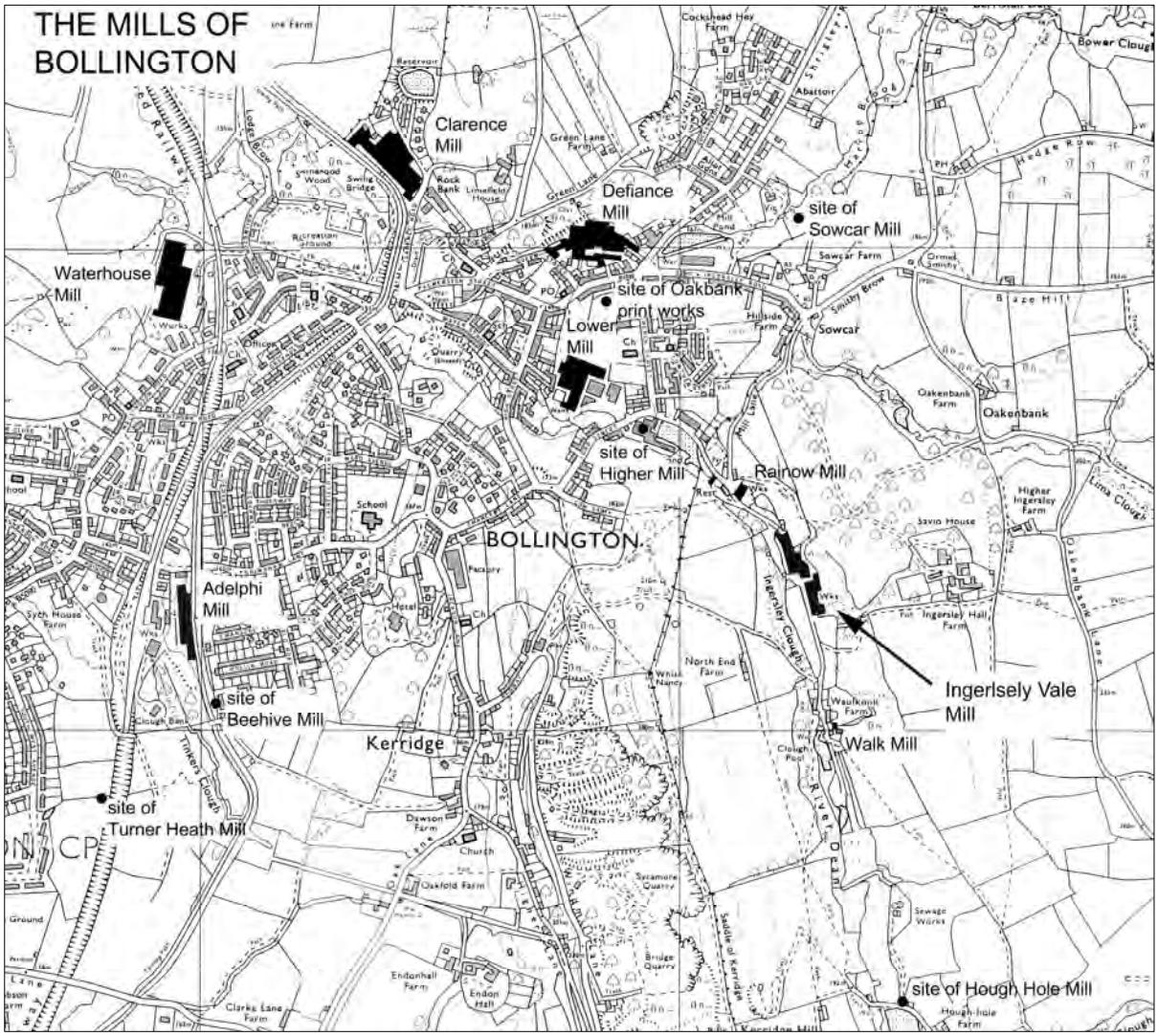

Fig 1: The location of Ingersley Vale Mill (arrowed) amongst the mills of Bollington. Source: Ordnance Survey 1:10,000 series, Sheet SJ 97 NW, published 1993.

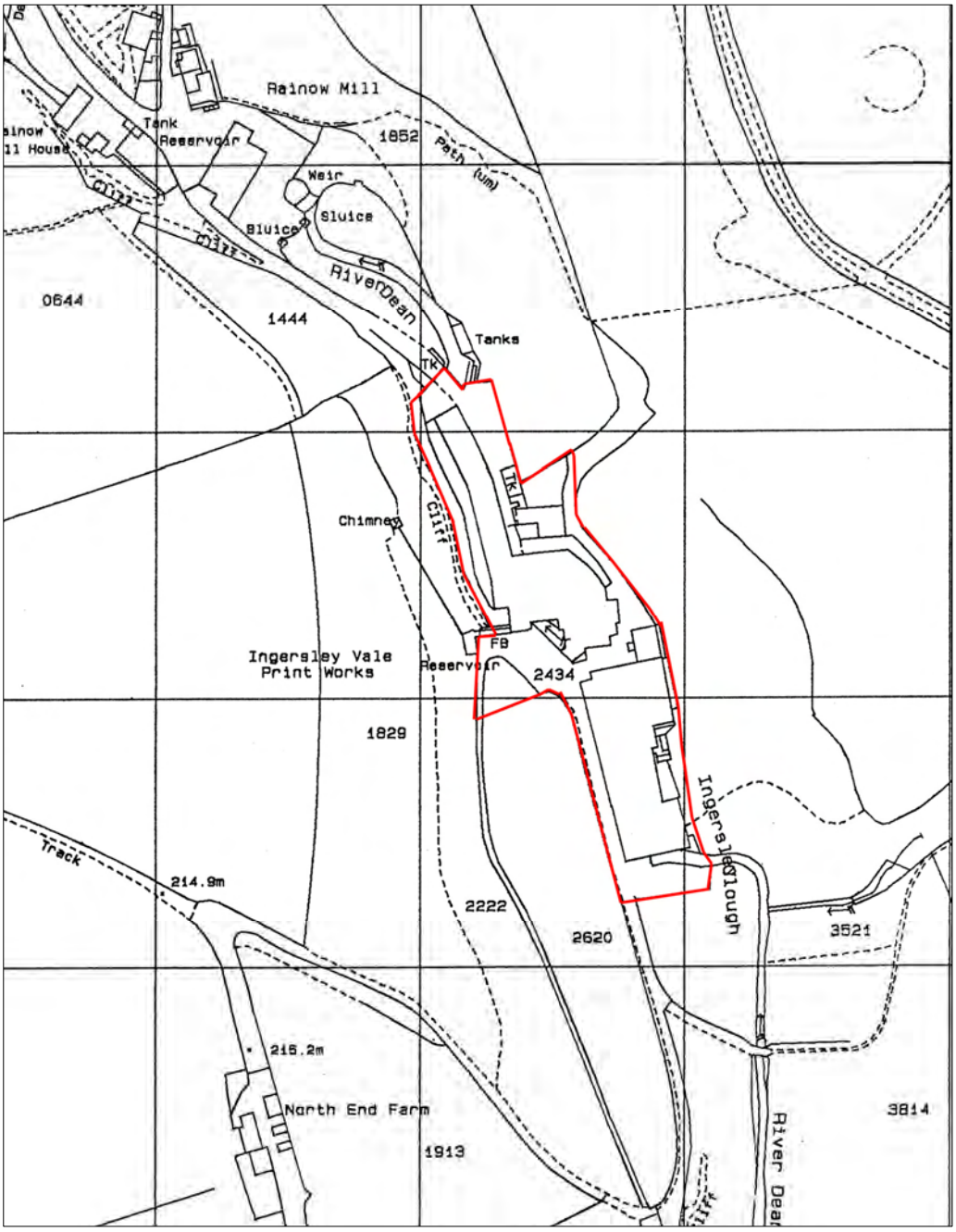

Fig 2: The location of the Ingersley Vale study area (outlined in red). Source: Ordnance Survey 1:2500 series, sheet SJ 94 77 (1993).

Fig 3: The location of the study area (outlined in red) on the Ordnance Survey First Edition One Inch Series, Sheet 81, surveyed 1840-42, published in 1842.

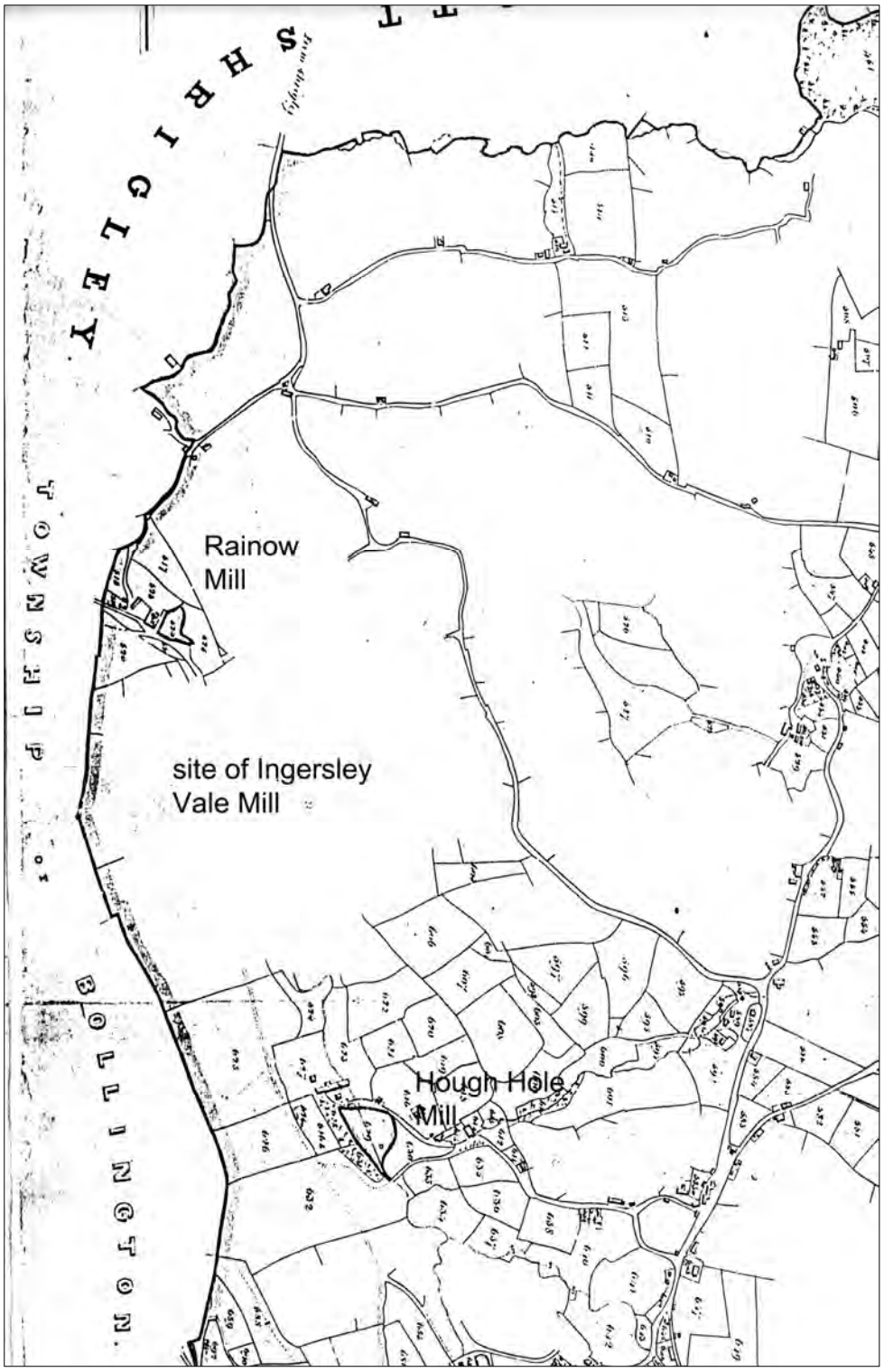

Fig 4: Ingersley Vale Mill is not shown on the Rainow tithe map drawn in 1850. Source: Chester Record Office.

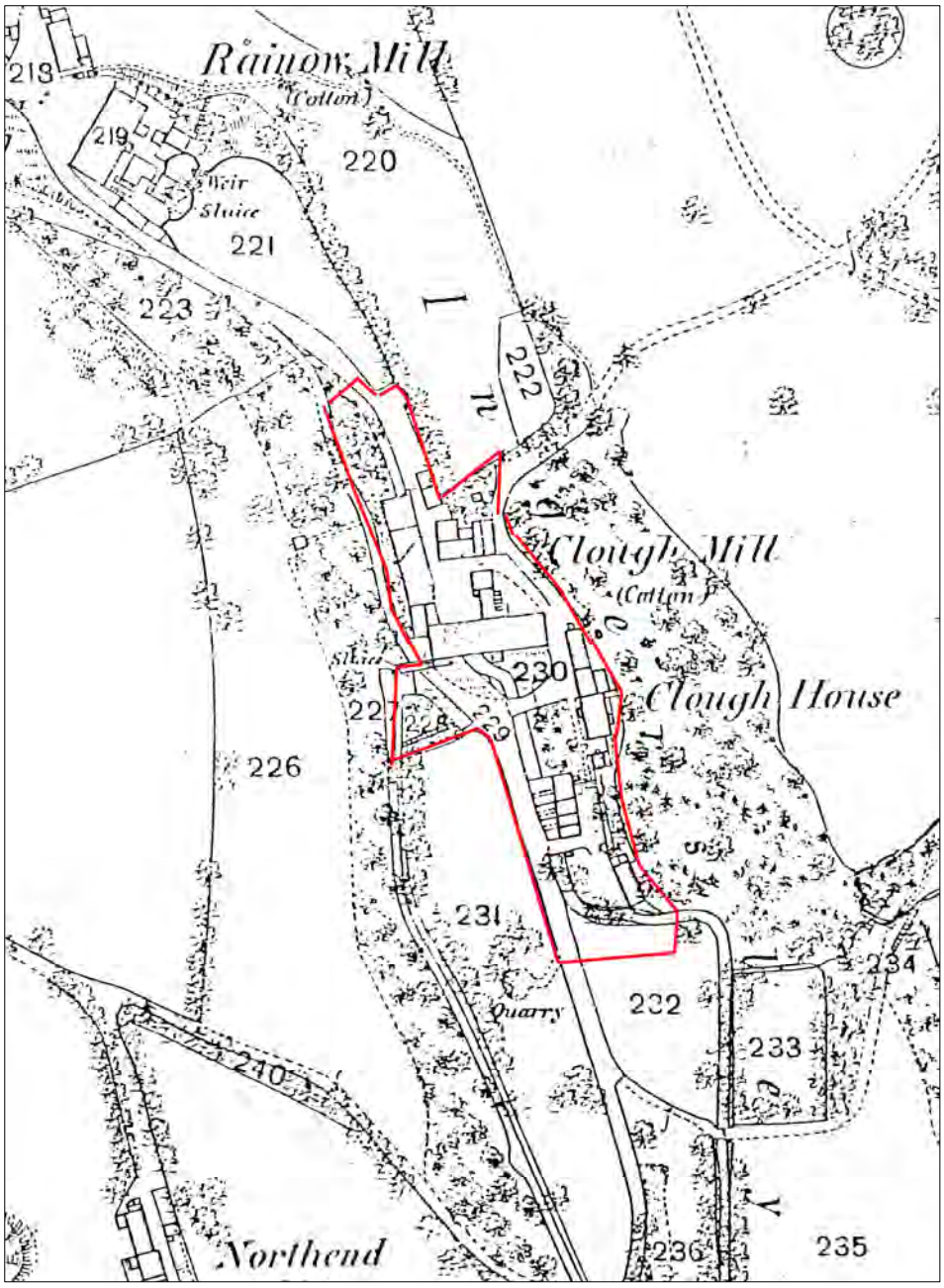

Fig 5: The location of the study area (outlined in red) on the Ordnance Survey First Edition 25 Inch series, Cheshire Sheet XXIX.13, surveyed 1870-1 and published in 1875.On this map Clough House is shown to the south-east of the main mill block.

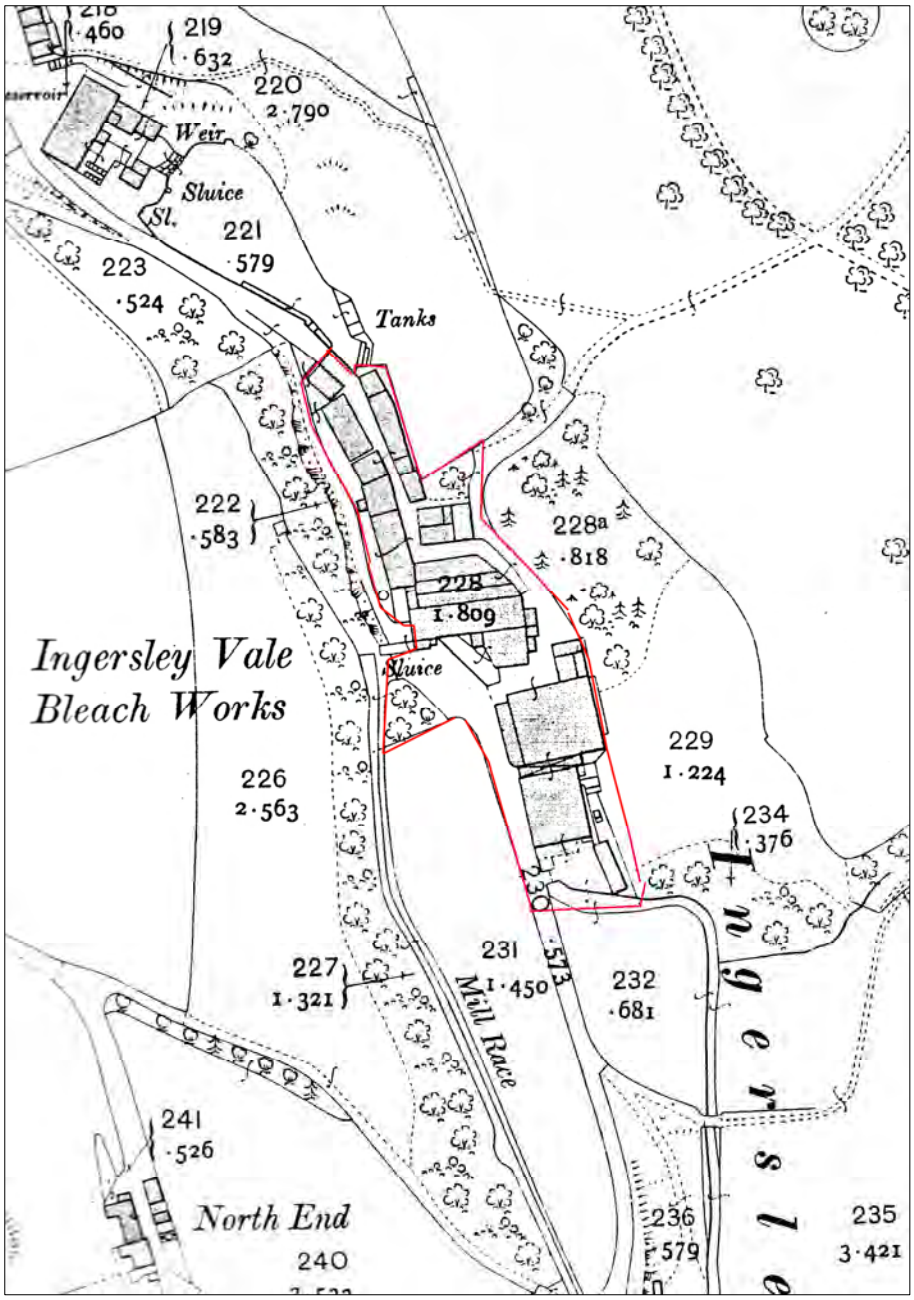

Fig 6: The location of the study area (outlined in red) on the Ordnance Survey Second Edition 25 Inch series, Cheshire Sheet XXIX.13, revised 1907, published in 1909. Note the expansion of the buildings to the south-east of the main mill as a result of the shift to textile bleaching.

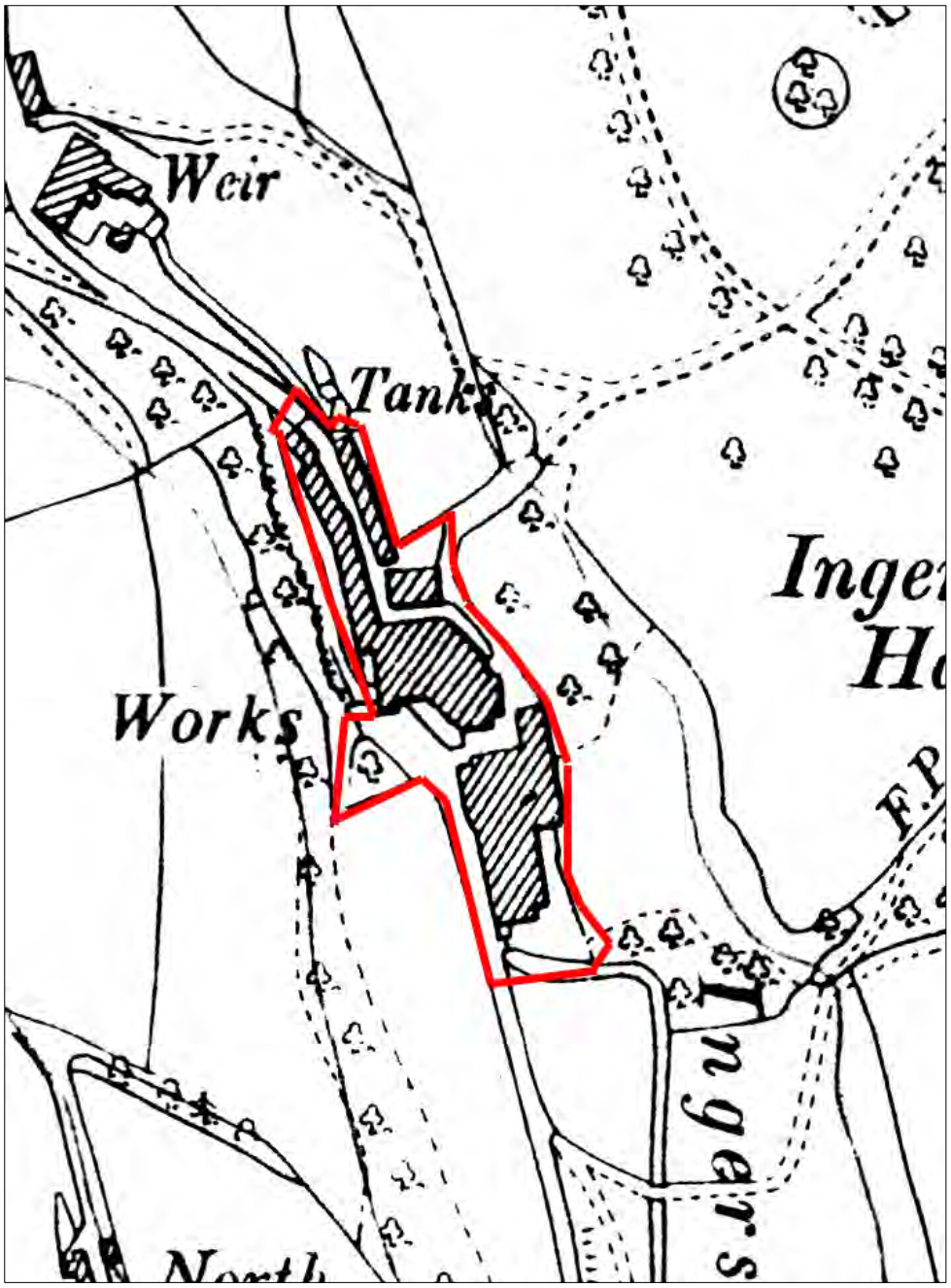

Fig 7: The location of the study area (outlined in red) on the Ordnance Survey 1:10,000 series, Sheet SJ 94 77, published in 1955.

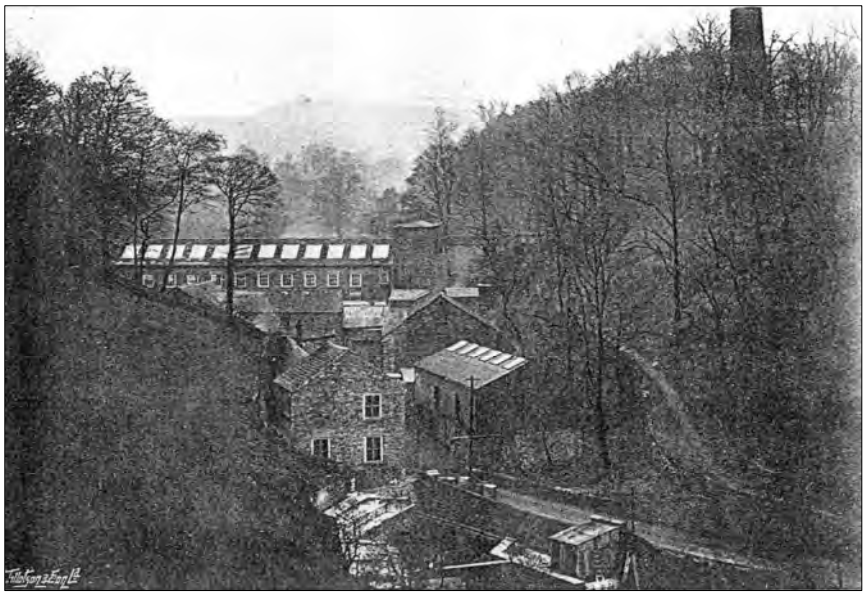

Fig 8: The buildings at Ingersley Vale as seen from the north in 1900 showing the entrance to the works, offices, chemical laboratory and grey rooms. The tall building to the right of the main mill block contained the 60 feet water wheel.

Fig 9: the buildings at Ingersley Vale as seen from the south in 1900 showing the small finishing shed, the large finishing shed and warehouse built in 1896 and the white cloth store room, making-up, stamping and packing room and stables (extreme right) built in 1899.

Fig 10: Sewing grey cloth for the kiers in 1900 showing on the left a small electric motor driving a circular sewing machine.

Fig 11: The bleaching croft (the basement of the former spinning block) as seen in 1900 with electric motors driving the machinery such as washing machines, pumps, squeezers, wincers.

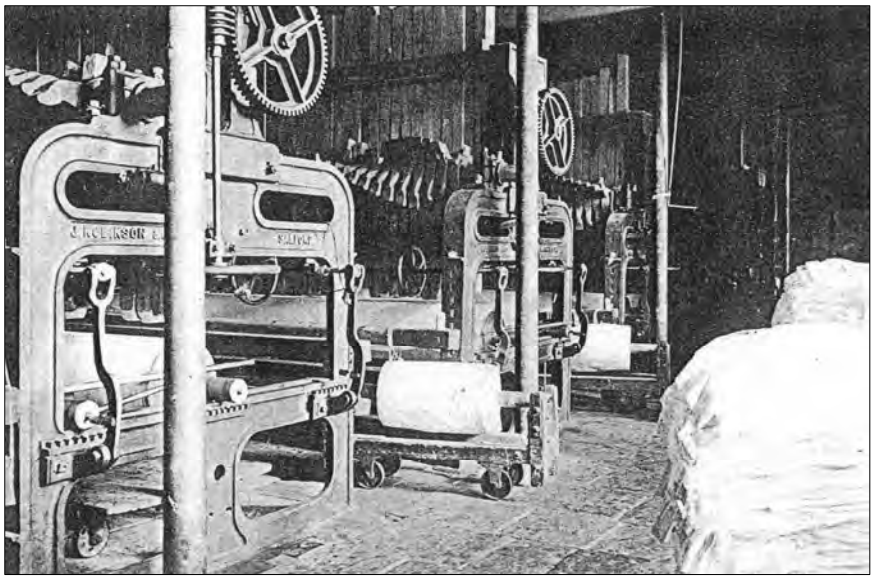

Fig 12: Beetling the cloth in 1900.

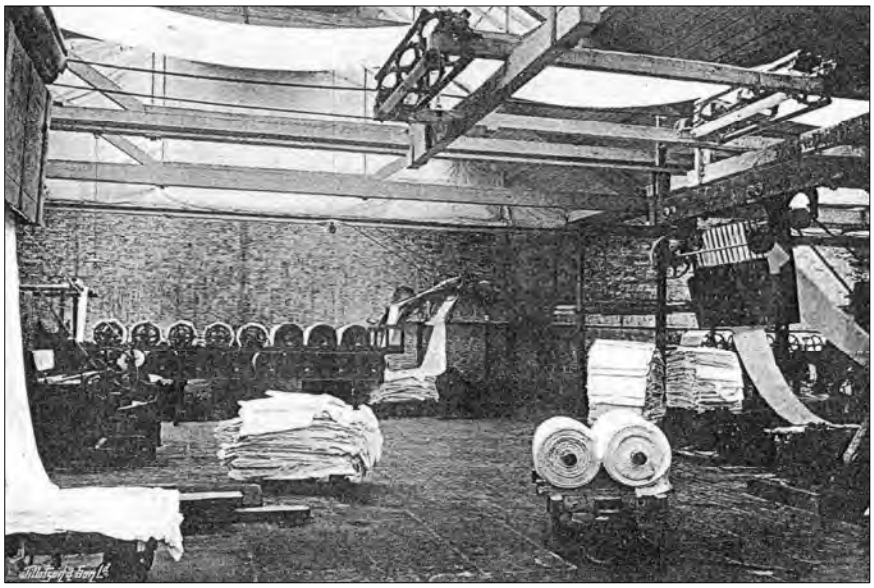

Fig 13: A 1900 view of one of the finishing sheds showing 13 electric motors driving the drying machines, 'Blackman' fans and finishing mangles.

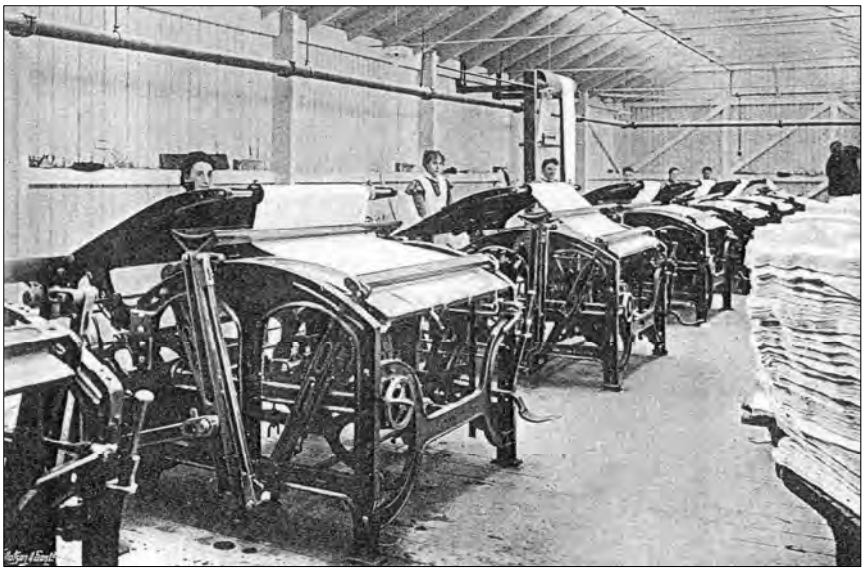

Fig 14: Plaiting and measuring machines in the finishing sheds in 1900.The shaft which drives these machines is actuated by an electric motor in the room below.

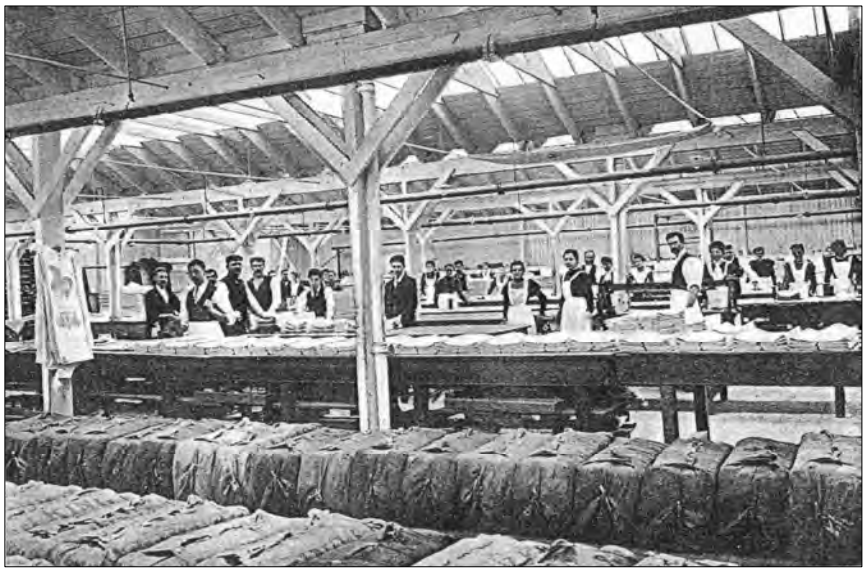

Fig 15: Making-up, packing and stamping in 1900. In this room finished goods were cut to lengths, made up and stamped for various different markets. 50 miles of calico per day passed through this room in 1900.

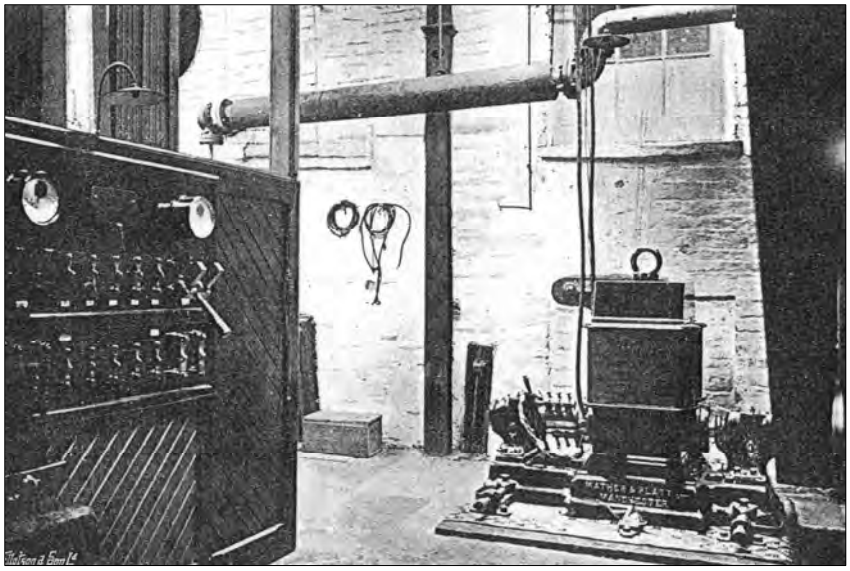

Fig 16: The Dynamo House showing the Edison-Hopkinson Dynamo, 350 amps at 105 volts, installed on 1st January 1896 and built by Mather & Platt Ltd. It was driven by the 60 feet waterwheel.

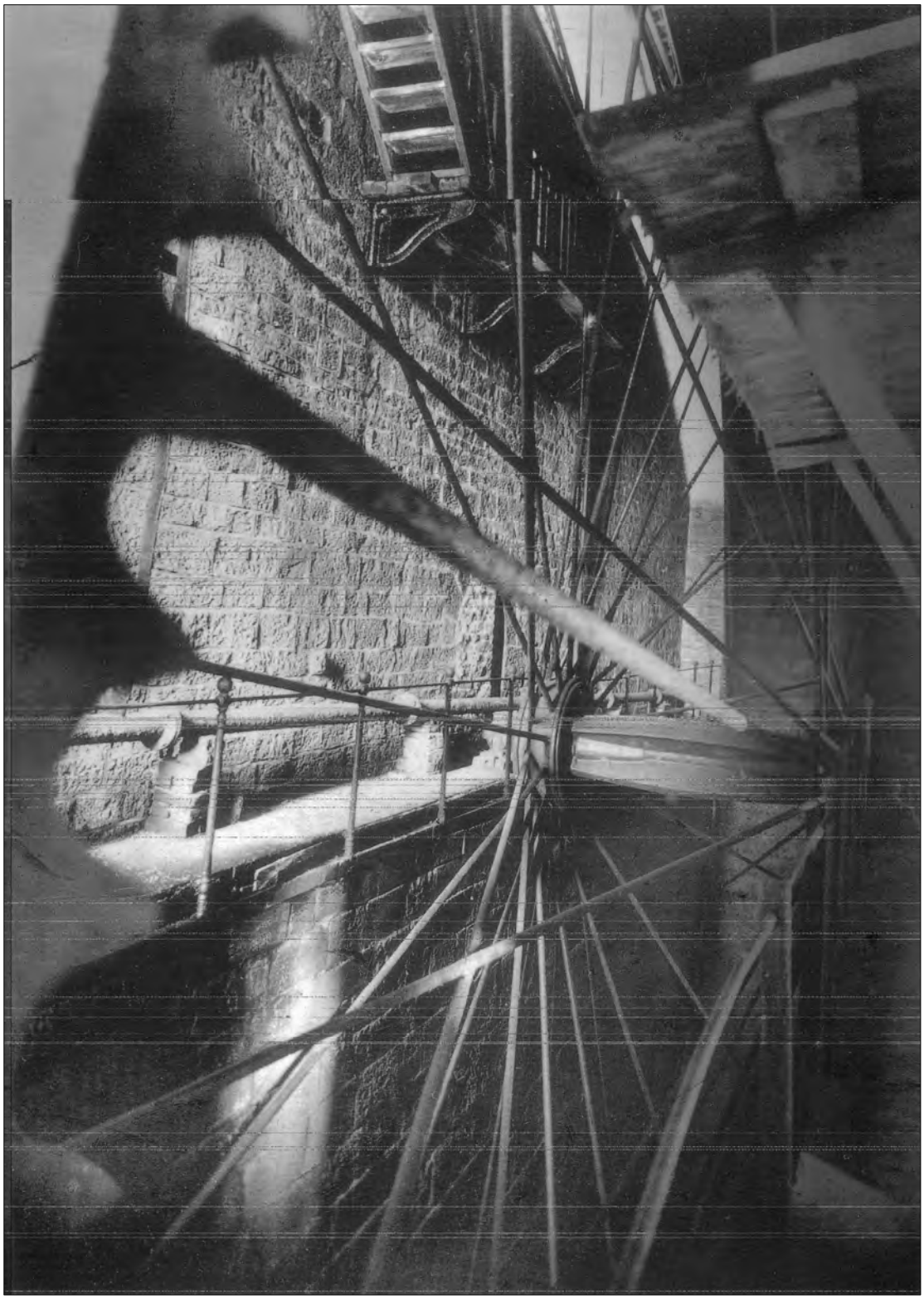

Fig 17: The suspension waterwheel in the wheel house at Ingersley Vale Mill. Installed sometime during the 1850s. It was 57 feet in diameter, 7 feet wide. The gearing ring was 54 feet in diameter and the pinion five feet in diameter. This view was taken by George Watkins in 1938.

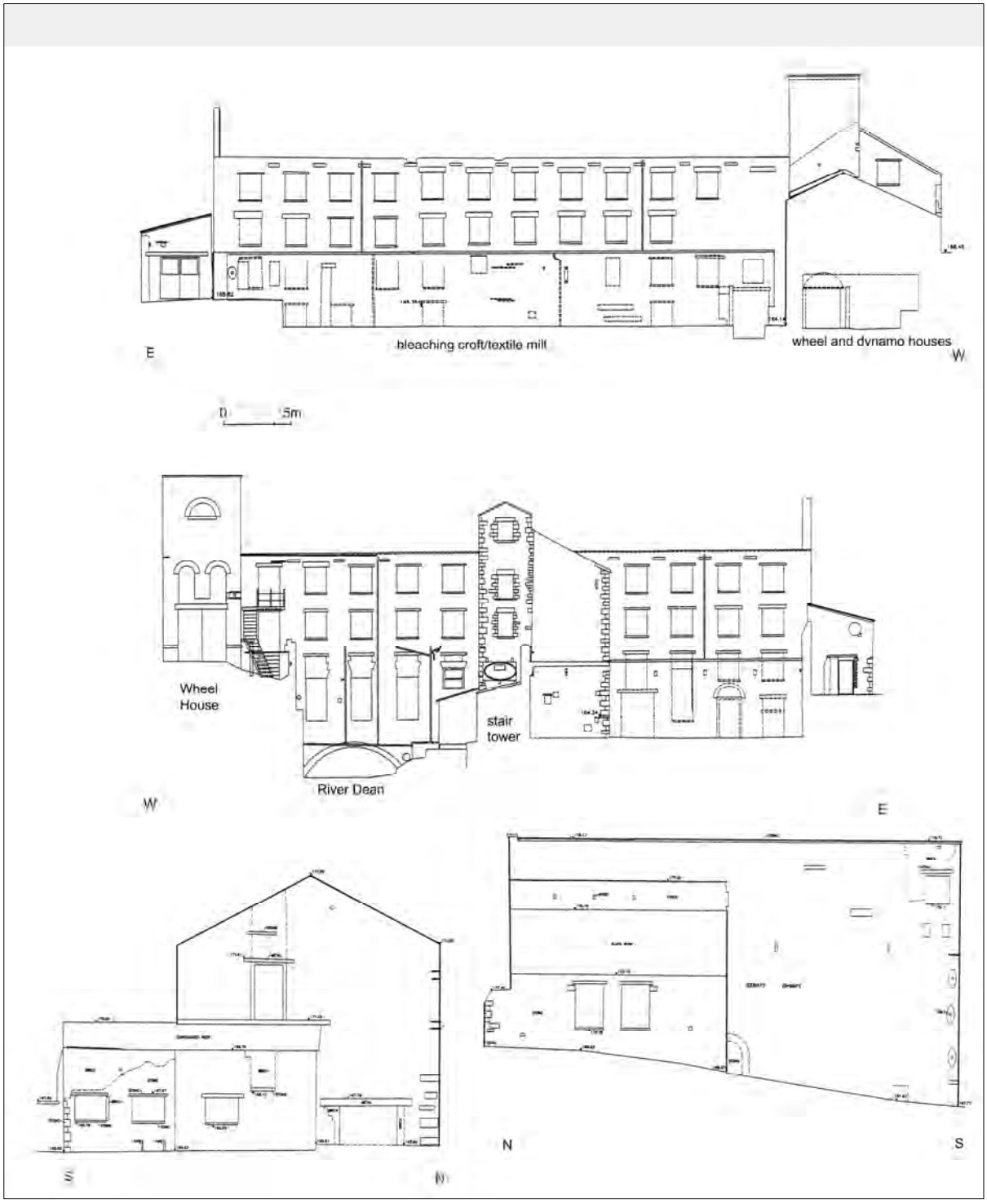

Fig 18: The elevations of the early 19th century spinning block at Ingersley Vale Mill. Based upon architects' drawings surveyed in 2004. Note the position of the River Dean in relation to the wheelhouse. NB scale is approximate.

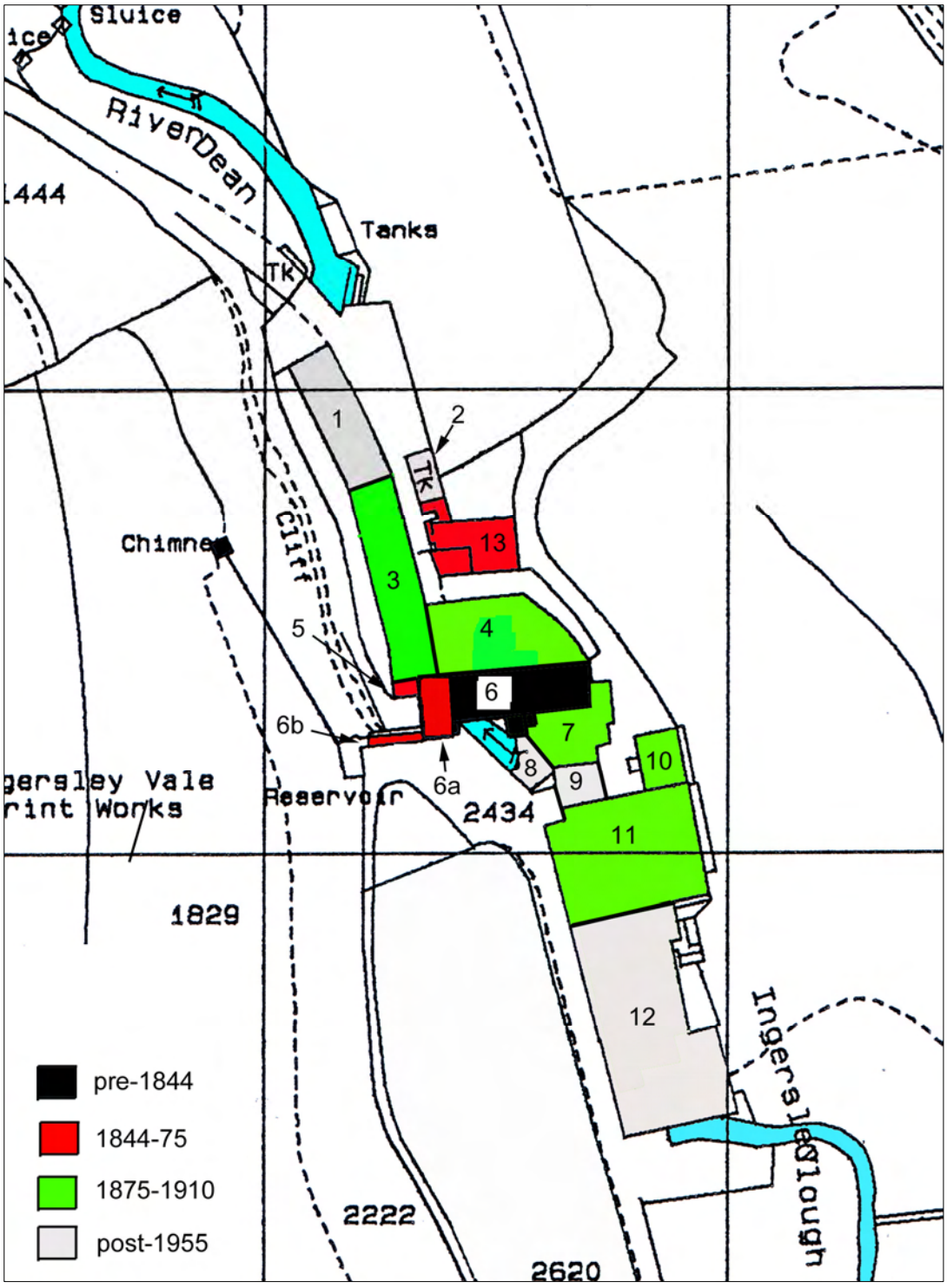

Fig 19: The phraseology of the Ingersley Vale Mill site, showing the upstanding buildings. Numbers refer to the gazetteer in section 5.

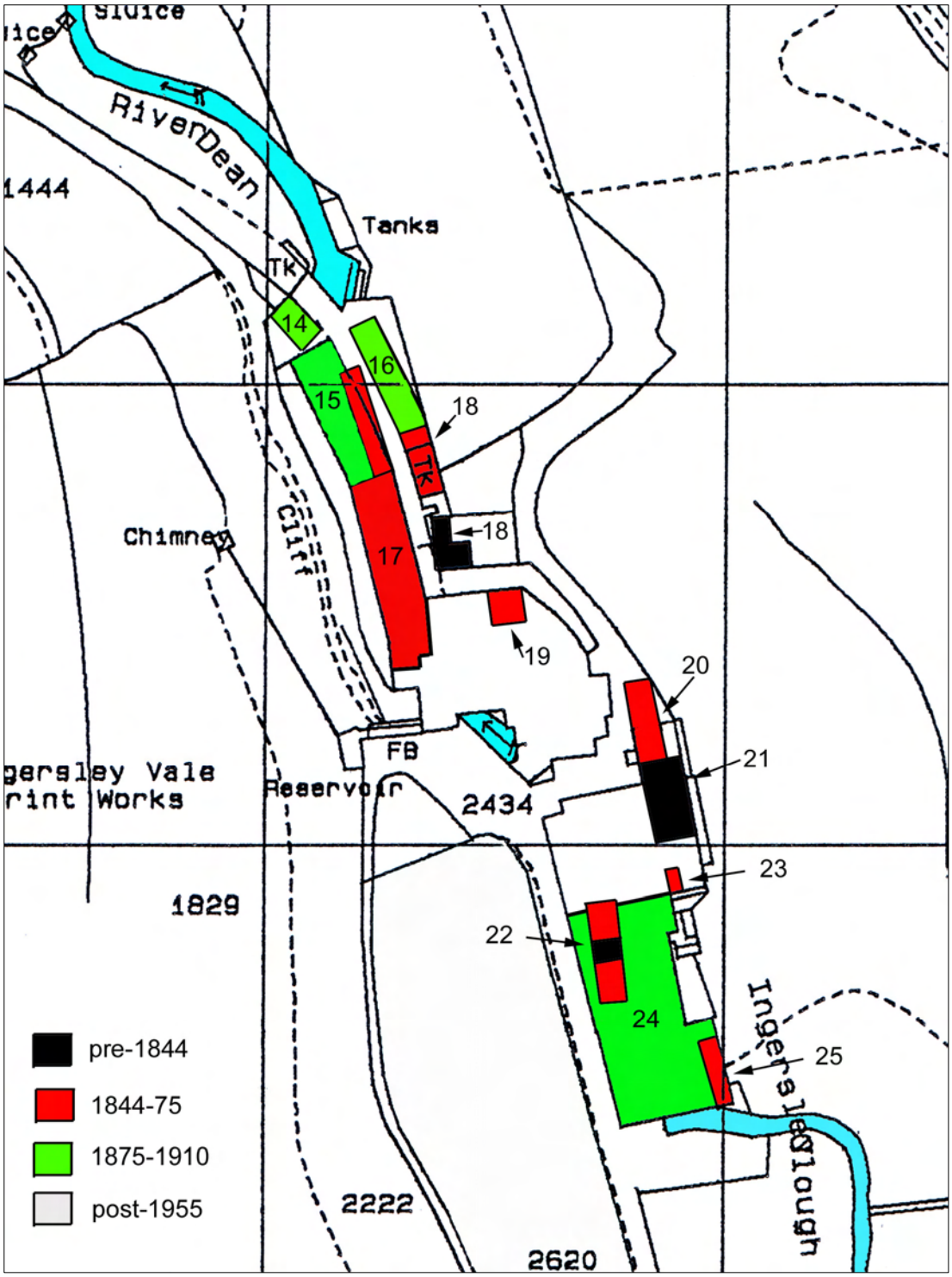

Fig 20: The phraseology of the Ingersley Vale Mill site, showing the demolished buildings. Numbers refer to the gazetteer in section 5.

EP2

Ingersley Vale Mill, Bollington, Cheshire

Archaeological Building Investigation

Oxford Archaeology North

February 2011

Ingersley Vale LLP

Issue No: 2010-11/1170
OA North Job No: L10283
NGR: SJ 942 773

Document Title: INGERSLEY VALE MILL, BOLLINGTON, CHESHIRE

Document Type: Archaeological Building Investigation

Client Name: Ingersley Vale LLP

Issue Number: 2010-11/1170
OA Job Number: L10283
National Grid Reference: SJ 942 773

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CONTENTS

SUMMARY

Cheshire County Council has granted outline planning permission for a redevelopment of Ingersley Vale Mill at Ingersley Vale, Bollington, Cheshire (centred on NGR SD 942 773). The proposed scheme of works allows for the demolition of several buildings surrounding the central spinning mill and waterwheel house, which are to be renovated for re-use within the proposed housing development.

In order to secure archaeological interests, the Development Control Officer (Archaeology) responsible for Cheshire East recommended that a programme of archaeological investigation was carried out to support and inform the planning application. It was recommended that the scope of archaeological investigation should comprise an English Heritage Level I-type survey of the majority of the buildings, coupled with an appropriate level of historical research. This was followed by an archaeological watching brief that was to monitor the first phase of demolition. Following the necessary demolitions, an English Heritage Level II-type survey of the spinning block and waterwheel house was also undertaken.

The building survey has provided an archaeological record of the buildings prior to both the demolition and any future development of the remaining structures. The survey was intended to ensure a record of the mill and its associated structures was made for archive and research purposes.

The complex has been heavily remodelled during its evolution from a cotton-spinning mill into a bleachworks, and the several phases of construction identified reflect both changes in ownership and function of the complex. The earliest extant fabric comprises the early nineteenth-century spinning block, which was typical of the period, comprising a slender stone structure with timber floors and a fireproof stair tower. This was heavily remodelled in the late nineteenth century to house bleaching kiers, involving the complete removal of the first floor.

The mill was originally water-powered, and the most striking feature of the complex is the extant waterwheel house, which contained a 56’ diameter cast-iron wheel, which was added to the western side of the spinning block in the mid-nineteenth century. This was almost certainly a backshot wheel, with a leat supplying water from the River Dean.

The watching brief revealed the buried remains of foundations for three boilers, which were previously unknown. Whilst the earlier of these appear to have been associated with a steam engine, providing supplementary power for the mill, the primary role of the later boiler was to provide hot water for the bleaching process, which heralded a rapid expansion of the complex during the late nineteenth century.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) is grateful to Brian Elwell of Brian Ewell and Company, for commissioning and supporting the project, and to Cheshire Demolition for their assistance and support during all phases of the fieldwork. OA North is also grateful to Mark Leah, Development Control Officer (Archaeology) responsible for Cheshire East, for his advice and consultation.

The building survey was undertaken by Liz Murray, Chris Wild and Lewis Stitt, and the watching brief was maintained by Chris Wild and Graham Mottershead. The report was written by Chris Wild and Liz Murray, and the drawings were prepared by Chris Wild. The report was edited by Ian Miller, who was also responsible for project management.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 Ingersley Vale LLP has submitted a proposal for a large re-development of the Ingersley Vale Mill site in Bollington, Cheshire. The proposed scheme of works allows for the demolition of several of the outlying buildings of the mill complex along with the re-development of the central spinning mill, the waterwheel house and the associated water-management systems running from a weir into the mill via an elevated leat.

1.1.2 In order to secure archaeological interests, the Development Control Officer (Archaeology) responsible for Cheshire East recommended that a programme of archaeological investigation was carried out to support and inform the planning application. It was recommended that in the first instance the scope of archaeological investigation should comprise an English Heritage Level I-type survey of the majority of the buildings, coupled with an appropriate level of historical research. Following this there was to be a watching brief undertaken during the first phase of demolition works to mitigate for the potential of finding any surviving water management systems. This was to be followed by a Level II-type survey on the original spinning block, the waterwheel house, and the leat that adjoins the waterwheel house at roof height. It was intended that the historical research would aid an interpretation of the results obtained from the building survey, and also inform a decision as to the extent of any further archaeological investigation that would be required in advance of development. The precise scope of works was specified in a Project Design that was devised by Oxford Archaeology North (OA North) in November 2009 (*Appendix 1*).

1.2 SITE LOCATION

1.2.1 The Ingersley Vale Mill complex (centred on NGR SJ 942 773) lies in the bottom of the Dean Valley (Fig 1), and is bounded to the north and south by the River Dean, which also flows under the main mill complex. To the west is a metalled trackway stepped into the steep valley slope, whilst to the east is the valley of Ingersley Clough.

1.2.2 The majority of the buildings were used until recently, by a number of small firms, principally in the textile trade. However, since these companies departed, the site has undergone some vandalism and many of the buildings were inaccessible due to fire damage or anti-vandalism measures.

2. METHODOLOGY

2.1 BUILDING SURVEY

2.1.1 The building survey occurred in several phases, with an initial English Heritage Level I-type survey of the buildings that were due to be demolished under the development plans. Following this was a watching brief on Buildings marked A-G (Fig 2), to allow for the potential to record any water management systems that may be uncovered during this scheme of works, along with a managed demolition of Building E, an almost extant boiler housing. This was to be followed by an English Heritage Level II-type survey of the original spinning block, waterwheel house, leat and other structural elements of the water-management system.

2.1.2 The initial Level I building survey aimed to provide a photographic record of the historic fabric and key architectural features of the buildings, and to provide an archive record of the structures and location prior to redevelopment. It has provided a photographic and textual record of the buildings to English Heritage (2006) Level I standard. Records were made of all external principal building elements, and internal where possible, as well as any features of historical or architectural significance. These records are essentially descriptive, although interpretation was carried out on site as required. All work was carried out in accordance with the Project Design (*Appendix 1*), and was consistent with the relevant standards and procedures provided by the Institute for Archaeologists (IfA), and generally accepted best practice.

2.1.3 ***Photographic Survey:*** a photographic archive of all the buildings was compiled, consisting of both general and detailed exterior photographs, which were captured using both digital and black and white 35mm formats. General photographs of the interior elevations were also taken where possible in digital and 35mm format.

2.1.4 ***Site Drawings:*** An architects plan has been annotated to show the buildings within the survey. Further drawings were produced by REDM survey. These drawings include a plan of the spinning block and waterwheel house (Buildings H and I), and a plan of the boilers uncovered during the watching brief. These have been annotated to show the form and location of any structural features of historic significance

2.1.5 ***Interpretation and Analysis:*** a visual inspection of the exterior of the building was undertaken and a description maintained to English Heritage (2006) Level II. These records are essentially descriptive, and provide a systematic account of the origin, development and use of the building.

2.2 WATCHING BRIEF

2.2.1 Whilst the initial aim of the watching brief was to monitor any impact on the water-management systems, none were disturbed during this phase of the project. However, the initial Level I survey identified the potential for extant sub-surface remains of a boiler house, and following discussions with the client, it was agreed that a watching brief be maintained during clearance within this area.

2.2.2 Excavation of the overburden was undertaken using a mechanical excavator under the supervision of an archaeologist. Further deposits were then removed with a small toothless ditching bucket, again under archaeological supervision. Further excavation was undertaken by hand, to identify and record the key features of the Watching Brief trench, and a plan and written description of the site was generated, accompanied by a photographic archive.

2.3 ARCHIVE

2.3.1 A full archive of the work has been prepared to a professional standard in accordance with current English Heritage guidelines (1991) and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990). The archive will be deposited with the Stockport Museum on completion of the project. In addition, a copy of the report will be forwarded to the County Historic Environment Record (HER).

3. BACKGROUND

3.1 INTRODUCTION

3.1.1 An understanding of the historical background of a site provides the local context within which the extant structures can be assessed archaeologically. The following section provides a chronological account of the development of the mill complex, and has been compiled largely from secondary sources and the sequence of available historic maps; there is little primary documentation on the mill available, and there are no known surviving company records.

3.1.2 Although not a listed building, the spinning block of Ingersley Vale Mill is the oldest surviving mill in Bollington, and one of the earliest surviving examples in Cheshire. The waterwheel house originally held the second largest water wheel in Britain, although this has since been removed.

3.1.3 This work draws heavily on an earlier desk-based assessment, which included a full map-regression, accompanying a documentary account of the development of the complex (UMAU 2004).

3.2 SECONDARY SOURCES

3.2.1 The earliest reference to a cotton-spinning mill at Ingersley is noted as 1792 or 1793 and occurs in an account of mills in the Bollington and Rainow area by a William Richardson, millwright, from August 1806 (Longden 2002, 40). He states that originally the mill had a very small reservoir, which didn't hold water for more than a few hours (Longden 2002, 40). This early reservoir was possibly located to the south of the current spinning block, although there are no visible remains present. The owner or occupier of the mill is unclear as the Rainow Land Tax returns do not mention any textile mills at all (CRO Rainow Land Tax Returns). However, it seems likely that Ingersley Vale Mill was held by the occupiers of land described as 'Lower Ingersley'. In 1793-4 this was Thomas Snelson, between 1795 and 1800 it was Edward Sharpley, and from 1801 Edward Collier.

3.2.2 Edward Collier is the first occupier directly associated with the mill and it is his initials, along with the date of 1800, that are carved on the parabolic weir (now a Grade II Listed Structure) constructed across the River above Waulkmill Farm. This weir created Clough Pool, which had a depth of roughly seven feet, from which water was brought to Ingersley Vale Mill via the leat terraced into the western side of the valley.

3.2.3 This new system of water management is mentioned by Richardson, although he states that the pool was built in 1803, and he noted that the new reservoir and leat provided water for two water wheels at the mill, "the one being placed above the other, and the water which turns the uppermost empties into and turns the lower one." He also mentions an 18hp steam engine for use "when the water is scarce and the reservoir replenishes." It is not clear whether this engine functioned solely for the purpose of pumping water into the reservoir

or whether it also powered machinery in the mill (Longden 2002, 40). The stair tower of the mill, located on the southern elevation of the main spinning block, bears an inscription 'E 1809 C', suggesting that much of this structure was built around this date. However, by 1811 Collier was bankrupt, perhaps because of the expense of all these works (Longden 2002, 40). Despite this, the Commercial Directory for 1814-15 and 1816-17 still recorded an Edward Collier of Ingersley under its list of cotton spinners and manufacturers. However, it is known that by 1819 the mill was under a new occupier. Reports from the Macclesfield Courier of a fire in the mill, in 1819, it is recorded that the mill had been latterly occupied by Messrs Chadwick, Clogg & Co of Manchester. The fire occurred on the night of Thursday 29 April 1819 although it is unclear from the newspaper account the extent of the damage (*Macclesfield Courier*, 1 May 1819). The sale of household furniture and other effects from the premises adjoining the mill the following month provides another account of the extent of the complex at this date. The site included the manufacturer's house, a warehouse, a smithy, and an apprentice house for at least 30 pauper apprentices (Longden 2002, 41; *Macclesfield Courier*, 22 May 1819).

3.2.4 The mill must have been repaired or re-built by August 1821, because at this time Thomas Gaskell of Tower Hill, the owner of the site, leased the mill for 21 years to the partnership of Martin Swindells I and Thomas and John Fearnley. Swindells was to become the founder of one of the great textile mill families of Bollington and the Fearnleys were already renting the nearby Rainow Mill, for £450 per annum (Wilmslow Historical Society 1973, 35). The lease included references to a steam engine, engine house and dwelling houses. Thomas Fearnley was replaced in the partnership in 1825 by James Fearnley and according to reports in the Macclesfield Courier (6 May 1826) by 1826 this new partnership had installed 330 power looms for weaving cotton at Ingersley Clough. The partnership between Martin Swindells I and the Fearnleys was dissolved in 1830 (Wilmslow Historical Society 1973, 35), resulting in Swindells taking over complete control of both Ingersley Vale and Rainow Mills. On October 1832 he also leased Higher Mill, Lower Mill and new Lower Mill for 15 years. His son Martin was a partner by this time and in 1834 Joseph Brooke also became a partner in Ingersley Vale Mill. According to Pigot's 1834 Directory of Cheshire, Brooke was living at Ingersley Clough House – presumably Clough House, although by 1841 Martin Swindells II was resident at Ingersley Clough House (Pigot & Slater Cheshire Directory 1841).The Swindells & Brooke partnership did not renew their leases on Ingersley Vale and Rainow Mills, which expired at the end of December 1842.

3.2.5 By 1844 both mills were occupied by James Leigh, a cotton spinner (Longden 2002, 41). This does not appear to have been a lengthy occupation as by 1848 the mill was in dual occupation by John Brier & Co, calico printers, and Ludwig Dyhrenfurth, also a calico printer (Pigot & Slaters Directory of Cheshire 1848). By 1850 only John Brier is still listed as a calico printer (Bagshaw's Directory of Cheshire 1850) and in 1856 Brier expanded his business by building the nearby Oak Bank print works (Longden 2002, 41). It is probably to John Brier that the building of the new wheel house and the installation of the large suspension water wheel should be attributed. Brier was

still at the mill in 1860, when it was described as the Ingersley Vale Printworks (Whites Directory of Cheshire 1860). However, he appears to have transferred his business to the Oak Bank printworks soon after. Little seems to be known about the immediate successors of Brier at Ingersley Vale Mill but by 1874 the mill was occupied by Anthony Scott & Co, dyers and yarn polishers (Longden 2002, 42).

3.2.6 By 1878 the mill had been taken over by the firm of Bates and King (Kelly's Directory of Cheshire 1878), and were still attested here in 1883 (Slaters Cheshire Directory 1883). In 1887-88 William King & Co were occupying the site (Worrall 1888); followed by A J King & Co from 1892 (Kelly's Cheshire Directory 1892). The firm merged with 53 other finishing companies in 1900 to become part of the Bleachers' Association. Their headquarters were in Manchester but individual sites such as Ingersley retained their existing name and management. A J King & Co, as part of the Bleachers' Association, remained at Ingersley Vale Mill until 1929, when the mill appears to have been sold to the new firm of Messrs Slater, Harrison & Company manufacturers of 'plain and coated pasteboards for litho and letterpress printing, showcard embossing, ticket writing and printing, and numerous other uses' (Longden 2002, 42). Slater Harrison moved to Lowerhouse Mill, Bollington, in 1937. Thereafter the mill complex was often in multiple occupancy. Eric Britton Ltd, manufacturer of bias binding, corded piping, and other edgings and tapes for the clothing industry, used the mill from 1946 to 1954. From 1952 W & A E Sheratt, dyers and printers, occupied part of the complex. In the 1970s and 1980s Astrand Printing Ltd, screen printers of warp knitted and woven fabrics, was based at the mill. In the 1990s the site was also used by 'Chameleon Dyers Ltd, Bleachers Dyers and Finishers' and by Deepcourt Ltd, and their name can still be seen on signage around the mill complex.

3.2.7 The destruction of the interior of the early-nineteenth century cotton spinning block on Wed 17th November 1999 appears to have brought an end to textile finishing production on this site. Following the fire the site has stood empty and has undergone numerous episodes of vandalism making many of the structures unsafe for access.

4. RESULTS

4.1 INTRODUCTION

4.1.1 The Level I archaeological building survey was targeted at those buildings due to be demolished under the proposed scheme of works. The subsequent Level II survey recorded the extant spinning block in greater detail. Buildings have been identified by an existing lettering system, as shown on Figure 2. Whilst the initial aim of the Watching Brief was to monitor any impact on the water-management systems, none were disturbed during this phase of the project. However, the initial Level I survey identified the potential for extant sub-surface remains of a boiler house, and following discussions with the county archaeology service and the client, it was agreed that a watching brief be maintained during clearance within this area.

4.2 LEVEL-I BUILDING SURVEY

4.2.1 ***Building A:*** this structure, situated at the northern end of the complex (Fig 2) comprised, a two-storey gabled building of machine-made brick, dating to the 1950s. The roof comprised corrugated asbestos sheeting, with additional corrugated plastic roof lights and a single centrally placed vent to the apex of the roof. The building was constructed above an earlier stone foundation, which survived partly as extant wall fabric within the north elevation (Plate 1), where a stone arch formed the outflow to the north of the River Dean. There appeared to be a blocked doorway within relict stone construction at ground-floor level, and a further blocked doorway at first-floor height, on the right of the elevation, within the later brickwork. A scar on the right of the elevation suggests the removal of a wall extending to the north from this elevation.

Plate 1: North elevation of Building A, with earlier stone footings at lower level

4.2.2 The east elevation comprised six bays, each with a louvred window with a concrete sill and lintel, within the second storey (Plate 2). At ground-floor level, the first two bays from the left of the elevation comprised doorways, with two windows in the following bays, and a further door and window at the northern end. To the south, the building butted the north elevation of Building B. The interior of the building was not accessible due to the presence of chemical drums and asbestos flooring.

Plate 2: East elevation of Building A, with Building B to the rear

4.2.3 ***Building B:*** this large two-storey, brick-built gabled building, also of mid-1950s date, was butted by Building A to the north, and abutted buildings G and H to the south (Fig 2). No internal access was available, and the west elevation was obscured heavily by vegetation. It comprised 17 bays, the northern three of which dog-leg slightly to the west, to follow the line of the valley (Fig 2). The ground floor has an entrance in the northern bay of the east elevation, with all remaining bays, bar the fourth bay from the southern end, having vertical ten-light windows with concrete lintels and projecting concrete sills. The slightly shallower upper floor has six-light windows within each bay, of similar style, but shorter than those on the ground floor below (Plate 3). The southern three bays of the east elevation lie within a corrugated asbestos sheet canopy, which forms part of Building F (Fig 2), although it post-dates both structures. The southern bay housed a wide double doorway in the east elevation, affording access from the complex to the south and east.

Plate 3: East elevation of Building B, with canopy to building F behind

Plate 4: Wall scar of Building D on northern elevation of Building E

4.2.5 ***Building C:*** this building had been demolished by the time of the building investigation.

4.2.6 ***Building D:*** this structure had been demolished shortly before the building survey was undertaken, but the demolition rubble suggested that it was at least partially constructed of, or remodelled with machine-made brick. Furthermore, scars to the north-west corner of Building E (Fig 2) demonstrated that it was of two-storey height, with a pitched roof, and almost certainly post-dated the building to the south, as the purlins appear to have been punched into the external elevation of Building E (Plate 4).

4.2.7 ***Building E:*** this two-storey, sub-rectangular building comprised mainly stone construction, below a damaged slate roof. The building was in an extremely poor state of repair, with parts of the north and west walls having collapsed. The west of the building contained a single-cell room at ground-floor level, presumably below a similar room above, although internal access was not possible to confirm the first-floor layout (Plate 5). This appears to have originally represented a separate structure, being later subsumed into an enlarged boiler house. The extant north elevation of this part of the building had two tall blocked windows at ground-floor level, with a smaller, blocked window above. A wall and roof scar on the right of this elevation appear to relate to the demolished Building D.

4.2.8 The eastern part of Building E contained a large boiler bed, of a size suitable for a Cornish boiler and an adjoining larger room to the east that possibly housed a further boiler, both of which were open to two storeys. Although parts of these had been demolished, part of the boiler bed, and fragments of a boiler, remained *in-situ* in the western bay (Plate 6). The two rooms were divided by a wall of brick and stone construction. The lower part of the wall comprised refractory brick, forming a plinth below an approximately 2m high section of red brick construction (Plate 6). Above this level the dividing wall was of rubble stone construction, possibly representing the original outer wall of the boiler house.

4.2.9 The west elevation of the building had a single doorway, placed to the left of centre, affording access into the single ground-floor room. The south-west corner of the building was chamfered at ground-floor level, in order to improve vehicular access around the building (Plate 7). The south elevation had two large open bays on the eastern side of the elevation, divided by a central pier constructed of bull-nosed engineering brick, unlike the rest of the elevation which was of stone construction (Plate 8). A small stone arch to the left of the entrance to the boiler bed had been infilled, and a doorway at the western end of the south elevation were also blocked, with an extant small window above.

Plate 5: South wall of western part of Building E, with arched aperture to west of entrance

Plate 6: In-situ remains of a Cornish boiler, Building E

Plate 7: Chamfered ground floor return of Building E

Plate 8: Open frontage of boiler house in eastern part of Building E

4.2.10 ***Building F:*** this comprised a late nineteenth-century building of stone construction, placed on the southern side of the main spinning block (Building I; Fig 2). Externally the building was of only a single storey, but internally it had a reduced floor level, consistent with that of the spinning block to the south. The majority of the building was of stone construction, but was remodelled below the eaves in modern machine-made brick, suggesting an alteration of the height of the structure, in conjunction with a replacement roof. Almost all of the of the window and door apertures were also blocked with brick (Plate 9). The north wall had a large double-door entrance on the western side of the elevation, where it was butted by Building B. This had bull-nosed quoins to the left jamb. All the remaining apertures had external sandstone quoin surrounds, with the windows also having stone lintels and projecting stone sills. A wide doorway at the western side of the elevation was partially blocked with brick, forming a window, itself blocked subsequently. Two stone lined recesses on this elevation appear to have originally housed recessed downspouts for the gutters.

Plate 9: North elevation of Building F, with blocked apertures and rebuilt wall-head

4.2.11 The north-east-facing elevation comprised three bays, with a doorway on the left also having bull-nosed stone quoin jambs. It was brick-blocked, as were windows in the other two bays. The roof line was higher above this elevation, rising to a peak above the right-hand jamb of the doorway. The east elevation was of bays, with a doorway in the north bay apparently representing an insertion, as there were no quoins to the jambs, and the door surround had been heavily re-pointed. The window to the right was blocked with clinker block. The southern wall of the building was formed by the north external elevation of the earlier spinning block, Building I (Fig 2).

4.2.12 ***Building G:*** this comprised a single-storey, stone-built structure, abutting the western side of the waterwheel house. It retained the majority of a single-pitched slate roof, supported upon a central principal rafter. A roof scar on the adjacent, earlier Building H, above the present roof-line, suggests that the height of the roof had been reduced, and the upper five courses of the west wall also appeared rebuilt, as they comprised larger stone blocks (Plate 10). The building had been reduced in length at its northern end, by approximately 2m, surviving to its original extent only as a collapsed wall on the roadside, western elevation (Plate 10). The replacement north wall was constructed using machine-made brick, and housed a central four-light window within the gable. The west wall had two large central windows, both brick-blocked, with a probable stone-blocked doorway at the southern end of the wall. A larger aperture, with an I-section steel lintel comprised the entirety of the south frontage of the structure, suggesting that it was originally open-fronted. The eastern jamb of this aperture overlay a blocked arched opening within the waterwheel house (Building H; Fig 2), demonstrating the later construction of Building G (Plate 11).

Plate 10: Building G, with shortened northern extent, and blocked apertures in west elevation

Plate 11: South elevation of Building G, with blocked aperture in west elevation of Building H

4.2.13 ***Building J:*** this represents the stair and hoist towers attached to the southern side of Building I, and both were included in the Level II survey.

4.2.14 ***Building K:*** a small single-storey, rectangular room butting the southern side of the hoist tower of the spinning block (Building I; Fig 2). It was of late twentieth-century brick construction, built in English Garden Wall bond, and with a single pitched roof. The building only had access via the hoist tower, and was presumably a small storeroom associated with the late re-use of the spinning block.

4.2.15 ***Building L:*** this comprised a single-storey shed butting the eastern side of the spinning block (Building I; Fig 2). It was of stone construction, with modifications in brick, and had a single-pitched asbestos sheet roof, supported on L-section steel members. The structure has a vertical joint in its eastern wall, flush with the south wall of Building I, suggesting that it was constructed in two phases (Plate 12). The northern part of the building may originally have extended further, quite possibly to the northern edge of the spinning block, and the latter elevation was formed in brick, with a steel lintel carrying the wall over a double doorway. The floor levels within the structure did not match those within the original layout of the spinning block, suggesting that these had also been altered within Building L. Part of a blocked doorway surviving at wall-head level in the east wall, above three blocked windows, demonstrated this change in floor level, and also that the building was originally taller.

Plate 12: East elevation of Building L, with central butt-joint within stone construction

4.2.16 ***Building M – Finishing Shed:*** this small sub-rectangular structure was butted onto the southern side of the earlier spinning block (Building I; Fig 2). It was of stone construction, and probably originally had a pitched slate roof, which was replaced by a single-pitched asbestos sheet roof supported on a steel frame. The building, which had a concrete floor, was empty internally, and had a large blocked doorway into the spinning block in its northern elevation. This was stone-blocked, suggesting that it may have been blocked at the time of the construction of Building M, with access being provided in the western end of the building, adjacent to the stair tower. The west wall of the tower also housed the end bearing for a lineshaft within Building M, demonstrating that power was provided for the structure.

4.2.17 ***Building N - Shed:*** this late single-storey shed overlay the River Dean, and was aligned parallel to the culvert below the spinning block. It was of machine-made red brick construction, erected in English Garden Wall bond, most probably in the second half of the twentieth century. Access was afforded in either gable, below a pitched corrugated asbestos sheet roof. No internal access was afforded to the building.

4.2.18 ***Building O – Shed:*** this timber structure had been demolished prior to the desk-based assessment of 2004.

4.2.19 ***Building P - Institute:*** this 1½ storey detached stone building was of well-dressed stone construction, with a hipped roof, and quoined returns, suggesting a higher status than many of the surrounding structures (Plate 13). It was unfortunately in a poor state of repair, and had an external stair to a blocked entrance at first-floor level in the northern elevation, and had several

ground floor apertures in a single-storey outshut range along its western elevation. These were also blocked and partly overlain by a large build-up of demolition debris forming the present ground level (Plate 13). A single window in this range afforded light to the upper storey, which was mainly contained within the roofspace of the main structure. Although no internal inspection of the building was possible, the western outshut almost certainly represented an entrance lobby with adjacent cloakrooms, vestibules, and a stair, probably with a single open-plan room to the rear.

Plate 13: Front elevation of Building P, with raised ground level in the foreground

4.2.20 ***Building Q – Large Finishing Shed:*** this large shed was of stone construction, and although heavily modernised both internally and externally, still retained several original features. It comprised a single storey, open to the rafters, and retaining two east/west-aligned pitched roofs. Each of these had a projecting coped parapet above the western gable, each with an *oeil de boeuf* round window in the upper gable (Plate 14). The late corrugated asbestos roof had rows of corrugated plastic skylights, probably replicating the original arrangement which would have comprised slate and glass. The roofs were supported on timber lattice trusses (Plate 15), which were somewhat unusual. It was unclear, given only the cursory inspection afforded, to establish whether these were original, but it is unlikely that any original steel trusses would have failed and needed replacing on such a large scale during a re-roofing of the building. Furthermore, the present trusses were not of consistent style for the probable date of the roofing material, suggesting that they represent original trusses. The valley between the two roofs was carried on an I-section beam, supported on cylindrical-section cast-iron columns.

Plate 14: West elevation of Building R, western gables of Building Q above

Plate 15: Roof trusses within Building Q,

4.2.21 ***Building R – Warehouse:*** this stone-built single-storey structure formed a continuous outshut to the larger shed to the east (Building Q; Fig 2). It had several stone-blocked windows and doors in its western wall, which was latterly partly subsumed below a rise in ground level for the present road bed (Plate 14). Given the material used in the blocking of the apertures, it would appear that this change of levels was undertaken relatively shortly after the erection of the building.

4.2.22 ***Building S – Storage Shed:*** this mid-twentieth-century large open warehouse/shed, replaced the southern half of the late nineteenth-century finishing shed, and a smaller shed placed on its southern side. Elements of the western wall appear to have been incorporated in the new building. Whilst the lower part of the external walls were of stone construction, the late building was supported on a steel frame, the upper parts of which were clad with asbestos sheeting (Plate 14), with corrugated asbestos sheeting to the gables. The majority of the eight bays of the building had a pair of windows in the western elevation, although the north and southern bays contained doorways, with a further full-height roller-shutter door presumably inserted into the third bay from the southern end. The southern gable housed two windows, which were level with the present ground level. Internally, the floor level was lower than to the south, and the building was open-plan, with the north wall being of machine made brick construction, forming a partition to the remodelled shed to the north (Building Q). The steel lattice trusses were more typical of its period of construction than those in Building Q to the north.

4.3 LEVEL II BUILDING SURVEY

4.3.1 ***Building I:*** the 12 bay spinning block (Fig 3), measuring approximately 110 x 37' (33.5 x 11.3m), was constructed of local coursed rubble to a height of four storeys, and survives without a roof or any of the internal floors (Plate 16). The upper two floors are each stepped back by 9½" (0.24m) on the north and south walls and the eastern gable, saving material and reducing the weight of the building. Internally, the windows had segmental brick arches and brick reveals. All original first floor windows have been blocked, with either stone or brick. On the upper floor, the tie beam sockets had projecting sandstone pads (Plate 17).

4.3.2 On the north external face, the windows have flat sandstone lintels of varying thickness. The eastern bay (12) at first floor level was remodelled subsequently into a door, flanked by a narrow window (Plate 18). Bay 4 has a pair of timber rails within the wall face, placed at the top of the ground floor window aperture, and probably relating to its blocking. Bay 5 has a fishplate at first-floor level, in the position where a window could be expected, but for which there was no evidence, suggesting one was not included within the original build. The two bays to the west were also devoid of windows, with a large bearing box in Bay 7, flanked by a pair of smaller boxes, set slightly lower in the wall (Plate 19).

Plate 16: General view of the spinning block, Building I, and wheel house Building H

Plate 17: North internal elevation, Building I, with diminishing wall thickness and window size, blocked apertures and narrow upper Bay 1 window

Plate 18: Eastern end of north elevation, Building I, with remodelled aperture in end bay

Plate 19: Large cast-iron bearing box, Bay 7, Building I, flanked by smaller apertures

4.3.3 The external ground level was increased subsequently on the north side of the structure, obscuring most of the original ground-floor apertures, all of which are stone-blocked, with the exception of the eastern bay (Bay 1), which has an enlarged opening with an I-section steel lintel (Plate 17). The window in the third bay was also brick-blocked at ground floor level. The windows in Bays 1 and 2 in the north wall were both also narrowed on the upper two floors (Plate 17).

4.3.4 The original four floors were reduced to three taller floors, supported on I-section steel beams. The original beams were either removed, with the sockets infilled with clinker block, or were cut flush with the wall face. Two of the large I-section beams inserted to create the new first-floor level had deflected significantly, and have two supporting cylindrical cast-iron columns, each set on flagstone pads above the present concrete floor (Plate 20).

Plate 20: Inserted steel beams for the repositioned first floor level, Building I

4.3.5 Both the north and south walls returned to form the eastern elevation of the waterwheel house, which was extended above the height of the original gable wall. A subsequently remodelled wide doorway was inserted into the partition wall between the two structures at its northern end, as was a round-headed arched opening to the south of centre (Plate 21). The base of this has been enlarged to form a doorway by cutting through the padstone of the original driveshaft bearing which it housed (Plate 22).

Plate 21: Apertures inserted into the western gable of the spinning block, into Building H

Plate 22: Detail of axle mount for water wheel, with cut padstone

4.3.6 Internally, the north wall retains several fragments of cast-iron wall brackets (Plate 23), which presumably carried lineshafting, although the height is unusual, being only around 5' above the present concrete floor. The fifth to seventh bays have no evidence for ground-floor windows, whilst at first-floor level above, there was similarly no evidence for windows, as observed within the external elevation. The large bearing box within Bay 7 was set on a sandstone pad (Plate 24). In the eastern bay (12), there was also no window, as this lay below the external ground level, but immediately to the west of where it would have been placed was a 3 x 1' (0.92 x 0.30m) vertical rectangular aperture (Plate 25). This was blocked with bricked stamped 'BC' denoting it was made at Bradford Colliery, Manchester, and was bonded in a black sooty mortar, suggesting a late nineteenth- or early twentieth-century date for the blocking. The exact purpose of the aperture is unclear, although it may represent the housing for an end bearing for a lineshaft, which may have been placed in this position if the end bay housed a stair from the raised external ground level (Fig 2). A late clinker block stair gave access to a concrete platform above a clinker block store in the end bay, which would have also afforded external access.

Plate 23: Broken cast-iron wall brackets, north elevation, Building I

Plate 24: Large cast-iron bearing box, Bay 7, Building I, flanked by smaller apertures

Plate 25: Blocked windows, inserted stair, and possible blocked end bearing bracket, Bay 12

Plate 26: Blocked end bearing box, eastern gable, Building I, with remodelled doorway above

4.3.7 The eastern gable has no apertures at ground-floor level, as this was also positioned below the external ground level, which rises up the hillslope around the end of the building. The only ground floor feature is a bearing box, presumably for an end bearing, placed approximately 18" (0.46m) from the south wall (Plate 26). A door at the north end of the first floor has been remodelled and enlarged, whilst the three floors above all have doorways positioned to the south of centre, with that on the top floor being stone-blocked. This afforded access into the adjacent structure (Building L; Fig 2), which was reduced in height subsequently.

4.3.8 Bays 10-12 of the south wall are heavily remodelled at original ground and first floor levels, although Bay 11 retains a large segmental arch, taller than the windows elsewhere, and apparently represented an original doorway, blocked subsequently with stone (Plate 27), quite possibly during the addition of a further finishing shed, Building M (Fig 2: *Section 4.2.16*, above).

Plate 27: Blocked doorway, south elevation, Bay 11, Building I

4.3.9 Bay 9 has an inserted doorway, possibly enlarged from a window aperture, with an extractor fan at first-floor level in the window above. Bay 8 afforded access into the original stair tower, and was latterly fitted with steel fireproof double doors. The first-floor aperture above is stone-blocked, whilst the upper two floors had single fireproof steel doors (Plate 28).

Plate 28: Bay 8, south elevation, Building I, showing doorways into stair tower J

4.3.10 The 14'² (4.27m) stair tower (Building J) is of fireproof construction, with an external door in its eastern side at ground-floor level. The stairs are of sandstone flag construction, with quarter-turn landings between each floor. The central newel is of brick construction, bonded in lime mortar, with bull-nosed corners, and is lime-washed. Windows were originally provided on each of the western landings and on floor level landings of the first three floors (Plate 29). A lineshaft appears to have been placed through the tower at first floor level, as opposing bearing boxes were observed in the east and west

walls (Plate 29). This possibly resulted in the stone blocking of the doorway into the spinning block at this level, as its insertion would have not been possible whilst the doorway remained in use. The external east wall also houses an end-bearing box (Plate 29).

Plate 29: East wall of stair tower with landing windows and two inserted bearing boxes

Plate 30: Bays 7 and 6, south elevation, showing blocked doorways and brick hoist tower J

4.3.11 The apertures in Bay 7 are blocked at all levels, flush with the internal wall face on all but the second floor. These were larger than the windows elsewhere on the upper floors, suggesting that they represented doorways, almost certainly into a privy tower, which would have been removed for the insertion of a hoist tower in Bay 6 (Plate 30). This was constructed in machine-made brick, in English Garden Wall bond, using a black sooty mortar, and clad in stone, similar in size, but greener in colour than the pinkish-red sandstone of the original construction (Plate 31). It was butted onto the earlier stair tower, which presently has a single-pitched roof, possibly remodelled during the addition of the hoist tower. On its southern external face, the hoist tower has has four-light windows to each floor (Plate 31), above a date stone of 1809, bearing the initials E C (Plate 31), presumably representing Edward Collier, who owned the complex at this date (UMAU 2004). This has clearly been repositioned from elsewhere within the building or complex.

Plate 31: Southern elevation of hoist tower, J, with repositioned datestone of 1809

4.3.12 The western five bays of the south wall were refaced in machine-made brick at ground and first-floor level, projecting a full-brick thickness from the wall (Plate 32). This appears to date from the alteration of floor levels within the spinning block. Bay 1 of the south wall has doors on the upper two floors, reflecting the change in ground level adjacent to the wheel house.

Plate 32: Western bays of south elevation, Building I, showing refaced ground floor

4.3.13 ***Building H:*** the five-storey high waterwheel house was most probably added to the western gable of the spinning block in the 1850s, to replace two smaller water wheels, one of which was presumably housed internally, within the western bay of the spinning block, where the River Dean passed under the building in a culvert (Fig 2).

4.3.14 The rectangular structure was built with well-dressed and coursed local stone, to a much higher standard than other buildings within the complex, and had a string course at externl ground floor level and projecting stone copings (Plate 33). The western elevation had a high-level wall scar for the roof-line of the original height of Building G (Plate 16), whilst the northern elevation had two doorways inserted into the north elevation, affording access from Building B to a floor inserted into the waterwheel house, following the removal of the wheel in the mid-twentieth century (Plate 16). The south elevation has further decoration in the form of a pair of round-headed arched windows, with a

projecting keystone, at a level corresponding to the fourth floor of the spinning block (Plate 33). The floor above had a shallower round-headed window, with a projecting sandstone sill (Plate 33). A doorway at external ground floor level, with an I-section steel lintel was almost certainly inserted following the removal of the wheel.

Plate 33: Large 1850s wheel house, with cast iron trough supplying water from a reservoir

4.3.15 No internal access was afforded into the waterwheel house, which contained late concrete floors at first- and second-floor level, but the round-headed apertures housing the axle bearing were observed in the west external wall (Plate 11) and within the gable of the spinning block (Plate 22).

4.3.16 The waterwheel was fed by a long leat which ran down the western side of the valley, being fed from the River Dean at a level where a suitable head of water could be generated (Fig 2). The leat filled a header reservoir, cut into the hillside to the west of the wheel house, and still extant, although heavily overgrown. A sluice in its eastern side controlled the flow of water into an iron trough, which bridged the road below, into the wheel house (Plate 33). This is heavily overgrown (Plate 34), and inaccessible, but could be seen to comprise riveted iron sheets, each approximately 4' (1.22m) wide and 2' (0.61m) high. At each junction a strengthening or tensioning bar was bolted across the top of the trough (Plate 34). The base comprised similar sized sheets, which were carried on cast-iron rails, which had a pair of strengthening braces at either end into the wheel house and retaining wall of the reservoir (Plate 33). The aperture from the trough into the wheel house had an I-section steel lintel (Plate 34), which presumably represented a replacement to an earlier lintel, with the wall above also being rebuilt in machine-made brick (Plate 34).

Plate 34: Detail of iron-sheet trough from reservoir into wheel house

4.4 WATCHING BRIEF

4.4.1 ***Building E***: the watching brief examined the below-ground remains of the boiler house element of Building E, following its demolition (Plate 35). Prior to this demolition, the western of the two bays retained part of the outer casing of a boiler, and an *in-situ* blown down pipe (Plate 6). Unfortunately this did not survive the demolition of the structure.

4.4.2 Not only did the watching brief reveal the size and layout of the boiler bed for the boiler, it also revealed two further boiler beds to the east of the dividing wall (Plate 36). These were slightly longer than that in the western bay (Fig 4), and had partially intact flues (Plates 37 and 38) feeding a perpendicular flue which ran across the northern end of all three boilers (Plate 39).

4.4.3 All were constructed of a mixture of red brick and refractory brick, with the latter being used primarily as facings, and within the flues where the heat was greatest. Many were stamped with the name HAMMOND, a local brick

manufacturer in Pott Shrigley. Several lower grade refractory bricks bore the stamp BC of the Bradford Colliery brickworks in Manchester.

Plate 35: Footprint of Building E following demolition

Plate 36: Three boiler beds with partially intact benches observed below Building E

Plate 37: Flue on boiler bench, and at rear (right) of both visible beds into main flue

Plate 38: Detail of boiler flue, with in-situ damper framing at rear

Plate 39: Boiler flue adjacent to front edge of Building E

4.4.4 All three boilers were of Cornish-type, with part of the full length side flues clearly visible within the extant fabric (Fig 4; Plates 37 and 38). Whilst these were mainly destroyed prior to, or during the demolition of the structure, elements of associated dampers into the main rear flue were observed *in situ* (Plate 38) and within the demolition debris. Elements of damaged projecting walls, of refractory brick construction at the rear of each boiler, almost certainly relate to the channelling of air from the back of the boiler into the two side flues, which ran to the front of the boiler bench and into a single flue beneath the boiler. Whilst the benches for the boiler were all badly damaged, probably as a result of the removal of the boilers themselves, a short row of disturbed, but effectively *in-situ* mounting blocks were observed at the northern end of the western bench. Several more of these L-shaped blocks, with concave inner faces to support the curved boiler, were observed within the backfill, as were examples of convex refractory tiles, which were placed over the top of the boiler.

5. DISCUSSION

5.1 INTRODUCTION

5.1.1 The chronology and development of the Ingersley Vale Mill complex has previously been discussed as part of a comprehensive desk-based assessment undertaken several years prior to this survey (UMAU 2004). This identified five principle phases in the development of the complex, which was begun in the late-eighteenth century. Whilst it is not deemed necessary to repeat this information for the purposes of this report, the buildings recorded will be discussed as individual entities within the broader framework of the earlier proposed phasing.

5.2 DISCUSSION OF COMPONENT BUILDINGS

5.2.1 ***Building A - Offices:*** whilst some fabric relating to an earlier structure in this position survived, the extant fabric was constructed during the final phase of activity, probably shortly after the survey for the 1955 Ordnance Survey map. The building was constructed as a large office block, showing the increased administrative workforce and workload associated with later-twentieth century manufacture.

5.2.2 ***Building B – former 'Grey Rooms':*** the present structure was of similar build to Building A to the north, and probably predated it by a very short space of time. It was built on the foundation of a structure erected between 1842 and 1871 (UMAU 2004, 17). Within the structure, unbleached cloth would firstly have been sorted, dependant on both its quality, and the bleaching processes to be undertaken, and subsequently rolled and sown together to form continuous belts for bleaching.

5.2.3 ***Building C – Oil tanks:*** these mid-twentieth century oil storage tanks had been removed prior to the building survey, but presumably stored oil for use within late oil-fired boilers.

5.2.4 ***Building D - Warehouse:*** although demolished prior to the survey, this structure appears to have been similar to the western part of Building E, and quite possibly originally formed part of the same structure, erected between 1842 and 1871 (UMAU 2004, 17). Its position close to both the Grey Rooms, and the site entrance strongly suggests use as a store or warehouse.

5.2.5 ***Building E – Boiler House:*** the previous study of the complex was unable to identify the function of this structure, but the Level I building survey and subsequent watching brief, clearly identified it as a boiler house. It would appear that the western part of the structure, which comprised a single small rectangular room on two floors, was originally an isolated structure, quite probably part of a north/south aligned row of buildings which included Building D, and probably serving as a warehouse or store. The original part of Building E appears to have been the eastern bay, which housed two Cornish-type boilers, installed prior to 1875, when the two boiler beds are clearly

depicted on the Ordnance Survey map (UMAU 2004, 29). The following edition of 1909 shows the area between these boilers and the single-celled building forming the western part of Building E, as being infilled, but in a different arrangement than that accommodating the third, slightly smaller boiler (Fig 2). This suggests that the western of the three boiler beds dates to the early-twentieth century, and was presumably installed to heat water for the bleaching process, rather than to provide steam for a power plant. The use of Cornish boilers at such a late date also suggests a low-pressure heating application, rather than use for power generation, as such boilers had been superseded by twin-tube Lancashire boilers in the second half of the nineteenth century within most textile manufacturing complexes.

5.2.6 The flue for the three boilers was placed on a perpendicular alignment, along the north wall of the building, and was modified for the addition of the flue from the western boiler. It survived to the edge of the demolished Building D, from where it must have dropped below ground level, and below Building B to a steeply rising flue leading to the chimney on the slope to the west (Fig 2). A depression in the ground surface marked the position of this flue, from Building B to the chimney, presumably resulting from the collapse of the flue. However, the 1875 map also shows a chimney on the hill to the north of the boiler house, and part of a flue was observed immediately to the south of its probable location (Plate 40). This suggests that this represented the original chimney for the two boilers, being replaced subsequently by a much higher structure on the opposite side of the valley, where a greater draw could be achieved.

Plate 40: Extant section of flue from boilers within Building E to demolished chimney above

5.2.7 It is highly likely that the original boilers not only provided hot water for the bleaching process, but also powered a steam engine, which apparently supplied supplementary power to the water wheel (UMAU 2004). Whilst no evidence for its position was observed during the building survey or watching brief, it was most likely placed adjacent to the boilers, and thus almost certainly in the space to the north of the extant eastern part of Building E, and partly beneath the later boiler bed.

5.2.8 ***Building F – Finishing Shed:*** this single-storey stone structure was built around the turn of the twentieth century as a finishing shed, where the cloth was dried, mangled, and beetled to produce the completed articles. The building was modified subsequently, with many alterations in machine-made brick.

5.2.9 The processes within the finishing shed required power, and this was probably primarily transferred from the water wheel, through the spinning block and finally into the finishing shed, rather than from the engine, which was almost certainly placed on the western side of the boilers within Building E. However, it is possible that a driveshaft from the engine was placed into Building F, where it could be used to augment the water-powered supply to both the finishing shed and spinning block when necessary.

5.2.10 ***Building G – Boiler House:*** this single-storey stone structure, built against the western face of the waterwheel house between 1842 and 1871, was described as a boiler house in an account of 1900 (UMAU 2004, 16). The extant building, although latterly shortened, was certainly of suitable style, with a large open frontage on its southern side, and with a high single-pitched roof. It would not have been inserted to provide steam for an engine, rather to provide an increased supply of hot water for the bleaching process, demonstrating the expansion of the complex and its output during this period.

5.2.11 ***Building H – Waterwheel House:*** the waterwheel house probably represents the most significant of the surviving structures. It was probably built in the 1850s to replace an earlier dual water wheel system (UMAU 2004, 14), and housed a large, 56' (17.07m) diameter cast-iron suspension wheel, reputedly the largest in the country (*ibid*). The wheel itself was removed in the mid-twentieth century, and concrete floors were inserted into the structure.

5.2.12 The water supply from the River Dean was carried via a gravity-fed leat, originating much higher up the valley, and fed a header reservoir placed adjacent to the waterwheel house, on the opposite side of the road, approximately level with of the top of the building. The water supply was controlled via a sluice, into a trough of riveted iron-sheet construction, which formed a flume within the top of the waterwheel house. The identification of a replacement lintel for the aperture into the waterwheel house, suggests that the present trough may have been a replacement for an earlier example, possibly of timber construction.

5.2.13 The extensive undertaking of constructing the leat, reservoir and water trough, considering that the river flowed directly below the mill itself, allowed the large waterwheel to have an overshot water supply, almost certainly of

backshot variety. This is a particularly efficient form of waterwheel, as all of the water applied to the wheel is utilised, and the full potential energy of the water is released and also enhanced by gravity. Such waterwheels did not require a large flow of water to keep them rotating. Furthermore it would cope much better with seasonal variations in flow rates and water levels, than a true overshot waterwheel, where the wheel rotates forwards from the flume, and thus against the water in the channel below the wheel. This would require it to be stopped at times of high water. It is unclear whether the River Dean was culverted through the base of the waterwheel house, to allow the water current to push the wheel, as in an undershot variant, further increasing its efficiency.

5.2.14 ***Building I – Spinning Block:*** although badly damaged by both fire and extensive remodelling, the spinning block represents the earliest extant building of the complex. It was certainly constructed prior to 1844, most probably in 1809, as depicted on the datestone inserted into the face of the late-nineteenth/early-twentieth century hoist tower. The structure is relatively narrow, even for an early-nineteenth century spinning block, designed to house spinning mules placed transversely across the structure. This allowed them to be placed in narrow spinning blocks that could be spanned by large-scantling timber beams, generally with only a centrally-placed row of columns providing internal support. The 37' span of the mill would only allow mules carrying well under 300 spindles (Miller and Wild 2007, 100), whereas rapid advances in mule design and uptake meant that significantly larger mules were available at this time (*ibid*).

5.2.15 The building was placed across the River Dean, with power for the mules presumably originally being generated by an internal undershot water wheel placed in the western bay. As a result of the position of the mill relative to the river, the stair tower was offset to the east of centre on the southern side of the building (Fig 2). This was of typical fireproof construction, with stone floors and stairs, whereas the floors of the main building would almost certainly have been timber above ground floor level, carried on timber joists and beams. This was the most common arrangement within mills of this period, as it represented a cost-effective compromise to the threat of fire (*ibid*). Blocked apertures in the bay immediately to the west of the stair tower, and the lack of fenestration within this elevation, suggest that a privy tower may have originally been placed in this position. The adjacent hoist tower was added prior the alteration of floor levels, dating it to the mid/late-nineteenth century, as it housed a doorway to the original first-floor level. The inclusion of windows in the south elevation of the relatively large hoist tower suggests that it also housed replacement privies for those which it replaced.

5.2.16 Very little evidence for the power system within the spinning block survived. A large aperture in the western elevation, at first-floor level represented the axle for the mid-nineteenth century water wheel, which presumably provided power directly into the spinning block. No evidence for footstep bearings, translating horizontal driveshafts into vertical rotative power survives, although the wider pier between the first and second bays in the north wall could feasibly have housed such features. An end-bearing box in the east wall, immediately below the ground-floor ceiling level, adjacent to the south

elevation, almost certainly reflects the position of a lineshaft, but their position on the upper floors is unclear. As the large bearing box and associated apertures in Bay 7 of the north wall are confined to the lower floors, it is almost certain that these relate to a bevel gear translating a driveshaft into the adjacent finishing shed to the north (Building F), where rotative power would also have been required.

5.2.17 The extensive remodelling of the structure began in the late-nineteenth century, when spinning ceased, and the building was converted for use within a bleachworks. The first floor was removed, allowing large vertical kiers to be placed at ground-floor level.

5.2.18 ***Building K – Store:*** this small late store related to the final use of the spinning block, after the mules had been removed and the floor levels altered. Its only communication was with the hoist tower, and its probable use as a store room was presumably related.

5.2.19 ***Building L – Finishing Shed:*** this heavily remodelled and extended structure appears to date from the latter part of the nineteenth century, and was constructed as a further small finishing shed. It would originally have communicated directly with the upper two floors of the adjacent spinning block, allowing for the easy transfer of materials. Its use probably changed after the erection of the hoist tower on the south side of the spinning block, culminating in a reduction in its height.

5.2.20 ***Building M – Finishing Shed:*** this small sub-rectangular structure was placed on the southern side of the spinning block (Building I). The single-storey, stone-built structure almost certainly contained beetling machines, as evidence for a powered process was identified in the extant eastern elevation of the adjacent stair tower, where the end bearing for a lineshaft within Building M was observed.

5.2.21 ***Building N - Shed:*** this late single-storey shed overlay the River Dean, and was aligned parallel to the culvert below the spinning block. It was described in the desk-based assessment of 2004 (UMAU 2004, 17) as being of timber construction, but was actually of machine-made red brick, most probably erected in the second half of the twentieth century. Access was afforded in either gable, suggesting that it functioned as a small workshop.

5.2.22 ***Building O – Shed:*** this timber structure had been demolished, or had collapsed prior to the original survey of 2004, and appears to have formed a temporary canopy between Buildings M and Q (Fig 2).

5.2.23 ***Building P - Institute:*** this detached stone building was described as a two-storey institute, erected in 1903, in the earlier desk-based assessment (UMAU 2004). It was well-constructed, with a hipped roof, and quoined returns, suggesting a higher status than many of the surrounding structures. It was of 1½ storey height, with a low upper floor, mainly contained within the roof space. Its presence within the mill demonstrates the varied role of such complexes, particularly in rural environments, where they served as a major

focus within the community, not only as an employer, but also in terms of a social and educational centre.

5.2.24 ***Building Q – Large Finishing Shed:*** this was the largest component of the site following its erection at the end of the nineteenth century, and marks the transfer from spinning to bleaching of textiles within the complex. It was used for making-up, packing and stamping the finished goods prior to their departure. The two coped parapets which rose above Building R to the west, represented the northern of four such gables within the original structure, demonstrating it to have been twice the length of the surviving building, which was heavily modernised internally.

5.2.25 ***Building R – Warehouse:*** this low single-storey structure lay mostly beneath the level of the present road, and apparently formed a continuous outshut to the larger shed to the east (Building Q; Fig 2). Stone-blocked windows and doors in its western elevation demonstrate that the road level was originally consistent with the floor levels within the finishing shed to the east. The structure was almost certainly a warehouse for finished packaged goods, awaiting transport from site. It is too wide to have formed a rope-alley for the shed, which would also have been unnecessary in this area, and too long to have housed boilers.

5.2.26 ***Building S – Storage Shed:*** this mid-twentieth century large open warehouse/shed, replaced the southern half of the late-nineteenth century finishing shed, and a smaller shed placed on its southern side. Elements of the original western wall appear to have been incorporated in the new building, which also had a stone-built southern wall, although this appears to represent re-used material, in an attempt to blend the building slightly with its surroundings.

5.3 CONCLUSION

5.1.2 The buildings of the Ingersley Vale Mill complex represent the culmination of a long and varied history of textile production in the valley. Little survives of the original spinning mill, and the spinning block itself was heavily remodelled for use as the main structure of the subsequent bleaching processes undertaken on the site. This conversion of the site to a bleachworks not only required the remodelling of the existing structures, but hailed a large-scale expansion of the complex, particularly on its southern side.

5.1.3 All of the buildings had been significantly remodelled, and many survived in a very poor state of repair at the time of the Level I survey. However, the rapid recording of the buildings has significantly increased our knowledge of the complex, and despite significant changes in ground levels, the watching brief demonstrated that significant archaeological features were preserved below later structures.

5.1.4 The removal of many of the late features, and the consolidation of the earlier structures will not only ensure their future survival, but will present the monument in a much more simplified fashion, more akin to its cotton-spinning origins.

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ILLUSTRATIONS

LIST OF FIGURES

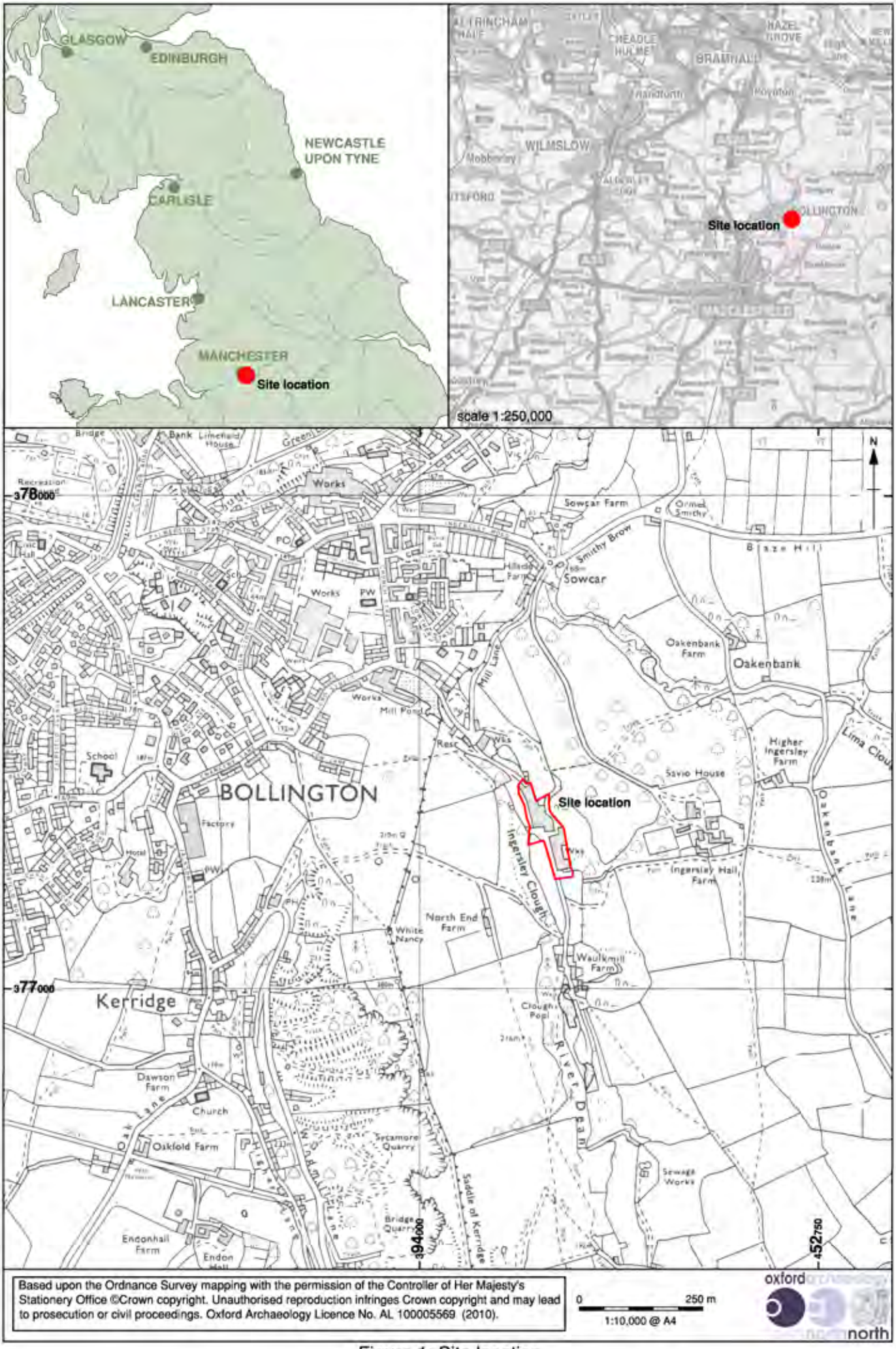


Figure 1: Site location

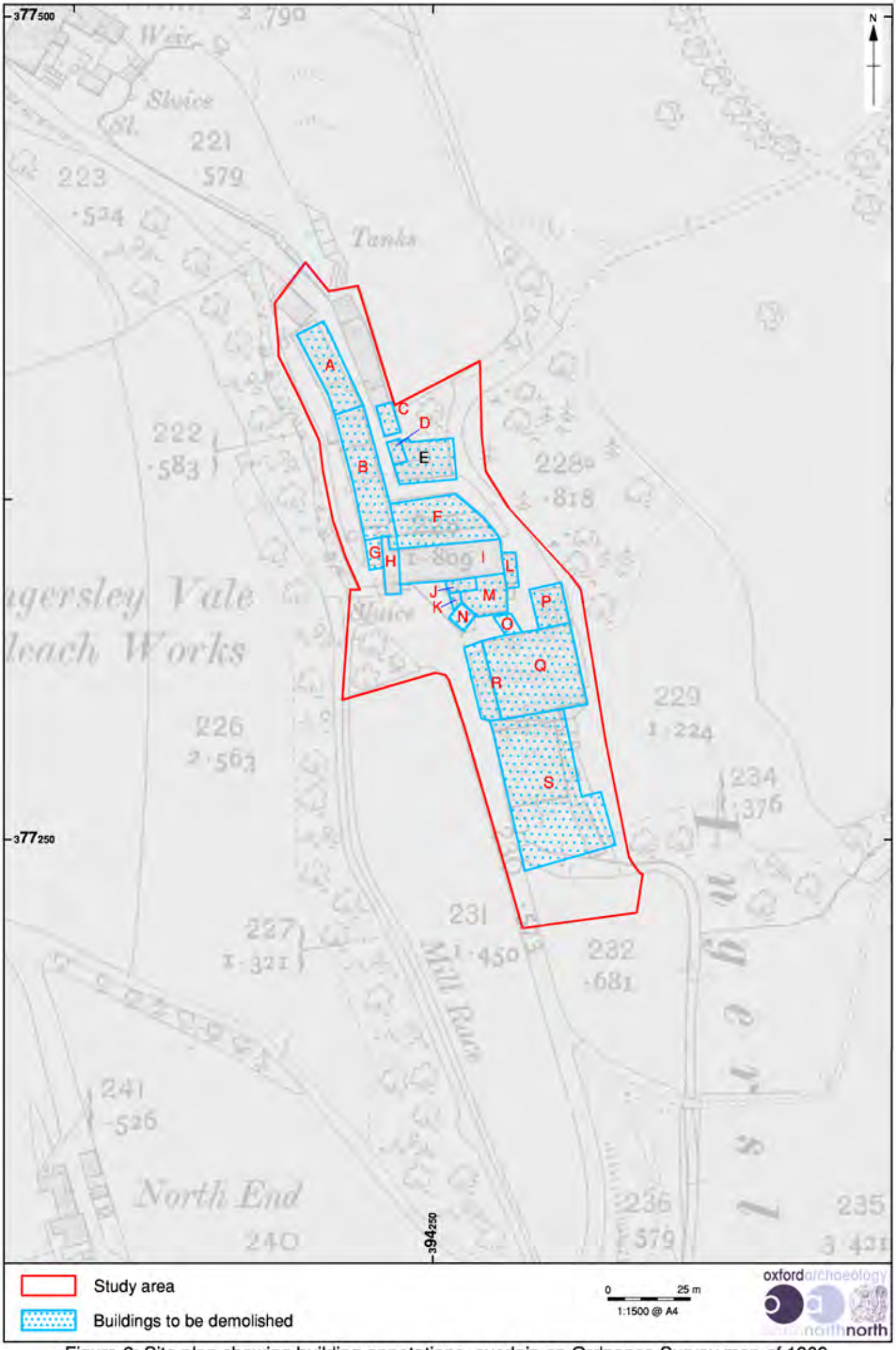


Figure 2: Site plan showing building annotations, overlain on Ordnance Survey map of 1909

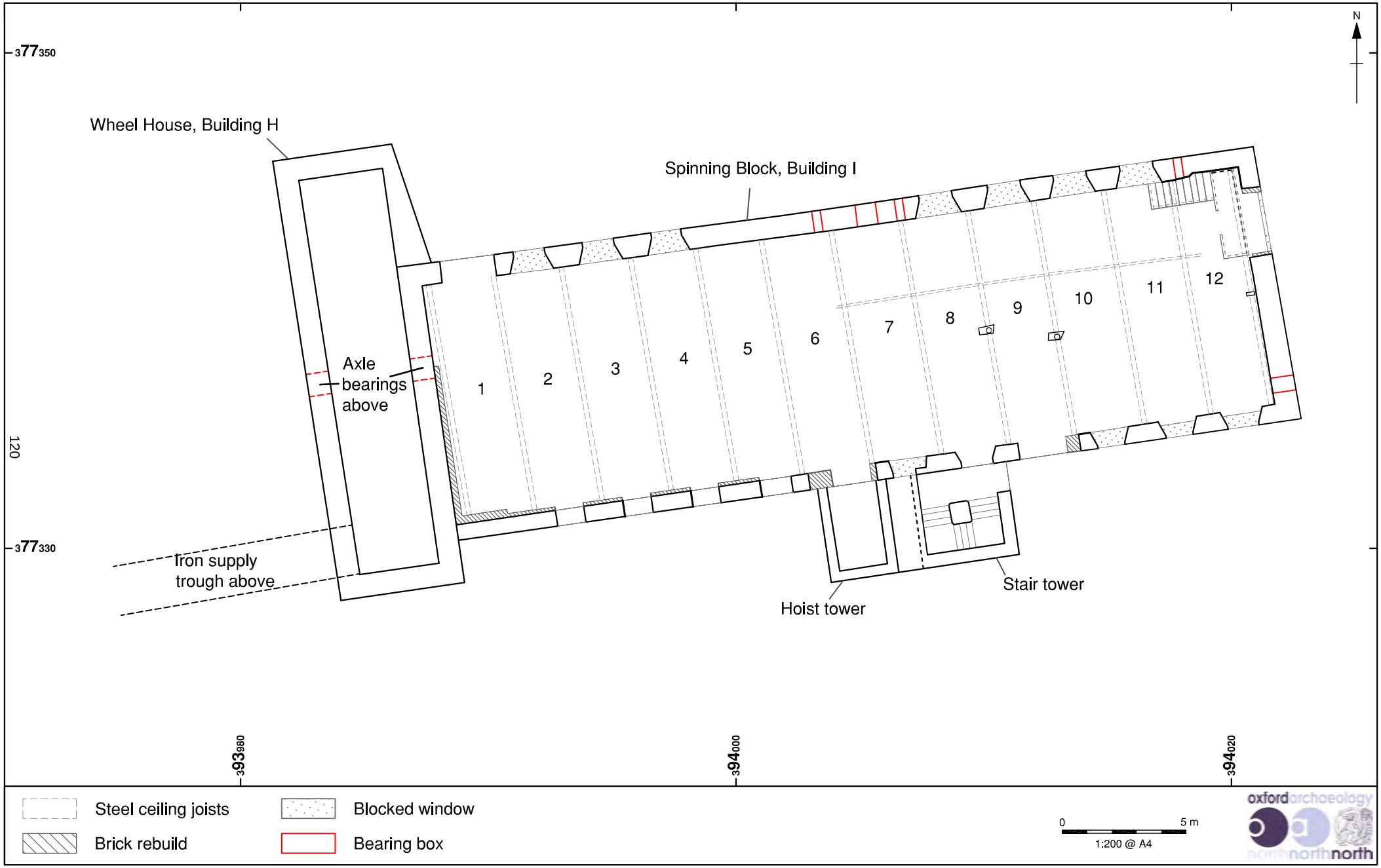


Figure 3: Plan of spinning block (Building I) and wheel house (Building H)

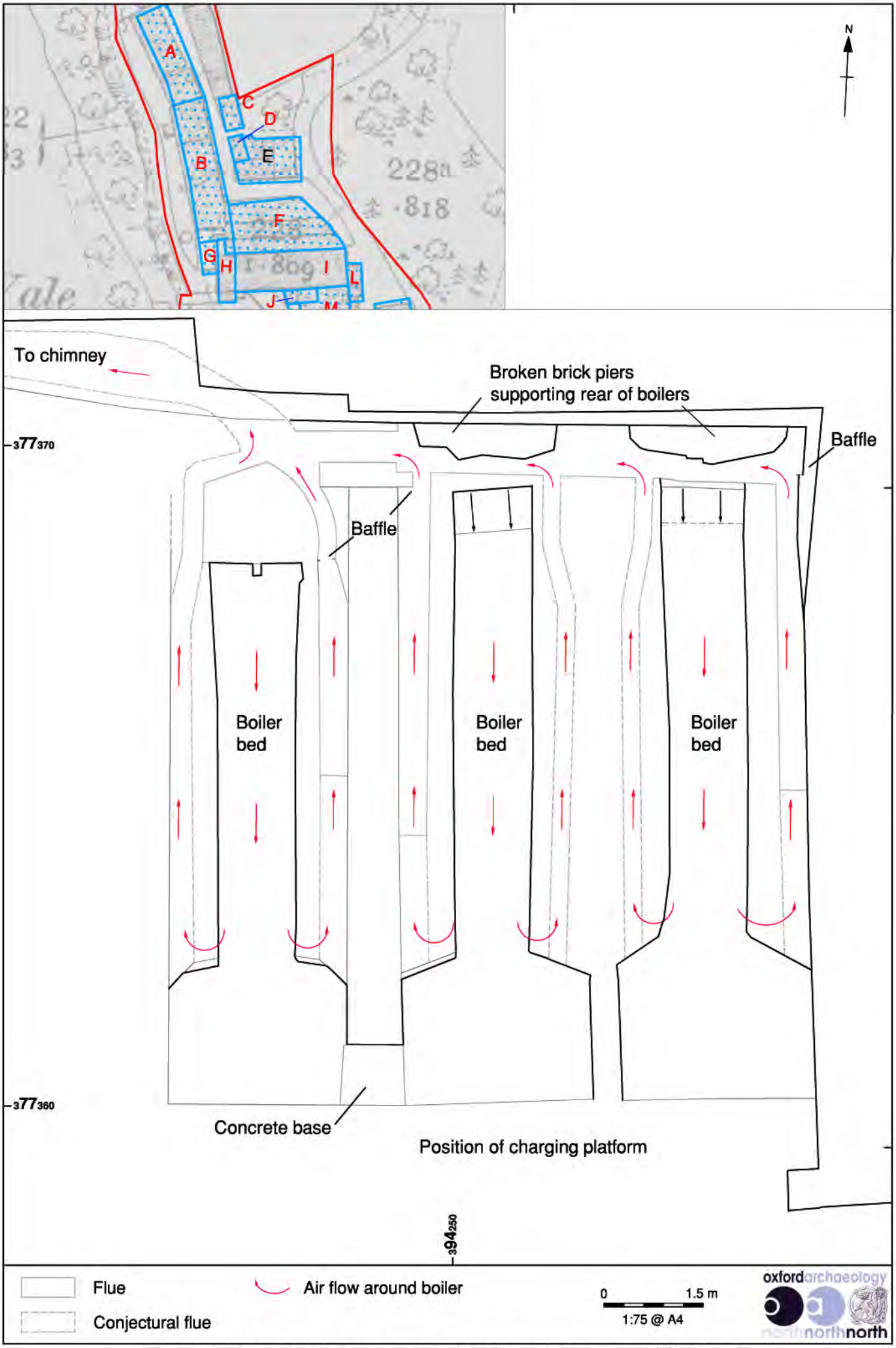


Figure 4: Plan of boiler beds revealed during watching brief of Building E

EP3

To follow

EP4

3 Brunel House | Hathersage Park | Station Approach | Hathersage | Derbyshire | S32 1DP
T: 01433 651869 | W: www.bsg-ecology.com | E: info@bsg-ecology.com

Our ref: P19-068 Ingersley Vale S73 Letter
Your ref:

15 May 2019

Jill Naylor
Emery Planning
2-4 South Park Court
Hobson Street
Macclesfield
SK11 8BS

Dear Jill

Re: Ingersley Vale, Bollington-Ecology Update

This letter provides details of the ecological survey work that has been undertaken at Ingersley Vale Mill in 2019.

An extended Phase 1 habitat survey, protected species survey and ecological assessment of the Site was undertaken on 5 February 2019, and the results of this survey work are provided in an unpublished Ecology Report (May 2019). This report also provides details of the historical ecological survey work that BSG Ecology have undertaken in 2004, 2008 and 2010.

Further survey work for bats was recommended and two dusk emergence bat surveys have been undertaken on 17 April and 13 May 2019, with a further dusk emergence bat survey scheduled for 12 June and a dawn re-entry bat survey scheduled for 26 June 2019.

The two dusk emergence bats surveys that have been completed to date have identified small numbers of common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus* bats roosting in gaps and crevices in the stonework of the mill and wheel house. Brown long-eared *Plecotus auritus* bat and noctule *Nyctalus noctula* have also been recorded on Site and it is possible that brown long-eared bats may also be roosting in the stonework of the mill. Once all the bat surveys have been completed we will be able to provide further details of the species and types of roosts that are present.

A report will be produced following completion of all the surveys that will provide details of the survey results, along with recommendations for the licencing, mitigation, compensation and enhancement measures as appropriate.

I hope that this letter is useful. If you have any queries, please do not hesitate to contact me.

Yours sincerely

Katy Stiles

Katy Stiles MCIEEM
Principal Ecologist
For and on behalf of BSG Ecology

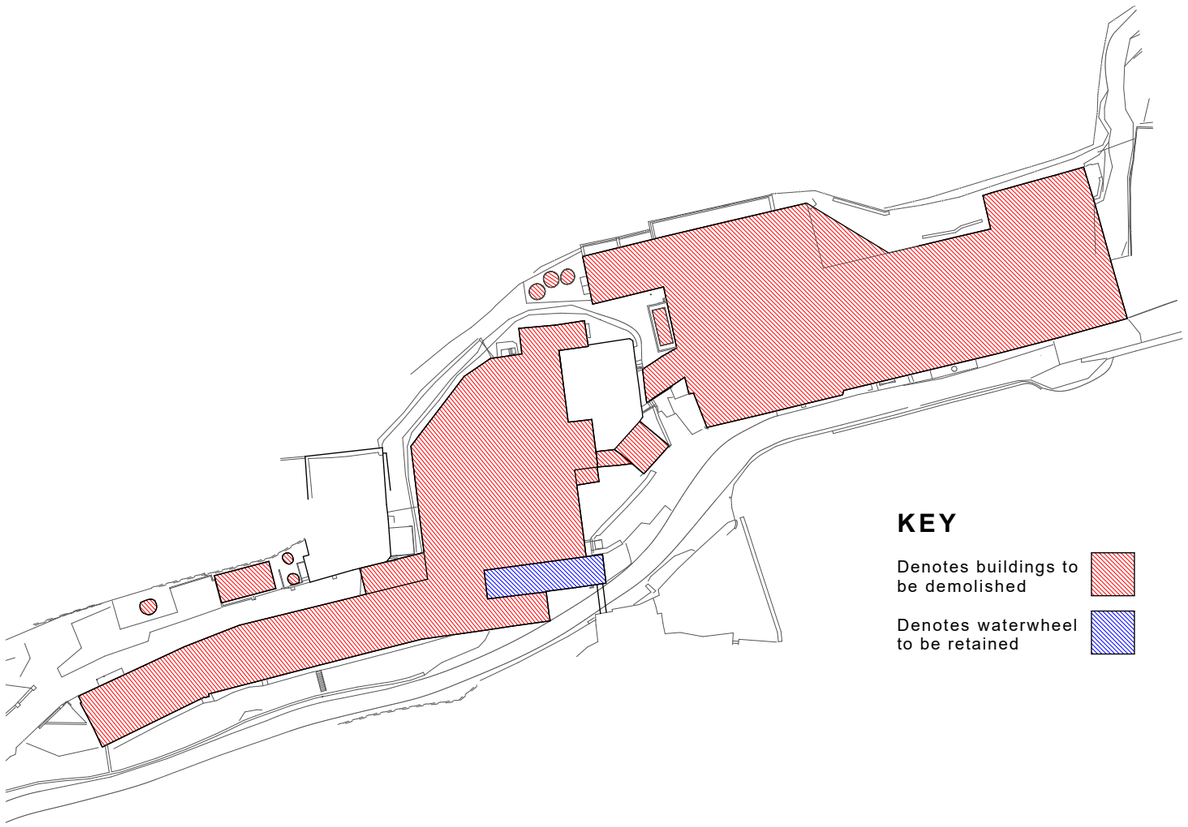
PLANNING APPLICATION ISSUE

NOTE:- These drawings have been prepared for the purposes of submission to the Local Authority as part of a planning application and are not to be used for any other purpose without the express permission of MSA.

Adjacent buildings, roads, etc scaled from O.S. plans.
Trees indicated for illustrative purposes only.

These drawings are not to be used for construction

rev.	notes	date



KEY

Denotes buildings to be demolished

Denotes waterwheel to be retained

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Demolition Plan

Project No.	Drawing No.	Rev No.	Size
1693	1693 PL 201		A3

Scale	Drawn By	Checked By	Date
1:1000	JRN	KMS	10/05/2019

P L A N N I N G

arb Architects Registration Board

RIBA Chartered Practice

Cheshire East (Development Management)
PO Box 606 Earle Street
CREWE
CW1 9HP

Our ref: SO/2012/110813/02-L01
Your ref: 19/2624M

Date: 23 July 2019

FAO: Paul Wakefield

Dear Sir

VARIATION OF CONDITIONS 3, 5, 6, 11 & 41 ON APPROVAL 08/0791P FOR DEMOLITION OF ALL BUILDINGS EXCEPT THE MILL, CONVERSION OF MILL TO 24 APARTMENTS AND ERECTION OF 24 APARTMENTS AND 18 TOWNHOUSES WITH ASSOCIATED LANDSCAPING AND CAR PARKING

INGERSLEY VALE WORKS, INGERSLEY VALE, BOLLINGTON, SK10 5BP

Thank you for consulting the Agency on the variation of condition application. This referral was received in office on the 17th June 2019.

Environment Agency Position

We object to the application 19/2624M as submitted, specifically the variation of condition 41 (approved plans), as insufficient information has been submitted to demonstrate that the following issues have been adequately addressed:

The potential flood risk associated with the proposed development, the impact of climate change and subsequent safety of its occupant.

The impact of the proposed development on nature conservation, ecology, physical habitats and Water Framework Directive (WFD) requirements.

Please see outlined below a further explanation of our rationale for this position and reasoning for our objection.

Reason for objection [1] - Flood risk

The application site lies within Flood Zone *3*, which is land defined by the planning practice guidance as having a high probability of flooding. The National Planning Policy Framework (NPPF) (paragraph 163, footnote 50) states that a Flood Risk Assessment (FRA) must be submitted when development is proposed in such a location. An FRA is vital to making informed planning decisions and in its absence, the flood risks posed by the development are unknown. This alone justifies the refusal of planning permission.

When the initial planning application for the proposal was submitted in 2008, no FRA was submitted and the Environment Agency consequently objected in line with the since updated NPPF. Despite this, application 08/0791P was subsequently

approved with no reference to fluvial flood risk provided or conditioned.

As part of this s73 application, the proposed variation of conditions includes the demolition of part of the former mill building and the construction of a new apartment building (condition 41). The 'Planning & Heritage Statement' accompanying this application explains that the proposed new building will be constructed to the same design as the previously approved building conversion. However, this cannot be considered sufficient consideration, investigation and mitigation of the risks from flooding the proposed development.

The Planning Inspectorate has previously stated to the Environment Agency that any s73 application would in essence be a new permission (to sit beside the current permission). Therefore, in line with our responsibilities as a regulatory body and given the proposed development site's flood risk designation, we have substantive grounds to request that a Flood Risk Assessment (FRA) is submitted in support of this application and any subsequent s73 application which looks to vary the relevant conditions of planning approval 08/0791P.

Overcoming our objection [1] - Flood risk

To overcome our objection, the applicant should submit a FRA which demonstrates that the development is safe without increasing risk elsewhere. Where possible, it should reduce flood risk overall. If this cannot be achieved, we are likely to maintain our objection.

Our position, outlined above, is supported by the following documentation:

Ministry of Housing, Communities & Local Government - Paragraph 053 of the Flood Risk and Coastal Change section of the planning practice guidance.

Cheshire East Local Plan Strategy (CELPS) - Policy SE 13 - Flood Risk and Water Management.

Paragraph 2 - "All planning applications for development at risk of flooding are supported by an appropriate Flood Risk Assessment (FRA) to demonstrate that development proposals will not increase flood risk on site or elsewhere and opportunities to reduce the risk of flooding are sought,taking into account the impacts of Climate Change in line with the Cheshire East SFRA." New development will be required to include or contribute to flood mitigation, compensation and / or protection measures, where necessary, to manage flood risk associated with or caused by the development"

Paragraph 3 - "New development is designed to be safe, taking into account the lifetime of the development, and the need to adapt to climate change."

National Planning Policy Framework (NPPF)

Paragraph 163 (footnote 50) -

> "*Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that: a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location; b) the development is appropriately flood resistant and resilient; c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate; d) any residual risk can be safely managed; and e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan."*

Guidance on how to prepare a flood risk assessment can be found at https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications

Reason for objection [2] - Impact on natural environment

This development will take place on and close to a culverted and canalised section of the River Dean. It will therefore require a flood risk activity permit (FRAP) under the Environmental Permitting (England and Wales) Regulations 2016. We are unlikely to grant a permit for this proposal, as submitted.

In determining the FRAP for this development, we will consider how the development affects water biodiversity and the wetland environment, in line with the relevant European and domestic law.

We will also assess its compliance with the River Basin Management Plan (RBMP). The RBMP states that the water environment should be protected and enhanced to prevent deterioration and promote the recovery of water bodies. We therefore seek the removal of existing culverts wherever possible and positive riparian development design with key green infrastructure asset(s) provided.

The proposed development may prevent the restoration of a heavily modified waterbody and a substantial loss of watercourse habitat. This is owing to the significant amounts culverted watercourse remaining and unclear development proposals in the River Dean (WFD Ref: GB112069060650), riparian corridor and river channel to achieve the stated development layout on Drwg.004 (UAD, 2008).

Further to above, there is a significant risk that the development may:

prevent achievement of good ecological potential;

potentially impact on nature conservation interests, including fish and other wildlife - no up to date provision of ecological survey and assessment of overall riparian site provided; and

represent a significant environmental/pollution risk to waterbody and ecological receptor based on indicative scheme proposals L033_Drwg 004 (the age and identified poor condition of building, infrastructure associated with 19th century mill, utilities within the river channel and the unclear construction methodology on/ near the culvert and river itself).

3
3Cont/d..
3
Cont/d..

This objection is supported by paragraphs 170 and 175 of the National Planning Policy Framework (NPPF) which recognise that the planning system should conserve and enhance the environment by minimising impacts on and providing net gains for biodiversity. If significant harm resulting from a development cannot be avoided, adequately mitigated, or as a last resort compensated for, planning permission should be refused. Opportunities to incorporate biodiversity in and around developments should be encouraged.

Overcoming our objection [2] - Impact on natural environment

It may be possible to overcome our objection by setting back the development at least eight metres from the centre-line of the open channel watercourse. This should maximise the amount of waterbody that can be opened up ('skylighted'); minimise the numbers of crossings as part of scheme design; remove redundant infrastructure from within the river channel; and clearly detailing new retaining structures within the riparian corridor. Where feasible these should be based on more environmentally sensitive bio-engineering techniques (http://www.hrwallingford.com/news/supporting-green-river-engineering). In conjunction with:

detailed drawings of the location and construction of the proposed development (including timing of works, methods and materials to be used);

detailed cross sections every 50m, pre and post development through riparian corridor;

details of how the River Dean waterbody is to be protected during construction works; and

details of appropriate mitigation/compensation for the loss of riparian habitat used by the development.

An ecological survey is required prior to the development of detailed plans, to enable an assessment of the level of risk posed by the development. The design, construction, mitigation and compensation measures should be based on a survey which is carried out at an appropriate time of year by a suitably experienced and qualified surveyor using recognised survey methodology.

The planning statement submitted states that some ecological assessment has been undertaken (BSG Ecology May 2019), but as yet, it is unclear how the results of said surveys and outputs of these have informed current riparian scheme proposals.

Note to Applicant / Agent

Should you wish the Environment Agency to review any technical documents or want further advice to address the environmental issues raised, we can do this as part of our Charged for Planning Advice service.

Further engagement will provide you with the opportunity to discuss and gain our views on potential options to overcome 4
4Cont/d.. 4

Cont/d..

our objection, before formally submitting further information as part of your planning application. It should also result in a better quality and more environmentally sensitive development.

As part of our Charged for Planning Advice service we will provide a dedicated project manager to act as a single point of contact to help resolve any problems. We currently charge £100 per hour, plus VAT. We will provide you with an estimated cost for any further discussions or review of documents. The terms and conditions of our service are available here.

If you would like more information on our Charged for Planning Advice service, including a cost estimate, please do not hesitate to contact me.

Note to LPA

Please forward a copy of this letter to the applicant/agent and re-consult us on the submission of any further relevant documentation submitted in support of this application. Should you wish to discuss this application further, then please do not hesitate to contact me.

We acknowledge that this variation of condition application specifically relates to a planning application 08/0791P, already approved. Therefore, the developer can rightfully implement 08/0791P and any relating existing approvals should they desire.

Regardless of the decision made on the current application, we wish to continue working closely with the council and developer so that all parties can reach an agreeable position on the use of the site. We consider that an improved scheme can be delivered if we commit to work together going forward. It would also be in the developer's best interest to deliver a development that is sustainable and that will align with the requirements of any relating environmental permit(s).

Yours faithfully

Mr Andy Davies
Sustainable Places Advisor

Direct dial 02077140640
Direct e-mail andy.davies1@environment-agency.gov.uk

BMC

BELL MUNRO CONSULTING LTD.

STRUCTURAL INSPECTION OF INGERSLEY CLOUGH MILL INGERSLEY VALE BOLLINGTON APRIL 2019

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Ref: J6037.B

CONTENTS

1.0 Introduction

1.01 At the request of Mr. K. Hollingworth the building known as Ingersley Clough Mill, Ingersley Vale, Bollington, Cheshire was visited by Bell Munro Consulting on the afternoon of 15th April 2019.

1.02 The purpose of the visit was to undertake a structural inspection of the building and to report on our findings.

1.03 We were commissioned to give recommendations regarding any structural works required in connection with re-development of the property.

1.04 It was dry and sunny at the time of the inspection and the temperature was approximately 10º C.

2.0 Findings

2.01 This section of the report should be read in conjunction with the photographs in the appendix.

2.02 The building was found to be of solid rubble filled wall construction and originally three stories in height. The majority of the roof and floors were not present and the East gable had mostly collapsed. A wheel house and associated aqueduct were exhibited at the West side of the building. A date stone shows 1809 but it is understood this refers to the central section of the building only and the majority of the building was constructed after this date.

2.03 A structural inspection of the South elevation was undertaken and significant movement of the stone wall structure to the main wall to the elevation was evident. Lateral movement and bowing was noted together with significant vertical displacement of the stone structure and failed stone lintels. Movement of the rubble fill to the wall was suspected together with significant weathering of the exposed wall head. Brick infill panels had been installed in several low level openings at some point in the past. The section of the South elevation at the West side of the elevation spanned over a watercourse and appeared to be supported by a stone arch structure. Significant movement of the stone wall structure above the arch was evident.

2.04 A central outrigger of five stories in height was exhibited together with a more modern outrigger at the East side of the main outrigger. Sections of the roof structure and finishes to the outriggers did remain but were damaged beyond repair and in an unstable condition. Self – seeded trees were noted to be growing at the head of the outriggers and weathering of the head of the outrigger walls was evident. Lateral movement of the structure to the smaller outrigger was noted. The outriggers appeared to be constructed using loadbearing brickwork clad in stone.

2.05 At the West side of the South elevation a water wheel building was present which consisted of a stone rectangular building with a more modern loadbearing brickwork outrigger. The stone section exhibited signs of local deterioration and movement of the stonework but appeared relatively stable. This section of the building exhibited a parapet and damage to the coping stones and parapet was noted in several areas. The roof structure to the outrigger was damaged beyond repair although the main structural walls to the outrigger did not appear to be in poor condition. An aqueduct structure spanned from the adjoining site to the wheel house at high level and temporary propping of the aqueduct had been installed at some point in the relatively recent past.

2.06 The North elevation was of a similar form to the South elevation and exhibited a significant lateral movement at the East side of the elevation. Further signs of local movement of the stone structure and weathering of the exposed head of the wall were noted throughout the elevation. The remains of what are thought to be steel roof trusses from a previous adjoining building were noted

built into the stonework structure at first floor level.

2.07 The majority of the East gable wall had collapsed and only a small section of the gable wall adjacent to the South elevation remained. This section of wall exhibited signs of significant structural movement within the stone structure.

2.08 An internal inspection of the main building was undertaken and it was clear the roof and suspended floors had collapsed at some point in the relatively distant past. A grillage of steel support beams were noted at first floor level and the beams were found to be deformed significantly at the East side of the building. The internal faces of the walls which remained and the heads of the walls appeared very heavily weathered and signs of local and global instabilities were noted throughout. Brick arches were exhibited internally over the heads of a number of the window openings and loss of mortar and movement of the brick arch structures was evident. Fire damaged sections of timber were noted built into the internal faces of the North and South elevation walls.

3.0 Discussion

3.01 The majority of the building was in a very poor state of repair and close to collapse in several areas. The main section of the structure consists of the North and South elevation walls and what remains of the East gable. Significant lateral movement of the North and South elevation walls has taken place and it is thought this has initially been due to the collapse of the East gable but more recently due to the lack of restraint to the walls and weathering causing damage to the wall structure via the head of the walls and existing damaged sections. Due to the construction of the stone walls it is likely the internal fill material has migrated downwards following ingress of rainwater to the structure of the wall via the head of the wall and existing fractures in the wall. Fractured stone lintels were exhibited resulting in the movement of the stonework structure above. Repair of these walls would be extremely difficult and unlikely to succeed due to the extent of movement and damage noted to date. It is thought any attempt to repair these walls so they would be suitable for re-development would result in local collapse of the walls. We would recommend the walls to the North and South elevations together with the remains of the East gable are taken down and re-built as part of any re-development. Given the poor condition of the sections of wall which remain it is recommended the taking down and re-building works take place as soon as possible to enable the works to progress in a controlled manner. Further deterioration of the wall structure would reduce the possibility of controlled demolition and the prospect of salvaging the stone and features.

3.02 The wheel house section of the building appeared relatively stable and it is thought this could be safely retained and re-used as part of the development. It is likely the roof structure will need replacing and local stone repairs to the parapet and upper sections of the wall will be required. The retaining wall at the base of the East side of the wheel house adjacent to the watercourse will need to be closely inspected following making safe of the West side of the South elevation as the retaining wall may need some strengthening works or remedial works to ensure the long term stability of the East wall to the wheel house. A detailed assessment of the aqueduct will be required when safe access can be provided and it is likely substantial remedial works will be required in order to make good the aqueduct structure and maintain the structural stability of the aqueduct in the future.

4.0 Conclusions and Recommendations

4.01 It is recommended due to the unstable state of the wall structures and the impracticalities of undertaking a safe repair that the North and South walls and what remains of the East gable to the main building are taken down and re-built. Given the poor condition of the remaining sections of these walls it is recommended the taking down and rebuilding works are undertaken as soon as possible. Further deterioration of the walls would reduce the possibility of the works being undertaken in a controlled manner and therefore the possibility of salvaging the stone and features.

4.02 It is likely the wheelhouse structure could be safely repaired although a detailed assessment of the retaining structure adjacent to the watercourse will be required as this may require strengthening or repair works.

5.0 Disclaimer

5.01 This report is confined to the terms referred to in section 1.0 of this report and no responsibility can be accepted in respect of defects in inaccessible or un-inspected parts of the property.

5.02 This report is in our opinion based upon a visual inspection of conditions as they exist at this moment in time and is confined to the terms of our brief, as laid down in section 1.0 of this report.

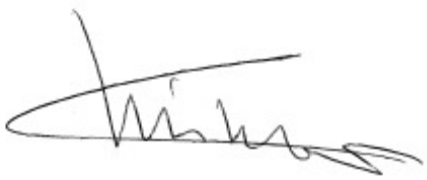
5.03 We have not inspected woodwork or other parts of the structure which are covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from defect.

5.04 We did not test any drains, water, electrical or gas services, nor did we open – up or break – out any of the building structure which is not highlighted in the report.

5.05 We did not have any consultation with British Coal, the Waste Management Authority or indeed any other statutory undertaker.

5.06 This report is solely for the use of the addressee and no responsibility can be accepted to any third party for the whole of it or any part of the content.

Report Prepared By:



…….....
Christopher J. Munro B.Eng.(Hons.), C.Eng., M.I.Struct.E.

Appendix A

A.1 South Elevation of Building

A.2 Fractured Lintel and Unstable Stonework

A.3 Internal Structure of Central Outrigger to South Elevation

A.4 Masonry Arch Supporting West Side of South Elevation

A.5 West Side of South Elevation showing Unstable Stonework

A.6 Wheel House at West Side of South Elevation

A.7 West Elevation of Wheel House Showing Aqueduct

A.8 Local Damage to Parapet of Wheel House

A.9 North Elevation of Building

A.10 Damage to Head of North Elevation Wall

A.11 Remains of East Gable

A.12 Damaged First Floor Steel Support Beams

A.13 Movement and Damage to North Elevation Wall

A.14 Fire Damaged Timber Built Into South Elevation Wall

Internal Consultee Reply Form

Consultation on Planning Reference Number **19/2624M**

Proposal:	**Variation of conditions 3, 5, 6, 11 & 41 on approval 08/0791P for demolition of all buildings except the mill, conversion of mill to 24 apartments and erection of 24 apartments and 18 townhouses with associated landscaping and car parking**
Location:	**INGERSLEY VALE WORKS, INGERSLEY VALE, BOLLINGTON, SK10 5BP**

Views of Structural Engineer for
CivicanceLtd in response to consultation dated 17-Jun-2019.

The building was last inspected by me in 2008 when it could be seen that the mill had been severely damaged following a fire in 1999 when it lost not only its roof but also all internal floors.

At that time the structural stone external skeleton of the building was still intact and it was proposed as noted in the structural report that was submitted at this time, to re-introduce new floors and roof elements. The introduction of these would then provide full structural integrity of the building and extend its life span thus the engineers observations and conclusions were accepted.

Following my recent site visit of the 20th June 2019 when once again I undertook a limited visual appraisal of the structural external skeleton of the mill and having read the new structural engineers report by Bell Munro Consulting dated April 2019 as well as assessing the photographic evidence provided in this report, I would in general concur with its findings and therefore its observations and conclusions are accepted.

It can clearly be seen that since 2008 that no remedial works have been undertaken to the mill and the structure has deteriorated significantly since then due to many years of exposure to inclement weather/high winds. This can be seen especially at the far east end of the building where most of this gable elevation has collapsed thus causing quite significant movement to the adjacent south and north elevations.

Continued on next page:-

The report recommends that the remaining section of the east elevation along with the south and north elevations up to the west wheel house structure (which is to be retained) should be immediately demolished in a controlled manner while it is feasible to do so in order to reclaim as much of the stonework and building features as possible.

This again I would generally agree with, although it may be possible to only demolish part of the bottom sections of the south and north elevations where infill of openings in the past has given more stability to this lower areas. However this may prove difficult due to health and safety of the work force undertaking the demolition and full demolition may be the only option.

Based on the above comments I would also point out that if the mill building is left exposed to ongoing inclement weather this will undoubtedly cause further deterioration to the structure and may cause collapse of other sections of the building to the point where full demolition is inevitable with no reclamation possible.