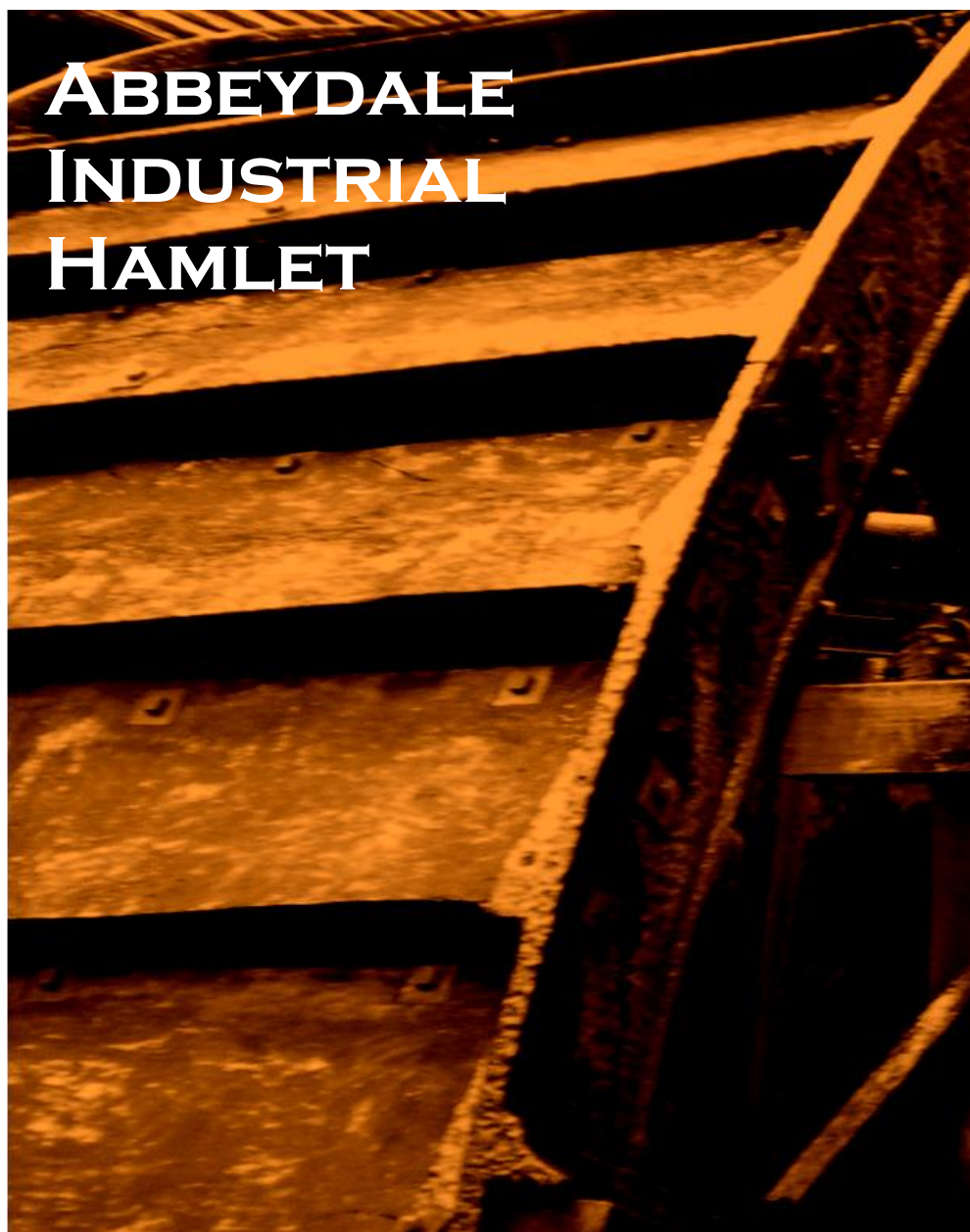


SHEFFIELD INDUSTRIAL MUSEUMS TRUST



ABBEYDALE INDUSTRIAL HAMLET:
A WORKING & SUSTAINABLE FUTURE

Introduction

Abbeydale Industrial Hamlet is a site of outstanding international significance as a very complete example of an 18th and 19th Century integrated water powered industrial works. From raw materials to finished products, Abbeydale provides a unique demonstration of the technologies, processes and economics of manufacture, social conditions of domestic life and work, international and national trade and company history.

It is the most important site in the story of steel manufacture in the country and is of world importance. The water powered works show nearly all the processes involved in the manufacture of scythes. The role in steel heritage lies specifically in the crucible steel works which is the best preserved in the world. Clock and Watchmaker Benjamin Huntsman invented the crucible steel process in Sheffield in the 1740s to make high quality steel for the springs in his watches and this revolutionised the production of steel. Within a few years Huntsman had given up clock making and just made steel. It was not until the latter half of the 19th Century that methods of producing good quality steel in bulk began replacing the crucible process. The site also has workers cottages and a manager's house which shows social conditions alongside the working life at the Hamlet.

The site ceased to operate in 1933 and was saved for the city by Alderman J G Graves, who presented it to the City in 1935. However it fell into disrepair, with a brief reactivation to make high quality steel in the 1940s for the war effort. By the 1960s many of the buildings were in a state of near collapse and in order to save it The Council for the Conservation of Sheffield Antiquities set about restoring the site and presented it to the Council in 1970, when it became a museum.



Abbeydale is shown here in a state of disrepair in the 1960s and undergoing a complete restoration.

During the 1980s and 1990s the site suffered from a lack of investment. The Council closed the site due to budget cuts in 1997. It was rescued by the formation of Sheffield Industrial Museums Trust in 1998 based on the success of Kelham Island Museum Ltd., a charity set up in 1994 to save Sheffield's industrial museum from closure. This followed a passionate campaign by a friends group supported by the local media putting pressure on the Council to negotiate with the Kelham trust and showing the importance of the Hamlet to the people of Sheffield

Abbeydale's national and international importance in the story of steel, the story of Sheffield and the industrial revolution from the 18th Century onwards has been recognised in the site being designated a Scheduled Ancient Monument (SM 1039) and the buildings listed with some at Grade 1 (the Tilt Forge 1785; Grinding Hull 1817; the Crucible Furnace, Hand Forges, the Warehouse and Counting House c1800-1830; the Coach House and Stable c1840) and some Grade 11* (the Manager's House and adjoining Stable, the former Counting House and Workers' cottages).

Abbeydale Industrial Hamlet – HLF Project Summary

Project Aim

The project will make a fundamental change in the way people can enjoy and engage with Abbeydale giving it a future based on the active participation of its local community and an important role in the preservation and presentation of heritage skills. The site is of world importance and this project is about how it is experienced and used by existing and potential new audiences.

Three key elements will deliver this and secure Abbeydale's future:

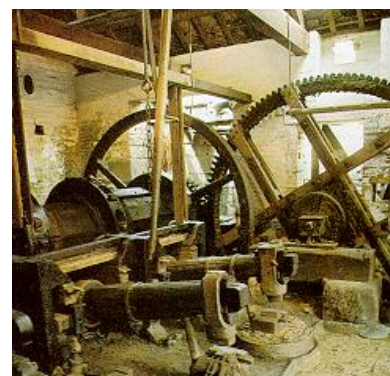
- creating a millwrighting team experienced in heritage skills, providing a sustainable solution to safe-guarding the site's working machinery
- providing improved and accessible heritage learning opportunities through new interpretation and learning facilities
- by engaging the local community in activities on the site and developing opportunities for participation in the heritage

This project is the main focus for SIMT and will create a step change in the development of Abbeydale as a Working and Sustainable site. The learning programme and all interpretation will be refreshed and able to expand within spaces accessible to all. Machinery will work again and skills will be gained and disseminated, with volunteers central to the life of the site.

Project Definition

The project is defined in two strands: 'Abbeydale - 'A new Learning Experience' and 'Abbeydale – A Working Site'. Under the former access will be created for all and this will be enhanced by a Community Participation Officer appointed for three years to develop a team of volunteers to interpret and improve the visitor experience of the site. The current interpretation scheme will be revisited and changes made which will improve access and visitors' understanding of the site, providing increased heritage learning opportunities and removing barriers that limit both numbers and means of delivery.

Under the latter strand the waterwheels and associated machinery will be restored to working order by the Trust's own Technical Services Team who will be trained as part of the project so that the heritage skills of repairing and maintaining waterwheels will be retained within the organisation and form part of the aspiration to be the regional centre for waterpower expertise. Workshops will be created so that metalworkers can return to the site and show craft skills that will sustain the traditions of Sheffield.



The Trust has worked in partnership with the Council in ensuring investment in the fabric of the buildings which is their responsibility so they are in the best state since the 1970s. The Trust embarked on a major investment in the waterwheels and machinery with a grant from English Heritage ten years ago, however since that time the main wooden shafts, which were not part of the project, have decayed and are unusable and hence major work is necessary to bring them back into use and conserve them for the future

The project meets all three of the core HLF priorities:

Learning:

- Interpretation throughout the site will be revisited to create new and improved heritage learning opportunities for all visitors and volunteers. Current proposals, which will be developed through further consultation, include: an up to date audio-tour; new interpretation panels for the heritage buildings designed within best practice guidelines; development of areas for deeper participation and hands-on activities including reconstructed period rooms and robust interactives.
- The earlier HLF funded Access & Learning scheme (2003-2006) was very successful in more than doubling school usage and brought in many groups from non-traditional museum audiences. However to move forward from this position major investment in fit for purpose spaces is essential and therefore a key element of the project is creating new learning and community use areas within a new structure which forms the capital element of the project. This will also liberate numerous spaces within the historic structures where interpretative activities can be undertaken in appropriate settings
- All these measures will enable growth of activity as well as sustaining the current programme in spaces accessible to all
- The other key learning outputs will be the training in mill-wrighting skills for the Trust's technical staff (see below) and the training of volunteers in the operation and interpretation of the site



Conservation :

- The site has four waterwheels, two large and two small. The small wheels can be turned but the shafts of the large wheels need replacing and other works are necessary to the control systems for safety purposes and to bring back into motion associated machinery such as the huge tilt hammer shaft
- However the main purpose of the conservation element of the project is to train the Trust's Technical Services Team to undertake this work themselves. This preserves heritage skills and provides Yorkshire with a centre of expertise that it currently lacks
- These skills will also be essential in the maintenance of the restored Shepherd Wheel funded by the HLF. Shepherd Wheel passed to SIMT for management at the completion of the restoration project in September 2011
- The buildings of the site are in good condition after a decade of investment by the Council since the trust took over and became in essence a pressure group to ensure work was prioritised and undertaken. The partnership has worked well in this area. However the Trust has commissioned a Conservation Management Plan which has provided comprehensive information of the site.
- The project will create modern workshops for metal workers to continue the craft skills and traditions of Sheffield. The old forges on site are used for demonstration purposes at special events but are not appropriate for 21st century working conditions



A graphic illustration of the rotten shafts

Participation:

- The most radical aspect of the project for Abbeydale is the core aim of creating an active team of volunteers to enliven and people the site
- This will be achieved by appointing a Community Participation Officer to work part time over three years in creating community activities to bring in new users and act as the inspiration and coordinator for volunteers to engage with and support all types of activity and bring the site to life. The team will work on displays and the collection, support engineering work, operate the wheels, enliven school events and even populate the site with costumed interpreters. Volunteer teams work best if there is dedicated management whether this is provided by a volunteer willing to take on such a role or more often by a paid post. The potential outputs are considerable and directly address the improvement of the visitor experience
- Once the Technical Team have acquired the necessary skills the aim will be to disseminate those skills and not only build a support team of volunteers for the site itself but provide a wider role in the region as the centre for water power expertise. Opportunities for apprentices will also be investigated; however this is likely to have a wider application throughout the Trust in overall heritage engineering skills that are then more transferable.

Background to the Project

SIMT has been considering this project since it took on the site in 1998. The strategy agreed with HLF at that time was to focus capital investment on Kelham Island Museum having rescued it very successfully from near closure in 1994, and pursue the Access & Learning project at Abbeydale which would reveal the needs of the site. Kelham has now been rebuilt (twice due to the flood) and the Abbeydale bid was then delayed by the successful Hawley Tool Collection HLF Project at Kelham. Therefore this project is overdue and is also timely in that investing in the site at time of cuts in funding will help it survive this very challenging time, in for example developing volunteer support.

SIMT success in redeveloping and renewing Kelham Island Museum leading to income growth has given the Board of Trustees the confidence to commit to underwriting the matching funding for the project to allow it to proceed. However, wider fundraising is essential to the Trust so that investment can continue at Kelham at the same time.

The need to ensure sustainability is also a driver with each of the three main elements of the project aimed at achieving that end: the renewal of the interpretation and new facilities in improving the visitor/learning experience; the community aspects raising profile and local commitment and potential letting income; the working site providing another attraction and rentals from the workshops.

Each of these elements is also generated by a specific need of the site: the current space configuration limits change, development and access; the visitor experience needs renewal and animation; and a working site needs to work. A comprehensive Options Appraisal was undertaken and given the gestation period of the project and consultations with interested parties, it went through several iterations. The current solution is the product of this extended process.

The Evaluation of the HLF funded Access & Learning project (2003-2006) influenced this project decisively in that a key recommendation: “noted the limited education facilities...and the restrictions this places on the education programme. A permanent ground level learning space would solve this issue – for example improving the heating all year round so workshops and events could be run in the winter, installing a safe storage area, an area specifically for lunch, changing areas for dressing up, white boards, CD player and computer area”.

This view was endorsed in February 2010 at a consultation workshop to review the provision and services for education groups with SIMT education staff and education professionals who were familiar with, and regularly used the site for teaching. The consultation explored the potential for the education market and identified barriers and solutions for the current and potential education users. The overwhelming conclusion from the meeting was that further development of the service, including increasing visitor numbers was not possible without a purpose built learning centre. With a step change in provision the group were very optimistic that significant increases in provision and education numbers could be made. Also new delivery methods would enable better education visitor use and increased understanding of the historic spaces and areas and reduce negative impacts on the historic structures. There would also be a beneficial impact on individual visitors whose access to the site would be less restricted by school groups.

The key limiting factor to increased learning and participation was discovered to be a physical one - the small and/or inadequate spaces within the historic structures struggle to house pupils and visitors alike. This restricts the visitors understanding of the site, reduces the operating season for the site, restricts numbers on site, it restricts the methods of education delivery, it reduces profitability/sustainability of the service, and it has a negative impact on the historic integrity of the monument.

The new learning centre is the most sensitive aspect of the project and therefore the final drawings which have secured planning permission and Scheduled Ancient Monument Consent were the product of extensive discussions with English Heritage and Sheffield City Council Planning Officers.

English Heritage have been involved from the very earliest consideration of what the project may comprise and have contributed to the development of the concept in a positive manner recognising that the site needs a step change to enhance its sustainability and ensure that it is not allowed to slip into decline and onto their endangered sites list as it was before the Trust took over.

Public consultation on what the site needs was undertaken at the main annual event at the Hamlet, the annual Steam Weekend in 2010. A comprehensive report was produced based on nearly 200 detailed responses:

- What is special about the site: The highest responses when asked about what was special about the Hamlet were that it was unique, a time capsule, industrial history and a sense of Sheffield's heritage. These accounted for 48% of responses. Other comments covered the atmosphere, its educational value, and opportunities for children
- Potential for improvement: The two equal highest responses accounting for 28% were for Live Interpretation and Working Machinery. "Restore working machinery thus giving added visual interest for the next generation understanding the past". This was followed by signage and interpretation boards at 9% and demonstrations and people at work at 7%. This has influenced the focus of the activity aspects of the project covering interpretation including the need to people the site and not just



animate the machinery but also to animate the spaces with volunteer interpreters. One such comment “the re-enactors help in understanding – vital”.

- There was also a clear wish to see people actually working, “have some of the workshops open with crafts people”. The project addresses this with new workshops with modern and safe working conditions. The old workshops would be used for demonstration purposes in the summer season and have new interpretation.
- Several commented on the need for audio visual interpretation and this project intends to replace the old wand based audio tour. Hands-on activities and special events were also seen to be important and the proposal will make putting these on much more easy with appropriate spaces and volunteers. Lying mid table were comments about the limitations on the café and better more modern flexible facilities and this is a by-product of the project although not a key driver for SIMT in the principles behind the bid, but it is important in the context of future sustainability.

The conservation need of the machinery is self-evident and a specialist report on works necessary was commissioned in 2006 and decay continues to place the heritage at risk. The shafts are rotten and the wheels cannot be run. This inevitably worsens, making replacement more difficult and other parts decay making the job more expensive. Due to staff changes and an organisational re-structure the time is right to create a well-trained millwrighting team which will ensure that the previous historic cycles of repair / neglect will not happen again and further enhance sustainability.

Project Outcomes

Heritage:

- The fabric of the historic buildings is in generally good condition, but this project will make a massive difference in terms of the visitor experience and understanding of the heritage and the site. The conservation focus is on the waterwheels and machinery being returned to working order, but in many ways the process of conservation is the most important aspect of this project as the Trust’s own team of engineers will be trained during the process by undertaking the work themselves with specialist advice as may be required. The Trust will then have the skills to maintain the wheels on an ongoing basis so that the cycle of major restoration through decline and decay to another major restoration can be broken for ever. This region does not have a specialist water wheel millwright and SIMT aspires to become the centre for water power having three large waterwheels and two small waterwheels in its care with the HLF funded restored Shepherd Wheel moving from the Council to SIMT’s management.
- The project will lay the basis for future training of the volunteer team being developed as part of the proposal and apprenticeships will be investigated during the development phase. The work of the Trust’s own team will be supported and enhanced by this.
- Physical and intellectual access to the heritage will be enhanced alongside a renewed community engagement securing support at a crucial time.



People:

- The part of this project that will make the most impact on how people relate to the Hamlet will be the volunteering opportunities that will be created. The site has had significant volunteer input over the years, particularly when it was first rescued by

SIMT, but this will be the first time it has been approached in a structured and funded way with the aim of securing ongoing participation into the future allowing people to experience and support their heritage in several different ways: interpretative roles, demonstrating roles, conservation roles. By these means they will acquire new skills and confidence, as well as learn about their own history.

- The Hamlet will be able to become more widely used with both the new facilities and through the community focused work of the dedicated post being created.
- The new spaces will be accessible to all, enhancing the capacity of the site for all activities and events, allow more people to enjoy and appreciate the Hamlet.
- Interpretation will be created that will bring to life those areas in the historic structures that remain inaccessible for disabled people through audio visual means. The new interpretation will be developed during the first year of the work of the Community Participation Officer which will be focused on consultation and inclusivity. In this way the project will also build on the work undertaken by the earlier HLF Access & Learning project in the deprived areas of the Abbeydale corridor.
- The totality of the project with a new visitor experience, facilities, working machinery and activity programme will change and enhance peoples' relationship with the Hamlet whether they are at school, a local person or a tourist.

Audience:

- In order to understand what the new audience maybe a brief overview of performance since the Trust rescued the site is helpful. In the first year of opening under the Trust 6000 attended with a short summer season. This increased as the season was lengthened and then the HLF Access & Learning project more than doubled the numbers from 9500 in 2001-02 to 22500 in 2004-05 and this impact was sustained with a consistent attendance level at over 18000. In 2009-10 the Trust secured an additional special grant from the Council to



- to make the site free and this took it back up to over 29000 in the first year and then fell back to 26,000 in 2010-11. Children had been made free some years ago, but within these figures were a 200% increase in adults and 120% rise in seniors.
- The breakdown for 2009-10 shows that 17% were educational visits and 16% came on event days. The rest are made up general visitors and other users of the site. The general and event visitors break down into 27% children, 54% adults and 18% senior citizens. When compared with the population of Sheffield this shows that it attracts a disproportionate number of children and hence family groups.
- Therefore the main group benefiting from this project will be families with children. Free access has been sustained in spite of budget cuts and therefore an aim to achieve 35,000 is an aspirational target.
- The improvement in learning facilities and extension of school visiting into the colder months will build on the already healthy school numbers. The Access & Learning Project increased numbers from less than 3000 to nearly 6600 and this project will aim to take it back up to that number from 5000, aiming for 7000.
- Target groups will also be identified although they will not constitute a 'main group' they will be clearly be important in the community aspects of the project. For example, people with disabilities that have been excluded from areas of the site due to its historic



structures. Abbeydale appears to be in a leafy, wealthy part of Sheffield but the Access & Learning Project identified and worked with the deprived BME Communities in the Abbeydale Corridor in the former Education Action Zone and this project will build on aspects of that work. A major barrier has been removed in making the site free and now activities and consultation can be aimed at these non-traditional visitors.

- New volunteers constitute another target group with the aim of having twenty regular volunteers supported by a new friends group of at least 100 members, which was the number that led the campaign to save the site in 1997.

Sustainability:

- Sustainability is the basis for this project as the step change it engenders will ensure that the visitor base, community support and essential skills are all in place.
- SIMT has a strong reputation and in spite of the cuts is in a sound financial position. The rebuilding of Kelham Island Museum after the flood is testament to its resilience as an organisation.
- The conservation skills embedded in the Trust's engineering team by this project will ensure that the machinery at both Abbeydale and Shepherd Wheel does not decay again.
- The development of new volunteers will assist in this and in disseminating knowledge and experience across other sites in the region.
- The improvement in the visitor experience and investment in new facilities will increase use and popularity enhancing the political position in these challenging times, as will income generation from café, shop and workshop rentals.
- The Community Participation Project and Officer will over the three years build a team that will self-sustain. It also gives time for the Trust to examine how the activities of the CPO can be built into the ongoing activities of the Trust staff team that is contracting at a time of public expenditure cuts. Volunteer support in most aspects will become more important. SIMT is undergoing a period of change in response to the cuts and this will last at least the three year period.



Budget Breakdown

Expenditure	
New Learning Centre	£777,940
Waterwheels and Machinery restoration	£85,467
New Interpretation and displays	£75,050
Community Participation Programme	£57,282
Total	£995,739
Income	
Match Funding Required	£100,039
HLF Grant	£895,700
Total	£995,739

The New Abbeydale Learning Centre



The new Learning Centre viewed from above fitting neatly into the car park and operating at two levels with the Learning spaces, shop and café at site level and workshops at car park level.



A view showing the Courtyard in front of the Learning Centre and covered area defined by stone pillars and a slate roof as specified by English Heritage. The courtyard has railings around it as walls could not be used due to the necessity for a permeable landscape to save the trees.



The Toilet block is changed into a gateway into a courtyard in front of the new building. This is to maintain the 'immersive heritage experience' of Abbeydale as required by English Heritage.



The new building is concealed behind the retained but altered toilet block. An additional disabled toilet is to be located within the block.

**ABBAYDALE
INDUSTRIAL
HAMLET**

