



HM Government

# **LANCASTER Hi!STREETS HERITAGE ACTION ZONE**

## **MILL RACE AREA CONSERVATION MANAGEMENT PLAN Summary Document (Adopted September 2023)**



Historic England

**LANCASTER  
CITY COUNCIL**

Promoting City, Coast & Countryside



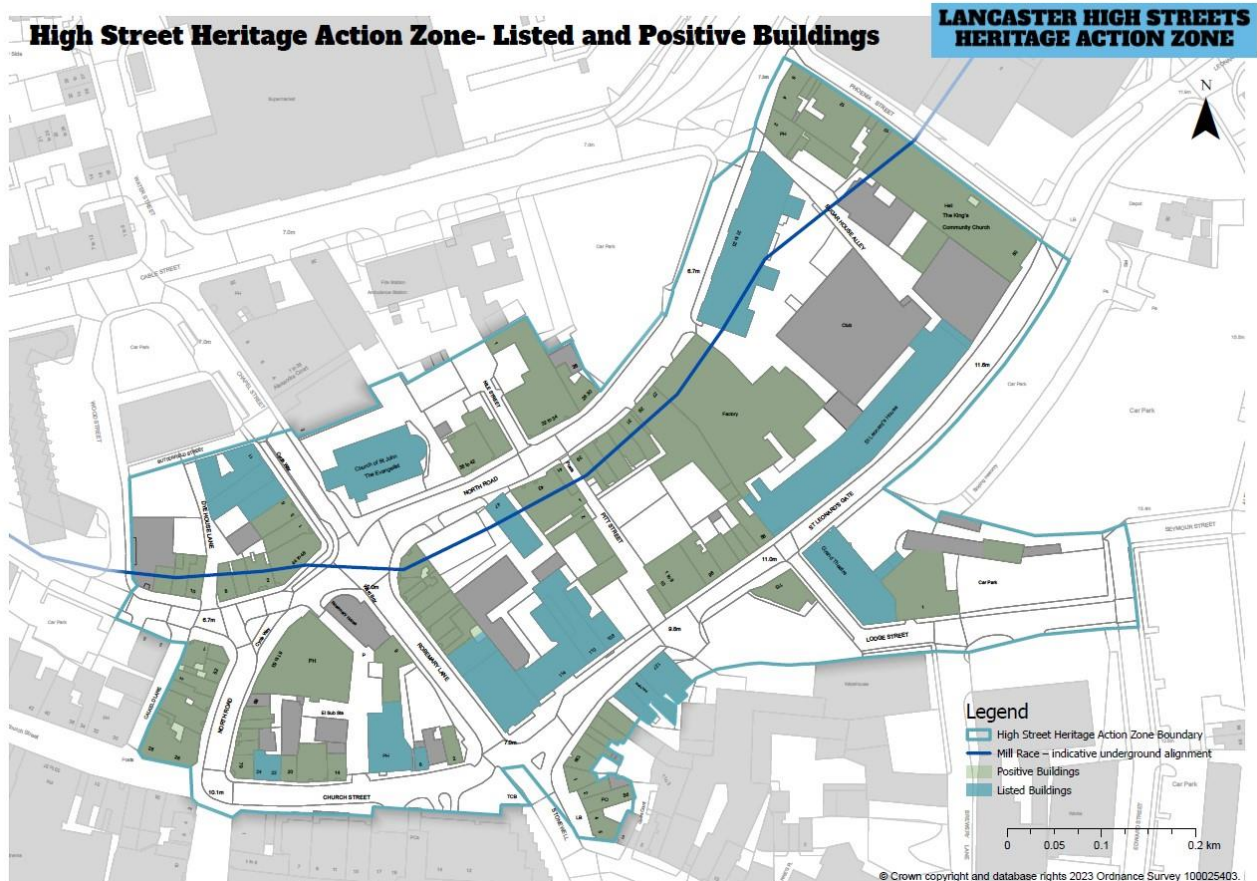
**The Mill Race Area  
Conservation Management  
Plan concerns an often-  
overlooked area of  
Lancaster's centre that  
encapsulates the history of  
the city**

*The Mill Race Area retains its multi-period character: street layouts, property boundaries and mix of building ages. We know from below ground archaeology that the area is likely to include part of the Roman settlement.*

Whilst the mill race itself is hidden from view today, it has had, and continues to have, a major impact on the city. The mill race has dictated the layout of buildings that we see today, and its presence is responsible for the industry which emerged in the area, including

the town's cornmill, which we know was powered by the mill race from at least the C16. The route of the mill race can be seen in the form of Damside Street and the NE part of North Road. It is these streets, together with the earlier routes of Lower Church Street and St Leonard's Gate, and those which connect them, which form the focus of the Lancaster High Streets Heritage Action Zone (HSHAZ).

The HSHAZ is about prioritising the Mill Race Area for improvement. The HSHAZ area is wholly within the Lancaster Conservation Area, straddling across two of the character areas which make up the Conservation Area. Although immediately abutting the city's core commercial area, there is a perception that this area is somewhat peripheral to the city centre and consequently has been afforded less attention than other parts. The HSHAZ was awarded to this part of the city in recognition of some of the challenges the area faces, and the changes occurring within it. The HSHAZ partially overlaps with the Canal Quarter to the south-east of the area (the southern side of St Leonard's Gate).



## What is the Lancaster HSHAZ project?

The HSHAZ project is a four-year £2m+ grant programme and is part of the Government’s national programme of investment into high streets which is being led by Historic England (HE), with a focus on capital works, community engagement and cultural programming. The HSHAZ is a combined effort from Lancaster City Council, Historic England and other partners to improve the condition of the area, as well as understanding and perceptions of it. The

HSHAZ area contains 18 listed buildings and a high number of positive unlisted buildings<sup>1</sup>, most of which would be considered non-designated heritage assets (NDHAs).

The HSHAZ project aim is to deliver heritage-led regeneration to help shape a sustainable future for the area.

The HSHAZ also supports the Spatial Vision for Lancaster District 2031, which aspires to manage Lancaster’s historic environment with rigour appropriate to its regional significance<sup>2</sup>, reflecting Lancaster’s selection as one of England’s Historic Cities.

<sup>1</sup> Buildings recognised as making a positive contribution to the character of the Conservation Area. Most were originally identified in the Lancaster CAA (2013).

<sup>2</sup> The Spatial Vision for Lancaster District 2031, from *Lancaster’s Strategic Policies and Land Allocations DPD, Adoption Version, July 2020*

## **What is the Mill Race Area Conservation Management Plan (CMP)?**

The purpose of the CMP is to set out what makes the area significant, in order to guide its future use and management. The aim of the Mill Race Area CMP is:

**To manage change appropriately to sustain, enhance and promote the Mill Race Area's built heritage for the benefit of all**

Part 1 of the CMP therefore explores the historical development of the area (section 2), which is followed by an assessment of significance by street (section 3), and a statement of significance for the whole area (section 4). Four key themes have also been identified and explored in further detail in the final section (section 5): The Mill Race, Sugarhouses, Transatlantic Trade and Nineteenth Century Court and Yard Housing.

Part 2 of the CMP considers how this area should be managed to ensure that its significance is sustained and, where possible, enhanced. It sets out the issues faced by the Mill Race Area and seeks to identify the

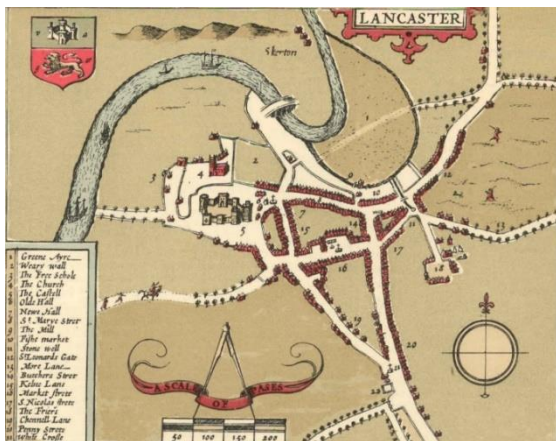
opportunities to address them. Each issue includes an objective which should be a material consideration in decisions involving the management of the Mill Race Area. A list of policies for each issue has also been set out in the CMP in order to help realise those opportunities. At the end of the document is a Summary Policy Implementation Plan which identifies how these will be delivered and which bodies will be involved, though it can only be delivered through the combined efforts of the local authority and private investment

## **Why is the Mill Race Area so significant?**

### **It retains its multi-period character**

The area retains evidence of its early street layout as dictated by the topography and the extent of the Lune, its shoreline, at each stage of development. The plotting of Roman archaeological finds in Lancaster reveals a settlement pattern along Church Street which is certain to have been a Roman road, leading down the hill from the Fort's east gate. Stonewell is considered to have been the eastern extent of the settlement, where the main roads converged (Penny Street being the north-south route). St Leonard's Gate is a possible Roman road, leading out of the settlement, alongside the river. However, we

know that its name comes from the leper hospital at its far end, outside of the town's boundary, which was founded in 1189, giving the road a least a medieval date. The earliest map of Lancaster, Speed's map of 1610, clearly shows that these streets were well-established, along with Calkeld Lane, though unnamed on the map, leading to the mill race, mill and fish market and a well. Calkeld derives from the Norse for 'cold spring' and is first referred to from the thirteenth century. Whilst Speed's map does not record property boundaries, later maps do illustrate the medieval burgage plots which characterised the town.



*Speed's 1610 map of Lancaster*

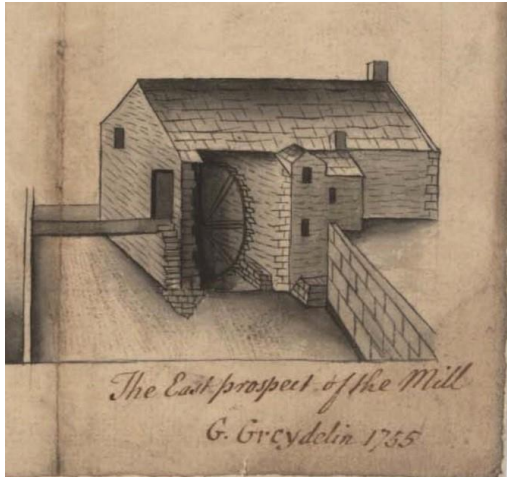
Lancaster saw much rebuilding of the earlier timber and thatched building in stone during the later C18 and C19. However, this did not tend to sweep away the historic burgage plots as they presumably still represented property boundaries. Evidence of them can still be seen in the form of some of the layouts today, including at the bottom of Lower Church

Street and along St Leonard's Gate, such as St Leonard's Place and the unusual shape of no. 113.

The earliest surviving buildings in the Mill Race Area are to be found in Lower Church Street where late C17 and early C18 buildings survive, having escaped the rebuilding. Many of the buildings we can see today, however, can be dated to the C18 and C19. This includes the development of the Green Ayre which, until the late C18, had mainly been used for recreational purposes. From the 1740s, housing was developed there by the Lancaster Corporation and by private individuals to accommodate the growing population. St John's Church was one of the first buildings to appear, and three of the earliest houses also survive; no.s 7-11 Chapel Street.

When Lancaster's maritime trade declined in the early C19, it was manufacturing which was to dominate. Its legacy can be seen today from the impressive Gillows Works to the small-scale manufacturing workshops. The area was also to see piecemeal infilling for worker housing, and vast numbers of court, yard and alley housing could be found here. Larger houses were adapted for retail purposes to serve this growing population, and some of these shopfronts have survived. Little of the lower quality worker housing survives, but what does serves as an important reminder of how many of the

town's large working-class population were expected to live.



*Extract from a 1755 description of the mill (Lancashire County Council, UAD 529)*

## The location of Lancaster's early industry

A water mill in Lancaster is first mentioned in the C12 but we know that the Dalton family were responsible for building a cornmill over the mill race in the 1570s, the site of which is now occupied by 10-14 Damside Street. Early industry which required access to large quantities of fresh water, such as dyeing and tanning, also developed in this area. A dyeworks can be seen opposite the cornmill on a 1742 plan of the area, replaced c.1800 by a new dyeworks building which survives today: 2-4 Damside Street. These particular industries also relied on the port for the importation of dyestuffs. Other industries also developed here due to the close proximity to the riverside and wharves; hogsheads of muscovado for the sugar house and mahogany for furniture-making was able to be

unloaded close to where it would be processed in the area's timber yards.



*James Booth, Collector of HM Customs, Port of Lancaster (Lancaster City Museums)*

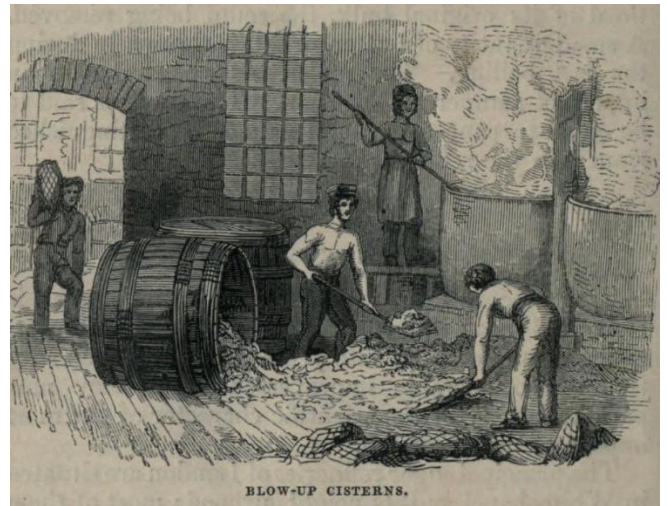
## Strong maritime connections

As well as supplying the area's industry, the establishment of Lancaster as an important port for the West Indian trade resulted in the growth of industry connected with shipping in the area, including sailcloth-making and rope-making. A number of ropewalks could be found around St Leonard's Gate. The former Ship Inn survives on North Road, described as having been 'contiguous with the old ship yard', which would have been easily accessed from Nile Street. St Leonard's Gate was the site of the town's first sugarhouse but was also where a number of wealthy merchants chose to live in the eighteenth and nineteenth centuries, including the Lawsons and George

Burrow. James Booth, Customs Collector based at the Custom House, lived at 108 St Leonard's Gate, with his wife, of the Brockbank ship building family. The success of the port in the eighteenth century, together with the bi-annual assizes, brought wealthy visitors to the town and resulted in the establishment of entertainment buildings in the town, including The Theatre (now the Grand Theatre) in 1782. The town's economic prosperity in the eighteenth century resulted in its expansion into the Green Ayre. St John's Church was built to serve the expanding population in the area, supplementing the Priory church. The church is very much associated with the town's merchant and mariner families, many of whom were benefactors and commemorated inside and outside the church.



*Ship Inn, 1889 (Red Rose Collections, Lancashire County Council, ref. NLA20130327016)*



*First stage in the sugar baking process (The Useful Arts and Manufactures of Great Britain, 1846)*

### Associated with Lancaster's role in transatlantic slavery

As well as the area clearly seeing an influx of plantation goods produced by enslaved people such as dyes, sugar and mahogany, the area also has close associations with slave traders, and slave owners. Sugar baking took place in the area for 150 years, and during that time the second sugar house was owned in partnership by a number of individuals known to have been plantation owners or traded in enslaved people, they include Abraham Rawlinson Sr, James Hargreaves, James Atherton and Thomas Giles. As well as importing slave-produced goods, the Butterfields, a merchant family who owned the eighteenth century dyehouse, and were responsible for building 7-11 Chapel Street, among other houses in the area, were also involved in the slave trade. They part-owned numerous slaver ships. Merchant and mill owner George Burrow, who lived in the

former Lawson mansion during the early part of the nineteenth century, also owned plantations and enslaved people in the Virgin Islands, receiving compensation from the Government in 1836, following the abolition of slavery in 1833.



*Waring & Gillow Showroom, North Road, 1950 (Historic England, ref. CC017237)*

### **A hub for small and large-scale nineteenth century manufacturing**

After the port's decline in the early nineteenth century, due to the ascendancy of Liverpool's more accessible port, it was manufacturing which became the town's new focus. Helped by the arrival of the canal, cotton looked like it might be the answer, though this was to be absorbed by the successful Storey and Williamson's oilcloth empires. The arrival of the railway in 1840 resulted in the repair and manufacture of

rolling stock, with works being developed in the area. However, small-scale craftsmanship could also be found and development behind street frontages for workshops became more common; numerous coach builders could be found in around St Leonard's Gate. Abbott & Co. stained glass firm were based in the workshop to the rear of 11 Chapel Street and cabinet makers could also be found in the area, including in St Leonard's Place. A small number of these workshop buildings remain today, including in Pitt Street and Lodge Street, and are an important reminder of the small-scale manufacturing taking place here. By the 1880s, the area was to become dominated by the impressive and imposing purpose-built Gillow Works, which embodies the company's domestic and international success. Soon after this, they became Waring & Gillow.



*Abbott & Co. Stained Glass shop, Chapel Street/Butterfield Street (Lancaster City Museums)*



*Dye House Lane, Sam Thompson, 1927 (Lancaster City Museums)*

### Home to the workers

As well as being an employment area for many, it was home to many more.

Throughout the nineteenth century, there was great demand for worker housing, when the population quadrupled. Many of those who lived in the area were employees of Williamson and Storey by the end of the C19. Piecemeal infilling was to be found throughout the area, in court, yard and alley developments. The residents often lived in cramped conditions, subjected to poor sanitation, resulting in diseases such as cholera and typhus. Most of this former housing has been swept away, but rare survivals include Swan Court, off St Leonard's Gate, and on Rosemary Lane to the rear of the open triangle of land, once Hemingway's Yard. The sites of others remain undeveloped today, including in Pitt Street, Dyehouse Lane and St Leonard's Place. Bylaw housing developments, built to improved standards, could also be found in the area, though only

one example remains within the Mill Race Area today, in Lodge Street.



*Edward Bousfield Dawson by Robert Edward Morrison, 1914 [The Shire Hall, Lancaster Castle.] (Credit: the Chancellor and Council of the Duchy of Lancaster)*

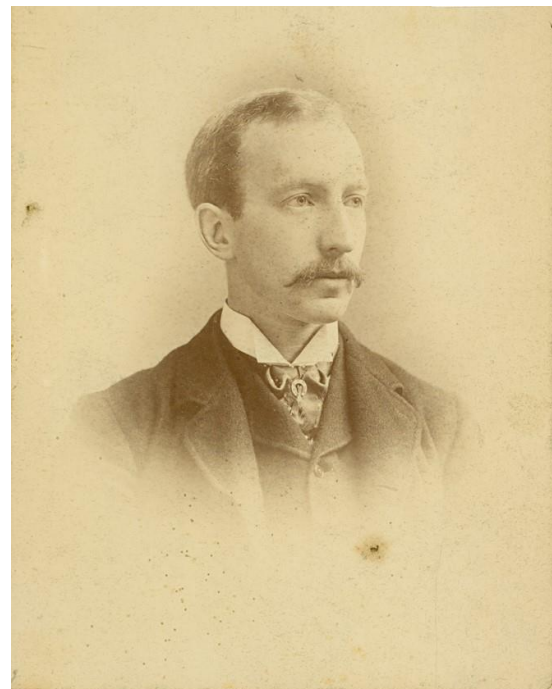
### Inspired nineteenth century reformers

It was the high mortality rates and incidence of disease in the area during the 1840s that so concerned the physicians, including Edward Denis de Vitre, and sanitary reformers, including Richard Owen and Edmund Sharpe. It was understood that this was in part due to there being no piped water supply and the few sewers that there were draining into the mill race, which often flooded at high tide. Owen carried out an inspection of the town's worst affected areas of behalf of the Health of Towns Commission, accompanied by Sharpe, and produced his *Report on the State of Lancaster* in 1845. Many of the examples given in the report are from within the Mill Race Area. The report and Sharpe's efforts did help bring about major sanitation

improvements for the town, with a supply of clean drinking water piped from Wyresdale to the town by 1855, and improvements to the sewerage system by the end of the century. The worker population continued to expand throughout the nineteenth century, and this also brought social reformers to the area. A group of Congregationalists from the High Street Chapel established the Centenary Chapel and School on St Leonard's Gate in 1873, "to supply means of grace and religious education to a needy and increasing population at the east-end of Lancaster". The congregation soon outgrew the chapel, however, and a new Centenary Church was built in Stonewell in 1881, with the chapel becoming the school, which was later extended in 1887-8. The same group of people, including Edward Bousfield Dawson of Aldcliffe Hall, who was also President of the Total Abstinence Society, was instrumental in the building of a coffee house in the area and the Phoenix Rooms, for the Lancaster Coffee Tavern Company (established in 1878). This was a bid to provide an alternative to drinking in beer houses for the worker population, as part of the temperance movement.



*Sir Richard Owen in 1855 by Maull & Polyblank (credit: National Portrait Gallery)*

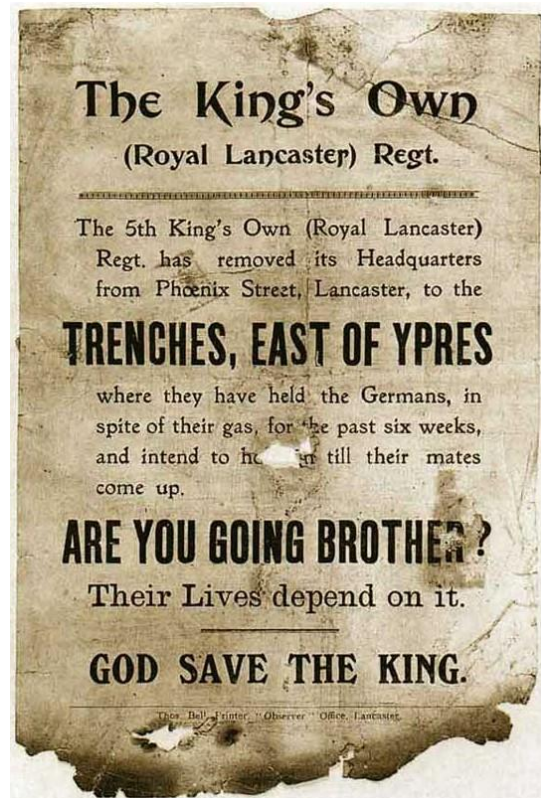


*Edward Howard Dawson (1864-1896), (Red Rose Collections, Lancashire County Council, ref. NLA20111104009)*

## **Contains the work of notable architects**

The area is notable for the number of buildings designed by or attributed to the nationally renowned Lancaster architectural practice Sharpe, Paley and Austin, under its various names. These include the Gillow

Showroom, the former car showroom on North Road and the Phoenix Street Drill Hall. Paley and Austin were also responsible for converting the former Lawson Mansion on St Leonard's Gate into the Centenary Chapel and School for the Congregationalists. Their work can still be seen to the rear of 50 St Leonard's Gate. The Sunday School was later extended to the front in 1887, and is the work of Edward Howard Dawson ARIBA, son of EB Dawson. EH Dawson was also the architect of the Phoenix Rooms of 1892. Paley was one of Dawson's ARIBA proposers, and his work is sometimes mistakenly attributed to the firm. He was held in high regard by his contemporaries but is now little known. He died, aged just 32, in 1896.



*Recruiting poster of the 1st/5th Battalion, King's Own Royal Lancaster Regiment, in 1915 (credit: KORR Museum Lancaster)*

## **Strong connections to the armed forces**

The area has a strong connection to Lancaster's military heritage, as well as a connection to the Royal Navy. The selection of eastern Lancaster, where much of the town's worker population lived and worked, as the location for the Rifle Volunteers Drill Hall in the 1890s is unlikely to have been a coincidence. The Phoenix Street Drill Hall was completed in 1894 and soon after, the Rifle Volunteers unit evolved into the 5th Battalion the King's Own Royal Regiment (Lancaster). They were deployed to the Western Front in 1914. From the research carried by the Lancaster: Streets of Mourning project, we know that this area suffered the highest

number of casualties during the First World War. St Leonard's Gate and its associated courts suffered the greatest number of losses of any street. Waring & Gillows factory assisted in the war effort and switched to production of aeroplane parts during the First and Second World Wars. The hangar-style building at 27 North Road is thought to be related to this work. They also produced kit bags, camouflage nets and ammunition chests for the Navy. Lancaster's Admiralty Recruiting Office was located at 92 St Leonard's Gate in 1914, and at no. 94 in 1919, when they were encouraging demobilised men to re-join. Again, this location is likely to have been selected based on the demographic of the area.

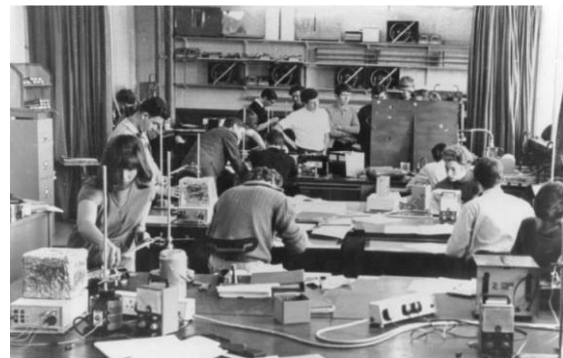


*Waring and Gillow 1919 hangar-style building, North Road, c.1960 (Lancaster City Museums)*

## Lancaster University: new beginnings

From the 1960s, the area fell into decline with the closure of Waring & Gillow's and the loss of much of the resident population with the clearance of substantial numbers of houses, in anticipation of an eastern relief road which was never built. However, the founding of the

new University in 1964 ensured that a number of buildings in the area were kept in use, as St Leonard's Gate became a temporary hub. St Leonard's House was fortunately re-purposed by the University soon after the closure of Waring & Gillow in Lancaster. It is back in use as student accommodation today, and several other redundant buildings, many of them listed, have been adapted for student accommodation, including the former Gillow Showroom, 110-114 St Leonard's Gate, the former Tramway (no. 127 St Leonard's Gate) and 129-131 St Leonard's Gate. Other buildings, notable for their size, which have been put to the same use are no. 98 St Leonard's Gate and the Phoenix Rooms, built for the Lancaster Coffee Tavern Company and later a Working Men's Club.



*An early undergraduate teaching laboratory in St Leonard's House, (credit: The First Fifty years of the Physics Department at Lancaster University. ed. T. Sloan, 2014, [www.lancaster.ac.uk](http://www.lancaster.ac.uk))*

## **What are the key issues for the Mill Race Area?**

It is important that this area of Lancaster is managed in a way which ensures its complex and multi-layered significance is sustained and enhanced where possible. The issues affecting the Mill Race Area are identified within the CMP with objectives, opportunities and policies to address them. It includes an implementation plan for the policies which will be monitored and reviewed. The objectives, which should be a material consideration in decisions involving the management of the Mill Race Area, are set out below with a summary of the opportunities:

### **Effective planning policy background**

#### **Objective 1:**

***To ensure that the Local Plan evidence base relating to the Mill Race HSHAZ is maintained and kept up to date.***

It is crucial that documents which provide the evidence base for the Local Plan are reviewed and kept up to date. This includes the Lancaster Conservation Area Appraisal.

Appraisals in turn, rely upon audits of heritage assets being monitored and maintained, as well as research into heritage assets being used to inform and update the Historic

Environment Record (HER), ensuring that the information is accessible to all.

### **Townscape**

#### **Objective 2:**

***To ensure that existing and new development contributes positively to the townscape.***

The challenge in managing the Mill Race Area is to ensure that existing and new development contributes positively to the quality of the varied townscape. Harm can be caused to the townscape through vacancy, lack of investment or unsympathetic alterations. The HSHAZ provides an opportunity to reverse some of the decline and enhance the historic character of the area through the building grants programmes which is supporting businesses in investing in their properties and establishing high standards of design and conservation. This can be furthered through the production of design and repair guidance, as well as the use of Article 4 Directions.

### **Traffic and public realm**

#### **Objective 3:**

***1. To ensure that new development and highways and street improvements significantly advantage safe pedestrian movement including crossing, help encourage longer dwell times and***

***opportunities for gathering and enhance the setting of the area's heritage assets.***

***II. To promote the interests of the Mill Race Area, and particularly that of St John's Church, Centenary Church and the Grand Theatre, in schemes and interventions to address the city-wide traffic issues.***

The presence of the A6 gyratory running through the centre of the Mill Race Area severs it from the rest of the city centre. The design of the streets is vehicle-led and uninviting to pedestrians. This means that the area can feel quite peripheral, as are a number of building uses. Significant public realm improvement requires substantive reductions in how traffic and parking dominate streets within and around the Mill Race Area. This is achievable only via a major city centre wide intervention to rebalance the use of streets towards pedestrians and cyclists and away from vehicle movements. Planning for such an intervention is underway as part of the *Lancaster City Centre Movement and Public Realm Strategy (2020)*. Meantime HSHAZ delivery presents an opportunity to deliver focused public realm improvement projects which can help create a safer, healthier, distinctive and more welcoming environment to support footfall, community activities and events. Damside Street, the Lower Church Street/North Road corner and the setting of the Grand Theatre are the priorities for public realm improvements that

can be delivered through the HSHAZ and work is underway to deliver these within the time frame of the HSHAZ programme.

## Occupancy and use

### Objective 4:

***To encourage uses which are compatible with a building, and which will make a positive contribution towards the area becoming an integral part of the city centre and a desirable place in which to live, work and visit.***

Student accommodation is becoming the dominant building use in the area, which has seen numerous building adaptations or purpose-built accommodation. However, there are also large numbers of hot-food takeaways and high vacancy rates. All of these factors can result in the loss of active street frontages, which are important for the vitality, as well as safety, as 'the eyes on the street'.

Consideration should be given to restricting the conversion of ground floor units for residential uses, and to maintaining day-time active street frontages. There are many opportunities to make use of vacant floor space above.

Vacant buildings can rapidly fall into a cycle of decline and affect how people perceive an

area. It is therefore important that uses compatible with the building and its special interest are found. Where a building is to be adapted for a new use, there is an opportunity to enhance the appearance of the building and the wider area. Their re-use is also sustainable, resulting in carbon savings, and presents an opportunity to make them more energy efficient.

## Redevelopment of gap sites

### Objective 5:

***To encourage the sensitive redevelopment of gap sites which conserves or enhances the quality of the townscape and demonstrates good design, in line with national and local policy, design guidance and advice.***

There is an opportunity to sensitively redevelop gap sites to benefit the area, both economically and physically, by improving its legibility; helping to define its street frontages, as well as its back lanes and alleys.

Designing in context is crucial, and part of this involves understanding the impact on the setting of the heritage assets affected, which could be numerous within a conservation area. Building heights will be a key consideration.

Development briefs and masterplans will be encouraged for larger or more complex and sensitive sites. However, all new development

will be determined in accordance with the design parameters set out in the council's DM DPD, as well as those factors set out in Historic England's Good Practice Advice in Planning Notes 2 and 3: *Managing Significance in Decision-Taking in the Historic Environment* (2015) and *The Setting of Heritage Assets* (2017). Applicants should also seek to engage with Lancashire County Council's archaeologists (Historic Environment Team) at an early stage.

## Understanding and interpretation

### Objective 6:

***To create awareness of the Mill Race Area's heritage, including its more challenging history, through interpretation and cultural activity presented in a sensitive and engaging way which will provide a lasting legacy for the Conservation Area.***

There is a great opportunity to promote the heritage of the historic mill race area, some of which is not well-known, and to promote some of the city's hidden heritage.

This will include the area's connections to the story of slavery, which raises wider questions about how the buildings and sites linked to the slave trade, to absentee slave and plantation owners and to early black residents should be treated and interpreted across the city and district. There is an opportunity to ensure that interpretation schemes within the

Mill Race Area reflect a district-wide approach.

A plaque scheme has recently been unveiled in the Mill Race Area, which involved working in collaboration with the Civic Society. It includes a 'Mill Race Trail' through area, in digital and leaflet format, providing further information, on the buildings, individuals and the area.

The city's wayfinding monoliths, based on the award-winning 'A Record of Lancaster', are a method which can be used to convey important narratives about the city's heritage. Two new monoliths, informed by the HSHAZ research, have been installed within the Mill Race Area, on St Leonard's Gate and North Road.

## Archaeology

### Objective 7:

***To ensure that archaeological considerations are at the forefront of any development scheme within the Mill Race Area and that opportunities for furthering our understanding of the area's heritage are taken.***

It is important that opportunities to learn more about past human activity are not lost, but are investigated and recorded, and that the Historic Environment Record (HER) continues to be enhanced.

The archaeological potential of the area is considered to be high, though disturbance caused by cellar construction is likely to have reduced the archaeological potential of some sites, though not necessarily of Roman levels.

However, where cellars have been present in areas of cleared C19 housing, this may also present an opportunity, as set out in the *North West Regional Research Framework for the Historic Environment* with regard to enriching our understanding of the impact of industrialisation on the working classes and their living conditions.

Archaeological desk-based assessments of proposed development sites should be carried out as a minimum. Lancashire County Council's archaeologists can then determine what further action should be taken.

### Exercising statutory planning powers

### Objective 8:

***To take statutory action where it is justified in terms of unacceptable harm caused to the historic environment of the Mill Race Area which merits protection.***

There is an opportunity to consider which enforcement measures would be most effective in achieving improvements in the quality of the built historic environment within the Mill Race Area. This could involve

setting out priorities for a Section 215 Notice initiative for the area.

Consideration could also be given to prioritising planning enforcement cases (categorising them as Priority A in Lancaster's Enforcement Charter) in the HSHAZ area, and more generally where the Council has specific place-led investment schemes.

Regular monitoring within the area is essential, as it is in conservation areas generally, in order to keep track of changes in appearance and condition.

## **Flooding and climate change**

### **Objective 9:**

***I. To ensure that the existing structure and capacity of the mill race are protected from damage or interference caused by development.***

***II. To maximise opportunities for the provision of sustainable drainage systems in all development and in highways and street improvements to help reduce the impact of surface water flooding, and to encourage building-appropriate flood resilience measures, within the Mill Race Area.***

***III. To promote the key role that historic buildings can play in the fight against***

***climate change; the carbon savings associated with their reuse/adaptation and in making them more energy efficient whilst preserving their significance.***

The Green Ayre often flooded historically due to the impact of the Lune at high tide.

However, in more recent times the flooding is thought to have been exacerbated by the combination of flooding from surface-water run-off, overloading of the combined sewer capacity (including the Mill Race), and high tide on the Lune.

It is therefore crucial that new development within the area does not exacerbate the surface water run-off issue in the area. There is an opportunity to help alleviate this issue through preventative measures and by designing best practice into new development and any public realm improvements schemes. In addition, new development and old should adopt building-appropriate flood resilience measures within the area.

In terms of tackling climate change, it is crucial that the carbon savings made by re-using historic buildings are not overlooked. The retention of historic buildings and their re-use preserves the embodied energy. Not only that but re-using them saves the carbon associated with new build. Opportunities to make existing buildings more energy efficient

and resilient to climate change in ways which do not harm their character or historic fabric should be sought and will be encouraged.

**Cover image:** Extract from Mackreth's 1778 *Plan of Lancaster*, surveyed in the mid-1770s, showing the still partially open mill race.

**Page 1 image:** Extract from *The North East Prospect of Lancaster* by Samuel and Nathaniel Buck, 1728 (showing the Green Ayre and the mill race on the left)