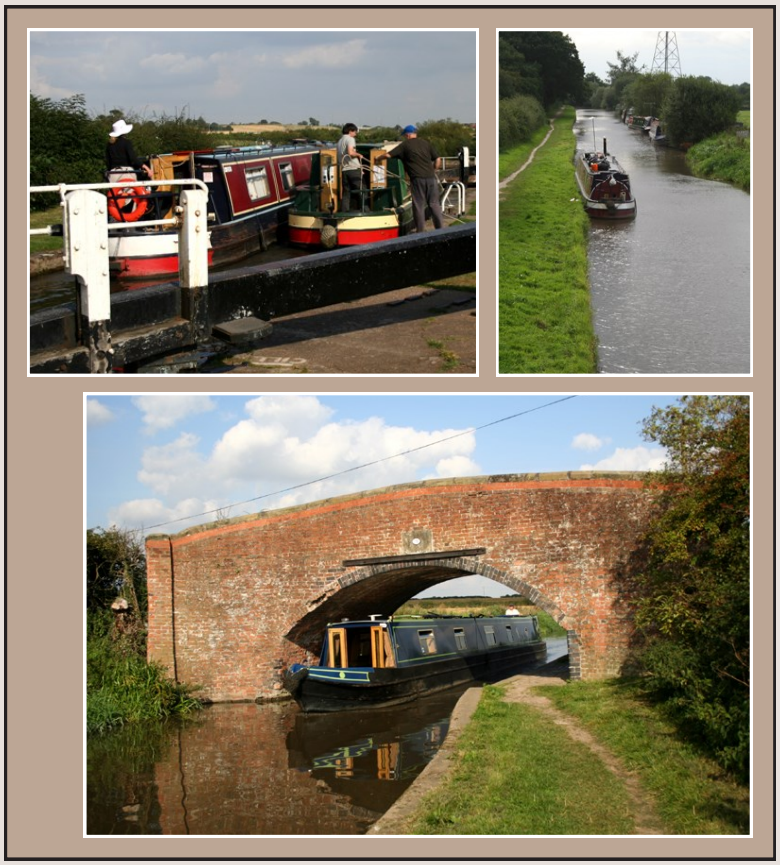
Trent & Mersey Canal *Conservation Area*

Character Statement



2014

SOUTH DERBYSHIRE DISTRICT COUNCIL

Trent & Mersey Canal *Conservation Area*

Contents

Trent & Mersey Canal *Conservation Area*

Introduction

This statement has been produced by Mel Morris Conservation for, and in association with, South Derbyshire District Council. It sets out the special historic and architectural interest that makes the character and appearance of the Trent and Mersey Canal worthy of protection. It also assesses the degree of damage to that special interest and thus opportunities for future enhancement. This document will be used by the Council when making professional judgements on the merits of development applications.

The Trent and Mersey Canal Conservation Area was designated by South Derbyshire District Council on 19th May 1994.

Summary

The Trent and Mersey Canal is of national importance as part of the country's industrial heritage. It stretches from Shardlow in Derbyshire, where it meets the confluence of the rivers Trent and Derwent, to Preston Brook in Cheshire, where it meets the Bridgewater Canal. 14 miles of the canal fall within South Derbyshire and the whole of this stretch falls within the Trent and Mersey Canal Conservation Area.

The conservation area connects with two other conservation areas. At its east end is Shardlow, the terminal port of the Trent and Mersey Canal, completed in the 1770s and a large conservation area in its own right. A small section of the canal conservation area extends beyond Shardlow as far as Derwent Mouth Lock. The Derbyshire section of the canal connects to its west with the Staffordshire section of the canal at Clay Mills. The Staffordshire section of the canal is a separate conservation area in its own right that runs from Clay Mills as far as Kidsgrove.

On its completion in 1777 the Trent and Mersey Canal was the greatest civil engineering project yet carried out in England. Along its length are the surviving bridges, locks and buildings, mileposts and canalside ephemera that were associated with the canal and its wharves. The development of the canal also led to the expansion of a few Derbyshire settlements in the late 18th and early 19th centuries, in particular Willington, Shardlow and Stenson. These contain buildings developed in association with, or influenced by, the presence of the canal, but often not built or owned by the canal company.

The distinctive characteristics of the Trent and Mersey Canal can be summarised as follows:

- A long, meandering corridor of wildlife ecological value, bordered by trees and native hedgerows

- A transport and communication corridor, on occasion tracked by railways and roads, the route influenced by the landform of the Trent valley

- Small, simple late 18th and early 19th century brick buildings facing the canal
- Bustle of regular narrowboat activity and bright coloured water craft along the water and at locks and moorings
- Lively working character at Stenson and Shardlow where there are established boat building and chandlery industries
- Local details, such as cast iron canal mileposts and wide, segmental arched bridges that reinforce a collective, distinct identity
- Long stretches of uninterrupted water with relatively few structures
- An important recreational route within the East Midlands; the towpath is popular with walkers, cyclists and anglers and the canal is regularly used by narrowboats

Area of Archaeological Potential

An area of archaeological potential has been defined through an assessment of the known archaeological and documentary evidence of the industries along the canal that were established from 1770 until the mid 19th century. It has been carried out as part of the review of each conservation area in consultation with the County Archaeologist, the Development Control Archaeologist and the Sites and Monuments Record Officer at Derbyshire County Council.

An area of archaeological potential may encompass both statutory designations (including Scheduled Ancient Monuments and Registered Historic Parks and Gardens) and other non-

statutory site information from the Derbyshire Sites and Monuments Record.

The Trent and Mersey Canal is one of the earliest canals in the country and is of industrial archaeological interest for that reason.

Over the centuries, the industries along the canal declined and physical evidence in the form of trackways and structures above ground may have been removed. Within the area of archaeological potential there may be reasonable expectation that archaeological evidence relating to the 18th century and early 19th century industrial development of the canal may survive below ground.

An area of archaeological potential need not necessarily coincide with the boundary of the conservation area.

Conservation Area Analysis

Historic Development

Canals pre-dated the railway transport network by some 60 years or more, at a time when the industrial development of Britain was surging ahead and there was an almost frantic rush to reach new markets. Canals were seen as the answer to many problems of bulk transportation of heavy goods.

The River Trent was navigable in part, and up until the 19th century it was an important trade route across the Midlands. By the second half of the 17th century Wilne Ferry, on the Derbyshire / Leicestershire boundary, had become the head of the Trent Navigation. Shardlow, on its banks, had a strategic role for communication and trade. The upper reaches of the River Trent had been navigable in short stretches but it was only at the end of the 17th century that it became completely navigable as far as Burton on Trent. The first Act of Parliament concerning navigation on the River Trent was passed in 1699, called: "An Act for making and keeping the river Trent, in the counties of Leicester, Derby and Stafford, navigable". This provided for maintaining the navigation up to Burton upon Trent, and granted tolls to the Earl of Uxbridge or his lessees.

View today of the junction of the River Trent, River Derwent and the canal at Derwent Mouth

Like many rivers, the River Trent was an unreliable method of bulk transportation as it was prone to significant fluctuations in level, either through flooding or seasonal shortages of water. With the introduction of canals into Britain during the second half of the 18th century, the creation of a canal to provide a much more reliable method of bulk transportation following a similar alignment to the River was almost inevitable. The Trent Navigation Company was one of the main objectors to the canal but they failed to prevent its construction.

The Trent and Mersey Canal was at first a competitor to the Trent Navigation, but soon eclipsed it.

The Trent and Mersey Canal was not the product of one individual's imagination but came about as a result of the interests of a number of men. The intention of the canal was to link the east and west ports of Liverpool and Hull across the country, by means of connecting the two principal rivers that led into Liverpool (the River Mersey) and into Hull (the River Trent flows into the River Humber at Trent Falls, just west of Hull). But the canal was more than that - the original concept was for a strategic canal network that would link the northern ports of Liverpool and Hull with Bristol and London. The intention was that the canal network would intersect and form a "Grand Cross" of waterways. This idea seems to have been in the minds of several men, including the famous canal engineer, James Brindley. Surveys for a waterway were made as early as 1755. With this network in mind, the Trent and Mersey Canal initially went by the name of the Grand Trunk Canal.

This was an enormously ambitious project both in terms of its engineering demands and its requirements for financial backing. It relied upon the co-operation of a number of industrialists in the North and East Midlands who needed to reach markets, and who were land-locked in the centre of England. The growing pottery industry based around Stoke-on-Trent was the primary industry to benefit from the new canal network and Josiah Wedgwood was one of its principal supporters and investors. Other industrialists, such as Matthew Boulton, the famous steam engine manufacturer and Birmingham businessman, were also investors. The Potteries relied upon large quantities of raw materials to be brought from other parts of the country; china clay and Cornish stone from Cornwall, ball clay from Devon, flint from Sussex, lead from Derbyshire, salt from Cheshire and coal from North Staffordshire. Historically china clay and flint had been shipped to Liverpool and then transported by horse-drawn wagon. With minimal handling, pottery could be loaded onto the narrow boats and easily transported to markets all over the country via the expanding canal network.

One of the main commodities carried on the Trent and Mersey Canal was salt. From medieval times salt had been transported long distances across country along drovers' roads. It was used in preserving food but during the 17th and 18th centuries salt became important for the growing pottery industry. Salt pans were used to make salt from inland brine springs as distinct from sea salt, which was made around the British coastline. During the 18th century rocksalt mining became a much larger industry. The transportation of salt directly from Cheshire had taken place on the Trent Navigation from the late 17th century, when it was first used in the pottery industry, but the Trent and Mersey Canal supplanted this and became an important trade route for salt. Salt warehouses, temporary holding areas for the commodity, important to protect it from damp, sprang up along the length of the canal.

Landowners along the route of the canal saw opportunities to exploit reserves of minerals on their land. The sand and gravel quarries within the Trent valley and the alabaster and

gypsum mines at Aston-on-Trent came to rely upon the canal for a short time, but to a lesser extent than the pottery industry. Limekilns were also dotted along its length, although very few of these survive.

"(The) principal objects are the export of coals, limestone, freestone, gypsum, lead, pig and bar iron, pottery wares and other manufactured articles, cheese, corn, and other agricultural products"

(Glover's Directory - 1829)

In December 1765 a meeting was held at Wolseley Bridge near Rugeley of "the Company of Proprietors of the Navigation from the Trent to the Mersey". All canals had to be authorised by Act of Parliament and it was on 14th May 1766 that the Act was passed enabling the navigation. The first sod was cut by Josiah Wedgwood in July 1766. The Trent and Mersey Canal was completed in 1777, one of the earliest inland waterways to be navigable in Britain.

In time, the Trent and Mersey Canal had branches including the Derby Canal, the Coventry Canal, the Staffordshire and Worcestershire Canal and the Cauldon Canal.

The canal stretches for 93 miles from Shardlow (Derwent Mouth), where the canal connects with the River Trent, to Preston Brook near Runcorn, from where it eventually runs into the Manchester Ship Canal and then the River Mersey. The cast iron mileposts that run along the towpath reveal the distances between the two end points. The actual length of the canal is slightly longer than the mileposts suggest, as it terminates at Derwent Mouth, a mile beyond Shardlow. Of these 93 miles 14 miles fall within Derbyshire, entirely within the District of South Derbyshire.

James Brindley (1716-1772) was commissioned to oversee the survey, design and construction and in 1758 he started to survey a route. James Brindley, born at Tunstead near Buxton in 1716, was a self-made engineer, who had designed steam engines and an engine for draining coalpits. He undertook all his works without detailed technical drawings or written calculations and there are therefore no records except the works themselves. The first canal to be built in Britain was the Bridgewater Canal, from Manchester to Worsley, completed in 1761, and James Brindley was its engineer. **Hugh Henshall** was appointed as the resident engineer for the Trent and Mersey Canal (he eventually became Brindley's brother-in-law). In 1772 James Brindley died, before the canal was completed, and he was replaced by Hugh Henshall.

In 1770 the first section of the canal was opened between Shardlow and Shugborough in Staffordshire. Several of the bridges within Derbyshire still bear a datestone with 1770 carved into the face.

The Derby Canal and Derby Junction at Swarkestone

The Derby Canal was built between 1793 and 1796. The River Derwent, which flows through Derby and flows into the Trent near Shardlow, had been navigable between the River Trent and Derby, but it was an unreliable transport system. James Brindley advocated a canal through Derby as early as 1771 to link the Trent and Mersey Canal with the Chesterfield Canal. In response to mounting pressure to reach the collieries within Derbyshire, in August 1792, the original proposal was reviewed by a committee of businessmen and Benjamin Outram was commissioned to survey and estimate for a broad

canal. The preliminary work was rapidly completed by Outram and he reported to a meeting of the promoters on 8 September, 1792. An article in the *Derby Mercury* of 13 September, 1792, stated that the canal would begin "at or near Swarkestone on the River Trent, passing by Derby to Smithy Houses, with a branch near Derby to the Erewash Canal near Sandiacre".

Junction of the Trent & Mersey Canal with the Derby Canal at Swarkestone

This proposal was reviewed by William Jessop and he made a series of recommendations including a short length of canal to be built to join with the River Trent, just above Swarkestone Bridge. This was apparently intended to link with a possible canal and railway to quarries and limeworks at Breedon, on the south side of the river, the route for which Jessop had surveyed during 1787. This small section of canal incorporated three locks between the Trent and Mersey canal and the River Trent. Although this section of canal was disused by about 1820, the earthworks for the canal cut can still be seen in the fields to the south of the towpath. The petition to Parliament originally referred to the Derby Canal as the "Swarkestone Canal". The passing of the Derby Canal Act took place on 17th April, and the granting of Royal Assent on 7th May, 1793. The entire canal was finished and fully operational by the end of June 1796.

The Derby Canal was designed as a broad navigation throughout; the channel was excavated 44 ft wide at the top, reducing to 24 ft at the bottom. The maximum size of boat normally using the waterway was 72 ft by 14 ft.

By the time of the Second World War traffic had virtually ceased on the Derby Canal and closure was authorised but the War Ministry put a stop to it in case it was needed. A warrant authorizing abandonment was issued on 3rd December 1964 by the Department of Transport. Release of liability for maintenance was on 5th January 1965.

The route of the Derby Canal between Derby and Swarkestone is now followed by a cycleway that forms part of the Sustrans National Cycle Network.

Development of the railway network and the relationship with the canal

In 1847 the Trent and Mersey Canal Company merged with the North Staffordshire Railway Company to become the North Staffordshire Railway and Canal Carrying Company. The original intention was to keep the canal open as a feeder for its own traffic and there is evidence from the earliest Ordnance Survey map (1" scale – 1836) that the railways were already beginning to be used in this way with transhipment taking place on

purpose-built canalside wharves with new railway sidings, as at Willington. In 1895 the railway company became The Anderton Company and then in 1923 it was taken over by The London Midland and Scottish Railway (LMSR).

The canals were gradually displaced by the railway network through the second half of the 19th century and had very little traffic by the 20th century. The canal was nationalised in 1948 and in 1963 the British Waterways Board took control.

The railway network that now interweaves with the canal was established in several phases. The first phase was the construction of the Birmingham and Derby Junction Railway, established in 1836, which ran to the south of the canal from Burton-on-Trent for several miles before crossing the canal to the west of Stenson and north-east to Derby. The first train ran in 1839. A spur ran off this railway to Stoke, the North Staffordshire Railway, crossing the canal near Willington. Again the line appears to have been established by 1836 but the railway company was constituted in 1845. In 1866-67 the Midland Railway established several lines from Derby, which spurred off the original alignment of the Birmingham and Derby Junction Railway. One of these ran parallel with the canal to its south from Stenson to Cuttle Bridge, where it crosses the canal.

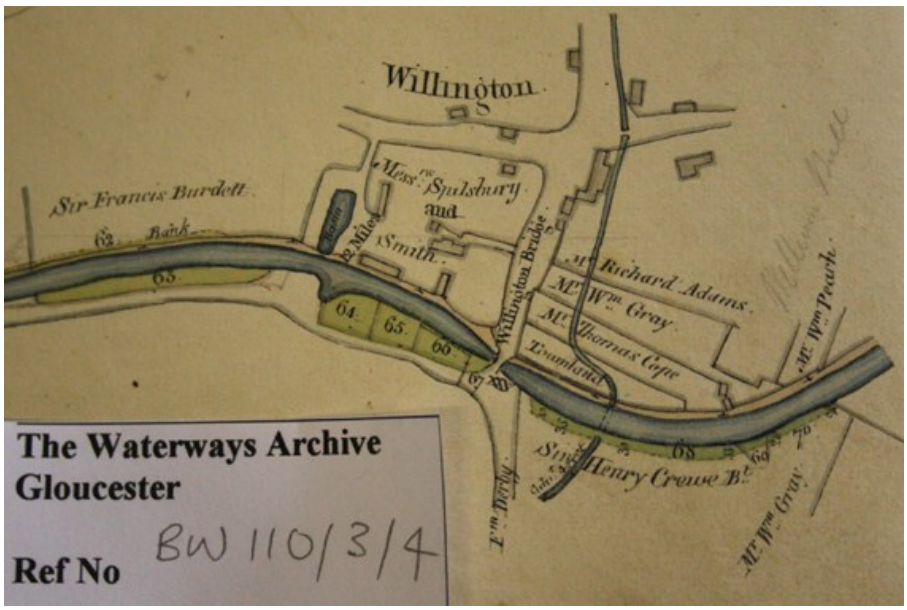
Railway bridge over the canal near Stenson

Settlements

There are several settlements situated along the canal. Shardlow, Stenson and Willington already existed but with the arrival of the canal, the focus of each place shifted. In the case of Shardlow, the new settlement along the canal was distinct and separate from the old village further west. Several farms can be found, mainly on the north side of the canal, pre-dating the canal, just beyond the floodplain, and these became physically linked with the canal by accommodation bridges (i.e. purpose-built bridges providing access to particular farmsteads).

The development of Willington

Willington developed in two short bursts of activity in connection with the arrival first of the canal and then the railway. It had always been an important place on the River Trent, and had several large warehouses on the riverbank for iron, salt, pottery and other commodities. The Green Man, at the main road junction, may have been built before the canal. In association with the construction of the canal, a small canal basin was provided to the south of the canal, which appears on the 1816 survey of the canal but seems to have disappeared by 1880. This may have been provided as a sweetener for local landowners, in case the canal displaced their river trade, as the survey shows that the land surrounding the basin did not belong to the canal company but belonged to Messrs Spilsbury and Smith. The Spilsbury family were local landowners in Willington. A tall, four-storey brick-built grain or corn warehouse was established here alongside the canal by 1816, of proportions similar to those in Shardlow, with a stepped brick verges, although much simpler in design and most closely resembling the building now used as Shardlow Heritage Centre. It was described in 1857 (White's Directory) as "a large warehouse and coal wharf" in the ownership of Messrs. Bass and Smith of Horninglow, who were "coal, brick, tile, drainpipe, lath and salt merchants". The building was still standing in the 20th century and part used as a grain store, but it was significantly damaged by a fire in 1935 and was demolished the following year. The Green Dragon and the cottage alongside, Jasmine Cottage, which sat alongside the wharf, also appear to be here by the 1820s. All three of the existing pubs were listed in 1846 (Bagshaw).



Detailed plan of Willington
1816 (The Waterways Archive, Gloucester)

In 1836 the Birmingham and Derby Junction Railway was routed through Willington and a small station / ticket office was built at road level, with a high level platform above. The station served Repton, and the school in particular, as well as Willington. The station building no longer exists but the bridges survive, possibly designed by James Trubshaw of Stafford (1773-1853), and the refurbished platforms are in regular use. "The Rising Sun" on the corner of Canal Bridge and The Green, known as "The Rising Sun and Railway Hotel" in White's Directory of 1857, was probably built shortly after the railway arrived in 1836. By 1836 the small canal basin had disappeared and had been replaced by railway sidings, providing an interchange between the Birmingham and Derby Junction Railway and the canal. A small brick building served as a wharfman's cottage, built gable-end onto the canal to serve the railway/ canal link c1836 and a hand-operated crane also sat nearby. The whole industrial area of the wharf was replaced in the 1970s by the grassy area, shrub

planting and car park that is known locally as the "Marina" located between the canal, and the railway embankment to the east of The Green. The brick cottage was eventually demolished in 1973 when the "Marina" was built.

The development of Stenson

In 1846 Stenson had 19 houses and 115 inhabitants spread out in a linear form to the north and south of the canal (1846 – Bagshaw's Directory). Stenson had been historically an area dominated by yeoman farmers and a large part of the land was owned by the Harpur-Crewe family, including the manor. Of the buildings to the north of the canal, most were built as roadside encroachments, outside the conservation area, with only Stenson House sitting in its own extensive grounds, built for a Harpur-Crewe tenant circa 1820.

Industrial development

Wharves once fronted the canal, built to accommodate nearby industries, such as brick manufacture, and to provide opportunities for transhipment of goods:

1. There was a wharf at Swarkestone on the north side of the canal - "Cuttle Wharf" – most of the buildings have been demolished but the structure of the wharf survives within the garden of Rose Cottage.

2. There was a wharf on the north side of the canal to the east of Massey's Bridge (Bridge No. 12) but this disappeared during the 20th century.

3. Wharves were built near Willington, to the south of the towpath, and were developed in association with the railway in 1836-39. The evidence for these was removed with the creation of the Marina in the 1970s.

4. There was a separate canal basin and transhipment wharf at "Potlocks Farm", to the south of the towpath, where stretches of the railway had been extended and adapted with sidings sometime between 1836 and the 1870s. These wharves were redundant and had been dismantled by the time of the second edition OS map (1901).

5. A tramway on the north side of the canal near Hicken's Bridge with a trackway and wharf ran alongside the canal. This transported gypsum and alabaster from nearby Aston-on-Trent and was developed circa 1812.

6. Egginton Wharf, a long tranche of waterway running parallel with the canal between High Bridge and Monks Bridge has been subsumed by vegetation. There is little documentary evidence about this wharf.

7. At Cliff Wood, near Weston upon Trent, there was once a small wharf between the river and the canal, known as King's Mill Wharf in 1816, where transhipment could take place. This was historically an old crossing point of the river. The canal roughly follows the course of the River Trent through Derbyshire, but the river is generally situated some distance away to the south and there are only two places where they come close together, at Cliff Wood and at Shardlow. The 1816 survey of the canal also shows the house, then known as "Weston Cliff", now the Ukranian Centre.

Immediately beyond the canal there is widespread evidence of pits for sand and gravel extraction, as local landowners took advantage of the presence of the canal and exploited local mineral reserves.

Along the canal there were occasional areas identified as "osiers" on the 1816 map of the canal. Osier beds were commonly planted along canals to provide a readily available source of material for basket making for the canal boats.

Views and Landmarks

Every conservation area has a multitude of changing views, both close-range and more expansive, too numerous to cover comprehensively in a document of this scope. This section describes a selection of general and more specific views that are likely to impress themselves most strongly in a visitor's experience of the conservation area. Some of the viewpoints referred to are included in the conservation area map included in this document.

The character of the Trent and Mersey Conservation Area is of course linear but it does take in views of the wider countryside and settlements both along its length and viewed from its many bridges, and so has far reaching connections. The Derbyshire section of the canal follows the course of the River Trent and lies within the flood plain, but other sections of the canal outside the county have elevation and there are occasions within Derbyshire where the canal is level with or higher than the surrounding fields and there are long views across the landscape, such as between Weston Grange running eastwards as far as the A50. Here, the lack of hedgerow lining the northern edge of the canal provides expansive views across the fields, which contain earthworks with the remains of an Iron Age settlement and cursus ditches and a henge (all Scheduled Monuments), although these earthworks are not particularly clear at this level.

Above - View of junction of Trent & Mersey Canal with Derby Canal

Right - view from Bridge No. 22 looking west

Like many early canals, its course meanders, following the contours of the landscape, with many bends. Later canals followed straighter courses for speed of travel. This meandering route gives rise to short-range vistas, and occasionally surprising views where a group of

buildings or a bridge comes into view, from either the towpath or the water.

Local landmarks assist canal users in marking their journey along the canal. The main local landmarks within the conservation area are the many canal bridges and most of these are numbered in sequence starting at Derwent Mouth. Beyond the conservation area boundary there are several prominent landmarks that are used by canal users to identify their progression along the route of the canal.

The main landmarks that appear along the canal are;

- The cooling towers of Willington Power Station
- St. Mary's Church near Weston upon Trent (pictured right)
- Kings Mills, on the River Trent, and the rock outcrop beyond
- Monks Bridge on the River Dove

Landmarks, above left and right; Monks Bridge on the River Dove, Kings Mills on the River Trent.

Left; the cooling towers at Willington Power Station

Building Materials and Details

With the arrival of the canal network, the choice of materials and building details was in part influenced by what could be transported along the canals. Nevertheless, there are distinct regional differences in the building materials and details found along the length of the Trent and Mersey Canal. The Appendix lists the special and typical traditional building details encountered within the conservation area, and is supplemented by photographs, to give a snapshot of the local vernacular details.

Brick and stone

Within the Trent valley there was a local tradition of brick making and there is some evidence of local brick pits in the documentary record, where bricks would have been made in temporary clamp kilns. Red bricks were the predominant material used for the construction of the bridges and the wharf buildings and canal cottages. Given the differences between the techniques of construction, it is most likely that the bricks would have been made locally. As time went on, repairs and later alterations were commonly carried out in blue bricks, which were manufactured in Staffordshire and would have been brought on site by canal narrowboat.

A typical canal bridge. Stone coping to red brick structure. Later repairs in red and blue engineering bricks.

Brickwork was used in the 18th and early 19th century for structural details such as horizontal projecting bands, corbelled eaves, some plain with several courses of brick projecting one above the other or "dentilled" brickwork, where each alternate header brick projects to create a decorative effect. This is a common detail found on the buildings along the canal.

Brickwork was commonly limewashed and there are examples where traces of limewash can still be seen attached to the brickwork at eaves level, such as No. 7 The Green, Willington and Stenson Lock Cottage. The brickwork at The Green Man and The Rising Sun in Willington, and the Lock-keepers' cottages at Weston and Stenson is still painted, although modern masonry paints have been used over the original limewash.

By the first half of the 19th century the use of stone was much more widespread, as a result of canal and rail transportation. Occasionally stone was incorporated into certain details, such as copings, the ashlar corners to the bridges and the wedge-shaped stone lintels in buildings along the canal.

Lintels and cills

The most common types of lintel are:

- the segmental brick arch. It is generally found in the 18th and early 19th century on the smaller domestic buildings. This was the simplest and easiest lintel to construct as the taper was accommodated wholly in the mortar joints, without the need to cut the brick.

- the gauged brick lintel. In the 18th and early 19th centuries hand-rubbed bricks or "gauged" bricks were used for the finer types of brick construction. Bricks were sandwiched together using lime putty. The result was a precise, thinly-jointed, wedge-shaped lintel.

In combination with the segmental brick arches, stone cills were not normally used, relying on the simple weathering properties of the brickwork, and the window joinery was placed directly onto the brickwork. Stone cills were used in conjunction with stone lintels and gauged brick lintels.

Roofs

Most of the oldest properties within the conservation area have Staffordshire blue clay tiles. These tiles are extremely durable and were easily imported into the area along the canal from the Potteries from the late 18th century on. Original handmade blue clay tiles incorporate subtle fluctuations in colour, which are not found in the new Staffordshire blue clay tiles being manufactured today, so it is important to preserve original examples.

There are several properties that predate the canal, such as Weston Grange, that still retain locally made red clay tiles.

The vast majority of pitched gable roofs are finished with a plain close verge, where the tiles or slate simply overlap the brickwork. A detail that is also occasionally found is the use of a stepped brick verge.

The oldest hipped roofs incorporate graduated Westmoreland slate, brought into the area along the canals, and were finished with mitred joints. Examples survive at Swarkestone Stop Bar Cottage and Swarkestone Lock Cottage. Hipped roofs tend to date from the first half of the 19th century and were usually clad in Welsh slate, which was probably transported along the canal; examples include the lock-keepers' cottages at Stenson and Weston and Stenson House. In the case of the latter, the use of wide overhanging eaves was intended to imitate an Italianate villa. Welsh slate was also used at 13-19 The Green, Willington.

Graduated slate roof with mitred hips

Architectural Quality

The Canal structure

The Derbyshire section of the canal is wider than that in Staffordshire, and indeed most other canals, and this broadness is a distinctive characteristic. The Derbyshire section is 31 feet wide and 5'6" deep. This changes at Horninglow in Staffordshire to a width of 29 feet and 4'6" deep. The 14 feet wide locks in Derbyshire change to 7 feet wide in Staffordshire.

Swarkestone Lock and Bridge No. 14

This change in width was done for practical reasons to conserve water and make construction more economic, particularly important for the tunnels in the Staffordshire and Cheshire sections of the canal. The wide canal in Derbyshire was probably intended to take the Trent River barges in the early years of the canal, as a means of appeasing the users of the Trent Navigation. In 1829 the canal was described as "adapted for river-barges of forty tons burthen". The width of the canal also enabled extensive multiple moorings.

In a few instances locks coincide with road networks and there is an attractive tussle of structures where a road bridge over the canal meets the lock gates and a narrow pedestrian footbridge, all in the space of a few metres, as at Swarkestone and Stenson.

Locks

There are six locks in the Derbyshire section of the canal. These are all 14 feet wide, accommodating two narrow boats at one turn or one Trent barge;

1. Derwent Mouth Lock (listed grade II)
2. Shardlow Lock (listed grade II, within a separate conservation area)
3. Aston Lock (listed grade II)
4. Weston Lock (listed grade II)
5. Swarkestone Lock (listed grade II)
6. Stenson Lock (listed grade II)

Bridges

As the Derbyshire stretch of the canal was wider than the average canal, the canal bridges along this length were built with a shallow segmental arch, rather than the usual "basket arch" of many canal bridges. This could accommodate just one Trent barge of 11 feet width and the canal towpath, suitable only for pedestrian traffic. On occasion the arch was "stretched" to accommodate a slightly wider section of towpath. At the time when the

bridges were first built, gangs of men dragged the barges and passed under the bridges. Horses, which were introduced in 1785, could not pass underneath the arches, and they would have had to cross over the bridges, as was customary elsewhere.

The original bridges were mostly built from soft, red, hand-made bricks with chamfered or bull-nosed stone copings, but few of these survive in their original condition. Many have been repaired over the years, particularly the brick arches, using semi-engineering blue or red bricks. Copings have occasionally been replaced in concrete. There is also one stone bridge (Sarson's Bridge – No. 11) and evidence that some of the brick bridges may have originally been built in stone, such as Fine George's Bridge - No. 9. There are a number of road bridges and pedestrian bridges that have been largely rebuilt using a concrete or steel girder construction. In these cases the segmental arch or timber deck has been replaced with a flat concrete deck. The original bridges have generally curved, battered walls tapering in towards the arch, and finishing in plain square piers. The bridges serving the locks were made narrower than the others and were reinforced with stone outer corners, presumably to allow for the additional wear from towropes.

Although the bridges serving the locks were similar, the many subtle differences between the other road and farm access bridges, and the evidence of the initials of JG on the bridge at Aston Lock, may indicate that these were privately funded.

There is now a full range of canal bridges of various eras. Documentary evidence shows that many were rebuilt or reinforced in the 1920s and 1930s, some to conform to new legislation – the Class "Z" bridge under the Rail & Road Traffic Act 1933. The more rural farm accommodation bridges generally escaped repair and reinforcement and are on the whole in their original form.

Road and farm track bridges

Many bridges are identified with their respective names on the 1816 canal survey and these have been reproduced here.

Bridge No. 1	Porter's Bridge, Wilne Lane, Shardlow (listed grade II) – also known as "Flint Bridge" (1816) *Red brick with wide segmental arch and brick parapet with bull-nosed stone copings; largely in original condition*
Bridge No. 2	"Wilne Bridge" (1816), carrying Wilne Lane (in Shardlow Conservation Area) *Modern concrete bridge with railings to parapet, c1943*
Bridge No. 3	carrying the A6 (in Shardlow Conservation Area) *Bridge installed when the road was widened circa 1930*
Bridge No. 3A	a new bridge carrying footpath across canal near the A50 *Flat bridge with concrete deck and brick abutments, dated 1997*
Bridge No. 4	Hicken's Bridge (now a modern replacement carrying the A50) *Brick abutments and parapets with flat concrete deck, dated 1997. A new bridge has been built 300yds to the east of it (3A).*

Bridge No. 5 Acrelane Bridge, also known as "Dildrum Ford Bridge" (1816)
Flat bridge of steel T-section beams and concrete deck, with brindled engineering brick abutments, steel handrail and sections of original stone coping; largely rebuilt c1917 but some brickwork & stone surviving

Bridge No. 6 Aston Lock (listed grade II along with lock)
Brick bridge largely original brickwork, with some repairs in blue engineering brick, outer segmental brick arch, chamfered, with central stone keystone incorporating date 1770 & initials JG, large stepped stone blocks to outer corners, brick parapets with chamfered stone copings

Bridge No. 7 Weston Cow Pasture Bridge, near Weston Grange
Brick with segmental brick arch – largely rebuilt in red engineering bricks but some original brickwork surviving on the abutments and the soffit, original bull-nosed stone copings largely reinstated

Bridge No. 8 at Weston Lock (listed grade II)
Red brick bridge, largely original with replacement segmental arch in blue engineering brick, stepped stone outer corners, brick parapets with chamfered stone copings

Bridge No. 9 Fine George's Bridge, also known as "Scotch", off King's Mills Lane (listed grade II)
Largely original brickwork with wide segmental brick arch and bull-nosed stone copings to brick parapets, some evidence of stonework to plinth and lower abutments, significant crack to one wall, some later repairs in blue and red engineering bricks

Bridge No. 10 Footbridge near Cliff Wood (pictured right)
Narrow footbridge for mainly pedestrian traffic, brick abutments with steel I -section girders and deck, repairs to parapets in blue engineering bricks with some original stone copings, simple wrought iron handrails and intermediate posts over bridge

Bridge No. 11 Sarson's Bridge, near Weston Hill Farm (listed grade II)
Stone bridge and stone parapet with deep segmental arch and projecting stone hood mould or overthrow, coursed stone with bull-nosed stone coping, projecting nib to both sides of the parapet, that facing east with incised datestone 1770

Bridge No. 12 Massey's Bridge
Outer abutments of original brick bridge survive but largely rebuilt in engineering bricks with new narrow concrete deck, brick parapets replaced with timber post and rail fence

Bridge No. 13 Cuttle Bridge
Bridge widened and rebuilt in blue engineering bricks in 1926. Sections of original brick bridge & stone parapet copings survive on east facing side.

Riveted I-section girders support deck of bridge, west facing side has blue brick parapet with moulded blue brick copings, east-facing side has shallow blue brick parapet and piers with intermediate panels of steel fencing

Bridge No. 14 Swarkestone (listed grade II along with lock)
Brick bridge with segmental brick arch, some minor repairs in blue and red engineering brick, stepped stone abutments to outer corners, chamfered stone copings over brick parapets

Bridge No. 15 Lowes Bridge (listed grade II)
Red brick with brick parapets and segmental brick arch. Arch has been repaired in places with blue engineering bricks. On both sides of bridge parapet a stone panel is set into the brickwork designed to take an inscription (defaced). Original bullnosed coping reinstated upon several courses of red engineering brick

Bridge No. 16 Barrow Bridge, Sinfin Lane
Bridge rebuilt 1944 in blue engineering bricks with brick raised band and brick parapet

Bridge No. 17 Deep Dale Bridge, off Deep Dale Lane (listed grade II)
Brick canal bridge with segmental brick arch in blue engineering bricks with rounded moulded profile and later 20th century repairs to brick parapets. Original stone chamfered copings

Bridge No. 18 "Arlistone Bridge" (1816) near Arleston House
Original brick abutments of narrow canal accommodation bridge with later concrete deck and steel handrails to parapet

Bridge No. 19 Stenson Lock (listed grade II along with lock)
Brick bridge, largely rebuilt in 2012 to its original pattern, with segmental brick arch and large stepped stone blocks to outer corners, brick parapets with chamfered stone copings

Bridge No. 20 "Stenson Green Bridge" (1816) near Stenson Junction (listed grade II)
Brick canal bridge with segmental brick arch (some distortion to arch), largely in original condition, with blue and red engineering brick repairs to parapet and arch and rounded stone copings

Bridge No. 21 off Buckford Lane (pictured right)
Largely rebuilt - deep segmental arch rebuilt in blue engineering bricks with later phase of reconstruction in red brick to parapets and abutments, re-set original chamfered stone copings

Bridge No. 22 pedestrian footbridge near Potlocks Farm
Lattice pedestrian bridge of narrow I-section construction, with iron posts, handrail and slim wrought iron rods, timber deck

Bridge No. 23 "Willington Bridge" (1816), carrying the B5008
Concrete bridge rebuilt 1936, iron railings, cast concrete panels and concrete rendered piers

Bridge No. 24 Willington, carrying the A5132
Concrete panel bridge with curved concrete arch

Bridge No. 24A access bridge for gravel extraction site
Bridge installed in 1997, concrete and steel with brick abutments

Bridge No. 25 "Gardener's Bridge" (1816), farm track at OS 279 279, off Derby Road, Egginton (listed grade II)
Red brick continuous segmental arch with rounded moulded bricks and later repairs, chamfered stone copings

Bridge No. 26 "Hargate Lane Bridge" (1816), High Bridge, High Hargate (listed grade II)
Brick bridge with continuous segmental arch and brick band/ overthrow. Repairs in blue engineering brick to arch and "rustic" bricks to parapet. Stone bull-nosed copings reset

Aqueduct carrying the Trent and Mersey Canal over the River Dove, off Derby Road, Egginton (listed grade II) - pictured right.
Of the 23 small arches that the aqueduct is supported by, only 12 are visible from the bank.

Road bridge and viaduct
at Buckford Lane.
The road bridge incorporates cast iron panels with decorative parapets of intersecting arches. It was constructed to carry the road over both the canal and the railway, which are very closely aligned at this point.

Railway bridges

The railway bridges of both the original Birmingham and Derby Junction Railway and its off-shoots criss-cross the canal at sharp angles between Willington and Weston Lock. There are five railway bridges crossing the canal and countless others in its immediate vicinity.

The railway bridges were all built during the 19th century, with riveted iron plate box-girder construction with riveted joints and flanges and either iron plate parapets or steel handrails. There are decorative rock-faced stone piers and abutments, which are most impressive viewed from the towpath, and occasionally gritstone parapets, just beyond the canal. The bridges are:

- Bridge near Willington, possibly designed by James Trubshaw of Stafford
- Bridge near Stenson Junction (DBPI – 12)
- Bridge near Stenson Lock
- Bridge near Westonhill Farm
- Bridge near Weston Lock

Mileposts

The original mileposts were designed with a round post and a "half-bobbin" top and were manufactured by Rangeley and Dixon. A plaque stating "R & D Stone 1819" was cast and added to the base of each post. These plaques were of two types – quatrefoil and simple rectangle. There are 6 original mileposts running from Swarkestone to Shardlow. In the other direction between Swarkestone and Monks Bridge, the mileposts were replaced in 1977 by the Trent and Mersey Canal Society. The casting is the same but with the inscription "19 T&MCS 77". There are 7 of this replacement type. The mileposts were removed during WWII and the surviving posts were rescued and restored, with new ones cast. The mileposts have each been moved about 50 yards along the canal from their original location. There is also a modern commemorative milepost at Derwent Mouth Lock.

Stop gates/stop planks and valves

All canals need to be maintained and repaired, in case of a breach, and the canal had a series of stop gates and stop planks, where the canal could be drained for maintenance. Many of the bridges had slots in the brickwork for stop planks and there were also a few locations for stop gates, such as to the east of Sarson's Bridge (No. 11), which were raised from the bed of the canal into position by chain.

Canalside ephemera - sluice mechanism (left) and crane (right) at Swarkestone

Building types

Lock-keepers' cottages and canalside houses

Lock House, Stenson Lock

There are a handful of surviving lock-keeper's cottages; a cottage at Weston Lock, one at Stenson Lock (pictured left) and a cottage at Swarkestone.

The locks at Derwent Mouth, Shardlow, Aston and Stenson were originally accompanied by a lock-keeper's cottage located on the "waste weir" side of the canal, where the outflow could be easily controlled. "Derwent Lock House and garden" built on the north side of the canal at Derwent Mouth has disappeared. The cottage at Shardlow was replaced by another on the north side of the canal. The original cottage at Aston Lock survived into the 20th century but has been removed. The cottage at Stenson was replaced c1820.

The surviving cottages at Weston Lock and Stenson Lock are of the same type, although the cottage at Weston Lock was extended in the mid 19th century. They are symmetrical buildings, with gauged brick lintels and stone cills, a central door and recessed panel "blind" windows above at first floor level, a central chimney stack and hipped roofs. In both cases the roofs are Welsh slate with wide overhanging eaves. This detail and the map evidence suggest that they were built around 1820.

The new cottage at Stenson Lock displaced the original lock-keeper's cottage and was located on the opposite side of the canal. For a time, both may have been in use, but the original lock-keeper's cottage had been demolished by 1880.

High Bridge House, west of Willington (pictured right), was called "Hargate House" in 1816 and the list description states that it was a lengthman's house. It was certainly one of the few buildings built by the canal company that was placed very deliberately to front the canal, but it is very fine indeed for a lengthman's house, and typical of the late 18th century, incorporating gauged brick lintels, sash windows and a central triangular pediment with a circular window.

A grade II listed cottage "Stenson Lock Cottage" to the south of the canal at Stenson, developed shortly after the canal was built, was built by the Harpur Crewe estate and has the unmistakable estate chimney stacks, with rounded moulded brickwork. It may have been built by the estate for use alongside an impromptu wharf.

The canal buildings at Swarkestone have dentilled brick eaves and graduated Westmoreland slate roofs.

The house at Swarkestone Stop was in existence by 1816. Its precise date is not known but it was probably built in this location to extract tolls from the users of the Derby Canal. It has a graduated and hipped Westmoreland slate roof and was built in a style similar to tollhouses on the turnpike roads, with a faceted end and blind windows. The house and adjacent wharf outbuilding were built by Sir Henry Crewe and rented by the Trent and Mersey Canal Company. The lock-keeper's cottage, further to the east at Swarkestone Lock was built in the 1820s.

Public houses

There are three public houses within Willington all of which were in existence in 1846. Of these the Green Dragon appears to have been the one most directly associated with the canal, although The Green Man is much earlier. There were a number of public houses, or beer houses, in Shardlow. Public houses elsewhere along the canal include;

- "Nadee", formerly named the "Dog Inn" (1836) and after that "The Greyhound Inn" (1880), built to the north of the canal near Buckford Lane and Bridge No.21. This has been converted into an Indian restaurant called "Nadee".

- "Potlocks Farm", formerly "The Boat Inn". The name Potlocks Farm belonged to a farm group that was demolished when Willington Power Station was first developed. The "Boat Inn" was a purpose-built canal workers and boatmen's pub.

Grain warehouses

A number of steam-powered cornmills and grain warehouses were developed along the canal during the early 19th century. Most of the cornmills were located within Staffordshire or within the Shardlow section of the canal, a separate conservation area (see conservation area statement for Shardlow). A grain warehouse stood at Willington wharf until 1936.

Wharfside buildings

Outside Shardlow, there are only a handful of buildings that survive that were built in association with the wharves. They are all plain, brick-built, with segmental brick arches and include:

- **Rose Cottage, Cuttle Bridge, Swarkestone**. This was described in 1816 as "Cuttle Wharf and Boatshed". The cottage appears to have been the building described as the boatshed, not owned by the canal company but there is no evidence of its original use. It has been used as a house for many years.

- **Outbuilding adjacent to Swarkestone Stop Bar**. This is a rather plain building, lifted by its dentilled brick eaves. The brickwork suggests that it is probably early 19th century and not 18th century.

Conservation Area Description

Although the character of the canal is now entirely devoted to the pursuit of leisure and a slow lifestyle, it was of course an industrial corridor and its wharves and its buildings were all purpose-built and intricately connected with supporting the local industries. Its significance, therefore, lies largely in its contribution to the industrial history of the Midlands.

The character of the canal has changed since its early days, when it was a new and stark introduction to the landscape. The growth of trees, shrubs and hedgerows along its length has transformed it from a stark, engineered structure to a soft edged, wildlife corridor. The water was once described by Josiah Wedgewood as possessing "a stagnant ochery surface", although that description would have best fitted its industrial heartland in the Potteries. Although the canal water is still churned up by canal craft, and doesn't have the clarity of river water, it is nevertheless of sufficient quality to support a thriving habitat for waterfowl.

The importance of the canal as a transport and communication corridor and a sense of its industrial past can be appreciated from the towpath, which regularly runs parallel with sections of the mainline railway. This is most noticeable near Willington where the canal and railway line are squeezed together and freight trains thunder past, disturbing the tranquillity of the canal. Elsewhere, the presence of the dual carriageways, the A50 and the A38, are particularly felt, both of which appear to hover above the canal for a distance. The presence of the A50, and the sound of traffic, is most pronounced near Swarkestone and immediately east of Aston Lock, where the A50 crosses the canal. The Willington to Clay Mills section of the canal is also dominated by the overbearing presence of the A38, which partly tracks the canal.

Monks Bridge to Willington

The area is characterised by its wide, open landscape and low-lying land within the river valley, where the Rover Dove meets the River Trent. There are numerous small watercourses and a series of culverts carrying drainage channels and brooks under the canal, originally of red brick but mainly replaced in blue brick. The River Dove was widened to reduce the force of the current on the new aqueduct and as a consequence some of these watercourses may have been created at that time. A long channel of water situated between Monks Bridge and Highbridge House can be seen on the 1816 survey. This appears to have been used in association with Egginton Wharf.

There are two principal features along this stretch of canal; Brindley's canal aqueduct that runs over the River Dove, on the County boundary, which is only visible from the riverbank, and High Bridge House. This is a fine brick building of two storeys plus an attic

storey, which because of its proximity to the towpath has a relatively dramatic relationship with the canal.

Hawthorn hedgerows, with occasional blackthorn and buckthorn, line long sections of the towpath. This section of canal is characterised by its proximity to the A38, a dual carriageway that follows the alignment of a Roman road (Rykneld Street). To the east of High Bridge large expanses of low-lying land are being quarried for gravel. Deep pits can be seen from the towpath (see picture on previous page).

Willington

In approaching Willington from the south-west, the original brick bridges have been replaced with concrete bridges. As a result, this section of the canal has lost some of its historic character. Despite the bustle of Willington to the south, there are open views across a gently rising pastoral landscape to the north giving this section of the canal a more tranquil character than may be expected.

Also Willington is unusual as the buildings that front the canal face away from it, focussed upon the narrow lanes and paths that were once important routes to houses and workshops. This network of footpaths has a private character, and they are infrequently used. To the rear of The Green Dragon and the terrace of cottages 13-19 The Green is a large amenity area, known as the Marina, created in 1973 after the wharf closed. It is a pleasant open green space, one of the few open spaces available along the canal for enjoying the array of moored narrow boats. On the north side of the canal there is a small cottage that sits on its own, built during a second wave of canal building, circa 1820.

Beyond the canal the buildings in Willington are focussed upon a main road junction, where four roads intersect - Canal Bridge, The Green, Repton Road and Castle Way. It is now a very busy space dominated by traffic and measures to control traffic, in the form of roundabouts, bollards, islands and signs. This was once an important space fronted by three buildings; the Station, The Green Man and The Rising Sun. The pubs still have a wide pavement frontage and their orientation helps to enclose the space, but the loss of the Station building on the southern side of the junction, and just outside the conservation area, has left a gap in the street. Because of the amount of traffic, and the lack of private space,

both pubs have attempted to soften their frontage through the use of planters and large plant pots.

Willington to Stenson

Dale Farm, to the north of the canal on Findern Lane, is a purpose-built stud farm. It was described as a "lodge" on the 1836 1" OS map and was built in its present form, with its courtyard of buildings, by 1880. It is a fine group of well-preserved historic buildings (see section on Boundary Review).

Where the railway runs to the immediate south of the canal to the east of Willington there is a narrow strip of land dominated by a series of old gravel pits, large areas of wetland, with reed beds, ponds, and a linear corridor of trees, comprised of mainly wetland species such as willow and alder, all valuable wildlife havens. Much of this area appears to have had informal public access from the towpath. The trees provide an important shelterbelt and buffer from the sound of trains and help to confine the views along the towpath. Here the southern side of the canal and towpath is defined by tall hawthorn hedgerows, although it was once more open, particularly around Potlocks Farm.

Potlocks Farm (formerly "The Boat Inn") was approached across the canal from a footbridge in 1816, and the bridge still survives, refurbished in the late 19th century. Although now only a series of deep pits and earthworks, a large canal basin and wharf was located to the south of the canal towpath, just to the west of the old pub. The original "Boat Inn" is now largely hidden by tall hedgerows. It is typical of canal buildings; a simple, brick-built structure with a dentilled eaves course and segment-headed casement windows.

Stenson

Stenson is a colourful place, with a busy marina and boatyard used by pleasure craft. It has a semi-industrial character, largely dominated by the industrial buildings of Stenson Boatbuilders, which are situated on rising land overlooking the marina. The cluster of buildings fronting the canal, where the lock and road meet, creates an interesting group and some memorable views. Stenson House, which lies to the north of the lock, is set back within its private grounds and is largely not visible from the road. Its former farm outbuildings have been adapted into a pub (The Bubble Inn, pictured above) and semi-industrial buildings serving the boatyard.

Stenson to Swarkestone

Between Stenson and Swarkestone the canal is quiet, even though it runs parallel with the railway line, but this has only occasional rail traffic. This area within the Trent valley is characterised by a number of large properties in substantial grounds, some developed during the 19th century but several, such as Arleston House Farm (just within the conservation area) that predate the canal. The close physical relationship with the canal was promoted by the construction of accommodation bridges. Arleston House Farm can be

clearly seen from the towpath. Just to the east of Arleston House Farm are private moorings at The Ragley Boat Stop. The buildings that stand overlooking the canal were formerly Ragley Barn, once connected to the canal by means of its own accommodation bridge (now demolished). The buildings have been extended and converted into a pub but have lost their original historic character. They are prominent from the towpath, although they are outside the conservation area.

A section of the canal is sandwiched between Deepdale Lane (also known as Sinfin Lane), to its north, and the railway line, to its south. The road overlooks the canal but has relatively little traffic.

Swarkestone

Swarkestone Stop Bar has one of the few surviving examples of canalside cranes left on the canal. This is situated near the small wharf and building adjacent to the toll cottage. The towpath changes character from an unmade gravel bound surface to black tarmac, which in places runs right from the edge of the buildings to the walls of the canal and is much more severe. From here, as far as the lock, there are moored craft and there is plenty of activity, in particular at the entrance to the former Derby Canal. The canal opens out here and there are long views towards the first canal bridge on the Derby Canal.

Swarkestone to Weston Lock

To the east of Swarkestone Lock is Cuttle Bridge, once an important wharf stretching along the north bank of the canal. There is now very little remaining of the original group of buildings that developed at Cuttle Bridge and its original identity is largely lost. Like many of the canal bridges, most of Cuttle Bridge itself was replaced with a wider and stronger bridge, suitable for heavy road traffic.

East from Cuttle Bridge there is an immediate sense of tranquillity as the volume of noise from road traffic slowly dissipates. The canal follow a series of curves restricting the views and gradually the character becomes much greener and crowded by trees as the canal runs at the foot of Weston Cliff, a natural rock sandstone outcrop. The course of the River Trent runs right under the cliff at this point and the canal was sandwiched between the river and cliff, elevated above the river. This is one of the few places where the canal was built up and has a steep embankment, overlooking Black Pool, a long canal of water that may have been a

former channel of the river. The area is now dominated by woodland arching over the canal and clinging to the steep hillside above (see picture at foot of page 25).

The narrow and deep sunken dirt track leading from the canal to Old Cliff House evokes the character of an ancient route, worn away by generations of packhorse and foot traffic. It leads to the Ukrainian Country Social Club. The original building (Old Cliff House) has been enveloped in later alterations and accretions, but there are places where its original historic character and identity is still visible.

Leading from the pedestrian footbridge in the other direction towards the river the original footpath to the ferry crossing is overshadowed by trees and is now indistinct. The wharf building and boathouse evident on the early OS maps have also disappeared but Horse Bridge, which led to the "horse and foot ferry" across the river, still survives, albeit in an altered form.

Immediately beyond Weston Cliff the countryside opens out and there is less tree cover. There are long views from the canal and towpath north towards St. Mary's Church, a prominent local landmark.

At Weston Lock, there is a small group comprising lock keeper's cottage, lock, lock gates, bridge and waste weir. The track over the canal was an old route to Kings Mills and this little group of buildings has its own quiet identity removed from the main part of Weston upon Trent.

Weston Lock to Shardlow

This stretch of canal has a predominantly open and rural character. Immediately to the east of Weston Lock there are long views from the towpath across the fields and pasture to the south towards Kings Mills, which together with the rock outcrop to its south is a prominent landmark in the distance.

Weston Grange

A large brick-built house with a large courtyard of farmbuildings, Weston Grange, is a very prominent and attractive historic building viewed from the towpath. The skirt of its front lawn leads down to the waters edge and the main part of the house is framed in views from the canal. The physical relationship of the canal and this house seems to suggest some connection with the canal, although there is no record of any connection.

To the east of Weston Grange the views to the south and east are hampered by a large "bund", a mound of soil which has been heaped to run parallel with the towpath to hide the extensive quarry workings and gravel pits from the canal. On the north side of the canal,

however, the views are expansive as the landform is fairly flat and uneventful and there has been widespread loss of hedgerows along the canal. The long views to the west run across areas of ancient settlement and several scheduled ancient monuments. This part of the Trent valley is peppered with archaeological evidence of early occupation and activity.

Long view to the west

Aston Lock is quite isolated and no longer has a lock-keeper's cottage. There is no obvious road access, although there is a bridleway and footpath from the road, Aston Lane. Between here and Shardlow there are a number of modern bridges crossing the canal, including a very low metal quarry access bridge, which appears completely out of place. The noise of the A50 reaches a crescendo, at its loudest and most oppressive at Hicken's Bridge, which is a new bridge carrying the A50, built in 1997 in sympathetic materials.

Shardlow to Derwent Mouth

The last section of the canal is dominated by the presence of narrowboat activity along the northern side of the canal where there are many moorings and a private marina. There is a steep change in level between the lock at Derwent Mouth and the mouth of the River Derwent beyond and the riverbanks appear soft by contrast with the canal, planted with naturalised trees and shrubs, which lead down to the water's edge.

Boundary Review

Proposed extensions to and exclusions from the Conservation Area

Willington

To the west of Willington Bridge is a small group of cottages that are an important focal point in views along the canal. They are currently outside the conservation area.

The building closest to the canal and a detached building were in existence by 1816, and by 1880 appear to have been extended and infilled with a terrace of cottages. They form an important relationship with the canal and although they were not owned or leased by the canal company they were built in association with the development of the canal. They are brick-built with Staffordshire blue clay tiled roofs and as a group they have an important relationship with the canal. It is recommended that they be included within the canal conservation area.

Dale Farm, Findern Lane

There is no doubt that Dale Farm is an important group of well preserved historic buildings. They currently fall within the canal conservation area. However, the canal conservation area is special because of its historic use and its industrial development and the buildings and historic structures associated with the conservation area have an immediate relationship or were linked physically by bridges, or wharves or by their industrial use. The buildings at Dale Farm have no historic association with the canal and indeed they have no physical relationship with the canal, as they cannot be seen or reached from either the towpath or the water and there are no connecting bridges. For these reasons, it is proposed that they be removed from the canal conservation area.

Potlocks Farm

To the immediate south-west of Potlocks Farm, and squeezed between the canal and railway track, is an area that was developed as a wharf in the first half of the 19th century. For a short period the railway network and canal network worked together and interchanges were created for the transhipment of goods between rail and canal. A large basin was created to the west of the Boat Inn, following the creation of the railway line in 1836. The rails can be seen on the 1880 Ordnance Survey map as well as a wharfside building. This was an important development of the canal. Very little is known about this area and its historic use. Although the tracks and wharf building have gone, there are extensive, deep earthworks associated with the canal basin and further earthworks in the garden of Potlocks Farm, which may be associated with an earlier form of canal basin and wharf pre-dating the railway. It is proposed that this area be included within the canal conservation area for its historic interest and relationship with the industrial development of the canal.

Stenson

The northern boundary of the conservation area currently includes Bank House, a building of the 1930s, with a green glazed pantiled roof. It is not characteristic of local vernacular buildings and has no historic relationship with the conservation area. It is proposed that the boundary be re-drawn to exclude Bank House.

Old Cliff House

The boundary of the conservation area includes a modern prefabricated building on the north side of Old Cliff House, where an old outbuilding once stood, but excludes a range of historic buildings that are attached to Old Cliff House. It is assumed that this boundary has been drawn in error and it is proposed that this be regularised to include the historic buildings.

Loss and Damage

The concept of conservation areas was introduced by the Civic Amenities Act 1967, as an acknowledgement of the need to conserve the "cherished local scene" in the face of accelerated change following the Second World War. It was not intended that development should be prevented, but rather that settlements should develop over time in a way that reflects and strengthens their special character. At the Trent and Mersey

Canal, some of the undesirable changes described below predate the designation of the conservation area in 1994. The designation was put in place as a safeguard against further harmful development, so far as this could be achieved by the need for planning permission.

In defining the character of the conservation area we can also identify instances where the canal has suffered alterations or losses that either individually or cumulatively have diluted this character. It is hoped that identifying these will help householders, designers and the planning authority to reverse some of the damaging alterations and to avoid the same mistakes in the future.

Setting

Gravel extraction has been going on for many years within the Trent valley, and many sites run parallel with the canal. The scale of extraction has increased immeasurably over the years and today there are some large sites that stretch for long distances alongside the canal. To the south-west of Willington there are expansive views over the deep gravel pits, and between Weston Grange and Hicken's Bridge views of gravel pits are masked by a long bund. The loss of views to the south, across the Trent valley, and the creation of the bund is the most damaging alteration as it removes the sense of place and its valley setting.

Noise

The canal is generally a quiet and tranquil place with slow-moving traffic and a relaxing environment. Occasionally noise, such as the wall of noise from the A50, near Hicken's Bridge, has a damaging effect on the atmosphere and character of the canal.

Loss of boundaries and hedgerows

The creation of the canal in the 1770s would have involved the planting of miles of hedgerow to provide a stockproof enclosure between the canal and the adjoining fields and meadows, at a time when the landscape was beginning to be formally enclosed. In places, sections of hedgerow have been grubbed out, enabling views across the immediate landscape and fields, but leading to loss of valuable cover and a wildlife corridor. There are areas where the long, thin slices of land lying between the major roads, railway and canal have been left without an economic use and are poorly maintained. Brambles have been allowed to grow unchecked and are choking other plants and hedgerows. In other places, these forgotten spaces are being treated more positively and a natural wetland habitat has been created and is being maintained.

Boundaries fronting The Green in Willington have been altered using modern concrete blockwork, and unsympathetic materials.

Alterations to bridges and inappropriate repairs to historic structures

Many of the alterations undertaken to bridges along the length of the canal are of their time

- repairs were carried out in what was considered to be the best materials of the day. In many cases blue engineering bricks were used during the late 19th and early 20th centuries for repairs, as these were hard and durable. These are occasionally of historic interest. However, as a general rule this pragmatic and engineered approach to the historic bridges has meant the loss of original hand-made red brickwork and stone details. In many cases modern repairs carried out during the 20th century have been even less sensitive, substituting smooth hand-made bricks with machine-made "rustic effect" bricks, introducing new brick bonds, and replacing stone copings with brick copings or concrete cappings. It is important to remember that the bridges are engineered structures and so they should be treated robustly, but loss of original material should be kept to the minimum, as it is of considerable importance to the character of the conservation area.

In several instances the original canal buildings, cottages and lock-keepers' cottages have had unsympathetic alterations, such as the introduction of uPVC windows and the replacement of slate roofs with concrete tiles.

In more recent years, under the stewardship of British Waterways, standards of repairs and maintenance have been greatly improved. Guided by a strong conservation ethic, carefully sourced materials and sympathetic adaptation are now the norm for structures in their control.

- Conservation Area boundary
- Open spaces
- Principal views
- Architectural landmarks & focal points
- Listed Locks
- Listed Mileposts
- Important Mileposts
- Listed Bridges
- Important Bridges
- Listed buildings
- Other buildings which contribute positively to the special architectural or historic character
- Scheduled Monuments
- Areas of high archaeological potential

N

A

B Willington

C

D

E Stenson

F

0 500 (1km) 1000 (2km) 2000 (3km) 3000

metres

Trent and Mersey Canal Conservation Area Part 1

Designated : 19th May 1994

- Conservation Area boundary
- Open spaces
- Principal views
- Architectural landmarks and focal points
- Listed Locks
- Listed Mileposts
- Important Mileposts
- Listed Bridges
- Important Bridges
- Listed Buildings
- Other buildings which contribute positively to the special architectural or historic character
- Scheduled Monuments
- Areas of high archaeological potential

N

Shardlow Conservation Area

0 500 (1km) 1000 2000 (2km) 3000 (3km)

metres

Trent and Mersey Canal Conservation Area Part 2

Designated : 19th May 1994

G Swarkestone Lock

H

I

J Weston Lock

K

Appendix

Distinctive Architectural Details

TRENT AND MERSEY CANAL

Checklist of details

The details in this appendix illustrate those building elements that help to define the Trent and Mersey Canal's particular character. These may be common everyday vernacular details found repeatedly throughout the conservation area or may be more exceptional, consciously designed features.

This appendix may prove useful in providing inspiration for new development, whether traditional or contemporary, if used with care. Paradoxically, the outstanding architectural details of a conservation area may not be the ones that are most typical of the area. They often belong to the important key buildings of a village and may look out of place on smaller buildings in subordinate locations. The majority of buildings in the conservation areas of South Derbyshire are plainly and simply detailed.

Bridges

- Canal bridges in hand-made English bond brickwork and variants with segmental brick arch and shaped ashlar copings
- Canal bridges in coursed stone with segmental stone arch and stone band
- Railway bridges of iron in box girder construction with massive gritstone masonry piers and abutments
- Pedestrian footbridges with cast iron and timber rails / lattice construction

Ephemera and Street Furniture

- Cast iron and cast iron bobbin mileposts
- Hand operated wharf crane
- Wall mounted letter box

Roof types and details

- Pitched roofs with plain close verges
- Raised coped gables finished with stone copings, or very occasionally brick
- Hipped roofs of graduated Westmoreland slate with mitred joints
- Hipped Welsh slate roofs with blue tiled ridges and hips
- Hipped roofs of hand-made red clay tiles

Chimney stacks and pots

- Brick chimneys with red or blue brick oversailing courses
- Brick stacks with moulded brick corners

Walls

- Corbelled eaves, with "sawtooth" or dentilled brickwork
- Raised horizontal brick bands
- Blind, recessed panels within brickwork
- Limewashed brickwork (often stripped or over-painted in modern masonry paints)

Windows

- Small-paned vertically sliding sash windows
- Multi-paned side-hinged timber casements, within chamfered moulded frames

Lintels and cills

- Segmental brick arched windows, often from a single course of header bricks
- Stone wedge lintels
- Gauged brick lintels
- Brickwork without cills

BRIDGES

The original canal bridges along the canal were largely built of brick. Sarson's Bridge is the only surviving stone bridge, probably built by a private individual who wanted to mark his land with a distinct bridge, but there is evidence that a few others were originally built in stone.

Above - Bridge No. 1 (Porter's Bridge); brick with segmental brick arch and bull-nosed stone copings. This is the main type of C18 bridge on the Trent and Mersey Canal, with curved battered walls, finished in plain, square piers.

Left - segmental brick arch with rounded moulded bricks to the soffit at Bridge No. 25, incorporating a numbered cast iron plaque.

Second left - brick parapet with chamfered and rounded stone copings (Bridge No. 17, Deep Dale Bridge).

Below - coursed sandstone bridge with segmental arch, raised stone band and 1770 datestone (Sarson's Bridge - No. 11).

Bottom left - detail of Fine George's Bridge, No. 9. The lowest courses of sandstone indicate that this may have been intended initially as a stone bridge.

The original brick bridges of the canal have been adapted over the years and the details of the alterations and repairs vary.

First left - plain red brick rebuilding in English bond brickwork at Weston Cow Pasture Bridge (No. 7).

Second left - reconstructed bridge (No. 21) incorporating a deep segmental arch and blue and Fletton bricks, laid in English bond, with original copings, re-seated.

Third left - the whole of the arch has been removed at Massey's Bridge (No. 12), and the deck replaced with a concrete deck and timber and metal rails and posts. The original brick outer abutments survive.

Bottom left and detail below - Bridge No. 16, Barrow Bridge, rebuilt in 1944 in blue engineering bricks to the same pattern as the original bridge.

The whole of the original bridge at No. 24 at Willington (left) was replaced with this concrete bridge in the 1930s.

View of the bridge at Swarkestone Lock (Bridge No. 14) from the side of the lock (below) - the complex arrangement of bridge, separate pedestrian footbridge and lock creates an interesting group.

Below - tapered brick parapet walls in hand-made red brick with chamfered stone copings at Bridge No. 6 (Aston Lock).

Bottom left and detail, bottom right - pedestrian footbridge over the canal (Bridge No. 22) near Potlocks Farm - a lattice bridge of narrow I-section construction with iron posts, handrail and slim wrought iron rods. This unusual bridge incorporates sections of railway track in its framework.

Above left and right - pedestrian footbridges over the canal. Bridge No. 10 at Cliff Wood (left) was always a narrow footbridge, which also catered for packhorse traffic approaching the river crossing. The iron posts and rails are 20th century and may have replaced a timber fence. The footbridge at Weston Lock (right) has a cast metal deck and is a pattern repeated at the locks.

Left - cast-iron road bridge over the canal, carrying Buckford Lane.

Below - railway bridges over the canal. Left; bridge near Stenson Junction incorporates giant stone piers with rusticated stone bases and cornices and riveted iron plate box-girder construction. Right; smaller scale bridge of similar construction at Weston Lock, with handrail to parapet.

ROOF TYPES AND DETAILS

Left - hipped tiled roofs, with bonnet tiles cloaking the hips, at Weston Grange. Hand-made red clay tiles were used in this area before the arrival of the canal, but the exact origins of this house are slightly obscure.

Above left - hipped graduated Westmoreland slate roof with lead flashings (probably covering failed mitred hips) at Lock House, Swarkestone.

Above right - hipped graduated Westmoreland slate roof with mitred hips at Swarkestone Stop.

Above - hipped Welsh slate roof with overhanging eaves and tiled hips (Lock House, Stenson Lock).

Below - plain close verge and Staffordshire blue clay tiles (Swarkestone Boat Club).

CHIMNEY STACKS AND POTS

Left - brick stack with rounded moulded corners (Stenson Lock - Harpur Crewe estate). Blue brick oversailing courses (above) at Swarkestone Stop.

WALLS

Canal buildings are generally quite plain, with little embellishment. There are few exceptions. The lengthman's house, Highbridge House (above left) incorporates horizontal raised brick bands, now painted. Old Cliff House (above right), which predates the canal and is technically unassociated, incorporates a horizontal raised brick band and diapers in blue bricks.

Above left - horizontal stone bands and tooled, raised stone quoins at The Rising Sun, Willington, built after the railway opened in Willington. Above right - brick quoins and large blocks of roughly coursed rubble sandstone at The Bubble Inn, Stenson.

Left - blind window at Swarkestone Stop. The recessed panel of brickwork, is part of the original symmetrical design. The canted end wall, with blind windows and symmetrical form is similar to the tollhouses that were built on turnpike roads.

Above - dentilled corbelled brick eaves, with evidence of limewash at the stone corner (The Lock House, Swarkestone). Below left and right - dentilled and corbelled brick eaves. There is also evidence of limewash at high level at 7 The Green, Willington (below left), which may indicate that this was a common finish for brickwork along this section of the Trent and Mersey Canal.

WINDOWS

Right - small-paned, side-hinged, casements set recessed within chamfered frames at Potlocks Farm, near Willington.

Below - "Yorkshire" horizontally sliding multi-paned sash at Old Cliff House, Weston Cliff.

Left and below - vertically sliding sash windows at The Green Man Inn, Willington.

CILLS

Many of the smaller cottages had no cill and relied on the natural weathering properties of brickwork (above).

Many of the buildings that incorporate stone lintels also have stone cills (left and below).

LINTELS

Where economy was important, lintels were often simple and utilitarian in form. A segmental arch formed in brickwork was adopted at Lock House, Swarkestone (above), No. 7 The Green, Willington (left) and The Green Man Inn (top left).

Left and below - more formal gauged brick lintels at High Bridge House and The Lock House, Weston Lock. Rubbed bricks were sandwiched together using lime putty; the result was a precise, thinly-jointed wedge-shaped lintel. In both cases the bricks have been painted.

Left - C19 stone wedge lintels at 13-19 The Green, Willington. The fashion for wedge-shaped stone lintels in the first half of the C19 was fairly short-lived.