

# DESK-BASED ASSESSMENT OF STOURPORT BASINS, WORCESTERSHIRE

Darren Miller

Illustrations by Carolyn Hunt

1<sup>st</sup> November 2005

© Historic Environment and Archaeology Service,  
Worcestershire County Council

Historic Environment and Archaeology Service,  
Worcestershire County Council,  
Woodbury,  
University College Worcester,  
Henwick Grove,  
Worcester WR2 6AJ



INVESTOR IN PEOPLE

Project 2671  
Report 1366  
WSM 34491



# Contents

<b>Part 1 Project summary</b>	<b>1</b>
<b>Part 2 Detailed report</b>	
1. <b>Background</b> .....	<b>2</b>
1.1 The study area .....	2
1.2 Reasons for the project .....	2
1.3 Project parameters .....	2
1.4 Aims .....	2
2. <b>Methods</b> .....	<b>2</b>
2.1 Desk-based research .....	2
2.2 Site visit.....	3
2.3 Analysis.....	3
3. <b>Development of the study area</b> .....	<b>3</b>
3.1 Before 1768.....	3
3.2 1768-1776.....	4
3.3 1776-1826.....	4
3.4 1826-1845.....	5
3.5 1845-1949.....	5
3.6 1949-present.....	5
4. <b>Development of targeted areas</b> .....	<b>6</b>
4.1 Tontine gardens.....	6
4.2 Tollhouse.....	6
4.3 Coal tunnel .....	7
4.4 Engine House .....	8
5. <b>Predictive modelling of deposits and features</b> .....	<b>9</b>
5.1 Tontine gardens.....	9
5.2 Site of tollhouse.....	10
5.3 Coal tunnel .....	10
5.4 Engine House .....	10
6. <b>Research frameworks</b> .....	<b>10</b>
6.1 Tontine gardens.....	10
6.2 Site of tollhouse.....	11
6.3 Coal tunnel .....	11
6.4 Engine House .....	11
7. <b>Outline fieldwork strategy</b> .....	<b>11</b>
7.1 Tontine Hotel gardens .....	11
7.2 Site of tollhouse.....	12
7.3 Coal tunnel .....	13
7.4 Engine House .....	13
8. <b>Other potential areas for investigation</b> .....	<b>14</b>
8.1 Site of building and dock by lower basin .....	14
8.2 Site of shop, saw pits etc by lower basin.....	14
8.3 Site of tollhouse adjoining Chandlery Wharf building.....	14
9. <b>Publication summary</b> .....	<b>14</b>
10. <b>Acknowledgements</b> .....	<b>15</b>
11. <b>Personnel</b> .....	<b>15</b>
12. <b>Bibliography</b> .....	<b>15</b>
12.1 Archives .....	15
12.1.1 The Waterways Museum, Gloucester Docks.....	15
12.1.2 Worcestershire Record Office .....	15
12.2 Ordnance Survey maps.....	16
12.3 Aerial photographs .....	16
12.4 Published sources .....	16
12.5 Unpublished sources.....	16



---

## **Desk-based assessment of Stourport Basins, Worcestershire**

**Darren Miller**

### **Part 1: Project summary**

This assessment seeks to establish the context and framework for a field evaluation at the canal terminus in Stourport, Worcestershire (NGR SO 8100 7100). It is based on a wide range of primary and secondary sources, including records held by Worcestershire County Council, British Waterways, and English Heritage. It is also informed by a draft Conservation Plan, and by a visit to the site itself.

The assessment begins by discussing the development of the canal basins from the 18<sup>th</sup> century to the present. It then focuses on four areas earmarked for field evaluation, namely the Tontine gardens, the site of a tollhouse to the west, a coal tunnel between the lower basin and the quay, and a former Engine House. The development of each area is traced in detail and an attempt is made to predict the likely character and date of buried deposits. The potential contribution of the evaluation to current research frameworks is also considered. The assessment ends by suggesting several alternative sites for evaluation, and by outlining the proposed fieldwork strategy.

## Part 2: Detailed report

### 1. Background

#### 1.1 The study area

The assessment covers an area defined by Bridge Street to the west, York Street and Lichfield Street to the north, and the River Stour to the east (Fig.1). This area comprises all the present and former canal basins and associated features.

#### 1.2 Reasons for the project

The assessment forms the first stage in a programme of archaeological work that will engage with the local community and inform designs for the restoration of the Stourport basins. More specifically, the assessment will provide the framework for a field evaluation that will involve local volunteers, and enable a comprehensive archaeological assessment to be made. This information will then be made available to the local community, and to architects and artists engaged on the restoration project.

#### 1.3 Project parameters

The project conforms to document produced by British Waterways (British Waterways 2005), and to a proposal prepared in response to this document by the Archaeology Service (AS 2005).

The project also conforms to the Institute of Field Archaeologists' *Standard and guidance for archaeological desk-based assessment* (IFA 2001), and, with local and national policies in relation to archaeology and development.

#### 1.4 Aims

The aim of this assessment is to provide information on the known and potential archaeological resource within four areas of the Stourport basins. As shown on Figure 9 these areas comprise the gardens in front of the former Tontine Hotel, the site of a tollhouse to the west, a reported coal tunnel between the lower basin and the quayside, and a former engine house (now Riverside House) on Engine Lane.

For each of these areas, the assessment aims to model the likely character, depth, and significance of archaeological deposits and features and, to establish suitable frameworks for field evaluation.

### 2. Methods

#### 2.1 Desk-based research

All secondary sources relating to the study area have been consulted and incorporated into this assessment. These included over 170 records held in the Worcestershire Historic Environment Record (HER), the Central Marches Historic Towns Survey *Archaeological assessment of Stourport* (Buteux, 1996), and a draft of the *Stourport basins conservation management plan* (Richardson and Bailey 2002).

The assessment also takes into account the most relevant primary sources, including manuscript and printed maps held at the Worcestershire Record Office and British

---

Waterways' Archive in Gloucester, and aerial photographs held in the HER and National Monuments Record in Swindon.

## 2.2 **Site visit**

The site was visited on the 19<sup>th</sup> of October 2005. The four areas earmarked for field evaluation were inspected, and details were sketched onto large-scale Ordnance Survey maps. A number of digital photographs were taken and will be included, along with the sketch maps, in the field evaluation archive.

## 2.3 **Analysis**

The sources described above were assessed and interpreted according to conventional archaeological and historical practice. Particular attention was given to a series of maps which were reproduced at the same scale to enable comparison. Predictions of deposit character and depth are based on this analysis, and on observations made in the field. In advance of the field evaluation, assessments of significance have been limited to a few comments, based on the likely value of predicted deposits as sources of information on particular issues.

# 3. **Development of the study area**

## 3.1 **Before 1768**

Judging by a map of 1802 (WRO BA 6507, parcel 3), entitled, "A survey...of lands attested to be the situation of the lands prior to the making of the canal", the study area was enclosed farmland before 1768. As shown on Figure 2, the area now occupied by the Upper Basin lay in a rhombus-shaped field called The Thorn Bush Piece, while the area of the Lower Basins lay in an irregular field called Lower Lamb Pit. To the east were two fields called Lamb Pit and Wall Field, and to the west was a rectangular field called Severn Piece. Only one building is shown on the map, at the south end of Severn Piece. This building is labelled "Price's Wharf", after its owner, who is known to have bought and sold land elsewhere along the line of the Staffordshire-Worcestershire canal (Elizabeth Turner, pers comm).

The patterns of enclosure, land-ownership and tenancy shown on the map suggest that most of the study area had once been farmed in an open-field system. In such systems, holdings were divided into strips that were grouped into furlongs, and farmed in common. Although the map shows a fully enclosed landscape, the field boundaries nonetheless reflect the layout of former strips and furlongs. These arrangements were probably of medieval origin, although they are likely to have changed considerably over time. The date of enclosure is uncertain as no surviving maps or documents record the process. However, the field pattern is typical of 18<sup>th</sup> and 19<sup>th</sup> century Parliamentary enclosure, and was probably established a generation or two before 1768.

This period in the history of the study area and its archaeological potential, are outside the scope of the present assessment. However, it is worth noting in passing how much the field pattern influenced the development of the canal basins. For example, the Upper Basin was clearly planned to lie centrally within Thorn Bush Piece. It is also striking how far successive housing developments were fitted into the earlier field pattern. This degree of topographical and (perhaps) tenurial continuity has not been commented on before: indeed, most researchers have regarded the development of Stourport as a radical departure from the past. This true in a fundamental sense, but the extent to which this development conformed to the earlier field pattern is nonetheless significant.

---

### 3.2 1768-1776

The development of the canal basins is well documented and has been considered by several researchers (Bailey and Richardson 2002, 9-12; Langford 1974, 176-188; Porteous 1977, 91-99). However, the changing topography of the area has not been described and mapped in detail, and some important issues are still unresolved. The following paragraphs and accompanying figures represent an attempt to improve knowledge in these areas, although a comprehensive statement will only be possible after further fieldwork and research.

In the decade after 1768 the study area would have been the focus of intensive engineering and construction activity. This would have involved a large workforce and a good deal of infrastructure, in the form of accommodation, workshops, store-rooms etc. Porteous (1977, 95-6) touches on these arrangements, but they remain largely unresearched. Because of the limited amount of land then available (Porteous 1977, 92), all this activity will have been concentrated in space as well as in time. Beyond the site itself, it is likely that farming continued much as before. The growth of the town only began in earnest in the 1780s (Porteous 1977, 98), and as late as 1802 the basins still lay adjacent to agricultural land.

Figure 3 is taken from a drawing of the canal basins made by James Sherriff in 1776. Figure 4 is a plan based largely on this source and on a map produced by Sherriff in 1802. It also draws on an anonymous map which is undated, but can be shown to be nearly contemporary. In 1776, the Upper Basin existed much as it does today. The area around the present Lower Basins was very different, however. The eastern basin was small, semi-circular, and seemingly less of a basin than a passing-place to allow two-way traffic. It connected the Upper Basin with the river *via* two locks. The western basin was even smaller, triangular, and reached directly from the river. Although the print shows no work in progress, it is clear that this basin was unfinished in 1776, as it would have served little purpose in the form it had then. Between the basins were two docks, both containing boats being repaired.

Only the south and east sides of the Upper Basin seem to have been developed by 1776. The Tontine Hotel (then the Stourport Inn) dominated the south side, and overlooked a rectangular formal garden. On the east side of the garden lay the stable block that belonged to the Tontine, and was presumably built at the same time. Price's House lay a short distance to the south-east. To the north of the Tontine, in the angle between the Upper Basin and the canal, was the surviving Chandlery Wharf building, with its distinctive curving wall. There was also a small building projecting from its north-west corner. A little to the east lay an L-shaped single-storey building that was probably a warehouse. Another warehouse, known as the Long Warehouse, lay along the east side of the Upper Basin. The only other building within the study area was a three-storey house that stood a little to the north of the Long Warehouse. However, just outside the study area stood a two-storey building with a flat roof and crenellations. This building has been identified as a lock house and watchtower (Porteous 1977, 94-5).

### 3.3 1776-1826

Between 1776 and 1826 the study area changed significantly and took on more of its present form. Figure 5 is a conjectural map of the area in 1826, based on another map by Sherriff made in 1802, and two anonymous maps dated *c*1800 and 1826.

The most significant changes were the construction of four new basins, and the enlargement of the Lower Basins. The impression gained from the literature is that the basins were constructed on an *ad hoc* basis, as need arose, and land became available, although the site of Lichfield basin was earmarked several years before its construction, and its design was re-drafted at least twice (Porteous 1977, 97). The new and enlarged basins were associated with major changes in water supply and management. These included the replacement of the old engine and aqueduct that took water from the Stour (Bretherton and Jones 2000) by a new engine and basin that took water from the Severn. The new Engine House was housed in a building at the head of the basin, near the site of a short-lived Lime House and Lime Kilns.



---

The buildings of the study area also changed significantly in this period. The warehouse next to the Chandlery Wharf building was demolished and replaced on a much larger scale. New warehouses were also built beside the Upper Basin, and behind the Long Warehouse and Tontine stables. A new lock house was attached to the latter building. The map of c1800 also shows other canal-related infrastructure, including stacking grounds, coal wharfs, and several small buildings. In addition, this period saw the first residential developments in the study area. Prices's House was demolished, but another house was built nearby, and others were built along the newly laid-out Bridge Street, York Street and Lichfield Street. Another new street, Cheapside, was laid out in the south-east of the study area, and fronted by a row of terraced housing with adjacent gardens. Cheapside also saw some industrial development in this period, with the establishment of a vinegar factory in 1798 (Pauline Annis, pers comm).

### 3.4 **1826-1845**

Although the volume of trade passing through the terminus began to decline after 1815, development continued, as shown by the Lower Mitton Tithe map of 1845 (WRO BA 1572, parcel 428, reproduced as Figure 6). A large number of buildings were added. These included 15 or so small buildings ranged around the basins, an octagonal tollhouse to the south of Chandlery Wharf, and several houses along Bridge Street, York Street, Lichfield Street and Severn Lane. In addition, the warehouses along Mart Lane were replaced by a row of terraced houses on the same footprint, and the Vinegar Factory at Cheapside was greatly enlarged.

### 3.5 **1845-1949**

The volume of traffic using the basins continued to decline in the following century. As a consequence, very little development took place, as can be seen by comparing maps of the area in 1845, 1884, and 1947 (Figs 6-8). The only major changes in this period were the construction of several new buildings along Bridge Street (including The Bridge Inn), and the redevelopment of the Cheapside area after the infilling of Cheapside basin in the 1860s (Bailey and Richardson 2002, 5). The gasworks built on the site of the basin and latterly the power station built beside the Stour to the west provided a need for coal shipments by canal, and this helped to keep the basins in use. However, once the "Light Run" to the power station was discontinued in 1949, the basins became largely redundant (Porteous 1977, 181).

### 3.6 **1949-present**

The canal basins have changed significantly since 1949, as can be seen by comparing figures and 8 and 9.

Many changes took place in the 1950s and 1960s, as a result of limited traffic, resulting over-capacity, and the arrival of new businesses. Most significantly, Lichfield basin was infilled and a timber yard and engineering works were built on the site. Several warehouses were also demolished, as were many smaller buildings, including the tollhouse to the south of Chandlery Wharf. Away from the basins, the main changes took place in the south-west part of the study area. Stourbank House was demolished and the field to the north was made into a car park. To the south, new light industrial units were built on the site of Lichfield basin, and along Cheapside, following the partial demolition of the old gasworks.

Fewer changes seem to have taken place in the 1980s, judging from the relatively minor differences between aerial photographs taken in 1970 and 1991. However, the last 14 years have seen several developments, notably the construction of Severnside Business Park at Cheapside, and a permanent amusement park to the west of Engine Basin. The timber yard on the site of Lichfield basin has also been cleared and the land decontaminated (Miller 2001). The basins themselves and related features have not changed significantly in recent years, although a third dock has been added to the Upper Basin (Richardson and Bailey 2002, 21).

---

## 4. Development of targeted areas

### 4.1 Tontine gardens

At present, the only source of information for the original form of the Tontine Gardens is the drawing of the canal basins made by Sherriff in 1776 (Fig 3). Assuming that the drawing is essentially accurate (and comparison with later maps supports this assumption), then the gardens in 1776 consisted of a rectangular plot enclosed by a lattice wood or iron fence. The plot was divided into rectangular beds separated by uncultivated strips or paths. Curiously, although the drawing was apparently made in the summer (the trees are in full leaf), the beds seem to have been totally bare, as if they had recently been made or turned over. This seems unlikely in view of the form and context of the gardens, but it is more likely than assuming that the beds were planted evenly and uniformly with low herbaceous plants, or that other plants were present, but were not depicted. If this reasoning is correct, then it follows that, at the time the drawing was made, the gardens were being redug or laid out for the first time.

Unfortunately, after this unique view of the gardens, they are not documented in any detail until 1845. Maps of c1800, 1802, and 1826 show the outline of the gardens but leave the interior blank. All that can be said is that the boundaries of the garden did not change significantly over this period, if at all. From the tithe map of 1845, however, it is clear that the original gardens had been divided into five smaller parcels, and that a sixth parcel had been formed by taking in a small amount of land to the west (Figure 6). The new west and south sides of the garden had also been built upon, in such a way as to change the original shape of the garden even further. This parcelling up of the gardens undoubtedly mirrors the leasing of parts of the Tontine hotel. This is documented at a later date but must have begun before 1845. The documents in question are drafts of leases dating between 1891 and 1917. The gardens are included in each of these leases, and are described without variation as "...the piece of land or pleasure ground being in from of the hotel". This description plainly does not reflect the situation that obtained at the time and probably derives from earlier leases made when the gardens were a single unit.

The gardens are shown in similar detail on the first edition Ordnance Survey map of 1884 (Fig 7). Unfortunately, however, only their outline is shown on later Ordnance Survey maps, and thereafter the only sources of information are aerial photographs. An oblique photograph taken in 1926 shows the garden very much in its present form i.e. an irregular-shaped lawn on two levels surrounded by a wall. Evidently the garden had been completely transformed at some point in the previous 42 years, with the removal of the internal boundaries, demolition of the buildings along the west and south sides, and terracing of the original slope. Apart from the surrounding wall, the new layout included two flights of steps to connect the terraces, and a path around the lawn. A vertical photograph taken in 1962 shows that this path had been removed, and that another path had been added across the lower terrace. This path has since been removed, and the flight of steps between the terraces has been broadened considerably, but, these details apart, it is clear that the garden has remained essentially unchanged since the very late 19<sup>th</sup> or early 20<sup>th</sup> century.

### 4.2 Tollhouse

As noted above, an octagonal tollhouse was built to the south of the Chandlery Wharf building between 1826 and 1845. According to the maps and photographs consulted in this study, it was demolished between 1955 and 1962. In his brief survey of Stourport basins, Langford states that the tollhouse "...was identical to those at Bratch and Stewponey [on the Staffordshire and Worcestershire canal], with iron-framed windows and a central stone chimney" (Langford, 1974, 183). Unfortunately, no more evidence relating directly to the tollhouse has been found during the preparation of this assessment, with the exception of a rather blurred oblique photograph taken in 1950. This photograph shows the tollhouse, and suggests that it was more like the one at Stewponey than the one at Bratch (the two are in fact

---

very different), at least with regard to its proportions. Photographs of these buildings can be seen online on the webpages of “Up the Cut” ([www.starling101.btinternet.co.uk/canals/homepage.htm](http://www.starling101.btinternet.co.uk/canals/homepage.htm)).

#### 4.3 Coal tunnel

As shown on Figure 4, the original lower basin incorporated two docks, and these were retained when the basin was enlarged. By c1800, the lower of the two docks was covered (Anon c1800), and by 1845 it had been infilled and built upon, as shown on a photograph taken around 1910 (Carter 2004, 14). According to Carter, “in the days of steam-tugs coal was wheeled through a tunnel from the building...to the river quay”. The source of this information is not given. In 2004, British Waterways maintenance staff exposed the end of a brick-lined feature in the scarp below the building (Elizabeth Tuner, pers comm.). Water had been seeping from the scarp at this point, and once the cause had been established, the feature was blocked and covered. A photograph taken at the time suggests that the feature was about half a metre tall and the same or more wide.

This is all the information currently available on the tunnel in this area. Unfortunately, it does not admit of any firm interpretations. It is not even certain that the tunnel described by Carter and the feature exposed in 2004 are one and the same. This seems inherently likely, but the feature could also be a disused sluice, perhaps replaced by the open sluice 20m to the east (Richardson and Bailey 2002, Appendix 2, no. 17). And even if the feature is indeed the tunnel, it is uncertain exactly what function it served, when it was built, and how long it remained in use.

With regard to its function, it is possible to see the tunnel as a means of transporting coal from the building to boats on the quay. This arrangement would have made it unnecessary for boats in need of fuel to enter the basins, and it would also have removed the difficulty of carrying coal down a steep slope. However, if this was the case, it is uncertain why a chute was not used instead, and why coal was dispensed from the building in the first place. On the latter point, it is worth noting that the building that was only accessible from the north *via* a narrow swing bridge, and from the east via the closed barge locks. Clearly, it would have been difficult to transport large amounts of coal to the building, and to maintain a supply that was regularly drawn upon. Alternatively, it is possible to see the coal going in the other direction, from boats to the building. If the building housed an activity that needed large amounts of coal, this could be more easily supplied from the river, and here a tunnel would be a definite advantage, allowing coal to be taken up a shallower gradient.

Turning to the chronology of the tunnel, if, as Carter states, it functioned “in the days of steam tugs”, then this would place it anytime between the mid 19<sup>th</sup> century and the early 20<sup>th</sup> century. It may have been built at the same time as the building, i.e. between 1826 and 1845, but could equally well be later. The date at which the tunnel went out of use is also uncertain. The building stood until the 1950s, but it may have been disused and derelict for some time. If, as seems likely, Carter’s statement is based on oral evidence obtained in the 1990s, then it is reasonable to assume the tunnel was still being used in the early 20<sup>th</sup> century.



*Plate 1 North wall and arch of the coal tunnel (British Waterways 2004)*

#### 4.4 **Engine House**

As noted above, the Engine House was built at the same time as Engine Basin in 1806, and was connected to it by an underground trough. It is shown on a map of 1826 as a single building although later maps and photographs suggest that it always consisted of separate elements. At the centre of the surviving complex is a three-storey building with a pitched roof. To the north is a single storey building, similarly roofed, and on the south a two-storey building with a flat roof. There were also two or three buildings to the west. By 1845, the buildings to the west had been demolished and rebuilt to a different plan. They had been modified further by 1884, while the surviving single-storey building had been extended to the east. By the mid 1960s, however, only the surviving buildings were left. A small extension has since been built to the south end of the flat roofed building (Richardson and Bailey 2002, Appendix 2, no. 5). The pitched roof and flat roofed buildings have been extensively modified, inside and out. By contrast, the building to the north seems to have left intact since the 1800s although it has been re-floored and the original doors have been replaced. This building is assumed to have housed the engine itself, and this is supported by the map of 1826 which suggests that the trough was immediately adjacent. In addition, the ground floor room is not partitioned, as if it were meant to accommodate bulky machinery. Langford states that the engine was removed for scrap during the First World War, after it had gone out of use, and that the trough was filled in c1950 (Langford 1974, 184). It is not known (to this author, at least) what alternative arrangements were put in place.



*Plate 2 South and west elevations of the Engine House*

## 5. Predictive modelling of deposits and features

### 5.1 Tontine gardens

As described above, the Tontine gardens have a long history, as long as any feature of the canal basins. However, in this case, there are reasons to doubt that this history is well represented by deposits and features. Quite apart from the fact that garden features are often ephemeral, the original slope of the gardens was landscaped into two terraces in the late 19<sup>th</sup> or early 20<sup>th</sup> century, and this will have removed the majority of earlier deposits and features. Truncation will have been especially severe in the area of the upper terrace where it can be assumed that the present ground level is well below that of the late 18<sup>th</sup> century. Survival of deposits is more likely on the lower terrace, but even here truncation is likely to have been severe. However, it appears that the east and west sides of the gardens were not terraced, and it is likely that remains of earlier arrangements survive in these zones. Along the west side of the gardens, these remains are likely to be associated with the extension to the original garden, made between 1776 and 1845. Along the east side, however, it is possible that remains associated with the original gardens survive.

In both zones, an accumulation of humic garden soils can be expected. It is also very likely that these soils will contain frequent sherds of pottery and other ceramics, as well as numerous fragments of animal bone. These artefacts are ubiquitous in post-medieval gardens and (for the most part) represent rubbish added to middens that were applied as manure. Where the gardens were cultivated, the uppermost soils will have been extensively reworked, mixing artefacts of different dates together. However, it is possible that earlier deposits and features survive between cultivated plots, or beneath dumps of imported soil. Remains in this context might include paths and surfaces of gravel and stone, and levelled dumps of rubbish or made ground. It is also possible that features have been cut into the underlying sands and

gravels of the river terrace. These features might include bedding trenches, drains, pits and post-holes. If they were present, such features would provide the most secure dating evidence. They might also contain the remains of plants that were grown around the time the feature was created.

## 5.2 **Site of tollhouse**

Unlike the Tontine gardens, the land to the west does not seem to have been landscaped in any period, and substantial remains of the tollhouse in this area are likely to survive. At all events, it is likely that the foundations of the building survive, along with the base of its central chimney. The internal surface may also survive unless, when the building was demolished, the materials were removed for re-use elsewhere. However, it is unlikely that many artefacts will be associated with these remains. The building will have been kept clean when in use and emptied completely before its demolition. Nevertheless, some artefacts might be present in primary contexts, and the building materials might be informative in themselves. As in the Tontine gardens, there is also a possibility of finding residual artefacts of 18<sup>th</sup> century and earlier date.

## 5.3 **Coal tunnel**

The existence of the tunnel described by Carter (2004, 16) cannot be gainsaid, and it is likely that the feature exposed in 2004 is the outfall of this tunnel rather than a disused sluice. From this premise, it is reasonable to infer that the rest of the tunnel survives below ground and ends within the footprint of the former building, probably near its south-west corner. Judging from past and present observations, the tunnel ought to be about 1m below the surface, although it may incline upwards from the quay. This is all that can be said by way of prediction, however. No feature of this type is known to the author or to any of the people consulted during this assessment.

## 5.4 **Engine House**

Considered as an archaeological resource, the surviving Engine House consists of three elements of contrasting types. Very little is known about these buildings beyond that gained from a brief inspection. The original form of the larger buildings is particularly obscure, due to the extent of modern internal decoration and external render. Unless these buildings were to be comprehensively stripped, it is unlikely that investigation would be very productive. The northern part of the Engine House offers more scope for investigation as much of the original brickwork is still exposed, both externally and internally. The arches and recesses on the ground floor are particularly striking, while the east elevation shows clear evidence of structural modifications.

## 6. **Research frameworks**

### 6.1 **Tontine gardens**

Archaeological investigation of the Tontine gardens has the potential to provide useful information on their character in successive periods. It would be particularly valuable to obtain information on the original layout and planting scheme of the gardens, as this is not altogether clear from Sherriff's drawing of 1776. It would also be interesting to find out how the gardens were managed after they were subdivided. Such information would be significant in itself, and would allow a proper appreciation of the hotel. Indeed, taken together, information on structural and horticultural changes might provide an index of cultural life around the basins. Also, on a more practical level, such information could be used to inform a more historically fitting redevelopment of the gardens.

---

## 6.2 **Site of tollhouse**

As suggested above, excavation on the site of the tollhouse is likely to expose substantial remains. It would allow the building to be identified to type, especially if the plans and dimensions were compared with surviving examples. Beyond this, however, the results of excavation are unlikely to have much wider archaeological or historical significance.

## 6.3 **Coal tunnel**

Excavation of the coal tunnel would help to resolve outstanding questions regarding its function and chronology. It would also provide a basis for comparison should any similar features come to light, or if any are already documented in the literature on industrial archaeology (something this assessment has been unable to establish).

## 6.4 **Engine House**

No excavations are currently anticipated in or around the Engine House, but there is some scope for measured and photographic survey. In the building to the north, this would help to establish whether or not it housed the engine itself, especially if the records could be compared with mid 19<sup>th</sup> century plans and elevations (eg WRO BA 6507, parcel 7).

## 7. **Outline fieldwork strategy**

### 7.1 **Tontine Hotel gardens**

It is proposed to excavate a single trench in the north-east corner of the present gardens, i.e. where evidence suggests that remains of the original gardens are most likely to be found (Fig 9). The trench will be located a safe distance from the trees to the south. It will be excavated in spits by a mechanical excavator working under the supervision of the Project Leader. The turf will be removed in such a way that it can be replaced tidily, and the spoil will be stockpiled well clear of the trench edges. The trench will be fenced off, although it is not likely to be deep enough to present a hazard. No volunteers will be present during machine excavation, although they are expected to play a full part in hand-excavation and recording afterwards.



*Plate 3 site of proposed excavation trench. Note terracing to left which will have removed evidence of the formal garden*

## 7.2 **Site of tollhouse**

In order to achieve worthwhile results, and to allow maximum volunteer participation, it is proposed to excavate the entire footprint of the tollhouse to the south of the Chandlery Wharf building. The initial excavation will again be done by a mechanical excavator, without any volunteers being present. As in the Tontine gardens, the trench is unlikely to be deep enough to require shoring or stepping-in, and it will in any case be surrounded by Heras fencing.





*Plate 4 site of tollhouse*

### 7.3 **Coal tunnel**

The most practical approach to the excavation of the coal tunnel would be to open a trench using a mini-digger or entirely by hand near the west end of the pieced brick wall (i.e. the south wall of the building that replaced the dock). Excavation on the scarp would be awkward, and the resulting trench would be hazardous to inexperienced volunteers. The trench might have to be *c*3m or so wide, in order to excavate it to an anticipated depth of *c*1m. As such, it would probably block the footpath, and might present a hazard passers by and trespassers, even though Heras fencing would be erected around it. For these reasons, and because the end of the tunnel has already been observed and recorded, it is recommended that one or other of the alternative sites in the immediate vicinity be targeted instead (see below, section 8).

### 7.4 **Engine House**

It is proposed that fieldwork in the Engine House should take the form of a rapid survey. More specifically, this would involve taking photographs using a combination of digital and film cameras, drawing a ground plan and the east and west elevations, and completing simple pro-forma recording sheets prepared by the Service. The survey could run concurrently with the excavations or at any suitable time thereafter.

## 8. **Other potential areas for investigation**

### 8.1 **Site of building and dock by lower basin**

If the excavation of the coal tunnel were considered to be impracticable or unnecessary, an alternative would be to investigate the building that served it, and the infilled dock beneath the building. This would present fewer hazards and might provide information that was just as, if not more, valuable. For example, it might establish what the building was used for when the tunnel was in use, and it would almost certainly date the infilling of the dock.

### 8.2 **Site of shop, saw pits etc by lower basin**

As another alternative, a map of c1800 show a small building labelled as a shop stood several meters to the south of the lower dock. An undated, though certainly 19<sup>th</sup> century map shows a larger building labelled “saw pits” in the same location, while the tithe map of 1845 shows what may be the same building with an extension. The extension is not shown on the 1884 map, but the original building (or a new building on the same footprint) appears on later maps up to 1955. Excavation here would be straightforward logistically and would almost certainly recover remains of these buildings and provide information on the kind of activities that sustained the canal basins throughout most of their history.

### 8.3 **Site of tollhouse adjoining Chandlery Wharf building**

If, for any reason, excavation of the tollhouse to the south of the Chandlery Wharf building did not take place, or proved instantly unproductive, than an alternative focus of excavation would be the site of the tollhouse that was stood the north side of the Chandlery Wharf building in the late 18<sup>th</sup> and early 19<sup>th</sup> century (Figs 3 and 4). Remains of this building should exist at no great depth below the surface, and might provide useful information, especially as this building is documented only by a partial representation on James Sherriff’s drawing of 1776.

## 9. **Publication summary**

The Service has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, and unless directed otherwise, the Service intends to use the following summary as the basis for publication in appropriate journals or other media.

*In October 2005, the Worcestershire Historic Environment and Archaeology Service undertook a desk-based assessment of several features of the canal basins at Stourport, Worcestershire (NGR SO 8100 7100; WSM 34491). The assessment was commissioned by British Waterways and was intended to establish the basis for a field evaluation. It was based on a wide range of primary and secondary sources, including records held by Worcestershire County Council, British Waterways, and the National Monuments Record. It was also informed by a draft Conservation Plan, and by a visit to the site itself.*

*The assessment begins by discussing the development of the canal basins from the 18<sup>th</sup> century to the present. It then focuses on four areas earmarked for field evaluation, namely the Tontine gardens, the site of a tollhouse to the west, a coal tunnel between the lower basin and the quay, and the former Engine House. The development of each area is traced in detail and an attempt is made to predict the likely character and date of buried deposits. The potential contribution of the evaluation to current research frameworks is also considered. The assessment ends by suggesting several alternative sites for evaluation, and by outlining the proposed fieldwork strategy.*

---

## 10. **Acknowledgements**

The Service would like to thank Elizabeth Turner and Alex Rusher of British Waterways for their kind assistance with this project. Thanks are also due to the many people who offered information and advice, including Pauline Annis (Stourport Civic Society), Martin Cook (archaeological consultant), Keith Faulkner (English Heritage) and Barry Jones (English Heritage).

## 11. **Personnel**

The assessment was undertaken by Darren Miller. The illustrations were prepared by Carolyn Hunt. The project manager responsible for the quality of the project was Simon Woodiwiss.

## 12. **Bibliography**

### 12.1 **Archives**

#### 12.1.1 **The Waterways Museum, Gloucester Docks**

BW 70.88

Drafts of leases and surrenders of Tontine Hotel and gardens 1892-1919]

BW 149.84

Plan of Stourport basin, scale 30 feet to one inch, by BW Dixon, 1930

#### 12.1.2 **Worcestershire Record Office**

BA 1572, parcel 428, ref s760:428

[Lower Mitton tithe map, 1845]

BA 6507/1 ref. f900.9:3

Plan of proposed "Bason and Wharfs in Mr Actons field" c1768]

BA 6507/3 ref. f900.9:3

A survey of land taken by Jas Sherriff May 1802 situated in the hamlet of Lower Mitton in the parish of Kidderminster and County of Worcester

A survey taken by James Sherriff of lands in Lower Mitton and attested to be the situation of the lands previous to the making of the canal

Plan of Stourport canal basins and part of the Staffordshire and Worcestershire Canal. Drawn by William Stephens, 1826

[Plan of canal basins, c1800]

BA 6507/7 ref. f900.9:3

Copy of part of the plan for an intended new basin at Stourport-on-Severn, 18<sup>th</sup> January 1810. Scale one quarter of an inch to seventeen feet

[Plan of canal basin, mid 19<sup>th</sup> century. Scale one eighth of an inch to one yard]

[Plan of the lower canal and canal basin, 1826. Scale half an inch to one chain]

[Plan of engine house boiler for the Staffordshire-Worcestershire Canal engine, mid 19<sup>th</sup> century]

## 12.2 **Ordnance Survey maps**

Ordnance Survey, 1884 and 1903 *Worcestershire, sheet 14, 14.10, and 14.14* (1:2, 500)

Ordnance Survey 1929, 1938, and 1947 *Worcestershire, sheet 14 SW* (1:10,560)

Ordnance Survey, 1955 *Sheet SO 87SW* (1:10,560)

Ordnance Survey, 1984, *Sheet SO 87SW* (1:10,000)

Ordnance Survey 1964/5 *Plans SO 70 NW, 71 SW, and 71SE* (1:1,250)

## 12.3 **Aerial photographs**

Oblique photographs taken 1926, 1950, and 1991

Vertical photographs taken in 1948, 1962, 1970, 1977, and 2001

## 12.4 **Published sources**

Brook, F 1977 *The Industrial Archaeology of the British Isles 1: The West Midlands*

Langford, J I, 1974 *A Towpath Guide to the Staffordshire and Worcestershire Canal*

De Mare, E, 1950 *The Canals of England*

Porteous, J D 1977 *Canal ports: The urban achievement of the Canal Age*

## 12.5 **Unpublished sources**

AS, 2005 *Proposal for an archaeological evaluation at Stourport Basins, Worcestershire*, Historic Environment and Archaeology Service, Worcestershire County Council unpublished document dated 10<sup>th</sup> June 2005, revised 15<sup>th</sup> July, 2005

Bretherton, L and Jones, L, 2000 *Evaluation at land off Lodge Road, Stourport, Worcestershire*, Archaeological Service, Worcestershire County Council, report 807

British Waterways, 2005 *Invitation to Tender/Request for Quotation*

Buteux, V 1996 *Archaeological assessment of Stourport, Hereford and Worcester*, County Archaeological Service, Hereford and Worcester County Council, report 346

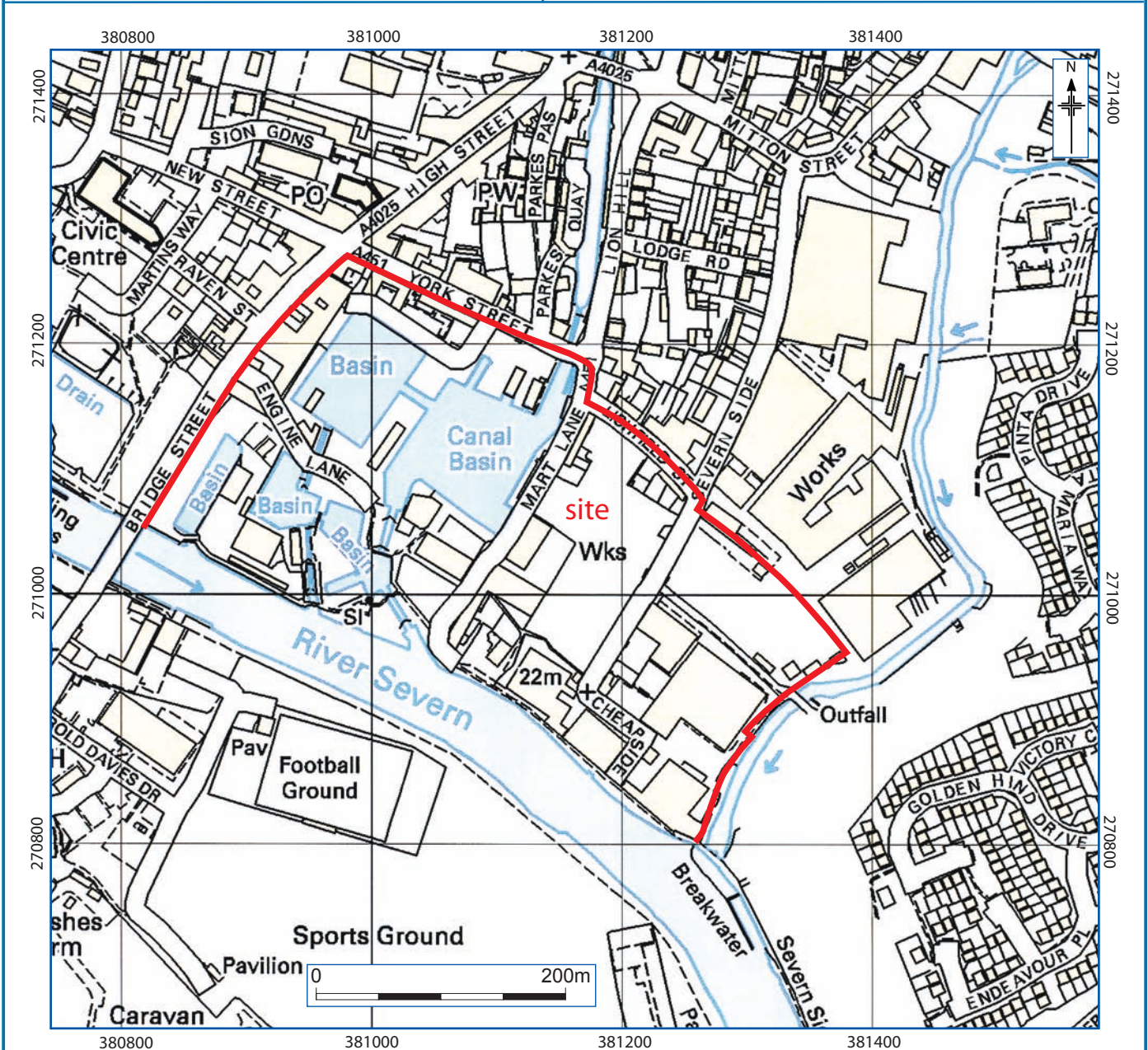
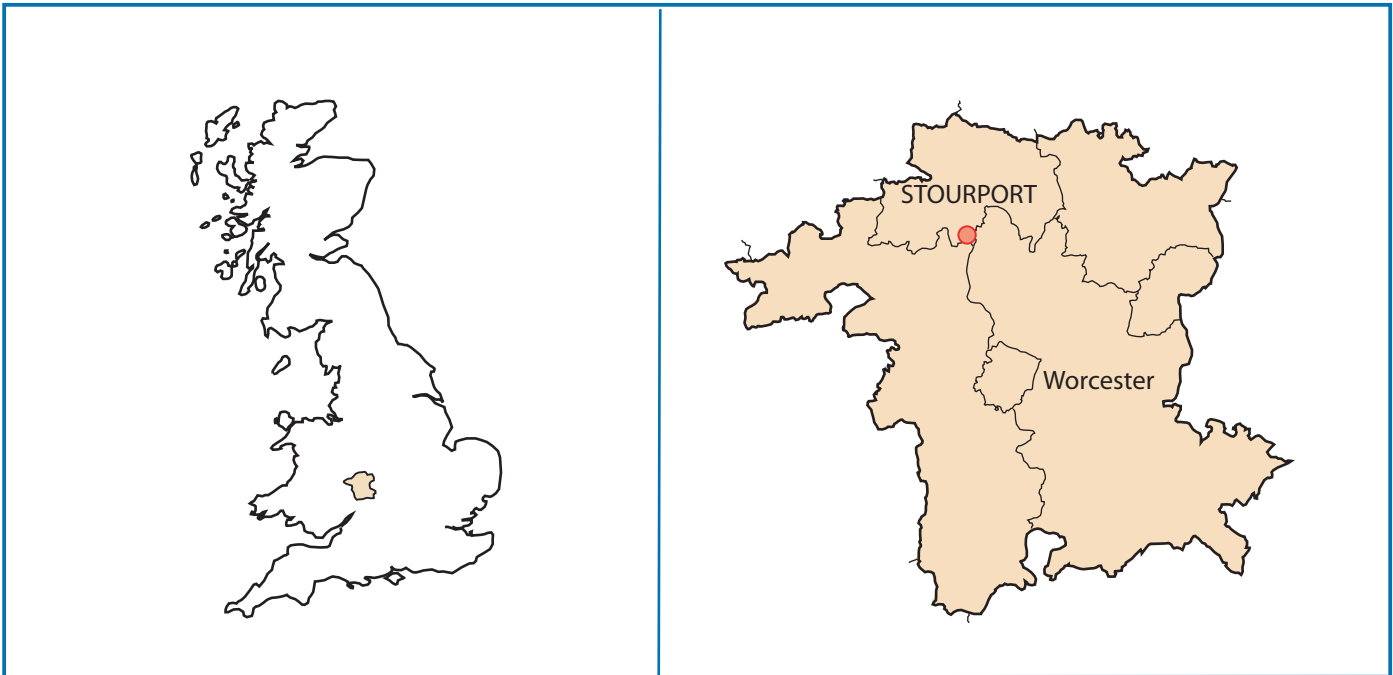
CAS 1995 (as amended) *Manual of Service practice: fieldwork recording manual*, County Archaeological Service, Hereford and Worcester County Council, report 399

Cook, M 1996 *Desk-top study at Stourport Basin, Stourport on Severn*, County Archaeological Service, Hereford and Worcester County Council, report 477

IFA, 2001 *Standard and guidance for archaeological desk-based assessment*, Institute of Field Archaeologists

Miller, D, *Watching brief during Soils Remediation at Larch Lap, Stourport-on-Severn*, Archaeological Service, Worcestershire County Council, report 844

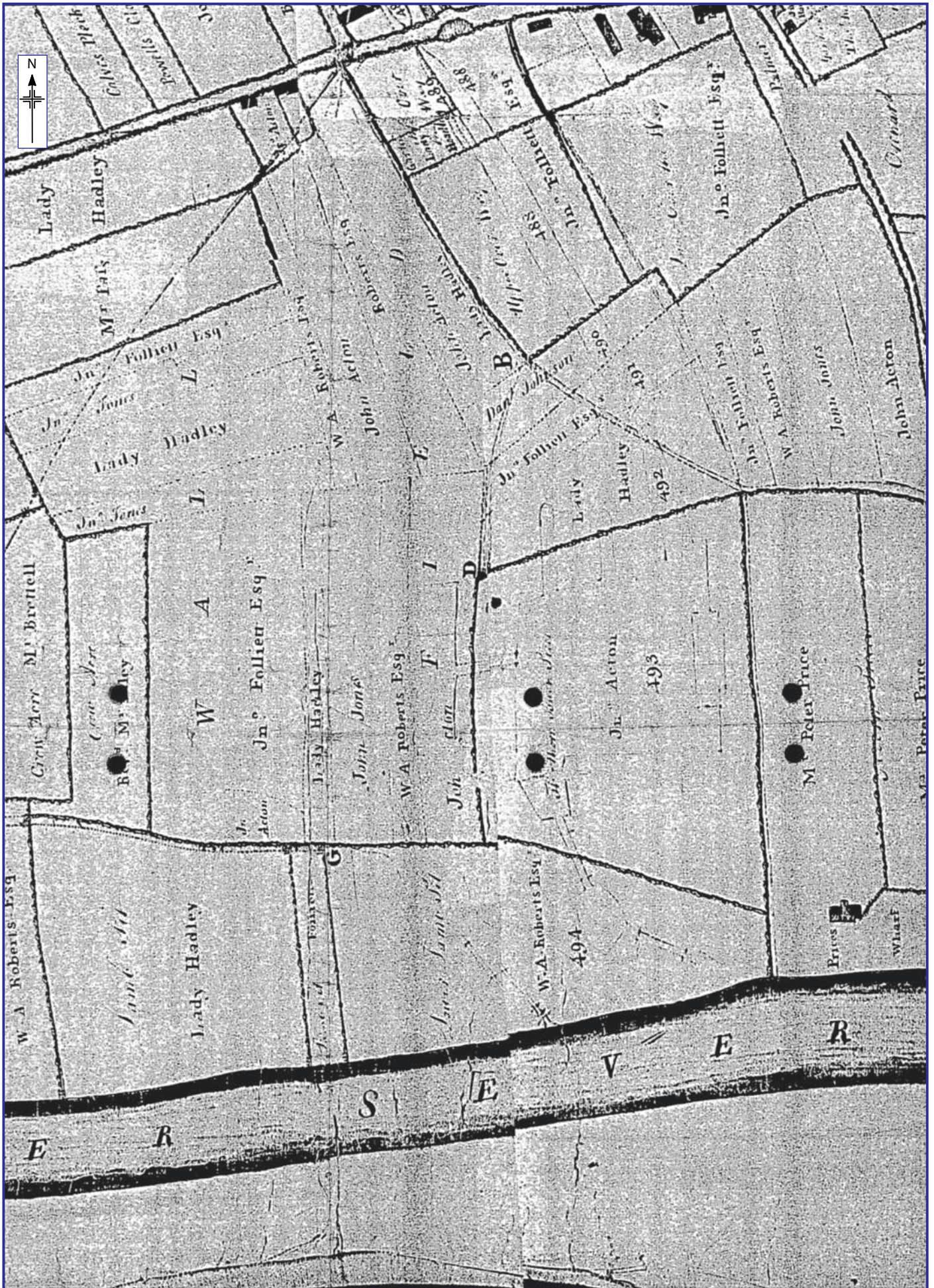
Richardson, L, and Bailey, S, 2002 *Stourport Basins Conservation Plan: draft March 2002*, British Waterways



© Crown copyright. All rights reserved. Worcestershire County Council 100015914. For reference purposes only. No further copies may be made.

Location of the site.

Figure 1



Part of a survey by James Sherriff of ‘...lands...previous to the making of the canal’ (1802)

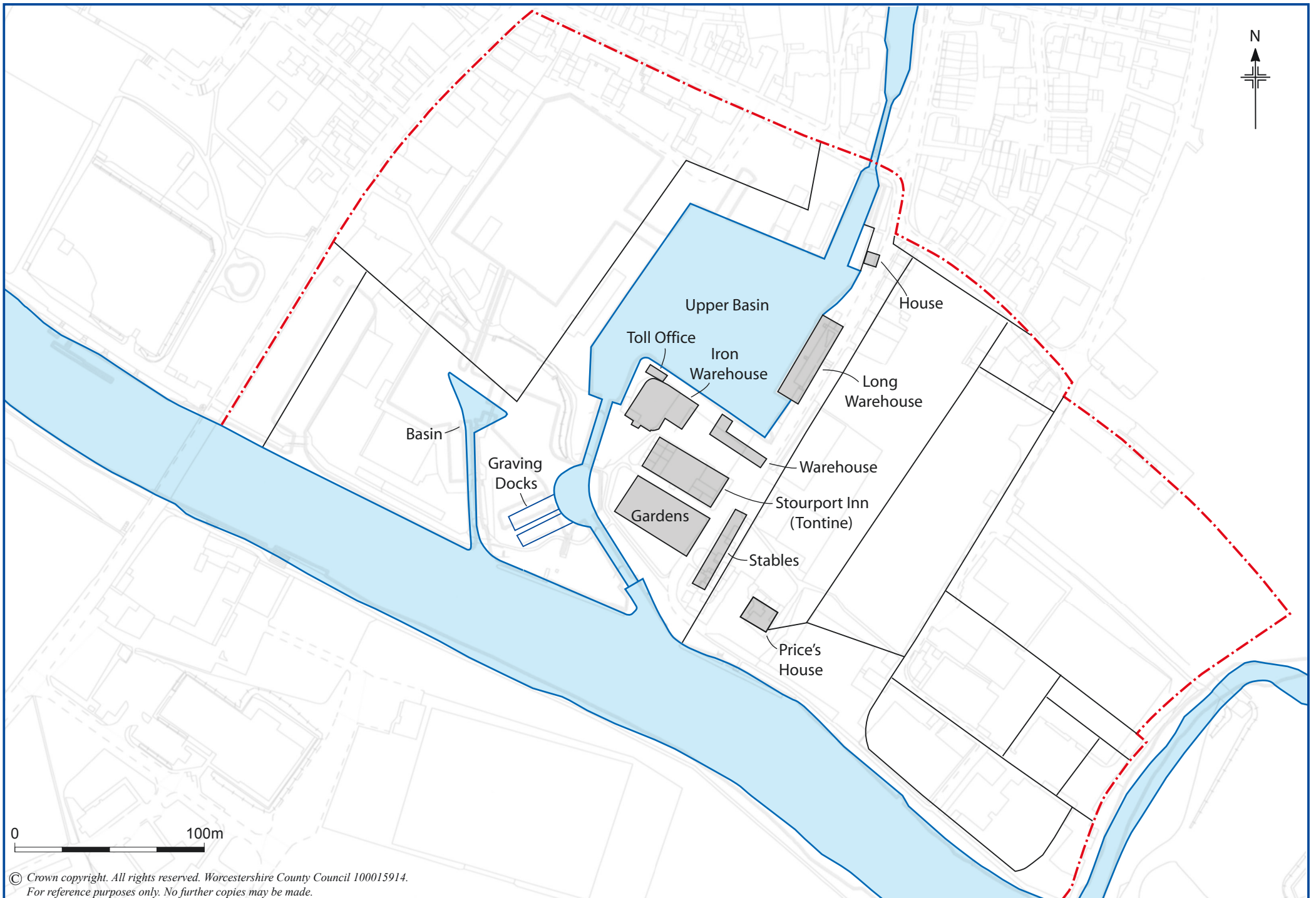
Figure 2



Part of a drawing by James Sherriff: 'A South-west Prospect or Perspective View of Stour Port' (1776)

Figure 3

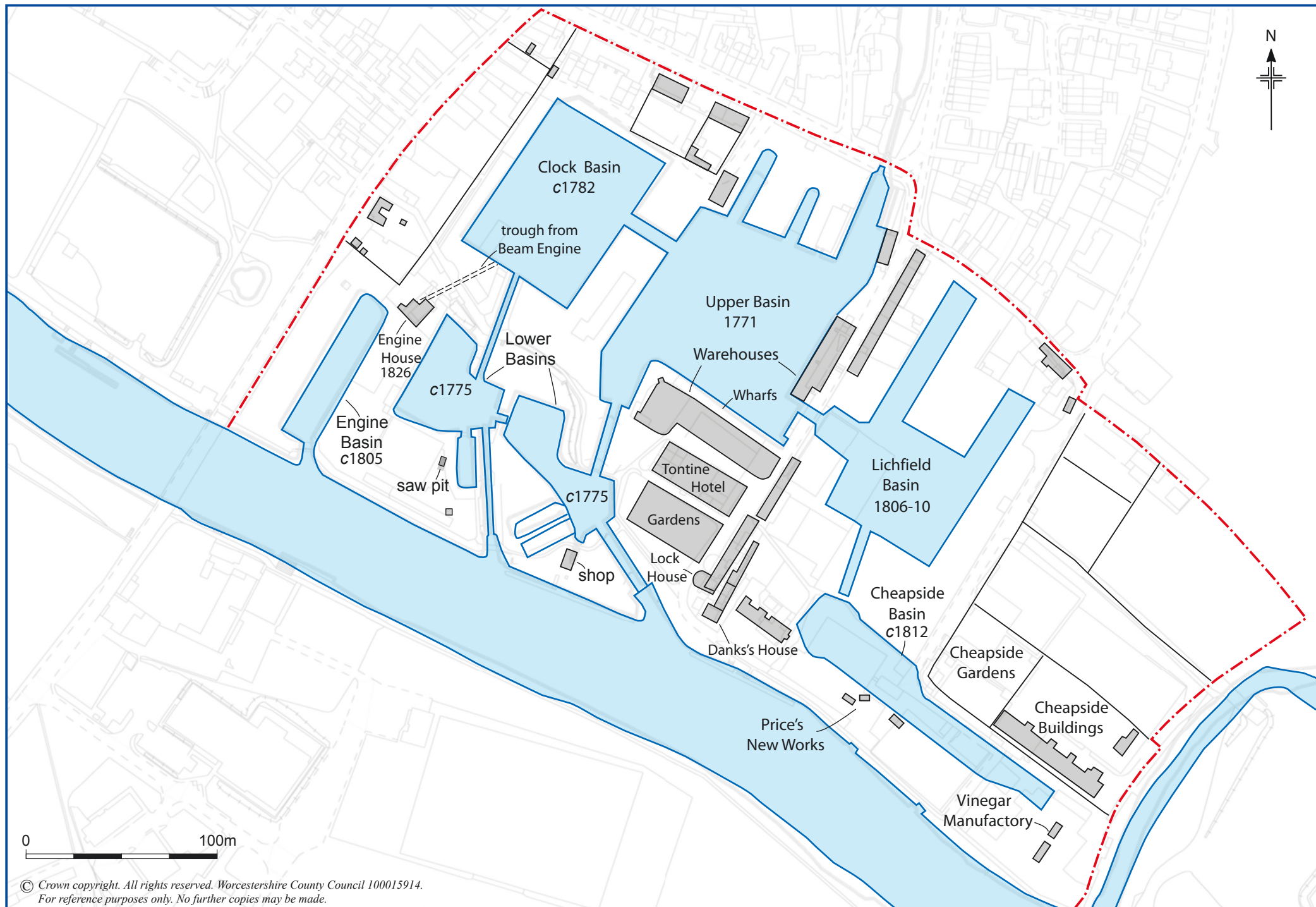




© Crown copyright. All rights reserved. Worcestershire County Council 100015914.  
For reference purposes only. No further copies may be made.

Plan of study area in 1776

Figure 4



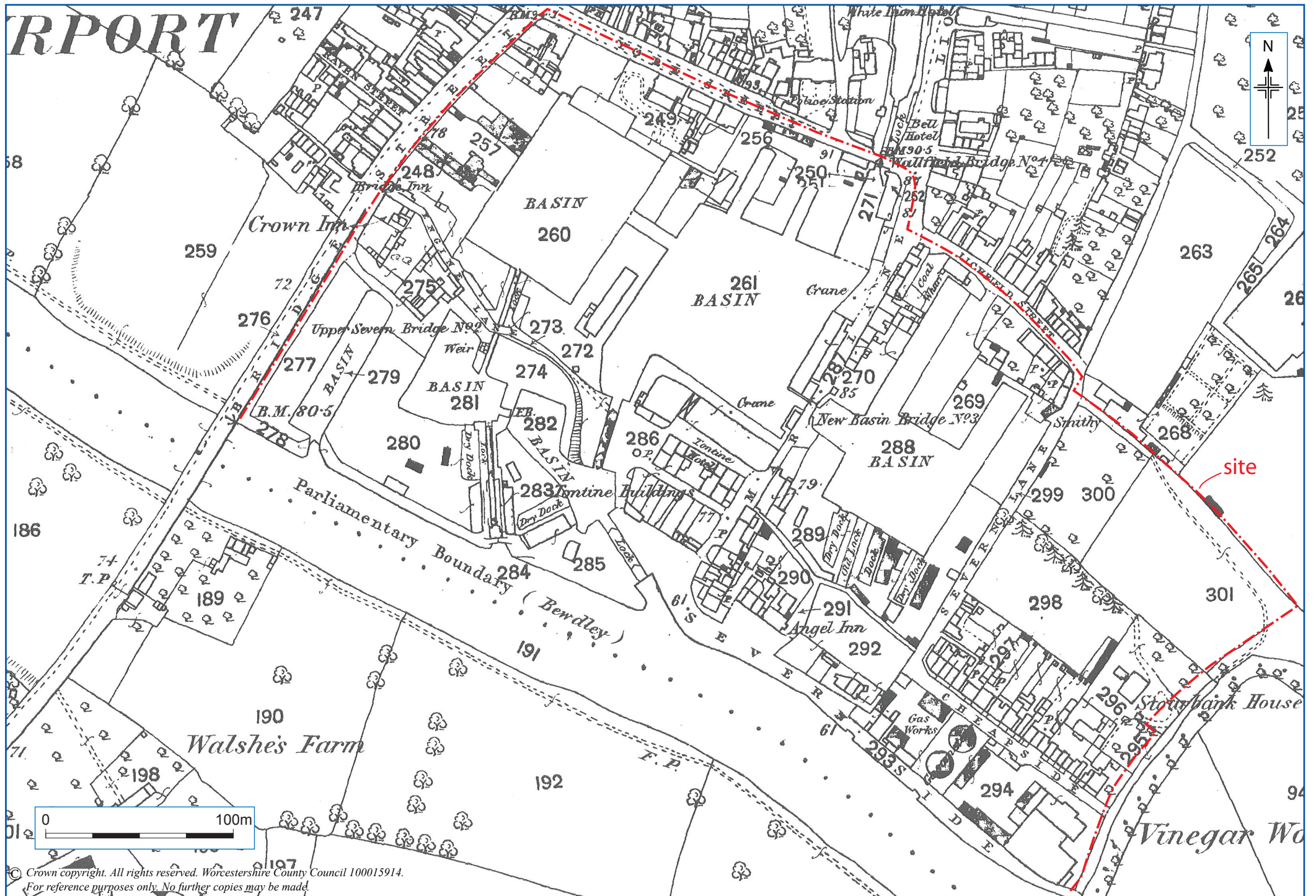
Plan of study area in 1826

Figure 5



Part of Lower Mitton tithe map (1845)

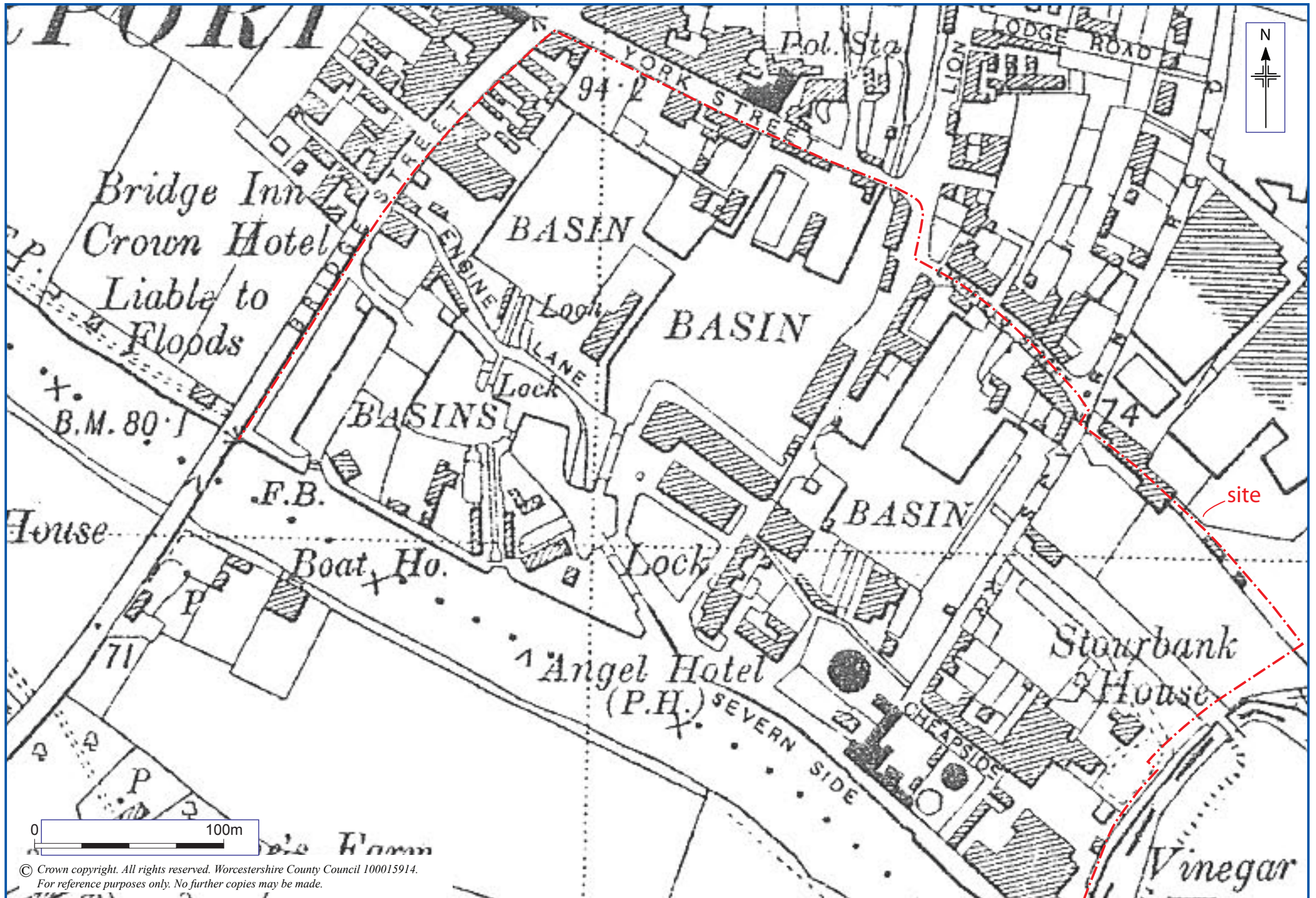
Figure 6



© Crown copyright. All rights reserved. Worcestershire County Council 100015914.  
 For reference purposes only. No further copies may be made.

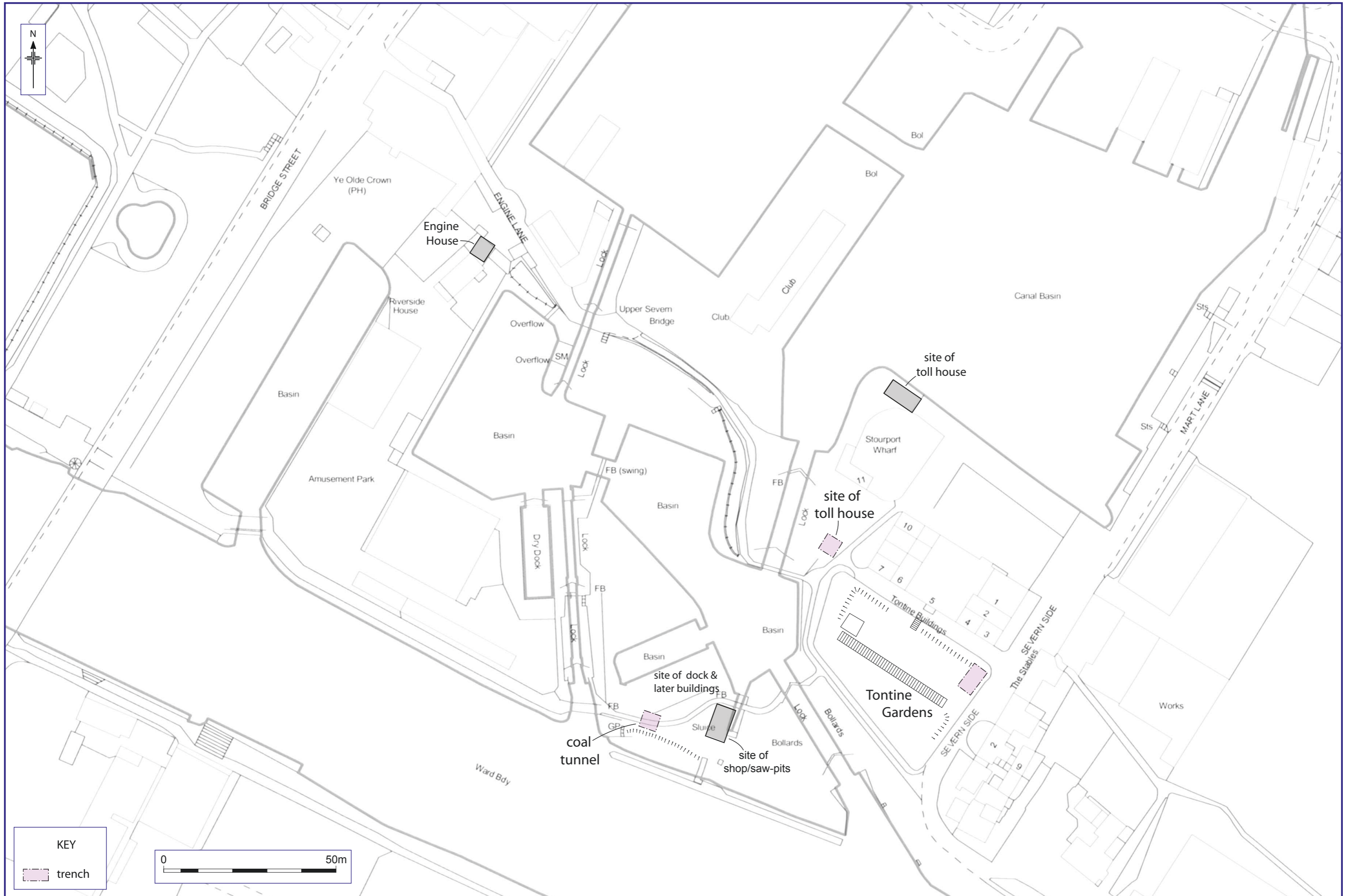
Extract from 1st Edition Ordnance Survey (1884)

Figure 7



Plan of OS provisional edition (1947)

Figure 8



Location of targeted areas, proposed trenches and alternative sites for investigation

Figure 9

This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Worcestershire County Council 100015914. For reference purposes only. No further copies may be made.