

CFOL10



ARCHAEOLOGICAL MONITORING DURING RESTORATION WORKS ON THE CEFN FLIGHT OF FOURTEEN LOCKS

*for Newport City Council in partnership with the Monmouthshire,
Brecon and Abergavenny Canals Trust Ltd (MBACT)*

August 2011

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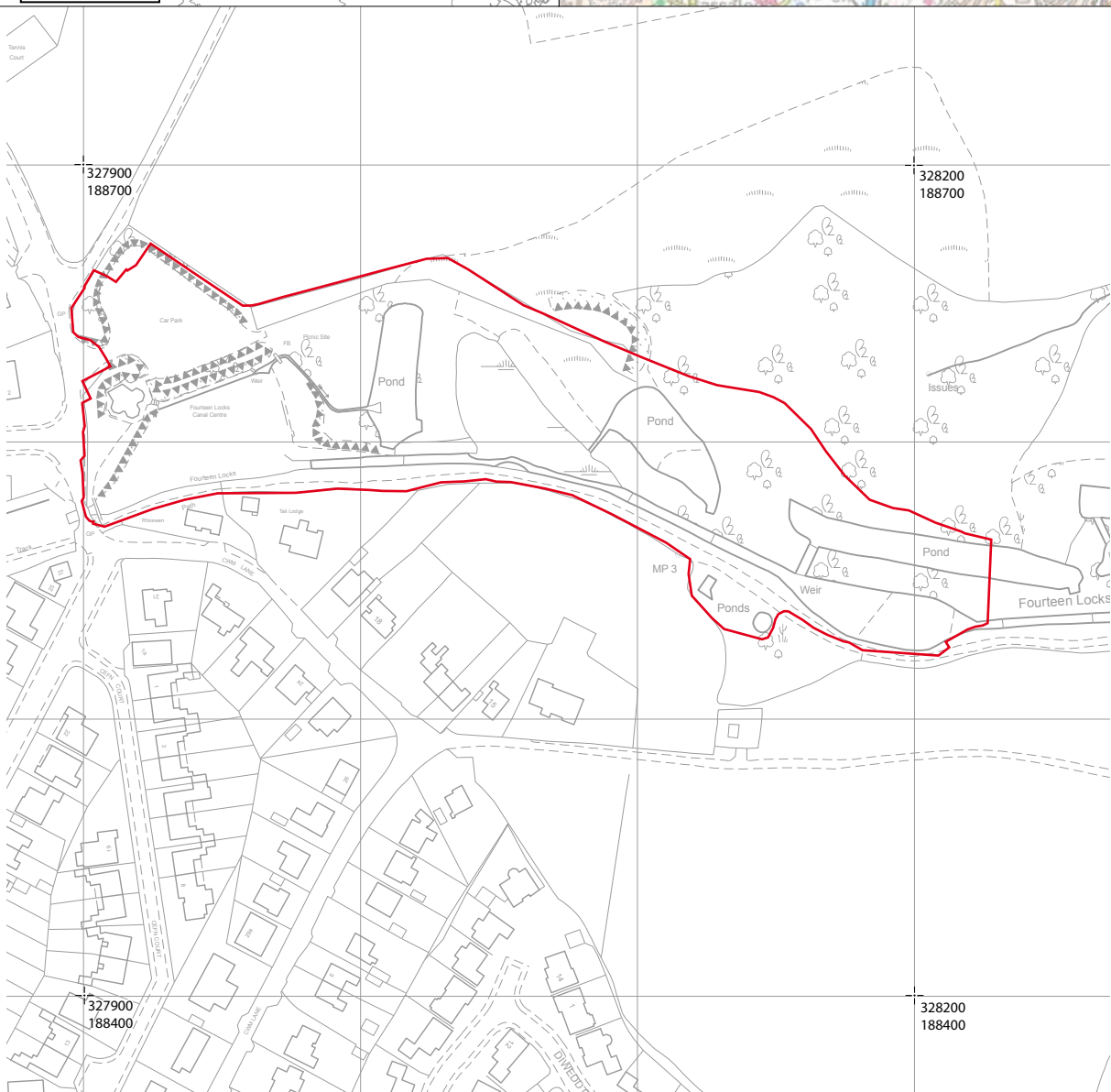
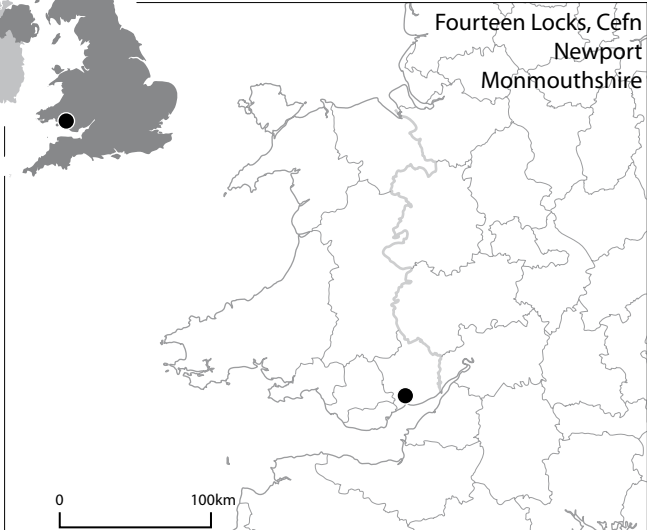
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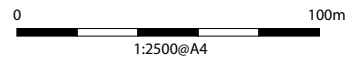
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Scale 1:2500 @ A4



Illus 1
Site location

ARCHAEOLOGICAL MONITORING DURING RESTORATION WORKS ON THE CEFN FLIGHT OF FOURTEEN LOCKS

The derelict Flight of Fourteen Locks is currently the focus of a planned programme of works to restore the currently un-navigable Crumlin Arm of the Monmouthshire & Brecon Canal by the Monmouthshire, Brecon, and Abergavenny Canal Trust in partnership with Newport City Council and the Heritage Lottery Fund.

The Crumlin Arm (western branch) of the Monmouthshire Canal ran from Crumlin in the Western Valley through to Rogerstone and then eastwards to meet the Eastern Valley branch at Crindai, just outside Newport, South Wales. The construction engineer was Thomas Dadford Jnr, who already had considerable experience in canal building, having previously assisted his father in the construction of the Glamorganshire canal. The Crumlin section of the canal was opened in March 1794.

This dramatic flight of very deep and narrow locks is a remarkable engineering achievement, and features a unique and complex series of embanked ponds, pounds, sluices, and weirs to manage the movement of water. Due to the historic significance of the flight of locks, the area is currently designated as a Scheduled Ancient Monument (SAM).

1

The focus of the first phase of restoration was two pairs of locks at High Cross, Rogerstone, Newport. These are located on the Cefn Flight of Fourteen Locks and are numbered 20, 19, 18, and 17. Because of the scheduled status of the canal, a programme of archaeological watching brief and historic building recording was required to run alongside the restoration work. The archaeological work has created a comprehensive record of the two pairs of locks, their associated structures and their landscape. New light has been shed on the functioning of the locks and their associated water management.

1. INTRODUCTION

The derelict Flight of Fourteen Locks is currently the focus of attempts to restore the un-navigable Crumlin Arm of the Monmouthshire & Brecon Canal by Monmouthshire, Brecon, and Abergavenny Canal Trust (MBACT) in partnership with Newport City Council and the Heritage Lottery Fund.

This dramatic flight of very deep and narrow locks is a remarkable engineering achievement, and features a unique and complex series of embanked ponds, pounds, sluices, and weirs to control the water supply, with no shared gates between individual locks. It therefore constitutes a flight of locks rather than a staircase lock.

The talented engineer Thomas Dadford Jr both designed and oversaw the construction of the canal, which was first opened to commercial traffic in 1799. The interdependent

balancing ponds combined with paired locks, creates a unique water management system not previously seen in contemporary canal systems.

Due to the historic significance of the flight of locks, the area is currently designated as a Scheduled Ancient Monument (SAM). Although the construction of the locks is seen by some as a relatively modern achievement, the SAM designation is considered to be the best method of preserving the infrastructure associated with the flight.

In accordance with the scheduled monument consent for the restoration works, an Archaeological Consultant (Halcrow Group Ltd) was appointed to manage the archaeological requirements of the scheme. Headland Archaeology UK Ltd (formally Archaeological Investigations Ltd) was commissioned by the Archaeological Consultant, Halcrow Group Ltd,



to conduct a continuing programme of monitoring, recording and topographical survey work during the first phase of conservation works to locks 20–17 in the system.

1.1 Site location and description

The site is located on the Crumlin Arm of the Monmouthshire Canal at High Cross, Rogerstone, Newport in South Wales. The focus of this phase of the project is two pairs of locks. These are located on the Cefn Flight of Fourteen Locks and are numbered 20, 19, 18, and 17.

The locks within the study area are grouped into pairs of locks and the pairs are divided through the inclusion of a winding hole or passing point. Due to the nature of the landscape the locks and associated ponds rather than being completely cut into the hill side consist of a mixture of excavated chambers and built up earthen embankments containing the ponds.

1.2 Background history and previous works

In 1791 the population of Newport was 750, and 247 vessels with a registered tonnage of 12,349 had cleared the port. Towards the end of the year, a newspaper reported that a canal was projected from Newport to Pontnewynydd, with a branch from Crindai farm to Crumlin.

The Crumlin Arm (western branch) of the Monmouthshire Canal ran from Crumlin in the Western Valley through to Rogerstone and then eastwards to meet the Eastern Valley branch at Crindai, just outside Newport. The Crumlin section of the canal was opened in March 1794. The construction engineer was Thomas Dadford Jnr, who already had considerable experience in canal building, having previously assisted his father in the construction of the Glamorganshire canal.

Between Crindau and Crumlin, Thomas Dadford found it necessary to construct 32 locks. He built five at Allt yr Yn and fourteen at Cefn (Rogerstone). The flight of fourteen locks at Cefn was opened in 1799, and although not unique, it is a remarkable feat of late 18th century engineering. The canal had to rise 51m within half a mile. To overcome the inherent problems associated with staircase locks, Dadford constructed a flight of locks grouped in sets with side ponds and winding holes allowing the relatively free passage of boats both up and down the rise continually.

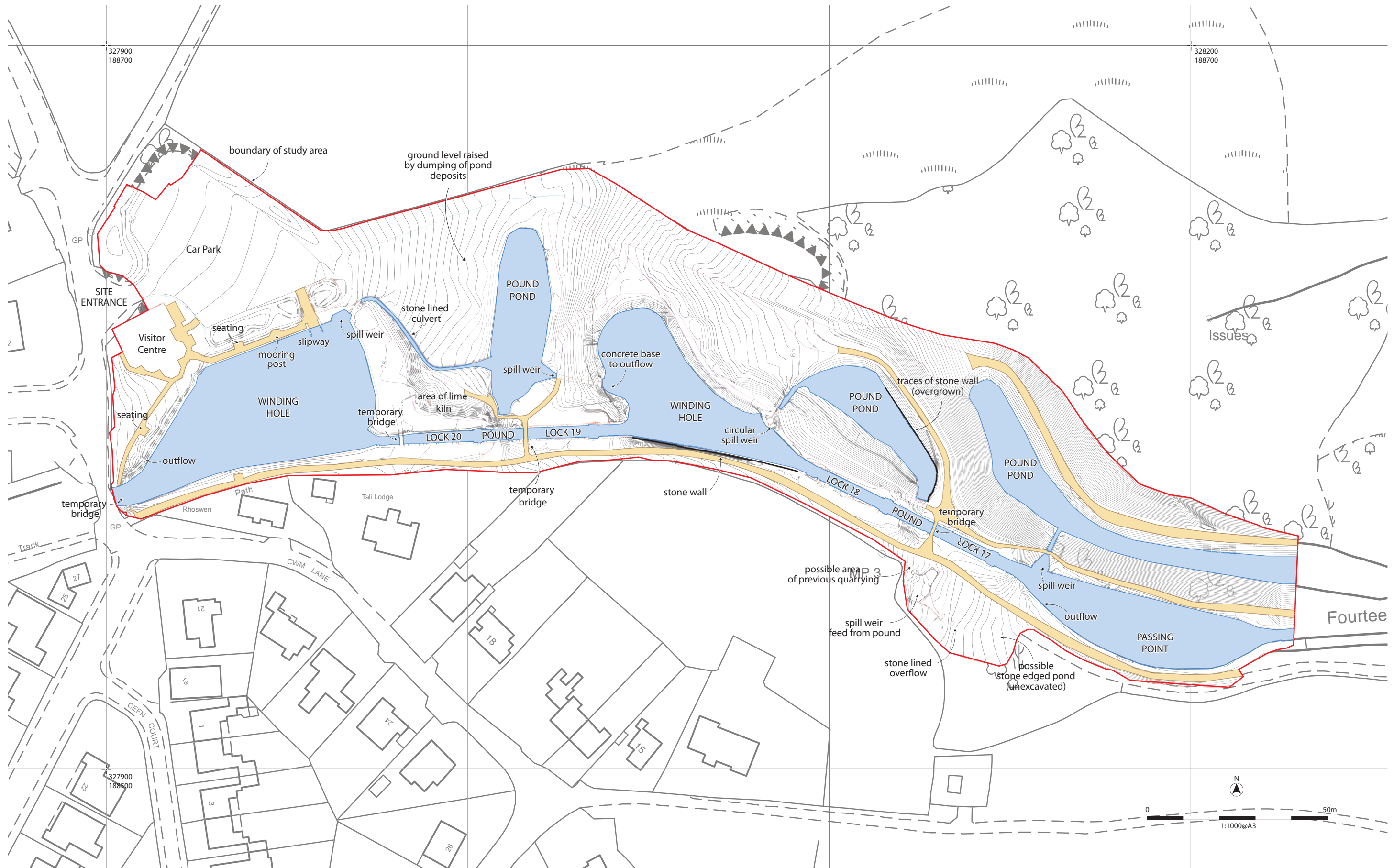
The proposed works were part of a restoration programme undertaken by the Monmouth and Brecon Canals Regeneration Partnership. To date, restoration works, which have been implemented within the canal, include Gwastad Mawr, Bettws, Ty Ffynnon and Tamplin Locks on the main line of the canal,

in addition to Ash Tree Bridge and Bettws Lane Bridge. On the Crumlin Arm, Lock 2 has been restored.

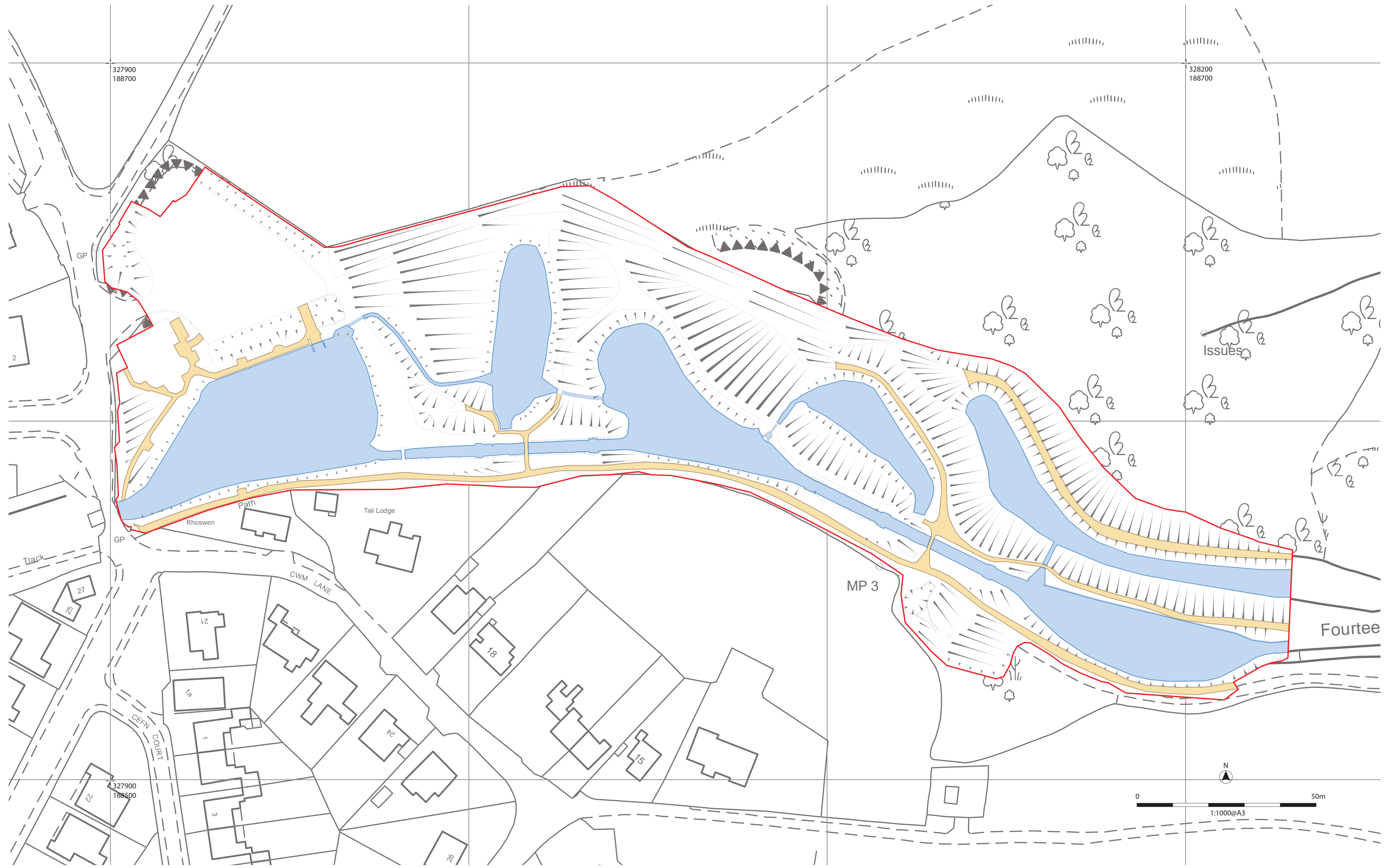
Prior to this phase of reconstruction the flight of locks had fallen in to a state of decay, the walkover conducted by Halcrow identified that the empty chambers were dry and being used as local rubbish dumps.

2. OBJECTIVES

- To establish the defining historic character of both the canal arm as a whole and specifically the Cefn Flight in order to input into future elements of the restoration.
- To determine the archaeological and cultural heritage assets within the area of the restoration.
- To establish a rolling programme of archaeological recording and monitoring to be carried out during the first phase of restoration works.
- To determine the extent, date, nature and state of preservation of any historic or archaeological deposits which may be present and previously unknown.
- To make an assessment of the relative significance of any archaeological deposits or historical features which are uncovered.
- To make a comprehensive record of the existing structures at a level commensurate with current best practice industry standards (IfA and CADW).
- To ensure that ground workings are monitored archaeologically and that an appropriate record of structures is made.
- To provide information on the historic development of the structures to compliment existing knowledge and further understanding as to the construction methodology and working water management during the canals heyday.
- To confirm the historic character of the individual structures and to provide an illustrated phase plan of the various phases of canal construction and usage.
- Provide input to assist engineering solutions to the modern presentation (restoration) of the Flight to ensure that the restored canal is sympathetic to the defining historic character of the canal system in general and specifically to the flight itself.



Illus 2
Site plan



Illus 3
Hachured site plan

3. METHOD

3.1 Topographic survey

The survey area originally included Locks 20–17 and the associated infrastructure, such as winding holes, balancing ponds and spill weirs but was expanded during the design process to include the immediate landscape around the lock system. The methodology followed the scheme set out in the Specific Works Methodology for the project, which was agreed by the project consultant Simon Griffin with CADW (Halcrow 2009) and was undertaken with the intention of adding to and complimenting existing historical engineering drawings whilst providing a detailed analytical record of Locks 20–17 and their infrastructure. It was broadly commensurate with Large Scale Survey (Levels 3 & 4) as maintained by the Royal Commission for Historic Monuments in England/Wales. The limits of the survey extended from the winding hole at the top of Lock 20 to the winding hole below Lock 17, including its spill weir to a lower balancing pond.

A detailed topographic survey of the area was undertaken using a Leica total station in combination with a Trimble R6 GPS system capable of sub-cm accuracy in order to relate the site survey to the Ordnance Survey grid and datum. The collected point data was transferred on site through TheoLT into an Auto CAD format, for presentation both in paper format within the report as well as digital data (dwg / dxf Format) on the accompanying DVD.

The results of the topographical survey have been presented in this report, in order to identify and locate features affected during the restoration works as well as define the extent of the historic landscape associated with the infrastructure of the lock system. The areas of the ponds and spill weirs were surveyed in order to minimise any impact that further development may have upon the sites general landscape.

3.2 Watching brief

An archaeological watching brief was maintained during the works within the site boundary. This comprised:

- Monitoring of the vegetation clearance conducted by the main contractor within the Locks and associated structures (slipways, spill-weirs, spillways, pounds, winding holes and balancing ponds) and making a photographic record of the structures and features exposed;
- Monitoring of engineering and refurbishment works on the locks and associated structures, making a photographic record of any areas of stone

or brickwork removed, temporarily or otherwise, from the area and recording any exposed soil horizons or hidden structures.

- Digital images with graduated metric scales were taken of the chamber walls prior to and during restoration in order to aid the program of consolidation. Both colour transparencies and black and white prints were also taken in order to complement the photographic record of the project and provide an archive of the work. All recording was undertaken on pro forma record sheets.

The watching brief was undertaken by a fully qualified archaeologist in accordance with IfA standards.

3.3 Structural recording

Originally, it was envisaged that the lock walls would be taken down and the locks tanked, with the photographs providing a base in order to reconstruct the lock chambers. This conservation method was later changed and a scheme of re-pointing and pumped grouting was conducted in order to secure the face stones to the core work. Once the locks, weirs and pounds were cleared of vegetation by the main contractors, the exposed structures were subject to archaeological building recording through the production of metric controlled photographs in order to record the existing fabric of the locks. A gazetteer of structural elements making up the locks and their associated infrastructure has been compiled and is given as Appendix 1.

3.4 The survey record

The archive of the survey is structured in several related parts. This report, and its associated plans, provides the primary high-level account of the archaeological works and their contribution to the interpretation of the flight. The appendices to this report contain a full inventory of the canal structures and features, providing the primary record of its state immediately prior to and immediately following the restoration works.

The structural inventory is organised as follows:

Appendix 1 (this report) contains descriptions of all structural elements (ponds, locks, culverts etc) grouped by lock pair. Each entry contains basic descriptive detail, dimensions and information on alterations such as modern repairs. This information allows the gazetteer to be used not only as a record of the historical structure, but as a tool for future monitoring of the canal's fabric and any further restoration initiatives.



The structure entry also acts as an index to the photographic record, stating which photographs relate to each structure. Gazetteer entries are numbered and referred to in the text as (Appendix 1.1; 1.2) etc; the gazetteer references appropriate photograph sequences in the main photographic register (Appendix 2).

Appendix 2 (this report) is the photographic registers. Appendix 2.1 contains file naming conventions for the digital photographic record. Appendix 2.2 is the register of digital photographs. Appendix 2.3 is the register of 35mm photographs (colour slide and black-and-white print).

Appendix 3 (enclosed on DVD) comprises the full digital photographic record. Photographs are organised by lock, with separate folders within each lock for each element of the lock; for photographs taken prior to and following cleaning; and for photographs suitable for photogrammetry.

4. RESULTS

8 A contour survey has been produced of the current restoration area (Illus 2); along with an interpretative hachure plan (Illus 3). As previously recognized the landscape surrounding the locks is a mixture of cut-and-fill, with the pound ponds being built into made ground.

The locks are constructed in a mixed style, mostly from local sandstone. A variety of different block sizes, dressing styles and coursings are used along this stretch of the canal, probably reflecting the acquisition of stone by different work groups from a large variety of different sources. No mouldings or dressed stone from older structures were observed within the canal fabric.

During the first phase of conservation works conducted on locks 20–17, key elements requiring archaeological monitoring were identified prior to the commencement of the project, particularly the assessment of the remains of the 'roundabouts' associated with the bottom gates of each pair of locks. Excavations of the roundabout areas (CFOL10-20-RN/RRW/RS) revealed that they may have once contained some contemporary stonework, but were mainly modern reconstructions, possibly associated with a phase of restoration in the 1970s.

Throughout the consolidation works areas of historic repairs to the lock chambers were identified, these consisted mainly of patches of inserted brick and have been highlighted in the accompanying structural gazetteer (for example, CFOL10-20-NWR-15; CFOL10-19-NW-26; CFOL10-18-SWC-21; CFOL10-17-NWR-2). It was also possible to identify minor features of the system, such as the beam sockets.

Continuous monitoring of the ground works allowed the opportunity to record the spill weir uncovered and excavated between locks 18 and 17 (Appendix 1.13). This feature had been backfilled and its entrance from the pound bricked up as a past safety measure. Examination of the associated finds gave an indication that this had been some time in the 1960'S. The spill weir was exposed for recording and reinstated using plastic piping and was then backfilled again. During the excavation of the spill weir, it was noted that the lower pond was edged in stone forming a small secondary pond as seen on the Great Western Railway map of Fourteen Locks (Illus 6).

5. DISCUSSION

The Crumlin Arm of the canal was required to surmount the Rogerstone Hill. Although the need to surmount gradients have been tackled through various different approaches such as bypassing them completely (contouring) or tunnelling through the obstacles the best-known method when canals are required to ascend or descend gradients is through locks and when the gradients are steep, a close group of locks are used such as a staircase or a flight of locks – this method can be seen on many other canals.

During the course of the works programme, many ideas have been suggested as to the significance and historic value of the flight. Many figures are given about the gradient of the complete flight and because of previous works, the flight of locks is considered to be in the top ten of the steepest vs. shortest distance a canal system climbs in the UK (Goff Barker. pers comm.).

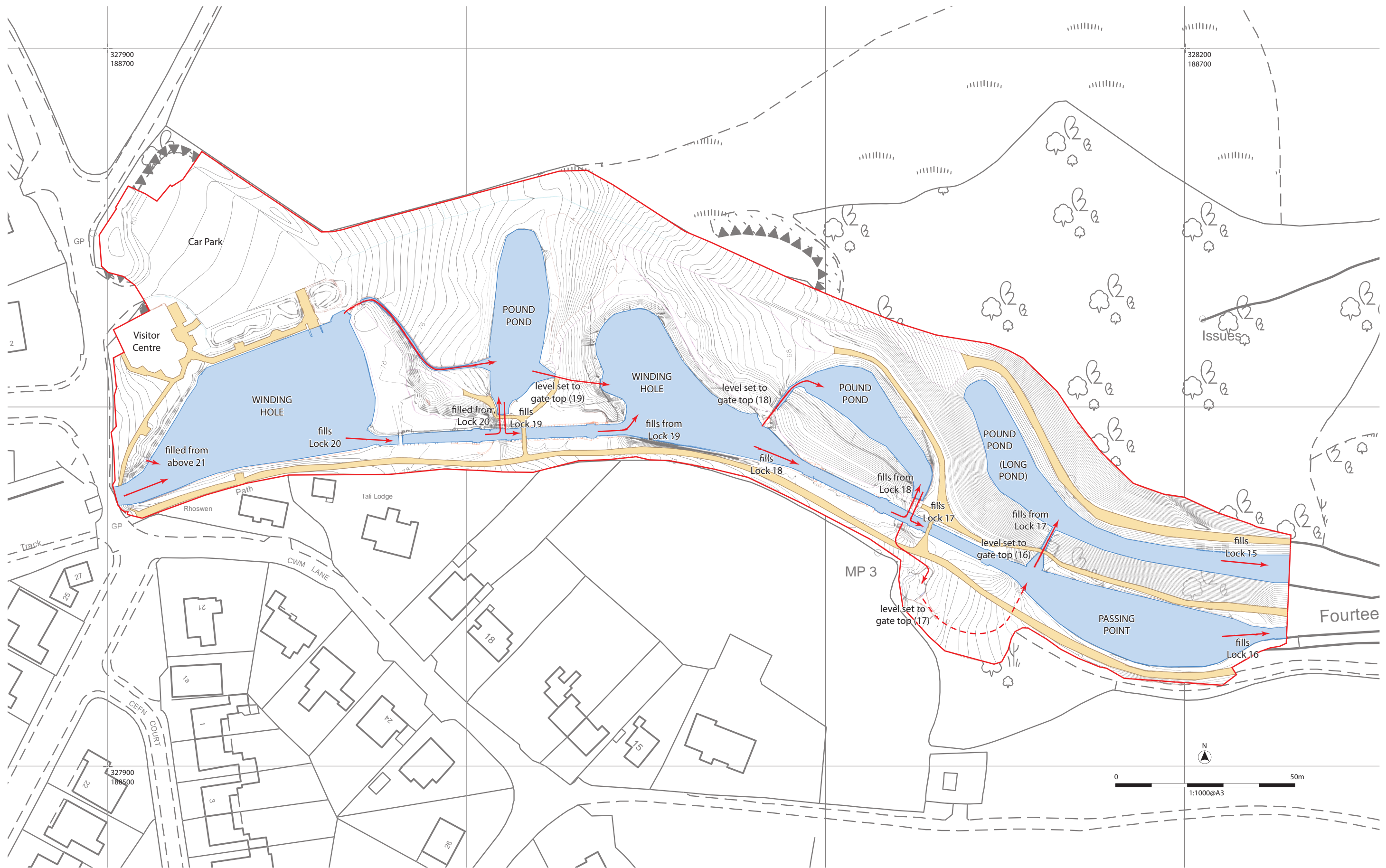
Taking such figures into consideration, when examining the Cefn flight, it is the unique features of the side ponds and winding holes in relation to spill weirs and pounds between locks that reveal the actual engineering secrets behind the Cefn Flight of Fourteen Locks.

Loosely, a flight of locks is simply a series of locks in close-enough proximity to be considered as a single group. A 'Flight' is not synonymous with 'Staircase' as a set of locks is only considered a staircase if successive lock chambers share a gate (*i.e.* do not have separate top and bottom gates with a pound between them). The Locks on the Cefn flight are operated in a conventional manner and do not share common gates but are paired and separated through the inclusion of a small pound. Hence they fall into the classification of pound locks. The flow of water through the system is shown on Illus 4.

5.1 The operation of the locks

All pound locks have three elements:

1. A watertight chamber connecting the upper and



Illus 4
Water flow diagram

lower canal, the position of the chamber is fixed, but its water level can vary.

2. A gate at each end of the chamber (the Cefn gates consist of a single top gate and a two half pointing gates at the lower end). The gate is opened to allow a boat to enter or leave the chamber; when closed, the gates are watertight.
3. A set of lock gear to empty or fill the chamber as required. This is usually flat paddle lifted by manually winding a rack and pinion mechanism that allows water to drain into or out of the chamber.

The principle of operating such a lock is simple. For instance, if a boat travelling downstream finds the lock already full of water:

- The entrance gates are opened and the boat sails in.
- The entrance gates are closed.
- A paddle is opened; this lowers the boat by draining water from the chamber.
- The exit gates are opened and the boat sails out.

If the lock were empty, the boat would have had to wait five to ten minutes whilst the lock was filled. For a boat travelling upstream, the process was reversed.

Staircase locks share a common gate, the disadvantage to this (overcome by Dadford's design) is that the locks have to be wide enough to allow the chambers to contain two boats, otherwise there is a potential bottle-neck at the top and bottom of the system.

5.2 Dadford's design

Thomas Dadford took the principle of pound lock and paired them together to form the Cefn flight. By pairing the locks and including a small pound between the pairs (Appendix 1.4, 1.11) he was able to feed excess water into side ponds, the system was further refined through the inclusion of spill weirs feeding lower side ponds, thus minimising the overall water loss within the flight.

When first examining Thomas Dadford's design of the Cefn flight, it may at first glance appear over-complicated and hence somewhat confusing, but what he has achieved is simplicity itself. He both achieved the free flow of boats in both directions (and consequently reduced the amount of water loss in the system) and minimised the construction costs involved.

By maintaining the relatively narrow nature of the locks (approximately 3.1m wide at the top) the build time was

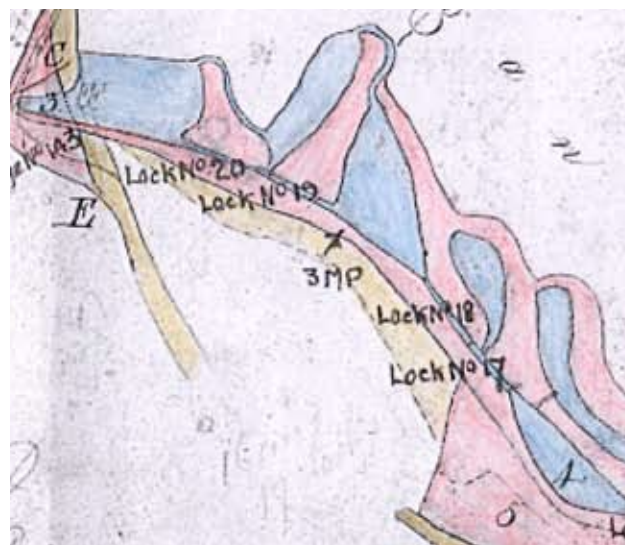
decreased, the materials required were reduced and hence the costs were kept down. The grouping of the locks together between passing points or winding holes (large side ponds) gave boats free movement either ascending or descending the flight, only waiting when individual pairs of locks were already in use. In the alternative 'staircase' arrangement, traffic had to wait at the foot or top of the staircase whilst the boat using it cleared the entire sequence of locks.

A boat descending the flight would approach a lock in its favor, the water would then be emptied and fed into the side pond, allowing the boat to proceed through the pound to the lower lock, when the water would be again emptied and fed into to the lower winding hole. The winding holes (Appendix 1.1, 1.8) are large enough for boats to pass but can be ultimately considered as large side ponds between paired locks.

In the case of Lock 17, the winding hole below this lock is undersized compared to those above locks 18 and 20, and appears more like a widened section of canal than a large pond (Appendix 1.15). It may be that space for a large winding hole below was not available, and therefore the required head of water for the operation of Lock 16 was stored via the overflow spill weir from the pound of locks 17 & 18 feeding into a secondary storage pond (Appendix 1.13).

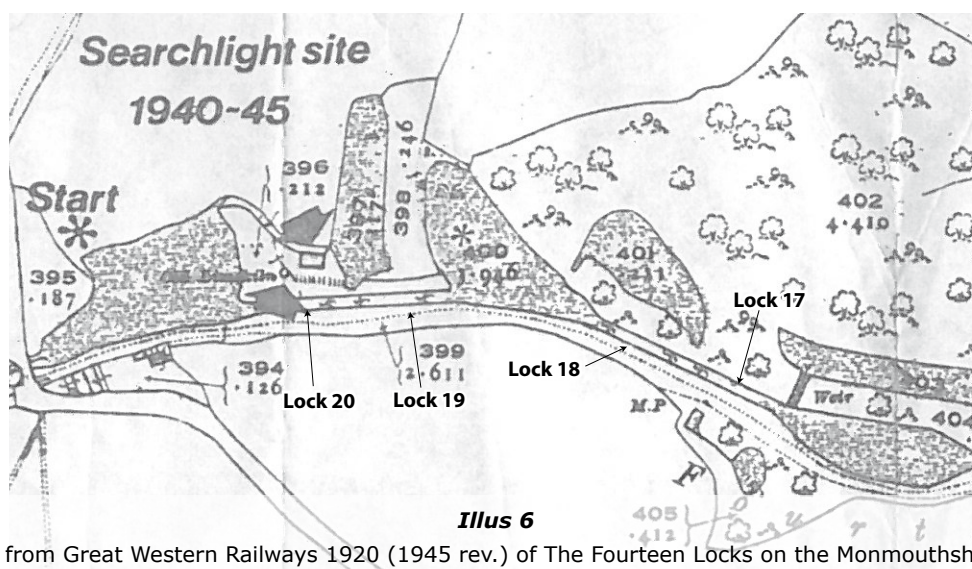
A boat ascending the paired locks would then enter the chamber, take the water from the side pond, previously deposited by the boat descending the gradient, and use this to fill the chamber. The series of side ponds are therefore designed to control the movement or loss of water down the flight. The level of the spill weirs in each side pond were set to just below the height of the top gate of its relevant lock, helping to maintain a consistent amount of water in each side pond.

11



Illus 5

Extract from 'Dd Davies' Plan in the year 1797 of Cefn Locks



Extract from Great Western Railways 1920 (1945 rev.) of The Fourteen Locks on the Monmouthshire Canal

12

The canal was constructed to make money for its patrons and in order to achieve this then the passage of commerce from A-B in the quickest time must be the controlling factor behind the design. Thomas Dadford through his adoption of the system employed on the Cefn flight achieved a system that avoided the bottlenecks associated with staircase systems and hence allowed boats to surmount the Rogerstone hill with the minimum of amount of delay.

The earliest map of the locks, the David Davies construction Plan of 1797 (No. 9 from Dd Davies' Plan in the year 1797 (Illus 5) shows how impressive the achievement was.

The main structural elements, such as the ponds and spill weirs remain in much the same form on the Great Western Railways map (Great Western Railways OHAS.1920; Illus 6) and also on the current survey (Illus 1-4). However there are a few notable discrepancies when the maps and the current survey are compared.

The 1797 map shows a spill or overflow channel from the north of the balancing pond for Lock 19 which links to the lock 19/18 winding hole. This feature is not evident on the Great Western Railways map nor on the survey carried out by Headland Archaeology. The spill weir evident on the lower east of this pond to the winding hole on the Great Western Railways map and the current survey (Appendix 1.9) is not apparent on the Davies plan. It may be that the Davies plan showed the intended construction plan of the locks and the top spill was rejected in favour of adding the lower spill as the landscape favoured a spill in this position.

Another feature not shown on the Davies plan is the culverted spill weir (Appendix 1.9) running from the winding hole between locks 19 and 18 to the balancing pond feeding the pond between locks 18 and 17. This spill weir can be seen on the 1920 map and the current

survey. The reason for the exclusion of this features on Davies' plan could simply be that it was added during or after construction, possibly to compensate for high volumes of water passing through the locks.

The overflow spill from the locks 18/17 pound to below Lock 17 uncovered during the remediation works (Appendix 1.13) is again not illustrated by Davies but appears with a small secondary pond on the Great Western Railways map. Brickwork relating to this secondary pond was observed during the 2010 works. If this feature was added to the system during or after construction it may indicate that it was a response to poor water management in this part of the system, possibly caused by the undersized winding hole below Lock 17.

6. CONCLUSION

When considering future works within the area of the Cefn Flight of Locks the archaeological and cultural heritage assets must be considered not only as the solid structures but also the landscape in which the flight is set, as this has been manipulated in order to create the natural looking side ponds and passing points that are located within the area of the restoration. The gazetteer of structural elements produced with this report (Appendix 1) is a logical starting point for the development of any future conservation plan designed to provide an ongoing strategy for the care and continued use of the system.

The defining historic character of the flight derives from its operation as an integrated system within a man-made landscape, yet the successful design of a canal is only as good as its individual elements. Dadford achieved a system that worked by combining all of these elements into one smooth-flowing system. Therefore, the design principles, the landscape and the hard fabric of the canal must be taken into consideration when any future elements are restored.

The extent and state of preservation of the canal fabric in the current restoration area was good, considering that it was originally a working structure that has undergone various phases of restoration throughout its history. Any archaeological deposits encountered during future restoration programs should be recorded in order to compliment the historic information, but the monitoring works undertaken to date suggest that they are likely to be limited in extent and are not likely to pose a major constraint to the renewed use of the flight.

The recording standards and methodologies that are observed when dealing with historic structures are probably most relevant to the stewardship of the canal as a scheduled monument. The methods employed in conserving such historic buildings should also be applied to the industrial heritage that remains. Ultimately the structure was designed and built to achieve commercial ends and it could easily be considered that the best preservation that the system as a whole could be given is to reinstate it into some semblance of working order. The neglect of the structure over the previous fifty years has been the greatest source of decay for the monument.

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7.2 Cartography

- 1797, Dd Davies, *No. 9*
- 1920 (1945 rev.), Great Western Railways, OHIAS, *The Fourteen Locks on the Monmouthshire Canal*.



8. APPENDICES

8.1 Appendix 1 – Gazetteer of structural elements

1.1



| | |
|-----------------|--|
| Group: | Lock 20-19 |
| Structure: | Lock 20 Winding Hole |
| Element: | Pond |
| Description: | Pond allowing canal traffic to manoeuvre between locks. Feeds lock 20 and pond for lock 19. |
| Dimensions: | 80m x 37m |
| Fabric: | Stone surrounding wall and appears to have a brick lined base |
| Detail: | Modern mooring point on north and slipway on north. |
| Repairs: | Sloping brick lined bottom, modern stone edging and slipway |
| Related photos: | CFOL10-20-WH |

1.2

14



| | |
|-----------------|--|
| Group: | Lock 20-19 |
| Structure: | Lock 20 Winding Hole |
| Element: | Spill weir to Lock 19 balancing pond |
| Description: | The spill weir which allows excess water to flow from lock 20/21 winding hole to lock 19 pond. |
| Dimensions: | Avg – 23.0m x 3.10m |
| Fabric: | Constructed from a mix of red and yellow local sandstone. Stone edges and base |
| Detail: | Spill weir, repaired with modern fabric; feeds stone culvert. Vertical edge to a semi flat stone lined base. The east end splays out as it enters lock 19 pond |
| Repairs: | Some evidence of 20th century brick repairs and modern re-pointing |
| Related photos: | CFOL10-20-SP |

1.3



- Group: Lock 20–19 pair
- Structure: Lock 20
- Element: Lock
- Description: Ashlar sandstone constructed lock chamber with stone lined concave base. Two sluices (Paddles), sluice gate, and gate recesses .Mitre block (previous replacement). Lower pound at east end leading to lock 19. There was evidence for two roundabouts associated with the lower gates, although these appear to be associated with a 20th century phase of consolidation works on the locks.
- Dimensions: Avg – 21.1 x 3.10m
- Fabric: Local sandstones with the addition of 20th century / modern red and white ceramic bricks
- Detail: This chamber is fed from the winding hole above. It is constructed from local red and yellow sandstone. The two sluices (paddles) were blocked by modern blocking .No paddle mechanisms survived. Use of mixed red brick patching throughout the chamber and in particular in the gate recesses. A mitre block was present however, this was a later replacement as they are often replaced with the gates. A number of the coping stones have been removed or broken. The base is a sandstone lined concave floor. The roundabouts (tread stones) were also constructed from sandstone. The roundabout on the south wall (CFOL10-20-RS) survived in better condition than on the north wall (CFOL10-20-RN/RRW), although examination of the fabric revealed modern concrete in the makeup suggesting a later embellishment or reconstruction (suggested date indicates works conducted in the 1970s). A possible beam socket was observed on the coping of the north wall to the east of the lock gates (CFOL10-20-NW-17, 21, 22).
- Repairs: The use of mixed red and white ceramic brick may have been part of the original construction but likely, it is an indication of repairs in weaker areas where the face stones have pulled away from the core work. The sluices (paddles) have been blocked and the mitre block may be a replacement. There was evidence of more modern repairs on the south roundabout. A retaining wall for the north roundabout is evident and may have been constructed in the mid 20th from salvaged stones. There were also some modern wing wall remains.
- Related photos: CFOL10-20-FL; CFOL10-20-G; CFOL10-20-GEN; CFOL10-20-HW; CFOL10-20-NW; CFOL10-20-NWEX; CFOL10-20-NWR; CFOL10-20-RN; CFOL10-20-RRW; CFOL10-20-RS; CFOL10-20-SW; CFOL10-20-SWR



1.4



Group: Lock 20–19 pair

Structure: Pound between Lock 20-19

Element: Pound

Description: The area between the locks that holds water at a constant level. Copingstones missing.

Fabric: Local red and yellow sandstone

Detail: Semi-circular arched culvert leading to lock 19 ponds. Sluices (paddles) for Lock 19 located here. Has evidence for opposing blocked beam sockets on coping that may have been used to provide access across the open locks.

Repairs: Ares of the chamber showed signs of re-pointing

Related photos: CFOL10-20-FL-10,21; CFOL10-20-NWR-76 -> 85

1.5



Group: Lock 20–19 pair

Structure: Lock 19 balancing pond

Element: Pond

Description: Balancing pond for locks 20-19. Fed by spill weir from winding hole 21/20. Also serves as an overflow for lock 20/19 pound. A sandstone spill weir and culvert at the eastern end. Sandstone retaining wall from culvert at south end, along the access path. Clay lined base (assumed as water still present in system)

Dimensions: 52m x 16m Depth unknown

Fabric: Red and yellow sandstone constructed retaining wall and spill weir. Clay lining in base.

Detail: The pond has a retaining wall at the south under which the culvert connecting to lock 20/19 pound runs

Repairs: Some re-pointing of the stones

Related photos: CFOL10-19-BP

16

1.6



Group: Lock 20–19 pair

Structure: Lock 19 balancing pond

Element: Spill weir to winding hole

Description: Funnelled sandstone spill weir from Lock 19 pond. Has a coursed slanting base with T shaped laid stone in the centre (decorative or functional –T for Thomas?) leading to small aperture culvert to Lock 19/18 winding hole. This has an open face arched culvert facing east. Runs west to east.

Dimensions: Avg- 51.0m x 15.0m

Fabric: Sandstone

Detail: Vertical edges to a sloping base leading to the culvert. Stone lip at the north controls the volume of water entering the spill weir that is then funnelled into the culvert.

Repairs: Some re-pointing of the original sandstone

Related photos: CFOL10-19-SP

1.7



| | |
|-----------------|--|
| Group: | Lock 20–19 pair |
| Structure: | Lock 19 |
| Element: | Lock |
| Description: | Stone lock chamber with stone lined concave base. Two sluices, sluice gate, and gate recesses. Mitre blocks (modern) <i>in situ</i> . Leads out to lock 19/18 winding hole. There is surviving evidence for two roundabouts. |
| Dimensions: | avg – 21.10m x 3.10m |
| Fabric: | Local sandstones with the addition of 20th century / modern red and white ceramic bricks |
| Detail: | Lock 19 is fed by water from lock 20 and its associated side pond. It is constructed mainly from a mix of local red and yellow sandstone blocks of varying sizes. The two sluices (within the pound for 20/19) were completely blocked. No original paddle mechanisms remain when the blocking was removed. The reinforcing iron plates in front of the sluice gate remain <i>in situ</i> . The sluice gate also had some timbers <i>in situ</i> (modern). Large Fe bolts protruded from the gate recesses indicating the location of previous gate fixings. The mitre block was present however on the chamber floor (CFOL10-19-EXMIB), although likely to be a replacement and not original. Some of the coping stones were dressed however many of the coping stones were removed or broken on both sides of the lock. In some areas, red brick has been used as a replacement and later repair. The base is again a stone lined concave floor. No evidence for original roundabouts remained. There were some possible masons marks on the north wall of the lock (CFOL10-19-MM) which may indicate reused stone from another structure. |
| Repairs: | The use of red and white ceramic brick may have been in the original construction but likely it is as a result of latter repairs in weaker areas. The sluices have been blocked and the existing mitre block may be a replacement. |
| Related photos: | CFOL10-19-EXMIB; CFOL10-19-F; CFOL10-19-FL; CFOL10-19-G; CFOL10-19-GEN; CFOL10-19-HW; CFOL10-19-MM; CFOL10-19-NW; CFOL10-19-NW-PRE; CFOL10-19-NWR; CFOL10-19-RMIB; CFOL10-19-SW; CFOL10-19-SW-PRE; CFOL10-19-SWR |



1.8



| | |
|-----------------|--|
| Group: | Lock 18–17 pair |
| Structure: | Lock 18 winding hole |
| Element: | Pond |
| Description: | Pond allowing canal boats to manoeuvre between locks 19 and 18 Feeds lock 18 and balancing pond for lock 17. |
| Dimensions: | 72m x 40m |
| Fabric: | Sandstone walls, circular spill weir and culvert |
| Detail: | Open-faced arched culvert from balancing pond 19 is visible on the west. The retaining wall on the south is in poor condition. Some of the coping stones are missing and there is evidence of repair using red ceramic brick. There are few visible signs of a wall on the north side of the pond. A circular spill weir set, into a repaired wall at the northeast feeds water through a sloping stone lined culvert into the balancing pond for lock 17. This weir has had extensive modern repairs. A wall runs from this weir joining it to Lock 18. |
| Repairs: | Modern re-pointing and ceramic red brick |
| Related photos: | CFOL10-18-WH; CFOL10-18-WHNNW; CFOL10-18-WHSW |

1.9



| | |
|-----------------|--|
| Group: | Lock 18–17 |
| Structure: | Lock 18 Winding Hole |
| Element: | Spill weir to Lock 17 balancing pond |
| Description: | The spill weir which allows excess water to flow from lock 19/18 winding hole to lock 17 pond. |
| Dimensions: | Avg – 10.0m x 3.10m |
| Fabric: | Constructed from a mix of red and yellow local sandstone. Stone edges and base. Metal grill over inlet from winding hole. |
| Detail: | Spill weir leading from lock 18 winding hole, inlet is circular in plan dropping vertically to a short enclosed culvert. This leads to an open spillway discharging into lock 17 balancing pond. |
| Repairs: | Some evidence of modern re-pointing. |
| Related photos: | CFOL10-18-SP |

1.10



- Group: Lock 18–17 pair
- Structure: Lock 18
- Element: Lock
- Description: Stone lock chamber with stone lined concave base. Two sluices, sluice gate, and gate recesses. Mitre block (with modern repairs) *in situ*. Evidence of roundabout grips but no solid structure suggesting cosmetic re-construction, possibly associated with latter works. Leads pound between locks 18/17.
- Dimensions: Avg – 18.0 x 3.10m
- Fabric: Local yellow and red sandstones with the addition of 20th century / modern red and white ceramic bricks
- Detail: This chamber is fed by water from 19/18 winding hole. It is constructed mainly from local red and yellow sandstone. The two sluices were blocked. No paddle mechanisms survive. The reinforcing steel plates in front of the sluice gate remain *in situ*. Again as previously seen, there are areas of brick patching throughout the chamber, in particular in the gate recesses indicating latter repairs. A mitre block was present however; this may be a later replacement. A number of the copingstones have been removed or broken on both side of the lock in some areas. The base is a stone lined concave floor. The stones are predominantly sandstone again with the addition of red brick patches. The partial remains for the north roundabout were revealed with some grips still *in situ* (later removed). Some modern (1970s) graffiti appears on the upper section of the north wall (CFOL10-18-GF).
- Repairs: Red brick repairs, evident on the wall sections particularly in the gate recesses. Traces of 20th century re-pointing still remaining on the chamber walls.
- Related photos: CFOL10-18-FL-NW; CFOL10-18-FL-SW; CFOL10-18-GEN; CFOL10-18-GF; CFOL10-18-NWNR; CFOL10-18-NWR; CFOL10-18-SWC; CFOL10-18-SWNR; CFOL10-18-SWR.

19

1.11



- Group: Lock 18–17 pair
- Structure: Pound between Lock 18–17
- Element: Pound
- Description: The area between the locks that holds water at a constant level. Copingstones missing. Distinctive feature include an arched culvert in north wall and a circular culvert on south wall.
- Fabric: Local sandstone
- Detail: Semi-circular arched culvert leading to lock 17 balancing pond. This has been partially blocked by re-used stones. Only 60% of the face of the circular culvert remains. The culvert is stone lined with a mixture of sandstone and red brick. It leads to the overflow spill weir feeding lock 17/16 winding hole.
- Repairs: The blocking of the semicircular culvert appears to have re-used other stones from the lock including coping stones and was probably an attempt to make the area safe.
- Related photos: CFOL10-18-BP- (3); CFOL10-18-CULVERT- (5); CFOL10-18-CULVERT-(15); CFOL10-18-FL-NW-70-87; CFOL10-18-FL-SW-78-81; CFOL10-18-NWNR-18-20; CFOL10-18-SWNR-3



1.12

Group: Lock 18–17 pair
Structure: Lock 18 balancing pond
Element: Pond
Description: Balancing pond that is fed by a circular spill weir and culvert from Lock 19/18 winding hole. An arched culvert at the south leads to the pond between locks 18 and 17.
Dimensions: Approx 48m x 13m
Fabric: Local sandstones
Detail: The area had dense vegetation that obscured much of the pond however; the remains of a lower sandstone retaining wall are visible beneath the vegetation on the northeast edge. The base was most likely clay lined
Repairs: No visible evidence
Related photos: CFOL10-18-BP

1.13

Group: Lock 18–17 pair
Structure: Lock 17–18 pound overflow spill weir
Element: spill weir and holding ponds
Description: A circular culvert from the pond between locks 18/17 feeds this spill weir. The weir is of a red and yellow sandstone construction. It is a "u" shaped enclosure with a small pond and attached funnelled spill weir leading to a steep declined open channel. This feeds a walled oval holding pond that is then converted to feed Lock 17/16 winding hole.
Fabric: Local mixed Sandstone blocks.
Detail: The u shaped enclosure is a sandstone construction and opens out to a small holding pond, which is walled on the east side. This leads to a stone spill weir that is the same as those at locks 19 and locks 16/15 balancing ponds which funnel water to a steeply declined stone channel. This channel leads to a partially walled oval pond that is then channelled beneath the towpath to feed locks 17/16 balancing pond.
Repairs: No evidence of later repairs and the walls were in a poor state of repair. Very poor state of preservation on the walls
Related photos: CFOL10-18-CULVERT; CFOL10-17-EXOFSP; CFOL10-17-OFSP; CFOL10-OFSP-PRE; CFOL10-17-PP-6

1.14



Group: Lock 18–17 pair
 Structure: Lock 17
 Element: Lock
 Description: Stone lock chamber with stone lined concave base. Two sluices, sluice gate, and gate recesses. Mitre block (modern) still *in situ*. Leads out to lock 16 balancing pond. No evidence indicating the existence of the roundabouts was visible within the area.
 Dimensions: Avg 19.00 x 3.01m
 Fabric: Local sandstones with the addition of 20th century / modern red and white ceramic bricks
 Detail: This chamber is fed by lock 18 and connecting side pond. It is constructed mainly from local red and yellow sandstone. The two sluices, as in the other chambers were blocked with modern rubbish. No paddle gear survived. As in all the chambers the use of brick as a method of repair was evident throughout the chamber. During the clearance a mitre block was observed. The base is of the same design as the other chambers. There are signs of 1970s graffiti on the upper chamber walls.
 Repairs: The use of red and white ceramic brick may have been part of the original construction but likely, it is later repairs in weaker areas. The sluices have been blocked and the mitre block may also be a replacement. The 1970s graffiti may suggest a program of repairs at this time as evidenced by the large amount of red brick within this chamber.
 Related photos: CFOL10-17-CW; CFOL10-17-EXW ; CFOL10-17-F; CFOL10-17-HW; CFOL10-17-GEN; CFOL10-17-GF; CFOL10-17-GR; CFOL10-17-NWNR; CFOL10-17-NWR; CFOL10-17-SWNR; CFOL10-17-SWR.

1.15



Group: Lock 18–17 pair
 Structure: Lock 17 winding hole
 Element: Pond
 Description: This is the winding hole for locks 17/16. It is more constrained than the winding holes for locks 21/20 and 19/18, being more a widened section of canal than a large pond. This may explain the presence of the overflow spill-weir and holding pond leading from the pound of locks 18/17 – probably necessary in order to store sufficient water to operate lock 16.
 Dimensions: Approx 73 x 30m
 Fabric: Sandstone and clay
 Detail: The pond is bunded half-way along its length, preventing water from entering the lower lock system. Feeds lock 16/15 balancing pond via a spill weir.
 Repairs: No evidence although this may be due to the overgrown nature of the pond.
 Related photos: CFOL10-17-WH-(0-6)



1.16



Group: Lock 18-17 pair
Structure: Lock 16 balancing pond
Element: Spill weir to Lock 16 balancing pond
Description: Funnelled sandstone spill weir from Lock 17/16 winding hole to Lock 16 balancing pond. Has a coursed sloping base, narrowing towards its base.
Fabric: Sandstone
Detail: Vertical edges to a sloping base leading to the culvert. Stone lip at the south controls the volume of water entering the spill weir.
Repairs: Not evident
Related photos: CFOL10-17-SPLP
CFOL10-17-WH-2

8.2 Appendix 2 – Site photos

Photo codes

| Example name: | CFOL10 | 20 | F | (1) |
|---------------|-----------------------|-------------|--------------|-------------------|
| Description: | Headland project code | Lock number | Feature code | Photograph number |

LOCK 17

| | |
|-----------------|---|
| CFOL10-17-G | Lock 17,1971 graffiti |
| CFOL10-17-EXW | Lock 17, exterior wall |
| CFOL10-17-NRNL | Lock 17, non-rectified, north wall |
| CFOL10-17-NRSW | Lock 17, non-rectified, south wall |
| CFOL10-17-RG | Lock 17, rectified gates |
| CFOL10-17-RNL | Lock 17, rectified north wall |
| CFOL10-17-RSW | Lock 17, rectified south wall |
| CFOL10-17-F | Lock 17, Finished |
| CFOL10-17-CW | Lock 17, Corework |
| CFOL10-17-EXOSW | Lock 17, Excavation Overflow spill weir |
| CFOL10-17-GR | Lock 17,Grips on roundabout |
| CFOL10-17-OFSW | Lock 17,Overflow spill weir |
| CFOL10-17-PCTSW | Lock 17, Pound culvert to spill weir |
| CFOL10-17-PP | Lock 17, Passing Point |
| CFOL10-17-SWLP | Lock 17, Spill weir to long pond |
| CFOL10-17-TOW | Lock 17, Top of walls |

LOCK 18

| | |
|-------------------|--|
| CFOL10-18-MIX | Lock 18, mixed photos |
| CFOL10-18-CULVERT | Lock 18, 17–18 pound culvert |
| CFOL10-18-CLEANED | Lock 18, during / after cleaning |
| CFOL10-18-NW | Lock 18, North wall (non rectified) |
| CFOL10-18-FL-SFW | Lock 18, floor & lower wall, south facing wall |
| CFOL10-18- G | Lock 18, Gates |
| CFOL10-18-F | Lock 18, Finished |
| CFOL10-18-NWNR | Lock 18, North wall non rectified |
| CFOL10-18-P | Lock 18, Pond |
| CFOL10-18-SW | Lock 18, South wall (non rectified) |
| CFOL10-18-SWR | Lock 18, South Wall rectified |
| CFOL10-19TO18-WH | Lock 19–18, Winding hole |

Lock 19

| | |
|--------------|-------------------------|
| CFOL10-19-BP | Lock 19, Balancing pond |
| CFOL10-19-F | Lock 19, Finished |



| | |
|------------------|----------------------------------|
| CFOL10-19-MM | Lock 19, Masons marks |
| CFOL10-19-R | Lock 19, Rectified |
| CFOL10-19-FL | Lock 19, Floor surface |
| CFOL10-19-CLSW | Lock 19, Cleaned, south wall |
| CFOL10-19-G | Lock 19, Gates |
| CFOL10-19-EXMIB | Lock 19, Existing mitre block |
| CFOL10-19-RMIB | Lock 19, Replaced mitre block |
| CFOL10-19-NR | Lock 19, Non rectified |
| CFOL10-19-SWtoWH | Lock 19, Spill weir |
| CFOL10-19-WHNW | Lock 19, Winding hole north wall |
| CFOL10-19-WHSW | Lock 19, Winding hole south wall |

LOCK 20

| | |
|-------------------|------------------------------------|
| CFOL10-20-CLEANED | Lock 20, After cleaning |
| CFOL10-20- F | Lock 20, Floor |
| CFOL10-20-G | Lock 20, Gates |
| CFOL10-20-GEN | Lock 20, General photos |
| CFOL10-20-RRW | Lock 20, Roundabout retaining wall |
| CFOL10-20-LK | Lock 20, Lime Kiln |
| CFOL10-20-NR | Lock 20, Not rectified |
| CFOL10-20-NWEX | Lock 20, North wall exterior |
| CFOL10-20-REC | Lock 20, Rectified |
| CFOL10-20-RN | Lock 20, Roundabout north |
| CFOL10-20-RS | Lock 20, Roundabout south |
| CFOL10-20-SW | Lock 20, Spill weir |
| CFOL10-TP | Lock 20, Top pond |

24

Digital photo register

| Area | Photo ID | Photo no. | Facing | Description |
|-------------|------------------|------------------|---------------|---------------------------------------|
| Lock 17 | CFOL10-17-CW | 0 | W | General views of core work |
| Lock 17 | CFOL10-17-CW | 1 | W | General views of core work |
| Lock 17 | CFOL10-17-CW | 2 | W | General views of core work |
| Lock 17 | CFOL10-17-CW | 3 | W | General views of core work |
| Lock 17 | CFOL10-17-CW | 4 | NW | General views of core work |
| Lock 17 | CFOL10-17-CW | 5 | N | General views of core work |
| Lock 17 | CFOL10-17-CW | 6 | N | General views of core work |
| Lock 17 | CFOL10-17-CW | 7 | NW | General views of core work |
| Lock 17 | CFOL10-17-CW | 8 | W | General views of core work |
| Lock 17 | CFOL10-17-CW | 9 | W | General views of core work |
| Lock 17 | CFOL10-17-EXOFSW | 0 | SE | Spill weir feed from lock 18/17 pound |
| Lock 17 | CFOL10-17-EXOFSW | 1 | S | Spill weir feed from lock 18/17 pound |

| Area | Photo ID | Photo no. | Facing | Description |
|-------------|------------------|------------------|---------------|---|
| Lock 17 | CFOL10-17-EXOWSW | 2 | SW | Spill weir feed from lock 18/17 pound |
| Lock 17 | CFOL10-17-EXOWSW | 3 | W | Spill weir feed from lock 18/17 pound |
| Lock 17 | CFOL10-17-EXOWSW | 4 | W | Spill weir feed from lock 18/17 pound |
| Lock 17 | CFOL10-17-EXOWSW | 5 | W | Spill weir feed from lock 18/17 pound |
| Lock 17 | CFOL10-17-EXOWSW | 6 | SE | Spill weir feed from lock 18/17 pound |
| Lock 17 | CFOL10-17-EXOWSW | 7 | S | Spill weir feed from lock 18/17 pound |
| Lock 17 | CFOL10-17-EXOWSW | 8 | W | Spill weir feed from lock 18/17 pound |
| Lock 17 | CFOL10-17-EXOWSW | 9 | W | Spill weir feed from lock 18/17 pound |
| Lock 17 | CFOL10-17-EXOWSW | 10 | W | Spill weir feed from lock 18/17 pound |
| Lock 17 | CFOL10-17-EXOWSW | 11 | W | Spill weir feed from lock 18/17 pound |
| Lock 17 | CFOL10-17-EXOWSW | 12 | NW | Holding pond |
| Lock 17 | CFOL10-17-EXOWSW | 13 | NW | Holding pond |
| Lock 17 | CFOL10-17-EXOWSW | 14 | N | Holding pond |
| Lock 17 | CFOL10-17-EXOWSW | 15 | NE | Holding pond |
| Lock 17 | CFOL10-17-EXOWSW | 16 | E | overflow spill weir to possible stone-edged pond |
| Lock 17 | CFOL10-17-EXOWSW | 17 | E | overflow spill weir to possible stone-edged pond |
| Lock 17 | CFOL10-17-EXOWSW | 18 | E | overflow spill weir to possible stone-edged pond |
| Lock 17 | CFOL10-17-EXOWSW | 19 | SE | overflow spill weir to possible stone-edged pond |
| Lock 17 | CFOL10-17-EXOWSW | 20 | SE | overflow spill weir to possible stone-edged pond |
| Lock 17 | CFOL10-17-EXW | 0 | N | External wall excavations |
| Lock 17 | CFOL10-17-EXW | 1 | E | External wall excavations |
| Lock 17 | CFOL10-17-EXW | 2 | N | External wall excavations |
| Lock 17 | CFOL10-17-EXW | 3 | N | External wall excavations |
| Lock 17 | CFOL10-17-EXW | 4 | W | External wall excavations |
| Lock 17 | CFOL10-17-EXW | 5 | W | External wall excavations |
| Lock 17 | CFOL10-17-EXW | 6 | W | External wall excavations |
| Lock 17 | CFOL10-17-EXW | 7 | N | External wall excavations |
| Lock 17 | CFOL10-17-EXW | 8 | N | External wall excavations |
| Lock 17 | CFOL10-17-F | 0 | N | Lock finished |
| Lock 17 | CFOL10-17-GEN | 1 | E | General shot |
| Lock 17 | CFOL10-17-GF | 1 | S | Details of Graffiti |
| Lock 17 | CFOL10-17-GF | 2 | S | Details of Graffiti |
| Lock 17 | CFOL10-17-GF | 3 | S | Details of Graffiti |
| Lock 17 | CFOL10-17-GR | 1 | N | Old grips |
| Lock 17 | CFOL10-17-GR | 2 | N | Old grips |
| Lock 17 | CFOL10-17-GR | 3 | N | Old grips |
| Lock 17 | CFOL10-17-HW | 0 | W | Head wall |
| Lock 17 | CFOL10-17-HW | 1 | W | Head wall |
| Lock 17 | CFOL10-17-NWNR | 1-32 | N | Photographic traverses of north wall of lock after cleaning, from west to east, top to bottom |
| Lock 17 | CFOL10-17-NWR | 0-49 | N | Photographic traverses of north wall of lock after cleaning, from west to east, top to bottom with scales |



| Area | Photo ID | Photo no. | Facing | Description |
|-------------|--------------------|------------------|---------------|---|
| Lock 17 | CFOL10-17-OFSP | 0 | S | overflow spill weir feed from pound - after restoration |
| Lock 17 | CFOL10-17-OFSP | 1 | N | overflow spill weir feed from pound - after restoration |
| Lock 17 | CFOL10-17-OFSP | 2 | N | overflow spill weir to possible stone-edged pond - after restoration |
| Lock 17 | CFOL10-17-OFSP | 3 | SE | overflow spill weir to possible stone-edged pond - after restoration |
| Lock 17 | CFOL10-17-OFSP | 4 | W | overflow spill weir feed to winding hole - after restoration |
| Lock 17 | CFOL10-17-OFSP | 5 | NE | overflow spill weir feed to winding hole - after restoration |
| Lock 17 | CFOL10-17-OFSP | 6 | se | overflow spill weir - general |
| Lock 17 | CFOL10-17-OFSP | 7 | W | overflow spill weir feed from pound - after restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 1 | W | overflow spill weir feed from pound - after restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 2 | - | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 3 | SE | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 4 | N | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 5 | - | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 6 | W | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 7 | NW | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 8 | - | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 9 | E | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 10 | E | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 11 | - | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 12 | W | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 13 | E | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 14 | E | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 15 | E | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 16 | W | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 17 | - | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 18 | - | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 19 | NW | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 20 | W | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-OFSP-PRE | 21 | W | Overflow spill weir - pre-restoration |
| Lock 17 | CFOL10-17-SPLP | 1 | N | Spill wier from Lock 17 winding hole to Lock 16/15 balancing pond |
| Lock 17 | CFOL10-17-SPLP | 2 | S | Spill wier from Lock 17 winding hole to Lock 16/15 balancing pond |
| Lock 17 | CFOL10-17-SPLP | 3 | S | Spill wier from Lock 17 winding hole to Lock 16/15 balancing pond |
| Lock 17 | CFOL10-17-SWNR | 1-31 | S | Photographic traverse of south wall of lock, west to east, top to bottom |
| Lock 17 | CFOL10-17-SWR | 0-48 | S | Photographic traverse of south wall of lock, east to west, top to bottom, with scales |
| Lock 17 | CFOL10-17-WH | 0 | E | Passing point in Lock 17 winding hole |
| Lock 17 | CFOL10-17-WH | 1 | E | Passing point in Lock 17 winding hole |
| Lock 17 | CFOL10-17-WH | 2 | N | Passing point in Lock 17 winding hole |
| Lock 17 | CFOL10-17-WH | 3 | W | Passing point in Lock 17 winding hole |
| Lock 17 | CFOL10-17-WH | 4 | E | Passing point in Lock 17 winding hole |
| Lock 17 | CFOL10-17-WH | 5 | S | Passing point in Lock 17 winding hole showing feed from overflow spill weir |

| Area | Photo ID | Photo no. | Facing | Description |
|-------------|-------------------|------------------|---------------|--|
| Lock 17 | CFOL10-17-WH | 6 | S | Passing point in Lock 17 winding hole showing feed from overflow spill weir |
| Lock 18 | CFOL10-18-BP | 0 | N | Lock 18/17 balancing pond |
| Lock 18 | CFOL10-18-BP | 1 | W | Lock 18/17 balancing pond |
| Lock 18 | CFOL10-18-BP | 2 | S | Lock 18/17 balancing pond showing feed from pond |
| Lock 18 | CFOL10-18-BP | 3 | S | Lock 18/17 balancing pond showing feed from pond |
| Lock 18 | CFOL10-18-BP | 4 | N | Lock 18/17 balancing pond |
| Lock 18 | CFOL10-18-BP | 5 | E | Lock 18/17 balancing pond |
| Lock 18 | CFOL10-18-CULVERT | 1 | S | Culvert from 18/17 pound to overflow spill weir |
| Lock 18 | CFOL10-18-CULVERT | 2 | S | Interior of culvert |
| Lock 18 | CFOL10-18-CULVERT | 3 | S | Interior of culvert |
| Lock 18 | CFOL10-18-CULVERT | 4 | S | Interior of culvert |
| Lock 18 | CFOL10-18-CULVERT | 5 | E | Culvert from 18/17 pound to overflow spill weir |
| Lock 18 | CFOL10-18-CULVERT | 6 | NE | Culvert from 18/17 pound to overflow spill weir |
| Lock 18 | CFOL10-18-CULVERT | 7 | SW | Culvert from 18/17 pound to overflow spill weir |
| Lock 18 | CFOL10-18-CULVERT | 8 | - | Culvert from 18/17 pound to overflow spill weir |
| Lock 18 | CFOL10-18-CULVERT | 9 | N | Culvert from 18/17 pound to overflow spill weir |
| Lock 18 | CFOL10-18-CULVERT | 10 | - | Culvert from 18/17 pound to overflow spill weir |
| Lock 18 | CFOL10-18-CULVERT | 11 | N | Culvert from 18/17 pound to overflow spill weir |
| Lock 18 | CFOL10-18-CULVERT | 12 | S | Culvert from 18/17 pound to overflow spill weir |
| Lock 18 | CFOL10-18-CULVERT | 13 | N | Culvert from 18/17 pound to overflow spill weir |
| Lock 18 | CFOL10-18-CULVERT | 14 | W | Culvert from 18/17 pound to overflow spill weir |
| Lock 18 | CFOL10-18-CULVERT | 15 | NW | Culvert from 18/17 pound to overflow spill weir - work in progress |
| Lock 18 | CFOL10-18-CULVERT | 16 | NW | Culvert from 18/17 pound to overflow spill weir - work in progress |
| Lock 18 | CFOL10-18-CULVERT | 17 | E | Culvert from 18/17 pound to overflow spill weir - installation of new pipe |
| Lock 18 | CFOL10-18-CULVERT | 18 | N | Culvert from 18/17 pound to overflow spill weir - installation of new pipe |
| Lock 18 | CFOL10-18-CULVERT | 19 | - | Culvert from 18/17 pound to overflow spill weir - installation of new pipe |
| Lock 18 | CFOL10-18-CULVERT | 20 | NW | Culvert from 18/17 pound to overflow spill weir - installation of new pipe |
| Lock 18 | CFOL10-18-CULVERT | 21 | NW | Culvert from 18/17 pound to overflow spill weir - installation of new pipe |
| Lock 18 | CFOL10-18-CULVERT | 22 | NW | Culvert from 18/17 pound to overflow spill weir - installation of new pipe |
| Lock 18 | CFOL10-18-F-0 | 1530 | W | New grips |
| Lock 18 | CFOL10-18-FL-NW | 0-87 | N | Photographic traverse of floor and lower wall of lock, west to east, with scales |
| Lock 18 | CFOL10-18-FL-SW | 1-82 | S | Photographic traverse of floor and lower wall of lock, west to east, with scales |
| Lock 18 | CFOL10-18-GEN | 1 | W | Pre-restoration shot from head wall of lock 18 |
| Lock 18 | CFOL10-18-GEN | 2 | W | Pre-restoration shot from head wall of lock 18 |
| Lock 18 | CFOL10-18-GF | 1 | - | Shot of carved graffiti |
| Lock 18 | CFOL10-18-HW | 1 | W | Gate and head wall of lock 18 |
| Lock 18 | CFOL10-18-HW | 2 | W | New lock 18 grips |
| Lock 18 | CFOL10-18-HW | 3 | W | Head wall of lock 18 |
| Lock 18 | CFOL10-18-NWNR | 0-20 | N | Photographic traverse of north wall, west to east, top to bottom |
| Lock 18 | CFOL10-18-NWR | 0-33 | N | Photographic traverse of north wall, west to east, top to bottom with scales |
| Lock 18 | CFOL10-18-SP | 0 | N | Top of spill weir from Lock 18/19 winding hole to lock 18/17 balancing pond |



| Area | Photo ID | Photo no. | Facing | Description |
|-------------|------------------|------------------|---------------|--|
| Lock 18 | CFOL10-18-SP | 1 | SE | Culvert from Lock 18/19 winding hole to lock 18/17 balancing pond |
| Lock 18 | CFOL10-18-SP | 2 | SE | Culvert from Lock 18/19 winding hole to lock 18/17 balancing pond |
| Lock 18 | CFOL10-18-SP | 3 | SE | Culvert from Lock 18/19 winding hole to lock 18/17 balancing pond |
| Lock 18 | CFOL10-18-SWC | 0-27 | S | Photographic traverse of south wall of lock during/after cleaning works, west to east, top to bottom |
| Lock 18 | CFOL10-18-SWNR | 0-17 | S | Photographic traverse of south wall of lock before cleaning works, west to east, top to bottom |
| Lock 18 | CFOL10-18-SWR | 1-40 | S | Photographic traverse of south wall of lock, west to east, top to bottom, with scales |
| Lock 18 | CFOL10-18-WH | 1 | E | General shot of winding hole between locks 18 and 19 |
| Lock 18 | CFOL10-18-WH | 2 | E | General shot of winding hole between locks 18 and 19 |
| Lock 18 | CFOL10-18-WH | 3 | W | General shot of winding hole between locks 18 and 19 |
| Lock 18 | CFOL10-18-WH | 4 | N | General shot of winding hole between locks 18 and 19 showing circular spill weir |
| Lock 18 | CFOL10-18-WH | 5 | N | General shot of winding hole between locks 18 and 19 |
| Lock 18 | CFOL10-18-WH | 6 | NE | General shot of winding hole between locks 18 and 19 |
| Lock 18 | CFOL10-18-WH | 7 | NW | General shot of winding hole between locks 18 and 19 |
| Lock 18 | CFOL10-18-WH | 8 | N | General shot of winding hole between locks 18 and 19 |
| Lock 18 | CFOL10-18-WHNW | 0-5 | N | Photographic traverse of north wall of winding hole, west to east |
| Lock 18 | CFOL10-18-WHSW | 0-31 | S | Photographic traverse of south wall of winding hole, west to east |
| Lock 19 | CFOL10-19-BP | 0 | S | Lock 19 balancing pond |
| Lock 19 | CFOL10-19-BP | 1 | N | Lock 19 balancing pond |
| Lock 19 | CFOL10-19-EXMIB | 0 | E | Existing mitre block in situ |
| Lock 19 | CFOL10-19-EXMIB | 1 | E | Existing mitre block in situ |
| Lock 19 | CFOL10-19-EXMIB | 2 | E | Existing mitre block in situ |
| Lock 19 | CFOL10-19-EXMIB | 3 | E | Existing mitre block in situ |
| Lock 19 | CFOL10-19-EXMIB | 4 | E | Existing mitre block in situ |
| Lock 19 | CFOL10-19-EXMIB | 5 | E | Existing mitre block in situ |
| Lock 19 | CFOL10-19-EXMIB | 6 | E | Existing mitre block in situ |
| Lock 19 | CFOL10-19-EXMIB | 7 | E | Existing mitre block in situ |
| Lock 19 | CFOL10-19-EXMIB | 8 | S | Existing mitre block in situ showing joining with old gate timbers |
| Lock 19 | CFOL10-19-F | 1 | W | Lock 19 finished |
| Lock 19 | CFOL10-19-FL | 12-26 | N | Photographic traverse of floor of lock 19, west to east |
| Lock 19 | CFOL10-19-FL | 0-11 | S | Photographic traverse of floor of lock 19, west to east |
| Lock 19 | CFOL10-19-G | 1-4 | E | Installation of new gates on lock 19 |
| Lock 19 | CFOL10-19-GEN | 0-10 | E | General working shots, lock 19 |
| Lock 19 | CFOL10-19-HW | 1 | W | Head wall, lock 19 pre-restoration |
| Lock 19 | CFOL10-19-HW | 2 | W | Head wall, lock 19, work in progress |
| Lock 19 | CFOL10-19-MM | 0-5 | - | Mason marks seen in lock 19 |
| Lock 19 | CFOL10-19-NW | 0-26 | N | Photographic traverse of north wall, west to east, top to bottom |
| Lock 19 | CFOL10-19-NW-PRE | 0-83 | N | Photographic traverse of north wall, west to east, top to bottom, pre-cleaning |
| Lock 19 | CFOL10-19-NWR | 0-82 | N | Photographic traverse of north wall, west to east, top to bottom, with scales |
| Lock 19 | CFOL10-19-SP | 0 | E | Spill weir from lock 20/19 balancing pond to lock 19/18 winding hole |

| Area | Photo ID | Photo no. | Facing | Description |
|-------------|------------------|------------------|---------------|--|
| Lock 19 | CFOL10-19-SP | 1 | S | Spill weir lead into culvert |
| Lock 19 | CFOL10-19-SP | 2 | W | Culvert outflow into winding hole - pre-restoration |
| Lock 19 | CFOL10-19-SP | 3 | W | Culvert outflow into winding hole - post-restoration |
| Lock 19 | CFOL10-19-SW-PRE | 0-59 | S | Photographic traverse of south wall, west to east, top to bottom, pre-cleaning |
| Lock 19 | CFOL10-19-SWR | 0-138 | S | Photographic traverse of south wall, west to east, top to bottom, with scales |
| Lock 19 | CFOL10-20-RMIB | 0 | E | Close-up of replacement mitre block |
| Lock 19 | CFOL10-20-RMIB | 1 | E | General shot of replacement mitre block |
| Lock 20 | CFOL10-20-FL | 11-22 | N | Photographic traverse of floor of lock, west to east |
| Lock 20 | CFOL10-20-FL | 0-10 | S | Photographic traverse of floor of lock, west to east |
| Lock 20 | CFOL10-20-G | 0-18 | - | Installation of new gates on lock 20 |
| Lock 20 | CFOL10-20-GEN | 5-10 | W | General shots, interior of lock 20 |
| Lock 20 | CFOL10-20-GEN | 11-21 | - | General shots, removal of rubble dam between lock 20 and winding hole |
| Lock 20 | CFOL10-20-GEN | 0-4 | - | General shots, work in progress lock 20 |
| Lock 20 | CFOL10-20-HW | 9 | W | Lock 20 head wall pre-restoration |
| Lock 20 | CFOL10-20-HW | 10 | W | Lock 20 head wall post-restoration |
| Lock 20 | CFOL10-20-HW | 0-8 | W | Photographic traverse of lock 20 head wall, bottom to top, south to north |
| Lock 20 | CFOL10-20-LK | 0-2 | N | General shots, 'lime kiln' |
| Lock 20 | CFOL10-20-NW | 0-22 | N | Photographic traverse of top of north wall of lock 20, west to east |
| Lock 20 | CFOL10-20-NWEX | 0 | S | Excavations on exterior of north wall of lock 20 |
| Lock 20 | CFOL10-20-NWEX | 1 | S | Excavations on exterior of north wall of lock 20 |
| Lock 20 | CFOL10-20-NWEX | 2 | S | Excavations on exterior of north wall of lock 20 |
| Lock 20 | CFOL10-20-NWEX | 3 | S | Excavations on exterior of north wall of lock 20 |
| Lock 20 | CFOL10-20-NWEX | 4 | W | Excavations on exterior of north wall of lock 20 |
| Lock 20 | CFOL10-20-NWEX | 5 | W | Excavations on exterior of north wall of lock 20 |
| Lock 20 | CFOL10-20-NWR | 0-85 | N | Photographic traverse of north wall of lock 20, bottom to top, east to west |
| Lock 20 | CFOL10-20-RN | 0 | - | General shot roundabout north excavation |
| Lock 20 | CFOL10-20-RN | 1 | - | General shot roundabout north excavation |
| Lock 20 | CFOL10-20-RN | 2 | S | Excavation of north roundabout |
| Lock 20 | CFOL10-20-RN | 3 | NE | Excavation of north roundabout |
| Lock 20 | CFOL10-20-RN | 4 | E | Excavation of north roundabout |
| Lock 20 | CFOL10-20-RN | 5 | N | Excavation of north roundabout |
| Lock 20 | CFOL10-20-RN | 6 | N | Excavation of north roundabout |
| Lock 20 | CFOL10-20-RN | 7 | N | Excavation of north roundabout |
| Lock 20 | CFOL10-20-RN | 8 | S | Excavation of north roundabout |
| Lock 20 | CFOL10-20-RN | 9 | S | Excavation of north roundabout |
| Lock 20 | CFOL10-20-RN | 10 | S | Excavation of north roundabout |
| Lock 20 | CFOL10-20-RN | 11 | W | Excavation of north roundabout |
| Lock 20 | CFOL10-20-RN | 12 | W | Excavation of north roundabout |
| Lock 20 | CFOL10-20-RRW | 0 | S | North roundabout retaining wall |
| Lock 20 | CFOL10-20-RRW | 1 | S | North roundabout retaining wall |
| Lock 20 | CFOL10-20-RRW | 2 | S | North roundabout retaining wall |



| Area | Photo ID | Photo no. | Facing | Description |
|-------------|-----------------|------------------|---------------|---|
| Lock 20 | CFOL10-20-RRW | 3 | SW | North roundabout retaining wall |
| Lock 20 | CFOL10-20-RRW | 4 | W | North roundabout retaining wall |
| Lock 20 | CFOL10-20-RRW | 5 | W | North roundabout retaining wall |
| Lock 20 | CFOL10-20-RRW | 6 | W | North roundabout retaining wall |
| Lock 20 | CFOL10-20-RRW | 7 | W | North roundabout retaining wall |
| Lock 20 | CFOL10-20-RS | 0 | W | South roundabout retaining wall |
| Lock 20 | CFOL10-20-RS | 1 | NW | South roundabout retaining wall |
| Lock 20 | CFOL10-20-RS | 2 | NW | South roundabout retaining wall |
| Lock 20 | CFOL10-20-RS | 3 | NW | South roundabout retaining wall |
| Lock 20 | CFOL10-20-RS | 4 | N | South roundabout retaining wall |
| Lock 20 | CFOL10-20-RS | 5 | N | South roundabout retaining wall |
| Lock 20 | CFOL10-20-RS | 6 | N | South roundabout retaining wall |
| Lock 20 | CFOL10-20-RS | 7 | E | Plan of south roundabout |
| Lock 20 | CFOL10-20-RS | 8 | W | South roundabout retaining wall foundations |
| Lock 20 | CFOL10-20-RS | 9 | NW | South roundabout retaining wall foundations |
| Lock 20 | CFOL10-20-RS | 10 | N | South roundabout retaining wall foundations |
| Lock 20 | CFOL10-20-RS | 11 | N | South roundabout retaining wall foundations |
| Lock 20 | CFOL10-20-RS | 12 | - | Detail of south roundabout foundations |
| Lock 20 | CFOL10-20-RS | 13 | - | Detail of south roundabout foundations |
| Lock 20 | CFOL10-20-RS | 14 | - | Detail of south roundabout foundations |
| Lock 20 | CFOL10-20-RS | 15 | N | General shot south roundabout retaining wall |
| Lock 20 | CFOL10-20-SP | 0 | W | Top of spill weir from Lock 20 winding hole to lock 20/19 balancing pond |
| Lock 20 | CFOL10-20-SP | 1 | N | Curving spillway from Lock 20 winding hole |
| Lock 20 | CFOL10-20-SP | 2 | SE | Spillway leading to lock 20/19 balancing pond |
| Lock 20 | CFOL10-20-SP | 3 | SE | Spillway leading to lock 20/19 balancing pond |
| Lock 20 | CFOL10-20-SP | 4 | E | Outflow into lock 20/19 balancing pond |
| Lock 20 | CFOL10-20-SW | 1-24 | S | Photographic traverse of south wall of lock 20, west to east, top to bottom |
| Lock 20 | CFOL10-20-SWR | 0-69 | S | Photographic traverse of south wall of lock 20, east to west, bottom to top |
| Lock 20 | CFOL10-20-WH | 0 | SW | Lock 20 winding hole general shots |
| Lock 20 | CFOL10-20-WH | 1 | W | Lock 20 winding hole general shots |
| Lock 20 | CFOL10-20-WH | 2 | NW | Lock 20 winding hole general shots |
| Lock 20 | CFOL10-20-WH | 3 | NE | Lock 20 winding hole general shots |
| Lock 20 | CFOL10-20-WH | 4 | N | Lock 20 winding hole general shots |
| Lock 20 | CFOL10-20-WH | 5 | NE | Lock 20 winding hole general shots |
| Lock 20 | CFOL10-20-WH | 6 | NE | Lock 20 winding hole general shots |
| Lock 20 | CFOL10-20-WH | 7 | S | Lock 20 winding hole general shots |
| Lock 20 | CFOL10-20-WH | 8 | SE | Lock 20 winding hole general shots |
| Lock 20 | CFOL10-20-WH | 9 | E | Lock 20 winding hole general shots |
| Lock 20 | CFOL10-20-WH | 10 | NE | Lock 20 winding hole general shots |
| Lock 20 | CFOL10-20-WH | 11 | NE | Lock 20 winding hole general shots |

35mm photo register

| Photo no. | Film no. | Photo ID | Area | Facing | Description |
|----------------------------|-----------------|-----------------|-------------|---------------|---------------------------------------|
| Monotone print film | | | | | |
| 1722 | 440 | 69300005 | Lock 17 | E | General view after works |
| 1723 | 440 | 69300006 | Lock 17 | W | Spill weir during works |
| 1724 | 440 | 69300007 | Lock 17 | N | Spill weir during works |
| 1725 | 440 | 69300008 | Lock 17 | S | Spill weir during works |
| 1726 | 440 | 69300009 | Lock 17 | S | Spill weir during works |
| 1727 | 440 | 69300010 | Lock 17 | S | Spill weir during works |
| 1728 | 440 | 69300011 | Lock 17 | S | Spill weir during works |
| 1729 | 440 | 69300012 | Lock 17 | S | Spill weir during works |
| 1730 | 440 | 69300013 | Lock 17 | N | North side canal wall after works |
| 1731 | 440 | 69300014 | Lock 17 | N | North side canal wall after works |
| 1732 | 440 | 69300015 | Lock 17 | N | North side canal wall after works |
| 1733 | 440 | 69300016 | Lock 17 | E | General view of works |
| 1734 | 440 | 69300017 | - | - | General view of works |
| 1735 | 440 | 69300018 | - | - | General view of works |
| 1736 | 440 | 69300019 | - | - | General view of works |
| 1737 | 440 | 69300020 | - | - | General view of works |
| 1738 | 440 | 69300021 | - | - | General view of works |
| 1739 | 440 | 69300022 | - | - | General view of works |
| 1740 | 440 | 69300023 | - | - | General view of works |
| 1741 | 444 | 69340001 | - | - | ID shot |
| 1742 | 444 | 69340002 | Lock 17 | - | Spill weir entrance |
| 1743 | 444 | 69340003 | Lock 17 | - | Spill weir , during works |
| 1744 | 444 | 69340004 | Lock 17 | - | Spill weir , during works |
| 1745 | 444 | 69340005 | Lock 17 | - | Spill weir , during works |
| 1746 | 444 | 69340006 | Lock 17 | - | Spill weir , during works |
| 1747 | 444 | 69340007 | Lock 17 | - | Spill weir , during works |
| 1748 | 444 | 69340008 | Lock 17 | - | Spill weir , during works |
| 1749 | 407 | 69230022 | Lock 20 | - | General view of works |
| 1750 | 407 | 69230023 | Lock 18 | S | General works, during restoration |
| 1751 | 407 | 69230024 | Lock 18 | S | General works, during restoration |
| 1752 | 407 | 69230025 | Lock 18 | S | General works, during restoration |
| 1753 | 407 | 69230026 | Lock 19 | S | General works |
| 1754 | 407 | 69230027 | Lock 19 | N | General view during works, spill weir |
| 1755 | 407 | 69230028 | Lock 19 | N | General view during works, spill weir |
| 1756 | 407 | 69230029 | Lock 19 | E | General view during works |
| 1757 | 407 | 69230030 | Lock 19 | E | General view during works |
| 1758 | 407 | 69230031 | Lock 19 | E | General view during works |
| 1759 | 407 | 69230032 | Lock 19 | E | General view during works |



| Photo no. | Film no. | Photo ID | Area | Facing | Description |
|--------------------------|-----------------|-----------------|-------------|---------------|---------------------------------------|
| 1760 | 407 | 69230033 | Lock 20 | W | General view during works |
| 1761 | 407 | 69230034 | Lock 20 | W | General view during works |
| 1762 | 407 | 69230035 | Lock 20 | W | General view during works |
| Colour slide film | | | | | |
| 1763 | 427 | 68950024 | Lock 20 | - | General view of works |
| 1764 | 427 | 68950025 | Lock 18 | S | General works, during restoration |
| 1765 | 427 | 68950026 | Lock 18 | S | General works, during restoration |
| 1766 | 427 | 68950027 | Lock 18 | S | General works, during restoration |
| 1767 | 427 | 68950028 | Lock 19 | S | General works |
| 1768 | 427 | 68950029 | Lock 19 | N | General view during works, spill weir |
| 1769 | 427 | 68950030 | Lock 19 | N | General view during works, spill weir |
| 1770 | 427 | 68950031 | Lock 19 | E | General view during works |
| 1771 | 427 | 68950032 | Lock 19 | E | General view during works |
| 1772 | 427 | 68950033 | Lock 19 | E | General view during works |
| 1773 | 427 | 68950034 | Lock 19 | E | General view during works |
| 1774 | 427 | 68950035 | Lock 20 | W | General view during works |
| 1775 | 427 | 68950036 | Lock 20 | W | General view during works |
| 1775 | 445 | 69340005 | Lock 17 | E | General view after works |
| 1776 | 445 | 69340006 | Lock 17 | W | Spill weir during works |
| 1777 | 445 | 69340007 | Lock 17 | N | Spill weir during works |
| 1778 | 445 | 69340008 | Lock 17 | S | Spill weir during works |
| 1779 | 445 | 69340009 | Lock 17 | S | Spill weir during works |
| 1780 | 445 | 69340010 | Lock 17 | S | Spill weir during works |
| 1781 | 445 | 69340011 | Lock 17 | S | Spill weir during works |
| 1782 | 445 | 69340012 | Lock 17 | S | Spill weir during works |
| 1783 | 445 | 69340013 | Lock 17 | N | North side canal wall after works |
| 1784 | 445 | 69340014 | Lock 17 | N | North side canal wall after works |
| 1785 | 445 | 69340015 | Lock 17 | N | North side canal wall after works |
| 1786 | 445 | 69340016 | Lock 17 | E | General view of works |
| 1787 | 445 | 69340017 | - | - | General view of works |
| 1788 | 445 | 69340018 | - | - | General view of works |
| 1789 | 445 | 69340019 | - | - | General view of works |
| 1790 | 445 | 69340020 | - | - | General view of works |
| 1791 | 445 | 69340021 | - | - | General view of works |
| 1792 | 445 | 69340022 | - | - | General view of works |
| 1793 | 445 | 69340023 | - | - | General view of works |
| 1794 | 445 | 69340024 | Lock 17 | E | General view after works |
| 1795 | 441 | 68940001 | - | - | ID shot |
| 1796 | 441 | 68940002 | Lock 17 | - | Spill weir entrance |
| 1797 | 441 | 68940003 | Lock 17 | - | Spill weir , during works |
| 1798 | 441 | 68940004 | Lock 17 | - | Spill weir , during works |

| Photo no. | Film no. | Photo ID | Area | Facing | Description |
|------------------|-----------------|-----------------|-------------|---------------|---------------------------|
| 1799 | 441 | 68940005 | Lock 17 | - | Spill weir , during works |
| 1800 | 441 | 68940006 | Lock 17 | - | Spill weir , during works |
| 1801 | 441 | 68940007 | Lock 17 | - | Spill weir , during works |
| 1802 | 441 | 68940008 | Lock 17 | - | Spill weir , during works |



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