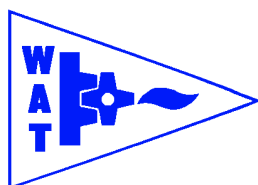


Health and Safety Plan for the Restoration of the Wendover Arm of the Grand Union Canal



SITE: Channel restoration; Phase 2
CANAL: Grand Union, Wendover Arm
REVISION: 13
DATE: Jan 2019
PREPARED BY: [REDACTED]



Restoration **Hub** Resource

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1 Introduction

1.1 Project Organisations

1.1.1 Wendover Arm Trust

The Wendover Arm Trust was formed in February 1989 as a voluntary body, set up to promote the restoration of the Wendover Arm of the Grand Union Canal. It is a company limited by Guarantee and without share capital, and a registered charity.

WAT is run by a dedicated team of volunteers and is a membership organisation.

The aims of the Trust are:

- To maintain and improve the waterway for the use and benefit of all.
- To promote the fullest use of the waterway by all forms of waterborne traffic and for all forms of local amenity, tourist and recreational, and water-related activities for the benefit of the public.
- To promote and educate the public in the history, use and associated wildlife of canals and inland waterways generally, and of the Arm in particular.
- To restore, reconstruct, preserve, and maintain canals and inland waterways and works and auxiliary works and buildings generally, provided that there is a net benefit to the public.

The Trust is run by a Council of Trustee Directors, who meet monthly. See “About & Governance” section of WAT website www.wendoverarmtrust.co.uk.

1.1.2 Canal and River Trust (CRT)

There is no local or national government subsidy and although the Canal and River Trust owns the canal, it is only permitted by legal constraints to carry out essential maintenance to keep the towpath clear and to ensure the supply of water from Wendover reaches the Tring summit at Bulbourne Junction.

1.1.3 The Inland Waterways Association

The Inland Waterways Association (IWA) was founded in 1946 and is a non-profit distributing company limited by guarantee, registered in England no 612245, and registered as a charity no 212342. The IWA advocates the conservation, use, maintenance, restoration and development of the inland waterways for public benefit.

IWA members’ interests include boating, towpath walking, industrial archaeology, nature conservation and many other activities associated with the inland waterways. The local IWA Chiltern branch provides a representative to the WAT Council.

Waterway Recovery Group (WRG) is the national co-ordinating body for voluntary labour on the inland waterways of Britain and is part of the Inland Waterways Association (IWA).

To achieve its aims, and that of the IWA, WRG (and its regional groups) work with regional and local canal societies to run weekend working parties and week long work camps (Canal Camps) every year, helping to restore derelict canals in Britain.

1.2 Purpose of This Document

This document has several purposes. It aims to:

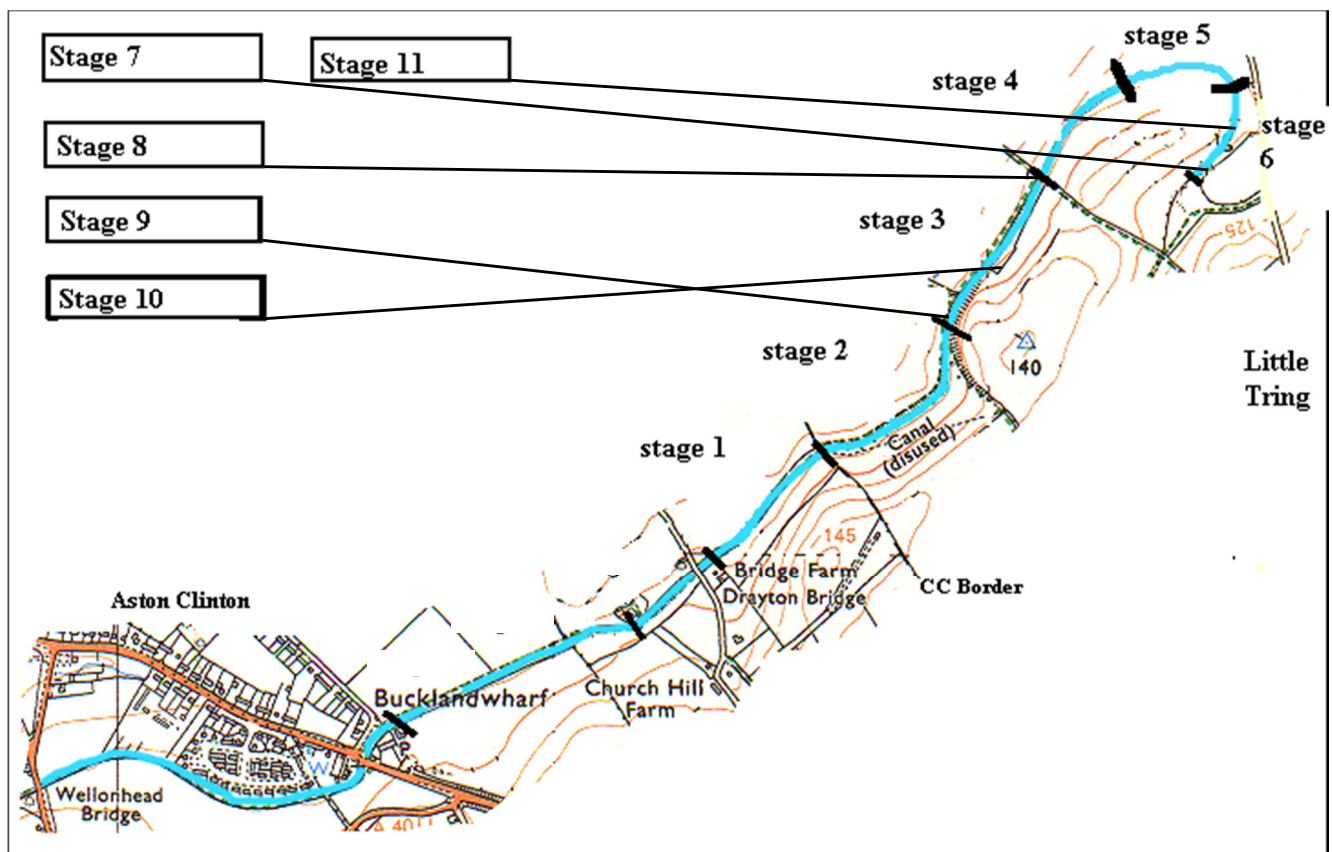
- Outline the project and the organisations involved.
- Outline the general principles and practices that will be adopted throughout delivery.
- Define the roles identified in the Construction Design and Management (CDM) Regulations 2015, the responsibilities of each party involved in the project and identify the role holders.

- Identify the significant site specific hazards against which safeguards need to be developed in order to safely deliver the project work.
- Define the Site Layout
- Outline the procedure to be followed in the event of an emergency and provide contact details for local health practices local to site.
- Define the breakdown of the work to be delivered by this project.
- Indicate where the proposed method statement(s) and initial risk assessment(s) for the planned works may be found.
- Act as a tool to support work party / canal camp leadership teams when read in conjunction with the IWA Practical Restoration Handbook and HSG150.

1.3 Site Description and Details

The project is the completion of Phase 2 of the restoration of the Wendover Arm from Little Tring to the winding hole (inclusive) between the A41 crossing and old London Road in Aston Clinton.

The stages of phase 2 are shown in the plan below;



Stage 1, Manhole east of Drayton Beauchamp bridge No 5 to county council's boundary, the first of six stages of relining, 321m long and includes 50m reinforced concrete towpath wall. **Complete.**

Stage 2, Bucks CC and Herts CC boundary to 87m west of footbridge 4a, the second of six stages of relining, 350m long and includes a 50m reinforced concrete towpath wall. **Complete.**

Stage 3, Footbridge 4a to Whitehouses (former pump station), the third of six stages of relining, 350m long.

Stage 4, Whitehouses to 164m past bridge 4, the fourth of six stages of relining, 350m long and includes a 50m reinforced concrete towpath wall. **Concrete wall complete.**

Stage 5, From 164m past bridge 4 to a point near the bridge narrows at the car track, the fifth of six stages of relining, 350m long.

Stage 6, From a point near the bridge narrows to the winding hole at the end of Phase 1 at Little Tring, the sixth stage of relining, 337m long.

Stage 7, Construction of reinforced wall from the end of Phase 1 to the car track entrance, 237m long.

Stage 8, The timber footbridge close to the former site of bridge 4. **Complete.**

Stage 9, The timber footbridge on the Herts County Council footpath that crosses the canal, bridge 4a. **Complete.**

Stage 10, Provision of sluice / weir at Whitehouses. **Complete.**

Stage 11, Construction of the bridge narrows at the car track.

Stage 12, Removal of temporary bunds and sump.

Stage 13, Extension of the existing winding hole to accommodate full length boats.

Programme

The sequence of the restoration will follow the stages 1 to 7 above followed by stages 11 to 13.

The work is being carried out by volunteers and a time scale has not been established. The timing of the restoration works is subject to funding from outside bodies, subject to a bidding process, so a fixed programme has not been prepared.

2 Health & Safety

The Wendover Arm Trust is a voluntary organisation and takes the health and safety of its volunteers very seriously, as do all the partners and associated organizations supporting the restoration of the Wendover Arm Canal.

The main objective is to avoid any accident or injury to any person associated with the restoration of the Wendover Arm whilst working on or visiting the restoration site or environs. There is also a need to protect and maintain the safety of members of the public at all times who may be in the vicinity or passing the restoration site.

WAT conforms with current and the continuous stream of new legislation regarding Health and Safety at Work affecting WAT's operations and provides instructions on how to carry out the various construction works that have to conform to the requirements and specifications of the Canal and River Trust.

The WAT volunteers have been granted self supervisory status by Canal and River Trust and this vote of confidence on our operations means that all our volunteers and visiting groups must be diligent at all times in maintaining a safe working environment and must observe all rules and regulations at all times.

WAT and all subcontractors and partners, will work to the standards outlined below and as described in the IWA Practical Restoration Handbook (PRH), as well as the Health and Safety Guidance 150 (HSG 150). If for any reason the text contained in this plan appears to contradict the text in either the PRH, or HSG 150, then the contradiction can be brought to the attention of the author and the text revised accordingly.

2.1 Health and Safety Statement and Policy

The responsibility for the health and safety of organisers, volunteers, visitors, members of the public etc. at the restoration sites of the Wendover Arm Trust rests with the Council of the Wendover Arm Trust.

The Council, however, relies on the assistance of all those associated with the organisation and running of WAT activities to ensure that an effective framework for health and safety is in place.

The Council will take all steps within its power to meet its responsibilities under all current and future health and safety legislation and regulations relating to its activities

WAT is committed to protecting the health and safety, so far as is reasonably practicable, of its volunteers, members and the wider public when engaged on activities managed or promoted by WAT and its partner organisations.

WAT is committed to achieving these specific health and safety aims:

- To prevent accidents and causes of work related ill-health, and to provide adequate control of health and safety risks arising from activities managed or promoted by WAT.
- To provide appropriate training, relevant instruction or supervision by a competent person to ensure volunteers, and members of WAT are able to carry out activities safely.
- To promote and clearly communicate health and safety matters throughout WAT by engaging with volunteers and members using various media including WAT's website, email, printed documentation and videos.
- To provide equal standards of protection to volunteers and members of WAT.
- To maintain safe and healthy working conditions by making available appropriate safety equipment, and ensuring that all plant, vehicles, tools and equipment owned or used by WAT and partner organisations are in good working order.
- To collect, consult and analyse information on accidents, dangerous incidents and work related ill-health in order to review working practices and take action where reasonably practicable to prevent any recurrence.

Whilst engaged in any activity managed or promoted by WAT, volunteers, members and visitors are required, in their own interest and that of their colleagues, to take reasonable care of their own health & safety and observe WAT's health and safety procedures. Any matter which those participating in any activity consider may be hazardous to either health or safety must be brought to the notice of their team leader or other responsible person at the earliest opportunity.

This policy will be reviewed on an annual basis to ensure that it remains effective in terms of the organisation's structure and activities.

2.2 Health & Safety Management

As stated above, WAT takes the Health and Safety of its volunteers very seriously, and with this in mind, WAT has a Health & Safety management regime that has evolved over many years and that we believe satisfies HSG 65.

All physical work undertaken by WAT on the Wendover Arm Canal will be subject to the planning processes outlined in the Construction (Design and Management) Regulations 2015 (CDM2015).

The key elements to securing construction health and safety include:

- Managing the risks by applying the **general principles of prevention**.
- **Appointing** the right people and organisations at the right time.
- Making sure everyone has the **information, instruction, training and supervision** they need to carry out their jobs in a way that secures health and safety.
- Dutyholders **cooperating and communicating** with each other and **coordinating** their work.
- **Consulting workers and engaging** with them to promote and develop effective measures to secure health, safety and welfare.

The General Principles of Prevention set out the principles dutyholders should use in their approach to identifying the measures they should take to control the risks to health and safety in a particular project. The general principles of prevention are summarised as:

- (a) avoid risks where possible;
- (b) evaluate those risks that cannot be avoided; and
- (c) put in place proportionate measures that control them at source.

CDM 2015 requires designers, principal designers, principal contractors and contractors to take account of these principles in carrying out their duties.

2.2.1 Structure

Responsibilities of the Council

The Council will;

- Formulate a Health and Safety Statement setting out in writing the responsibilities and arrangements for ensuring safety before, during and after any restoration works.
- Regularly review the Health and Safety arrangements and implement new arrangements as necessary.

- Seek appropriate advice on matters the Council is not fully competent on, or where additional advice could usefully be sought.
- Promote high standards of Health and Safety.

Duties of all persons with an identified organisational role

Some of the day to day responsibility for Health and Safety matters will be delegated to persons organising specific areas and tasks. All organisers should;

- Be aware of their responsibilities under Health and Safety legislation and regulations.
- Take reasonable care for the Health and Safety of themselves and others who may be affected by their acts or omissions.
- Co-operate with the Council in all matters of Health and Safety, so as to enable the law to be complied with.
- Report to the Council any serious or immediate danger to Health and Safety, or what is seen to be a potentially dangerous situation.

General responsibility of all personnel involved in restoration work

It shall be the responsibility of all people while undertaking any form of restoration work to take every reasonable care for the health and safety of themselves and other persons with whom they are working or may otherwise be affected by their actions such as members of the public.

Responsibilities of the Health and Safety Co-ordinator

The Health and Safety Co-ordinator will;

- Have overall responsibility for implementing the Health and Safety arrangements as assigned by the Council.
- Be the focal point for references on Health and Safety and give advice or sources of advice.
- Stop any misuse of plant, equipment, etc.
- Arrange for any person strongly suspected of being drunk or under the influence of a prohibited substance to be escorted from the site.
- Seek specialist advice on Health and Safety matters when necessary.

Regulations

Where relevant, the Construction (Design and Management) Regulations (CDM) 2015 shall apply.

All work equipment will comply with the requirements of the Provision and Use of Work Equipment Regulations (PUWER) 1998.

Lifting operations will comply with the requirements of Lifting Operations and Lifting Equipment Regulations (LOLER) 1998.

Materials will be subject to the Control of Substances Hazardous to Health Regulations (COSHH) 2002.

The Restoration Director is responsible for identifying Regulations which apply and will arrange for the requirements of the Regulations to be met.

Audit and Review

The Council shall carry out an annual review of the Statement and its implementation and the Health and Safety Co-ordinator will be responsible for ensuring that any changes are fully implemented and that any training needs identified are fulfilled where possible.

2.2.2 Planning

All tasks undertaken on this project will be subject to CDM2015, and as such, all activities on site will be planned to identify hazards and minimise or where possible eliminate them during the design or activity planning stage.

All activities will be subject to a Safe System of Work / Method Statement / Job Description, with supporting risk assessments.

2.2.3 Project Delivery

All WAT work on the Wendover Arm canal Restoration project will be delivered by either week long work parties each month that are led by team leaders appointed by WAT or by groups from the IWA Waterways Recovery Group or other organisations who are led by working party organisers. Team leaders and working party organisers will implement the requirements and measures stated in the safe systems of work, method statements and job descriptions. The team leader or working party organiser will also be responsible for ensuring that volunteers work safely and in accordance with WAT policy and implement the following;

- When a volunteer first arrives on the project they will be given a Health and Safety Induction talk before being allowed to work on the site. The talk will reinforce general site procedures and provide specific details for the site and project they will be working on.
- The talk will introduce the documentation for the site and the projects being undertaken. Such documentation will include the Safe System of Work, Method Statements, Job Description sheets and Risk Assessments as appropriate. Other documents such as the "IWA Incident Report Form" will also be introduced during this brief.
- It is made clear to volunteers that as part of the Health and Safety at Work Act 1974, they have a legal responsibility in the Health and Safety operations of the project.
- All volunteers will be required to sign a register stating that they have received the site induction talk, and that they are willing to follow the project leaders' directions at all times. The signed register will be kept by the Assistant Restoration Director or H&S Co-ordinator.
- Copies of all relevant documentation will be available on site.
- At all times during working parties, the team leader or working party organiser will ensure that volunteers are given sufficient instruction and supervision to enable them to undertake any tasks requested of them in a safe manner. This will include frequent informal communication and utilisation of the Safe System of Work, Method Statements as a toolbox talk style briefing. Through regular communication the project leaders will check that volunteers understand the task in hand and help to ensure that Health and Safety is at the forefront of everyone's mind. Feedback from volunteers will be considered when reviewing systems of work, method statements, job descriptions and risk assessments.
- In the event of an incident or near miss on site, leaders will complete the WAT Incident Report Form to inform the WAT Restoration Committee. The WAT Restoration Committee will seek to learn any lessons that result from the incident or near miss and where necessary, make changes to the Operating Procedures.

2.2.4 Project Leaders

Project Lead/ Manager: [REDACTED], WAT Restoration Director

Project Co-ordinator: [REDACTED], WAT Assistant Restoration Director

Team leaders: [REDACTED], [REDACTED], [REDACTED], [REDACTED], [REDACTED].

Health and Safety Co-ordinator: [REDACTED]

CRT Representative: [REDACTED]

2.3 Personal Protective Equipment

Hard hats, safety footwear and high visibility jackets shall be worn at all times by all persons in the work area. A supply of hard hats and high visibility jackets will be made available in the WAT hut. Protective gloves should also be worn for most jobs.

All personnel shall be responsible for ensuring that their Personal Protective Equipment (PPE) is kept in good condition. Any damaged or defective hats must be safely disposed of and a replacement obtained.

All volunteers are responsible for supplying their own personal PPE, such as gloves and fully protective footwear that are highly recommended to be used at all times.

Other items of (PPE), such as ear defenders or eye protection will be supplied when undertaking specific tasks requiring additional protection.

Certain items of protective footwear can be provided by WAT when available.

3 Construction (Design and Management) Regulations 2015

The Construction (Design and Management) Regulations 2015 (CDM 2015) came into force on 6 April 2015, replacing CDM 2007.

CDM 2015 describes:

- a) the law that applies to the whole construction process on all construction projects, from concept to completion; and
- b) what each dutyholder must or should do to comply with the law to ensure projects are carried out in a way that secures health and safety.

The regulations are intended to focus attention on planning and management throughout construction projects, from design concept onwards. The aim is for Health and Safety considerations to be treated as an essential, but normal part of a project’s development – not an after thought of bolt-on extra.

The CDM 2015 identify a number of roles that must be undertaken. Because of the duration of the Wendover Arm Canal Restoration Project, the project is notifiable to the HSE (with a form F10) when identifying the duties of each party.

3.1 CDM Roles

CDM dutyholders:* Who are they?	Summary of role/main duties
<p>Clients are organisations or individuals for whom a construction project is carried out.</p>	<p>Make suitable arrangements for managing a project. This includes making sure:</p> <ul style="list-style-type: none"> • other dutyholders are appointed; • sufficient time and resources are allocated. <p>Make sure:</p> <ul style="list-style-type: none"> • relevant information is prepared and provided to other dutyholders; • the principal designer and principal contractor carry out their duties; • welfare facilities are provided. <p>See paragraphs 23–52 of Managing health and safety in construction Construction (Design and Management) Regulations 2015 for more guidance.</p>
<p>Designers are those, who as part of a business, prepare or modify designs for a building, product or system relating to construction work.</p>	<p>When preparing or modifying designs, to eliminate, reduce or control foreseeable risks that may arise during:</p> <ul style="list-style-type: none"> • construction; and • the maintenance and use of a building once it is built. <p>Provide information to other members of the project team to help them fulfil their duties.</p> <p>See paragraphs 72–93 of Managing health and safety in construction Construction (Design and Management) Regulations 2015 for more guidance.</p>

<p>Principal designers** are designers appointed by the client in projects involving more than one contractor. They can be an organisation or an individual with sufficient knowledge, experience and ability to carry out the role.</p>	<p>Plan, manage, monitor and coordinate health and safety in the pre-construction phase of a project. This includes:</p> <ul style="list-style-type: none"> • identifying, eliminating or controlling foreseeable risks; • ensuring designers carry out their duties. <p>Prepare and provide relevant information to other dutyholders.</p> <p>Provide relevant information to the principal contractor to help them plan, manage, monitor and coordinate health and safety in the construction phase.</p> <p>See paragraphs 94–115 of Managing health and safety in construction Construction (Design and Management) Regulations 2015 for more guidance.</p>
<p>Principal contractors are contractors appointed by the client to coordinate the construction phase of a project where it involves more than one contractor.</p>	<p>Plan, manage, monitor and coordinate health and safety in the construction phase of a project. This includes:</p> <ul style="list-style-type: none"> • liaising with the client and principal designer; • preparing the construction phase plan; • organising cooperation between contractors and coordinating their work. <p>Ensure:</p> <ul style="list-style-type: none"> • suitable site inductions are provided; • reasonable steps are taken to prevent unauthorised access; • workers are consulted and engaged in securing their health and safety; and • welfare facilities are provided. <p>See paragraphs 110–146 of Managing health and safety in construction Construction (Design and Management) Regulations 2015 for more guidance.</p>
<p>Contractors are those who do the actual construction work and can be either an individual or a company.</p>	<p>Plan, manage and monitor construction work under their control so that it is carried out without risks to health and safety.</p> <p>For projects involving more than one contractor, coordinate their activities with others in the project team – in particular, comply with directions given to them by the principal designer or principal contractor.</p> <p>For single-contractor projects, prepare a construction phase plan.</p> <p>See paragraphs 147–179 of Managing health and safety in construction Construction (Design and Management) Regulations 2015 for more guidance.</p>
<p>Workers are the people who work for or under the control of contractors on a construction site.</p>	<p>They must:</p> <ul style="list-style-type: none"> • be consulted about matters which affect their health, safety and welfare; • take care of their own health and safety and others who may be affected by their actions;

	<ul style="list-style-type: none"> • report anything they see which is likely to endanger either their own or others' health and safety; • co-operate with their employer, fellow workers, contractors and other dutyholders.
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*Organisations or individuals can carry out the role of more than one dutyholder, provided they have the skills, knowledge, experience and (if an organisation) the organisational capability to carry out those roles in a way that secures health and safety.

** Principal designers are **not** a direct replacement for CDM co-ordinators. The range of duties they carry out is different to those undertaken by CDM co-ordinators under CDM 2007 (see paragraphs 181–186 for information about transitional arrangements).

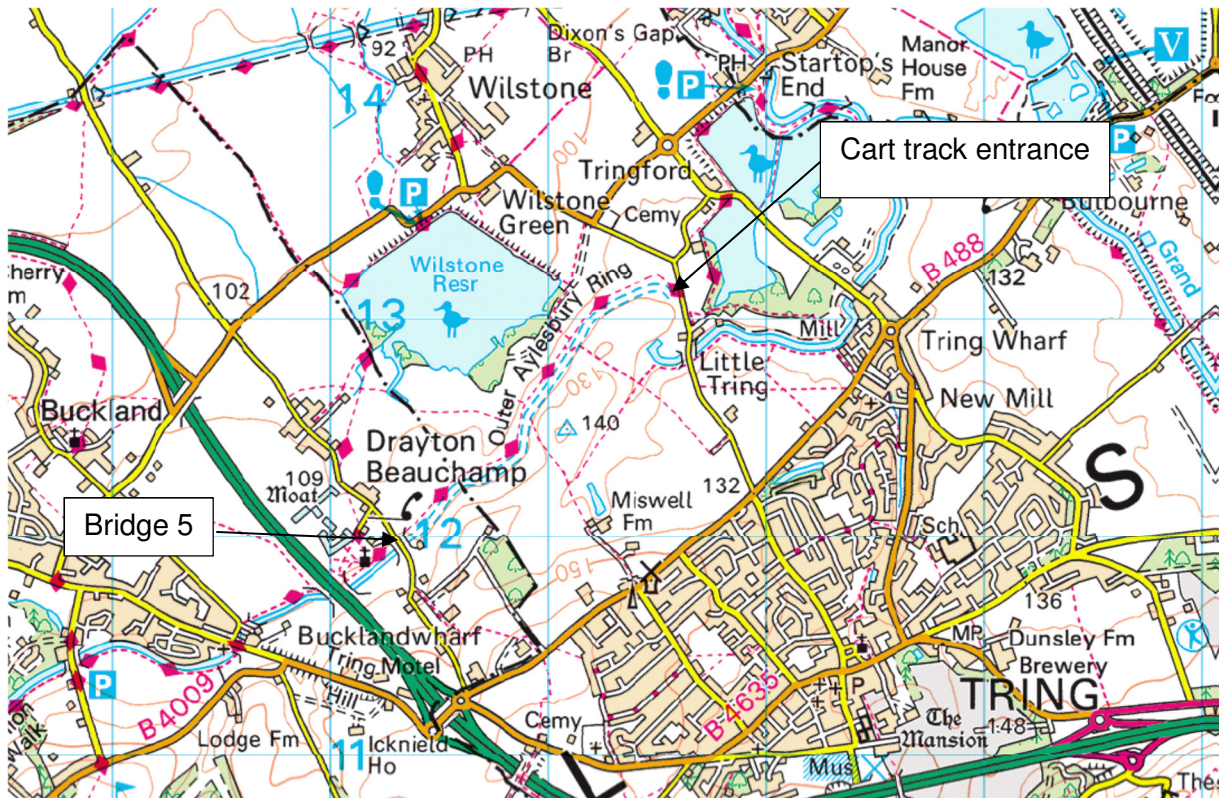
3.2 CDM Dutyholders

For the purposes of CDM, the defined roles are being filled by:

Client:	Canal and River Trust
Designer:	██████████, WAT Restoration Director.
Principle Designer:	Wendover Arm Trust.
Principle Contractor:	Wendover Arm Trust.
Contractors:	Waterway Recovery Group (WRG) and others.
Workers:	Volunteers and contractors staff.

4 Work Site

4.1 Location



The cart track,
Little Tring Road,
HP23 4NR
Grid Ref; SP916131

Canal Bridge 5, Drayton Beauchamp,
The Holloway,
HP22 5LT
Grid Ref; SP903120

4.2 Finding the Site

To the car track from A41;

From the B488 junction head north east on the B488 towards Dunstable / Ivinghoe. After approximately 1½ miles at the staggered cross road, turn left into Little Tring Road. Follow this road over a bridge over the canal, down a dip and past the entrance to Tringford Pumping station. The entrance to the cart track is on the left just up the rise from the pumping station entrance.

To Bridge 5, Drayton Beauchamp from A41;

From the B488 junction head north east on the B488 towards Dunstable / Ivinghoe. Turn left immediately after the roundabout on the B488 north bound, signposted Drayton Beauchamp village only. Bridge 5 is the first bridge on this road. Note, there is no vehicular access to the towpath from this bridge.

4.3 Site Access Notes

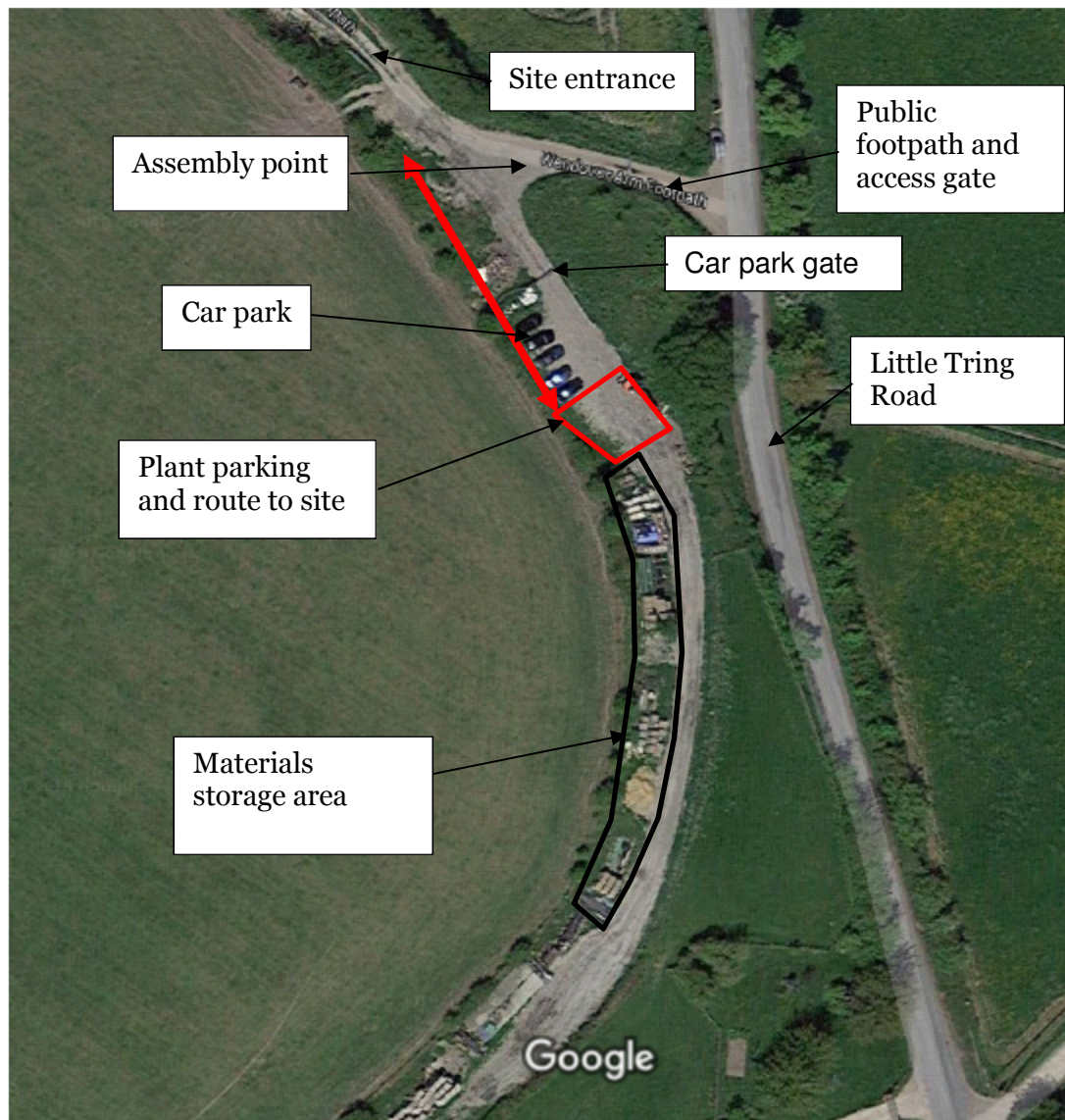
Little Tring is the normal access point. Access from Little Tring Road is along a public footpath. Pedestrians have right of way. Vehicular access is via a metal field gate across the footpath and a second gate at the entrance to the car park. Keys to the gates are held by WAT.

The access onto the work site is via a metal field gate and along the bed of the canal. The bed of the canal is not suitable for road vehicles.

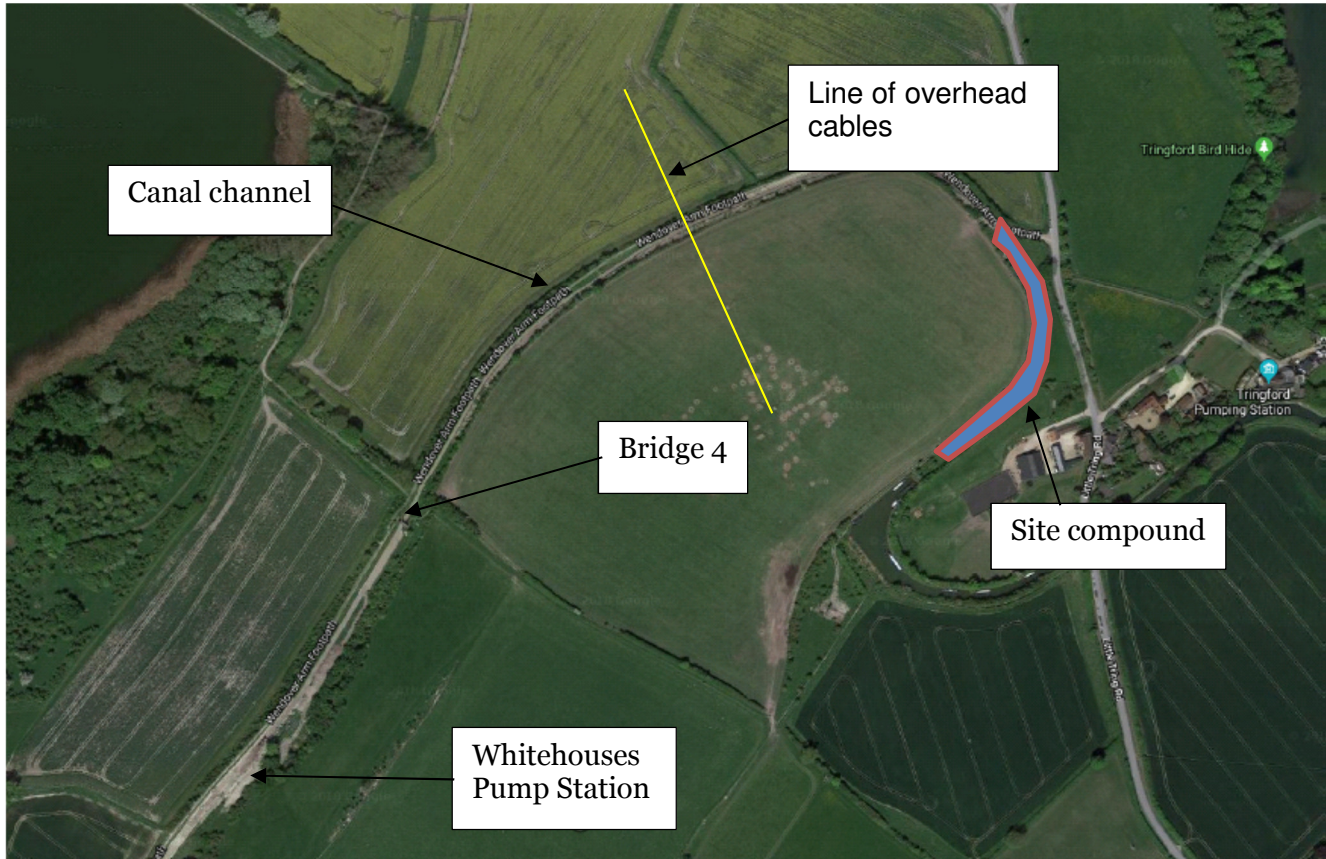
The following rules are to be observed:

- **Once all volunteers are on site main access gate and car park gate must be closed.**
- **All gates to be closed and locked by last person to leave site.**
- **Drive slowly along the track.**
- **Pedestrians on the track are to be given right of way.**
- **Be aware of plant movements around the car park area and along the bed of the canal.**

4.4 Site Layout Diagram



Site Compound area



Working site area

5 Site Specific Hazards

5.1 Uneven Ground

The work site and surrounding areas include areas of uneven ground. Working areas are profiled to suit the design prior to channel lining.

The pedestrian access to the working area is via the towpath. Steps are provided into the canal channel. The bed of the canal channel is used as the plant access route.

A welfare area is established at Whitehouses pumping station. Access into the work area is via ladder at the structure into the bed of the channel.

As work progresses the access points from the towpath and Whitehouses will change to suit the work area.

5.2 Unfirm / Waterlogged Ground

The canal bed is formed in clay soil and after rain the clay becomes soft and puddles can hide uneven ground. Standing water drains towards Whitehouses pumping station, but needs to be pumped out of the canal channel. The presence of water softens the clay in the bed of the channel, the soft clay can be deep in places.

The passage of plant along the canal bed creates ruts in the clay canal bed. The ruts fill with water and soft clay after rain. Outside the ruts the wet clay can become very soft. The soft clay can be deep in places.

The bed of the restored section of canal is made up of 300mm clay fill over the Bentomat channel liner. The clay fill is not compacted and will become unfirm and waterlogged after rain.

5.3 Dam Failure / Flooding

A temporary earth bund (dam) has been installed at Bridge 4a near Whitehouses to keep the working area free from water in the rewatered section of the canal.

5.4 Loose Masonry / Falling Objects

The canal channel is approximately 2m below towpath level and has steep sides at a 1:1 slope. Loose material on the towpath or access route on the offside may fall into the canal channel.

The sluice / weir structure at Whitehouses Pumping Station is brickwork and there is loose brickwork in the structure.

5.5 Access

Plant access to the working area is along the bed of the canal channel and is undulating.

Pedestrian access is along the towpath. There is pedestrian access on the offside between bridge 4 and Whitehouses Pumping Station.

A set of temporary metal steps is established from the towpath into the bed of the canal.

The bed of the canal in the working area is shared between plant and pedestrians.

5.6 Overhead Electricity Cables

Overhead electricity cables pass over the canal channel part way along the site. The cables have sufficient headroom for plant to pass underneath without affecting the plant or cables.

5.7 Members of the Public

The entrance from Little Tring Road and the towpath is a public footpath. In addition public footpaths cross the site at bridges 4 and 4a. There is no public access into the bed of the canal.

The towpath is a popular route for cyclists and pedestrians and runs immediately adjacent to the worksite.

5.8 Plant

The majority of the canal lining work is carried out using heavy plant. Materials are moved from the site compound to the work area by plant run along the bed of the unlined section of the canal.

Deliveries of materials pass through the car park area.

WRG Driver Authorisation scheme will operate at all times on site. Only when authorised and requested by the Team Leader will plant and equipment be used. All fuelling will be done using the pump from the fuel bowser located in the site compound. When necessary, on-site manoeuvring of vehicles will utilise banksmen.

5.9 Falls from Height

The canal bed is approximately 2m below the towpath level and the bank slope is steep at 1:1 gradient.

The sluice / weir structure has vertical drops down to canal bed level.

During the relining process materials have to be lowered down the bank slope and have to be manually unloaded from plant delivering them from the site compound.

5.10 Hazardous Substances

Some of the materials or by-products from using the materials may be hazardous to health.

All materials and their by-products brought to site will be assessed under Control of Substances Hazardous to Health (COSHH) and a record kept of the assessment.

Any precautions that need to be taken when handling any substance that is hazardous to health will be included in the appropriate task risk assessment and method statement and will be passed on to any volunteer likely to come into contact with the material.

5.11 Buried Services

A pipe carrying water from the upstream open canal channel is buried under the canal bed. The pipe is capped with a 2m wide by 150mm thick reinforced concrete slab prior to lining.

5.12 Environmental Factors

The section of the canal channel through the car park is through a former council refuse tip.

The banks of the channel are heavily vegetated. Vegetation removed as part of the channel lining work will be burned on site bonfires. Bonfires will be sited so that the smoke does not create a nuisance to the neighbouring residents.

The site works are unlikely to cause a noise nuisance, but noisy activities, such as cutting concrete blocks, will be carried so as not to cause a nuisance.

Refuelling of plant will take place in the designated area using the hand pumping equipment.

Wash water from concrete mixing and cleaning of hand tools will be disposed in the canal bed.

Waste material, such as cement bags, Bentomat wrapping, will be disposed in a designated area and will be removed from site to a suitable tip.

The foundations of the former swing bridge at Bridge 4 location are considered a heritage item by Canal and River Trust (CRT). Advice will be sought from the CRT Heritage adviser prior to any work in this area.

6 Site Welfare

Welfare facilities have been established at Whitehouses Pumping Station. A steel container is used to store materials and hand tools. The first aid kit and defibrillator is also stored in this container which will always be unlocked when staff are on site.

During volunteer work weeks a temporary shelter is set up with roof, weather screen and seating. A wood burning stove is provided for cold conditions. There is a portable toilet located in the welfare area. Potable cold water is brought to the welfare area in containers.

These welfare facilities are considered to be the most that is reasonably practical to provide given the remoteness of the worksite and temporary nature of workparties. Volunteers are made aware of the arrangements and bring suitable clothing and refreshments.

7 Work Breakdown Description

To help explain the work and split the project into smaller more manageable tasks, the project work has been broken down into work areas and project tasks. Method statements and risk assessments for the work areas and project tasks are held in separate documents.

7.1 Remedial Work to the Drayton Beauchamp Bund

- De-watering of canal section between Drayton Beauchamp and sump
- Excavation and removal of bund at Drayton Beauchamp

7.2 Laying Capping Over Pipeline

- Laying reinforced concrete capping over existing pipeline
- Dealing with access manholes on pipeline

7.3 Formation of Basic Canal profile

- Formation of basic canal profile

7.4 Construction of Mooring Walls, Towpath Walls and Walls for Bridge Narrows

- construction of mooring walls, towpath walls and walls for bridge narrows

7.5 Construction of Footbridges

- construction of footbridges

7.6 Laying Bentomat Lining

- Laying Bentomat lining on canal sides
- Laying Bentomat lining across canal bed

7.7 Installing Lining on Top of Bentomat on Canal Sides

- Installing hollow concrete blocks
- Installing solid concrete blocks and Coir rolls on top of Bentomat on canal sides

7.8 Spoil Infill of Canal Bed and Sides

- Spoil infill of canal sides
- Spoil infill of canal bed

7.9 Construction of Temporary Bunds

- Construction of temporary bunds

7.10 Planting of Aquatic Plants

- Gathering and planting of aquatic plants

7.11 Initial Flooding of Canal Sections

- Initial flooding of canal sections using pipe
- Initial flooding of canal sections without pipe

7.12 Modifications to Cart Track at Site Entrance

- Modifications to cart track at site entrance

7.13 Restoration Work at Whitehouses Pumping Station

- Restoration work at Whitehouses (subject to design)

7.14 Construction of Weirs, Paddle Gear, Spillways

- Construction of weirs, paddle gear, spillways etc. (subject to design)

7.15 Final Flooding of Canal to Navigation Level

- Final flooding to navigation level

7.16 Removal of Temporary Bunds

- Removal of temporary bunds

8 Emergencies

In all cases of **EMERGENCY** ring **112 or 999**

The Team Leader (or nominated person) will carry a whistle. In the event of the whistle being blown, all volunteers are to stop what they are doing, make their work place safe and return to the Site Compound assembly area and await further instruction.

If the emergency requires the presence of the emergency services, the Team Leader, deputy or nominated person will call 112 or 999

The address of the site is:

Grid Ref/ Postcode: The cart track,
 Little Tring Road,
 HP23 4NR
 Grid Ref; SP916131

8.1 NHS 111

You can call 111 when you need medical help fast but when it's not a 999 emergency.

NHS 111 is available 24 hours a day, 365 days a year.

Calls are free from landlines and mobile phones.

Call **111** if:

- you need medical help fast but it's not a 999 emergency
- you think you need to go to A&E or need another NHS urgent care service
- you don't know who to call or you don't have a GP to call
- you need health information or reassurance about what to do next

8.2 Hospital

The nearest Accident & Emergency Unit is located at:

Stoke Mandville Hospital

Mandeville Road
Aylesbury
Buckinghamshire
HP21 8AL

Tel: 01296 315000

The nearest minor injuries department is at:

Hemel Hempstead Hospital

Hillfield Road
Hemel Hempstead

Hertfordshire
HP2 4AD

Tel: 01442 213141

8.3 First Aid Facilities

A First Aider(s) will be identified at start of each day during the weekly working party and will be made known to all volunteers.

A First Aid kit suitable for at least 20 persons is available in the steel container at Whitehouses Pumping Station. This includes eye wash bottles and a defibrillator. All accidents (however trivial) will be reported to the team leader and recorded on a WAT accident/incident form. Copies will be located with the first aid kit. Incidents and near misses will be recorded on the same form.

8.4 Doctors and Pharmacists

Doctor Surgery;
The New Surgery,

St Peters House
Church Yard
Tring
Hertfordshire
HP23 5AE

Tel: 01442890661

Pharmacy;
Lloyds Pharmacy

66 High Street
Tring
HP23 4AG

Tel: 01442822258

List of Major Suppliers

Other suppliers can be used if required.

No.	Suppliers	Address	Telephone	Contact / Notes
1	Bentomat			
2	Concrete Blocks			
3	Coir Rolls			
4	Plant Hire			
5				
6				