



Grand Union  
Canal Transfer

Moving water together

# Preliminary Environmental Information Report

Volume 1: Non-technical summary

February 2026



# Introduction

The Grand Union Canal Transfer (GUCT) project (the Proposed Development) is a new scheme to bring water from the Midlands to the Southeast. It's a joint water transfer project between two water companies, Severn Trent and Affinity Water, and the Canal & River Trust (the Trust) charity, who are the owner and navigation authority of the canals in England and Wales.

The Proposed Development will transfer highly treated recycled water from the Midlands to the Southeast to ensure future drinking water supplies for the region, and to strengthen the UK's water infrastructure.

It starts at the existing Minworth Wastewater Recycling Centre (WwRC) near Birmingham, where water is planned to go through a further treatment process and transferred via a new underground pipeline to Atherstone in Warwickshire.

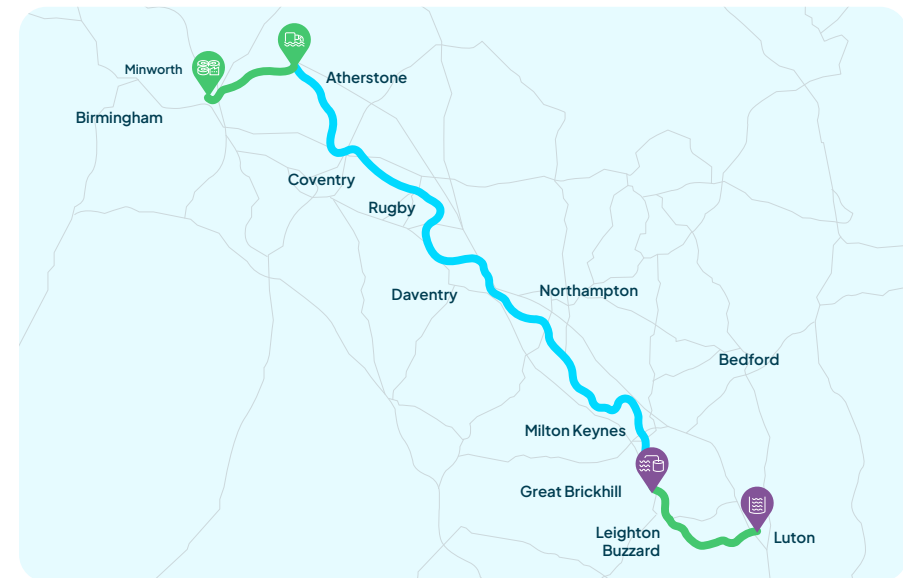
It will then begin its journey along the Coventry, Oxford and Grand Union Canals, where additional infrastructure is proposed to manage the additional volume of water. The water from Minworth's WwRC is treated recycled water, which would usually be discharged

into the River Tame, a tributary of the River Trent. For the Proposed Development, some of this recycled water will be diverted to a new Advanced Water Treatment Plant (AWTP) and further treated to ensure the safeguarding of fish and wildlife in the canal is maintained.

Once it's been transferred through the canal network, the water will be piped from the canal, stored, and treated again at a proposed new water treatment works near Great Brickhill, southeast of Milton Keynes. It will then be transferred via a new underground pipeline as clean drinking water into Affinity Water's supply network for customers, from an existing underground reservoir near Luton.

To support this transfer, works will be required to parts of the canal network. These include new pumping systems, bypasses around locks, up to four new locks (referred to as transfer locks), adjustments to weirs, and raising canal banks, where needed. There may also be works on one bridge. In addition, upgrades to the Daventry and Drayton Reservoirs will help store water during drier periods, supporting both the transfer and canal navigation.

## Grand Union Canal Transfer route overview



### Legend

-  Advanced Water Treatment Plant
-  Outfall
-  Abstraction structure, water treatment works and water storage
-  Existing underground reservoir
-  Canal section
-  Pipeline

# Purpose of this document

**This document provides a non-technical summary of the Preliminary Environmental Information Report (PEI Report) that accompanies the Phase Two Public Consultation.**

The PEI Report presents the preliminary findings of the Environmental Impact Assessment (EIA) that's being undertaken to determine the likely positive and negative environmental effects resulting from the construction and operation of the Proposed Development. It's provided to assist the public, local authorities, and statutory bodies in understanding the potential environmental effects of the Proposed Development. That feedback will then be taken into account in preparing the Environmental Statement (ES) that will accompany the Development Consent Order (DCO) application.

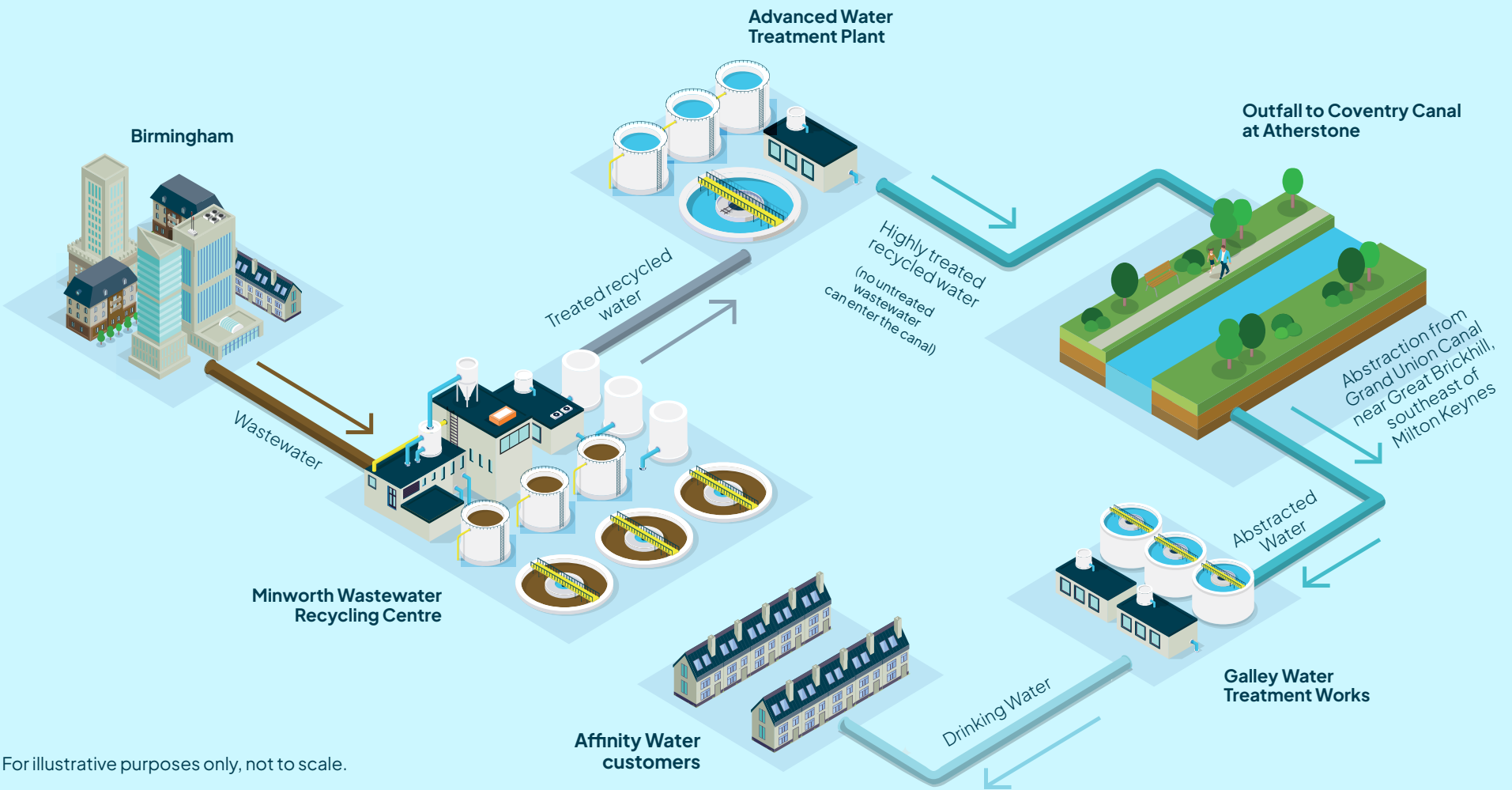
The DCO process is a bespoke consenting route for certain major infrastructure schemes considered to be of national significance. The DCO application will be submitted to the Secretary of State via the Planning Inspectorate.



Ecologists sampling chalk stream



Main elements of the Proposed Development





# Why do we need this scheme?

The UK's water supply is facing growing pressure due to population growth, increasing demand, climate change, and the need to protect sensitive ecosystems. At the same time, the canal network, originally built to transport goods, is now a vibrant part of many communities, supporting leisure, tourism, and businesses, and providing access to nature and wellbeing.

The Proposed Development is to help move recycled water from the Midlands to the Southeast, where future water shortages are expected. It would make use of the canal network to help deliver treated water to areas with limited supply, supporting both public water needs and the long-term sustainability of the canal network.

The Proposed Development aims to reduce reliance on other water sources, including chalk aquifers that support rare chalk stream habitats, and to secure future water availability for canal navigation. It represents a significant step towards a more resilient and environmentally responsible water supply.



Example of chalk stream

# Evolution of the Proposed Development and Consideration of Alternatives

**The Proposed Development is identified in regional water resources management plans and the Water Resources Management Plans (WRMPs) prepared by Severn Trent and Affinity Water, for delivery in the early 2030s.**

At an early stage in the WRMP and regional plan processes, lists of potential water resources options were identified, for consideration and assessment. These options included demand management measures such as leakage reduction, water efficiency and drought options (including temporary use bans). They also included new supply options such as desalination plants, water recycling, reservoirs and water transfers within or between water companies or regions.

Once the Grand Union Canal Transfer was identified as a preferred solution, a number of options were considered to look at the routeing and location of key parts of the project. This included:



Site locations for the Advanced Water Treatment Plant (AWTP) at Minworth



Routes for the transfer of highly treated water from Minworth to the canal network



Storage and water treatment site options following abstraction from the Grand Union Canal



Routes for the transfer of drinking water from the water treatment site to Affinity Water storage

Minimising potential environmental impacts has been a key consideration and, wherever practicable, important environmental sites and features have been avoided.

The options with the greatest potential were presented for consideration at the Phase One Public Consultation. Further to feedback from that consultation and ongoing optioneering, design refinement, environmental assessment and stakeholder engagement, the Applicants have arrived at the Proposed Development, which is described in further detail in the following sections.

Engineering design and environmental assessment work is ongoing and will be informed by feedback from the Phase Two Public Consultation. This work is also being shaped by the draft Design Principles adopted by the Applicants, which cover five core themes: Safe and Well, Climate, People, Place, and Value. These principles will help guide the overall design of the Proposed Development and how individual sites are designed, as plans are developed in more detail.

The draft Design Principles are presented in a stand-alone document and form part of the Phase Two Public Consultation materials.

Included with the draft Design Principles is a Canalside Design Principles document. This sets out design principles for all above ground buildings and structures required along the canal for the water transfer under three principal headings: Heritage & Cultural Value, Community Value and Environmental Value.

The principles, which are framed as a series of questions, are intended to inform appropriate design responses to local contexts and serve as a quality assessment and decision-making framework. In each location, where visible buildings and structures are required, it's likely that a bespoke solution, considering these principles against the local context as well as technical requirements, will be needed. The Canalside Design Principles will be used as the framework within which detailed design of all above ground structures required along the canal will be undertaken.



# The Proposed Development

For the purposes of the PEI Report, the Proposed Development is split into a number of main project 'Parts':

1

**Part 1 – Minworth to Atherstone:**

- Part 1a – Minworth AWTP
- Part 1b – Minworth to Atherstone pipeline

2

**Part 2 – Works to the Coventry, Oxford and Grand Union Canals**

3

**Part 3 – Works to Daventry and Drayton Reservoirs**

4

**Part 4 – Abstraction, storage and treatment pipeline to an existing underground reservoir near Luton:**

- Part 4a – Abstraction, storage and treatment
- Part 4b – Pipeline to an existing underground reservoir near Luton

A red line boundary, referred to as the 'Preliminary Order Limits', has been adopted for the purposes of the PEI Report to define the potential maximum extent of land required for construction and operation of the Proposed Development. The Preliminary Order Limits are draft and may be subject to change due to ongoing design development, surveys, stakeholder engagement and feedback from the Phase Two Public Consultation.

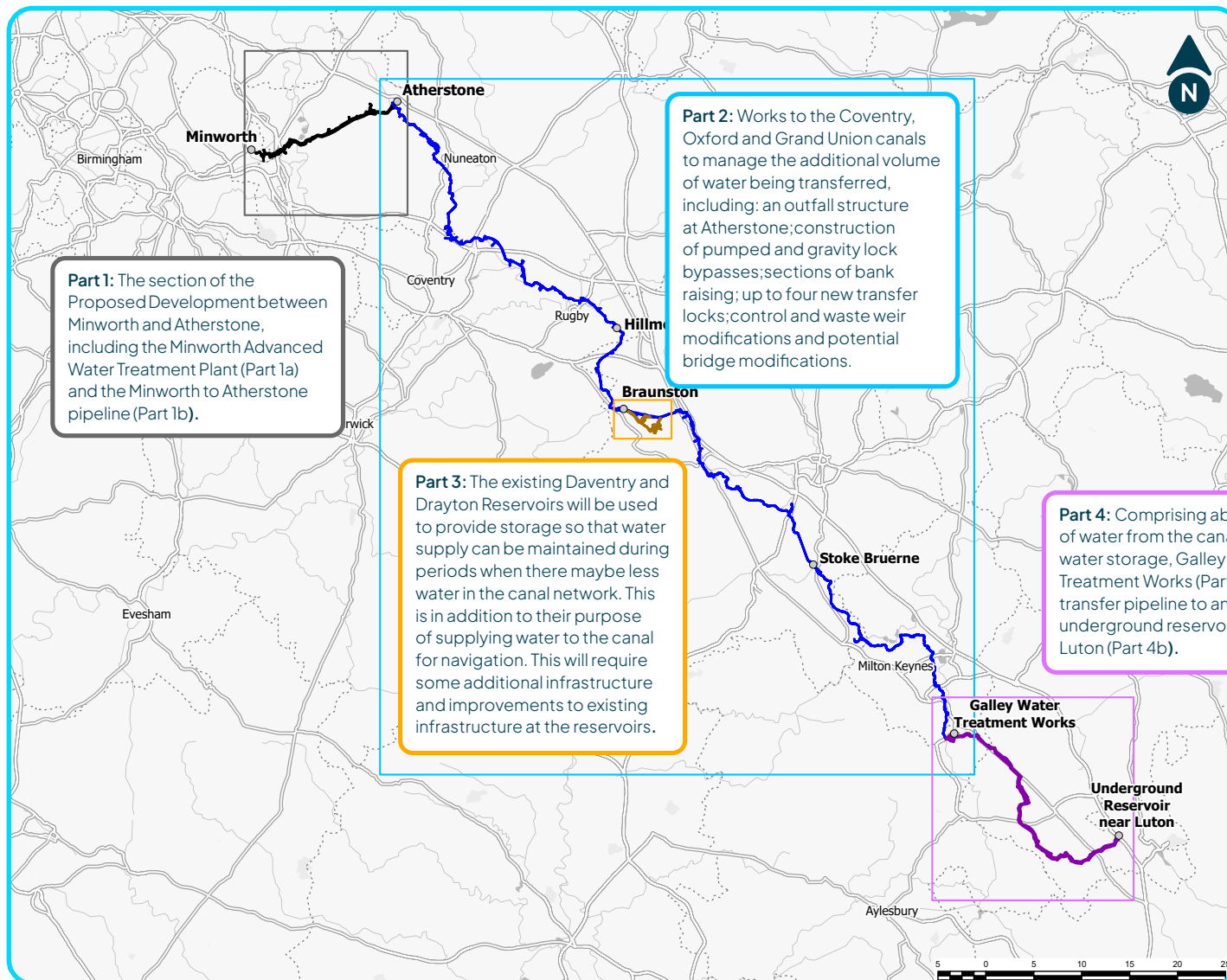
Final Order Limits will be published as part of the DCO application and assessed in the ES.

Where the area within the Preliminary Order Limits contains existing buildings or other known environmental constraints, ongoing design development will look to avoid any works occurring to these features, where practicable.



Southern Hawker Dragonfly

## Map showing Proposed Development Project Parts



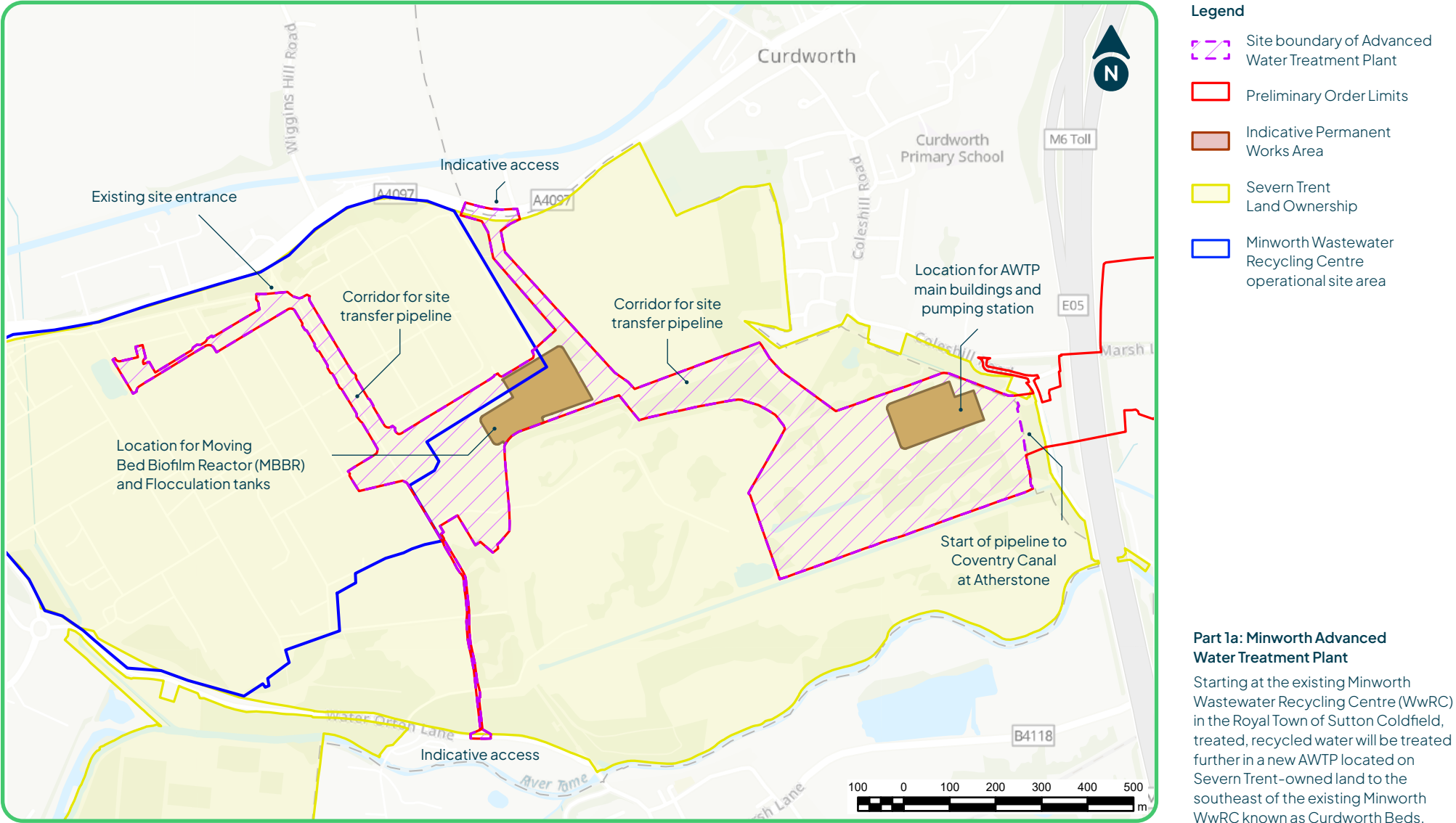
### Key

- **Part 1** Minworth to Atherstone
- **Part 2** Works to the Coventry, Oxford and Grand Union Canals
- **Part 3** Works to Daventry and Drayton Reservoirs
- **Part 4** Abstraction, Storage and Treatment and Pipeline to an Existing Underground Reservoir Near Luton

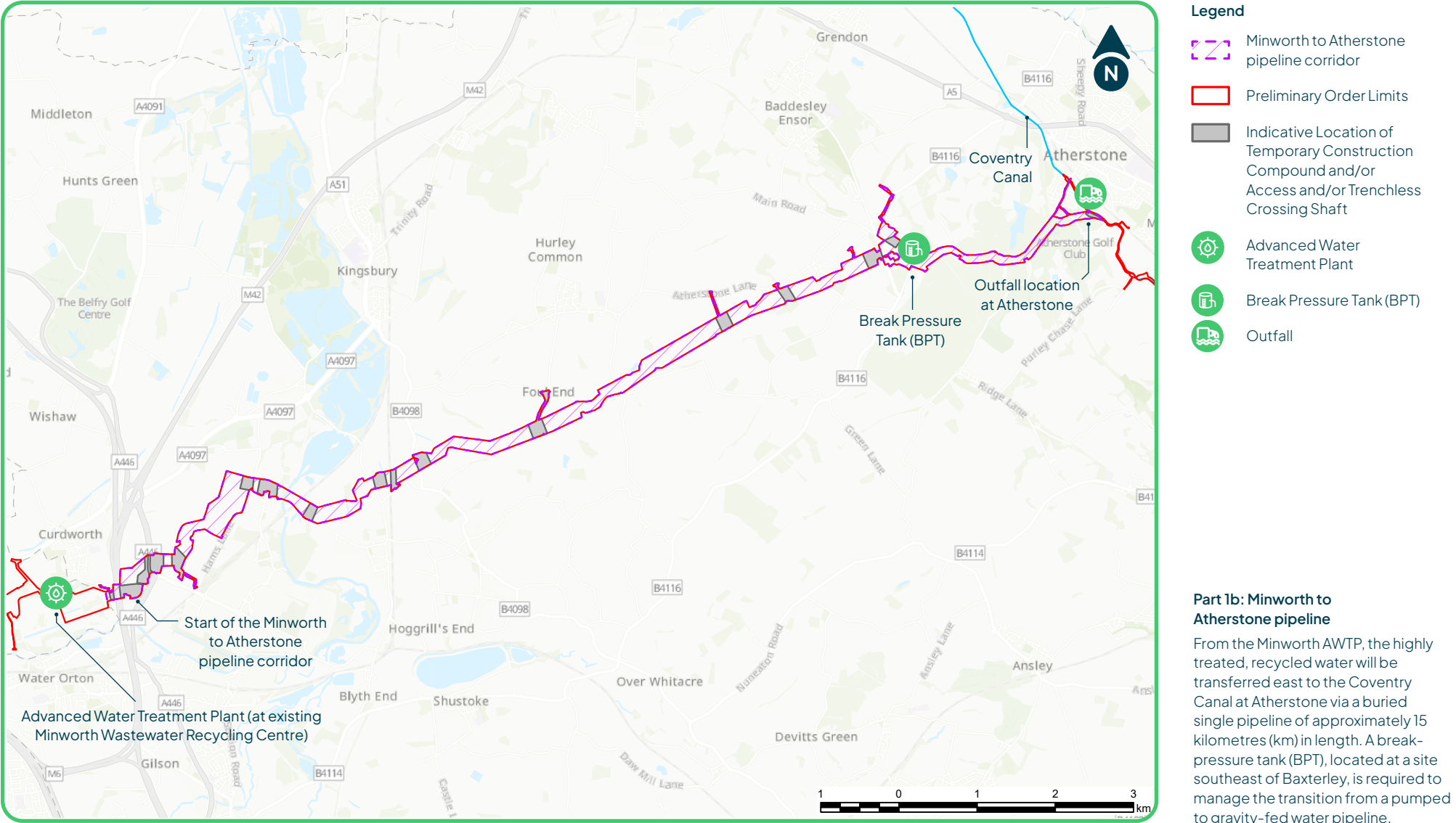
To view this map in more detail, please visit our interactive map on our website: [www.guctransfer.co.uk](http://www.guctransfer.co.uk)



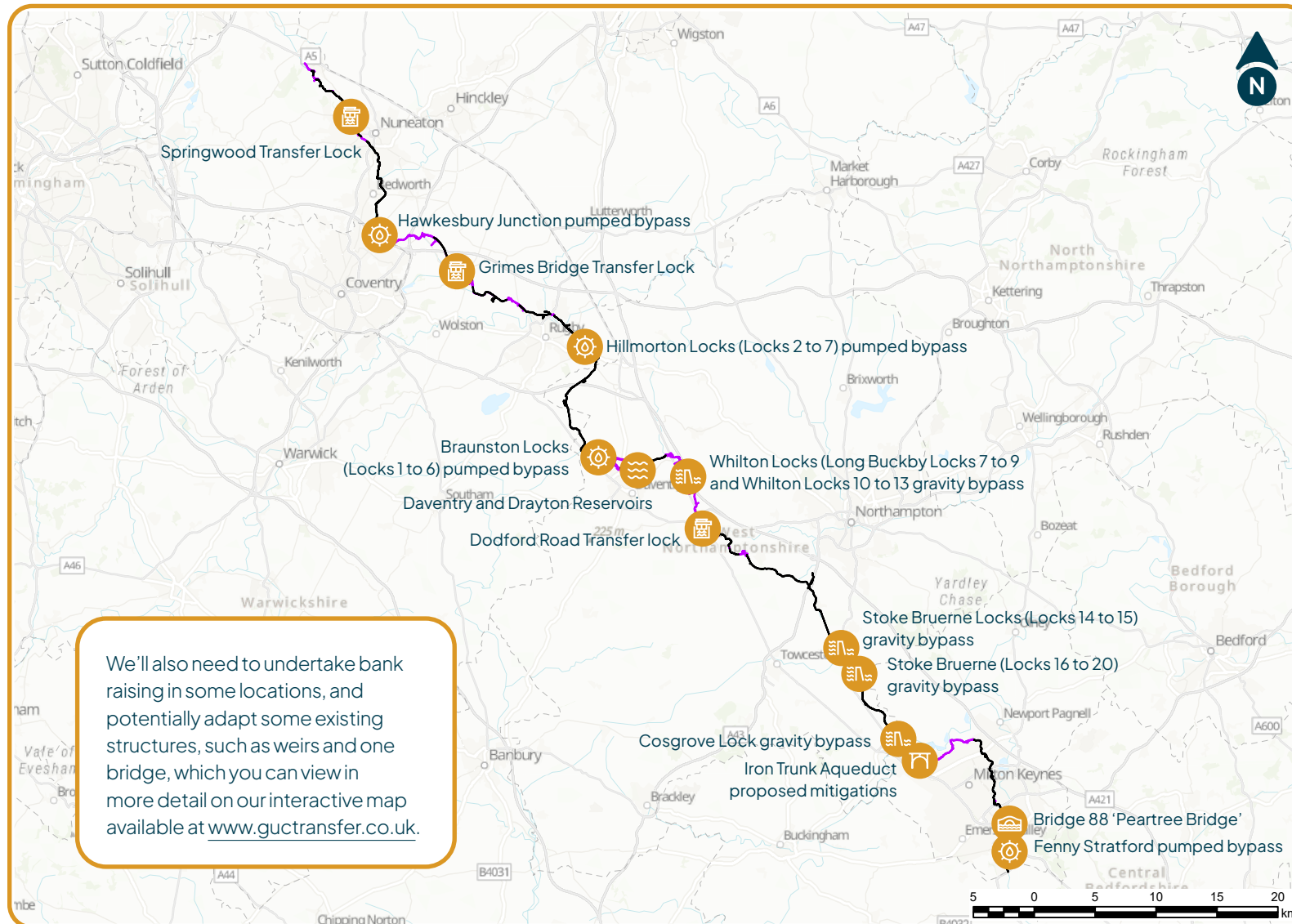
Indicative site location of the new Advanced Water Treatment Plant at Minworth Wastewater Recycling Centre



Proposed pipeline corridor route between Minworth Advanced Water Treatment Plant and Atherstone



## Overview of the proposed infrastructure work along the canal



### Legend

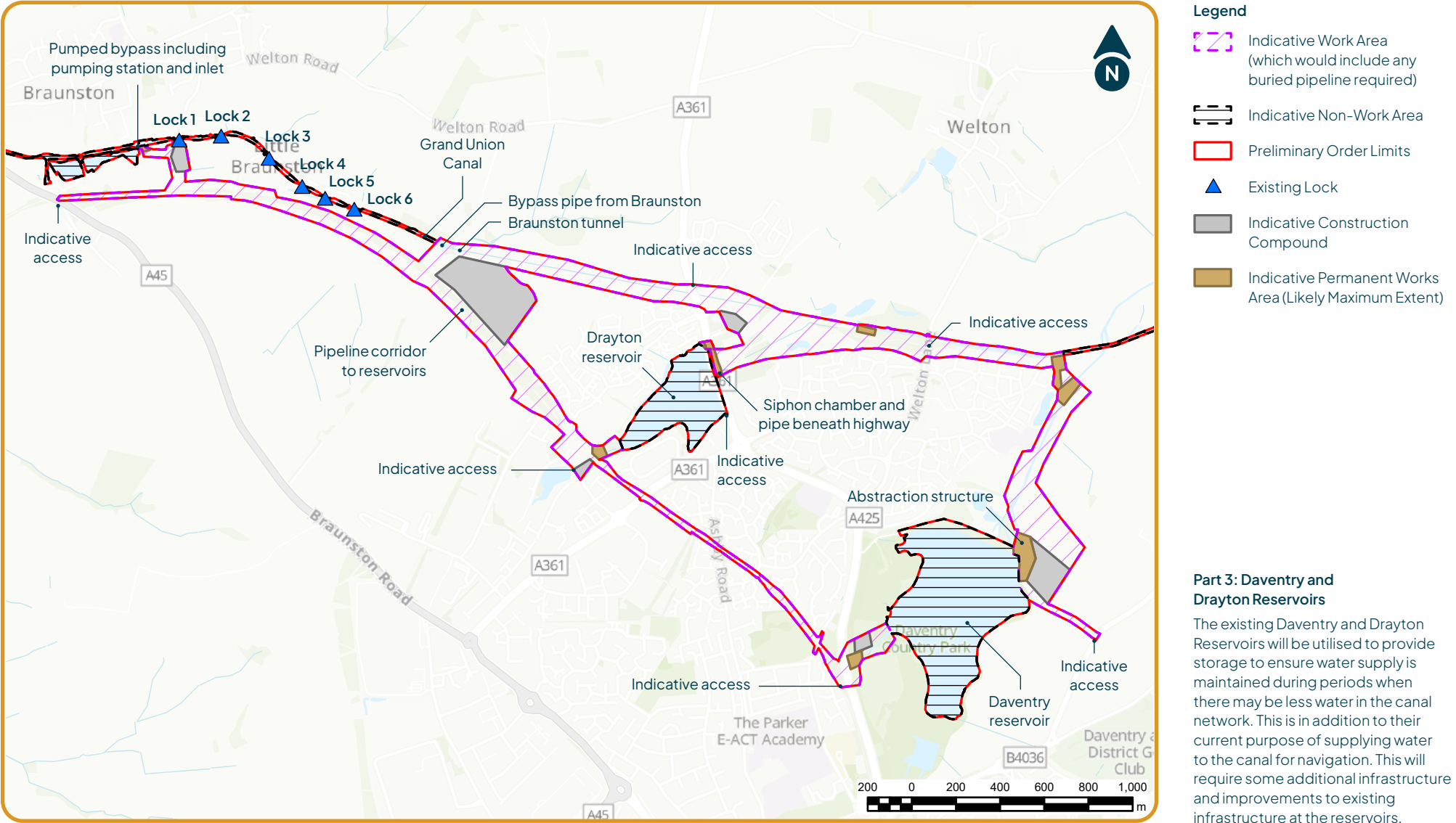
- Indicative Work Area
- Indicative Non-Work Area
- Preliminary Order Limits
- Transfer lock
- Pumped bypass
- Reservoirs
- Gravity bypass
- Iron Trunk Aqueduct
- Bridge

### Part 2: Works to the Coventry, Oxford and Grand Union Canals

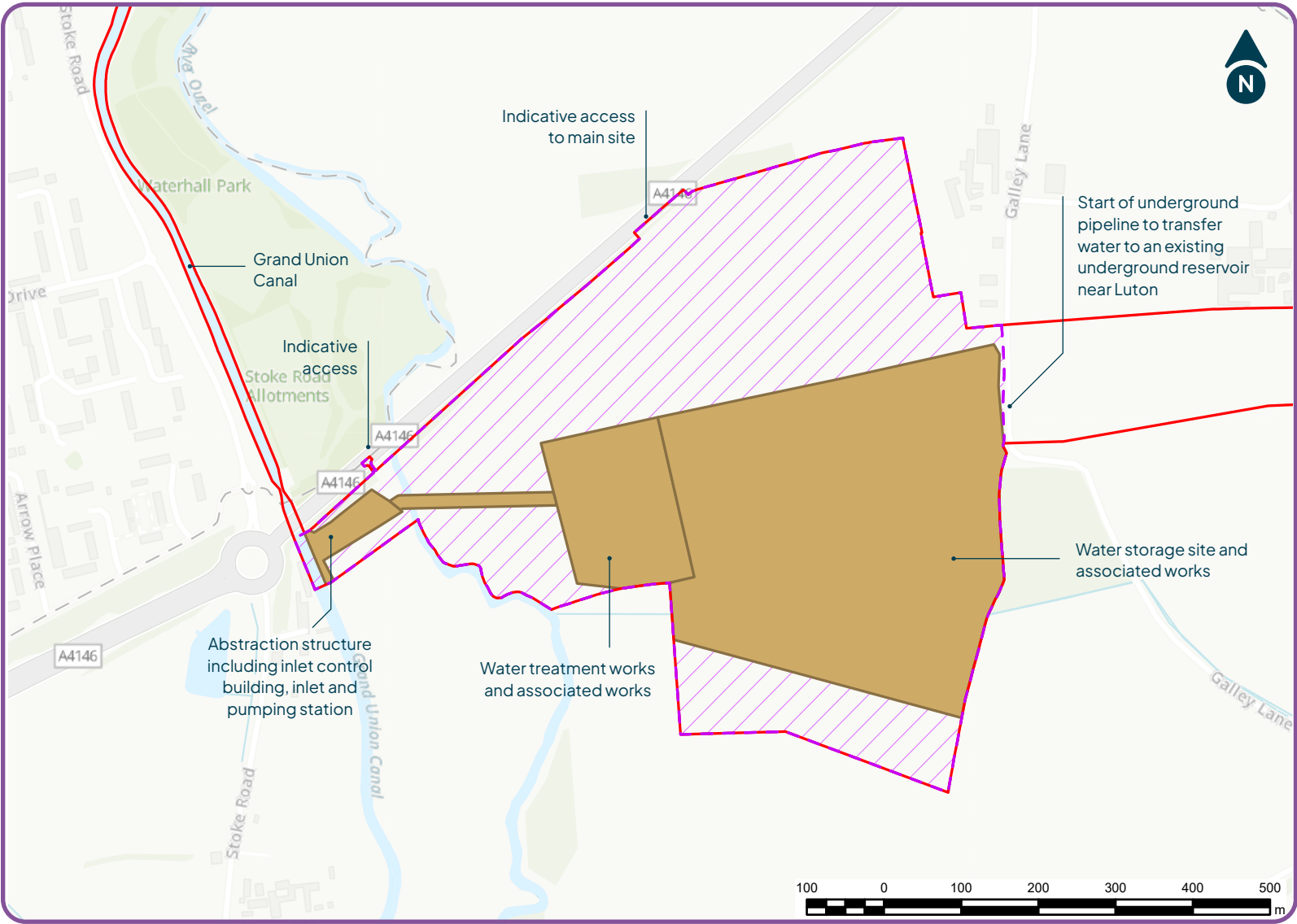
From the new outfall, the water will travel south through the Coventry Canal and Oxford Canal and then into the Grand Union Canal (approximately 120 km total length of canal network). To manage flow velocities and water level changes within the canal network resulting from the water transfer, a range of new infrastructure, along with modifications to existing infrastructure, will be required. The new infrastructure will include new pumping stations at locks (uphill), weir bypasses around locks (downhill), up to four new locks (referred to as transfer locks) and some sections of bank raising.



Proposed infrastructure and adjustments at Braunston Lock and Daventry and Drayton Reservoirs



Indicative site location of Galley Water Treatment Works and water storage site (including abstraction structure)

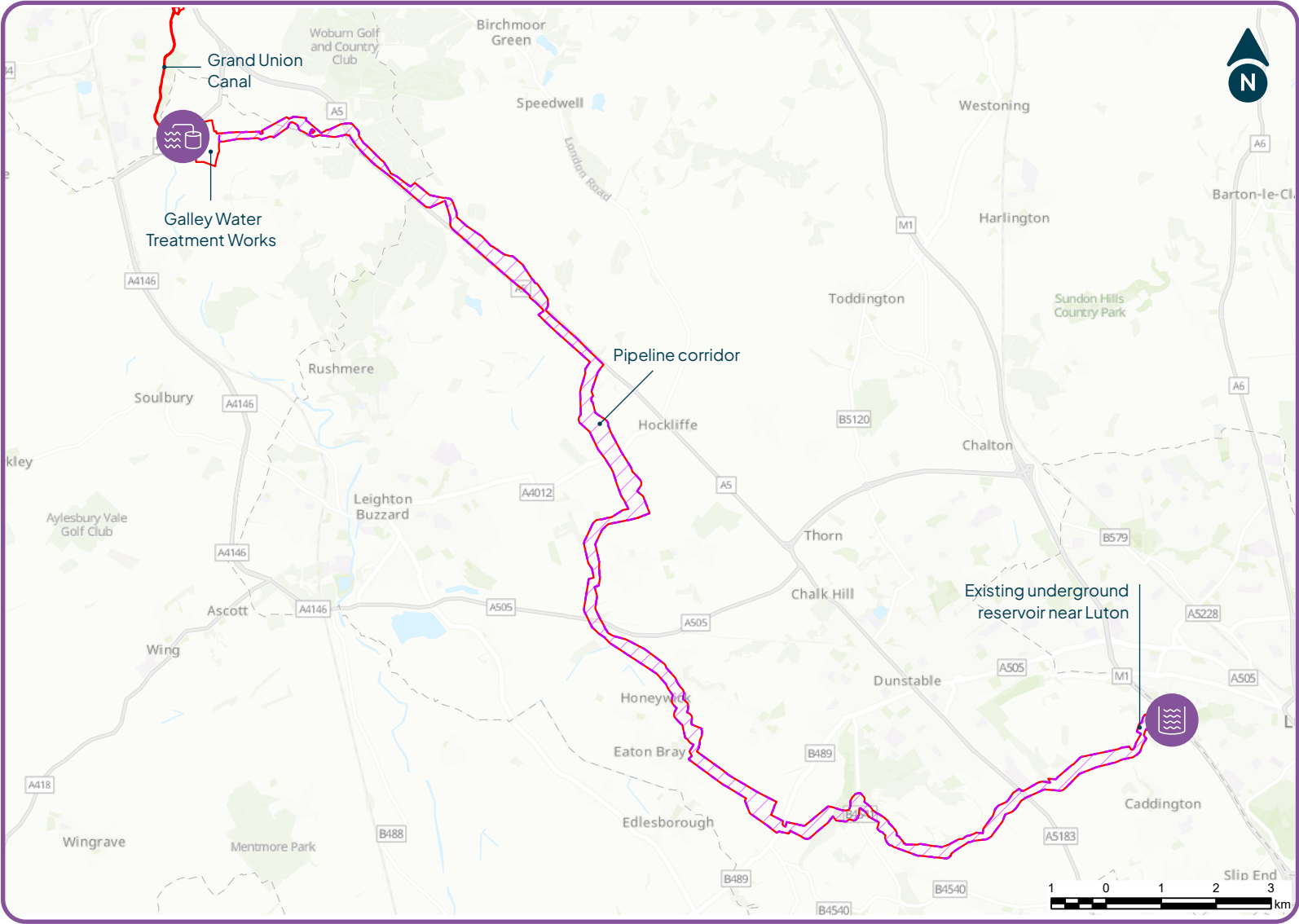


- Legend**
- Indicative Work Area
  - Preliminary Order Limits
  - Indicative Permanent Works Area (Likely Maximum Extent)

**Part 4a: Abstraction, storage and treatment**

Water will be abstracted from the Grand Union Canal at a location near Great Brickhill, southeast of Milton Keynes. Abstracted water will then be piped and pumped to the proposed Galley Water Treatment Works (WTW) where it will be stored and further treated to drinking water standards.

Indicative pipeline corridor from Galley Water Treatment Works to an existing underground reservoir near Luton



- Legend
- Indicative Work Area
  - Preliminary Order Limits
  - Galley Water Treatment Works
  - Existing underground reservoir

**Part 4b: Pipeline to an existing underground reservoir near Luton**

From the Galley WTW site, the treated water will be transferred via a new buried single or dual/twin pipeline approximately 28 km in length to an existing underground water supply reservoir (Affinity Water owned) located near Luton for distribution to Affinity Water customers.



# Constructing the Grand Union Canal Transfer

A range of construction techniques will be adopted to deliver the works efficiently while minimising disruption. Most pipelines will be installed using an open-cut method which involves excavating trenches, laying pipes, and reinstating the surface.

For certain crossings, such as main rivers, roads, and railways, trenchless techniques will be used to avoid disturbing the surface, where possible.

Construction is expected to take around four years to complete. Core working hours will be Monday to Friday (08:00 AM – 6:00 PM) and Saturday (08:00 AM – 13:00 PM), though some trenchless installations and emergency works may require 24-hour operations.



Engineer operating valve on installed pipeline

During construction, works along the canal, towpaths and Public Rights of Way (PRoW) will either be kept open where possible (for example, through the use of temporary railed floating walkways that are installed in the canal as works progress) or diverted. However, there may be some lengths of the canal where this will not be possible and landside diversions or temporary closures will be required. Towpaths that will be affected by the construction will be reinstated.

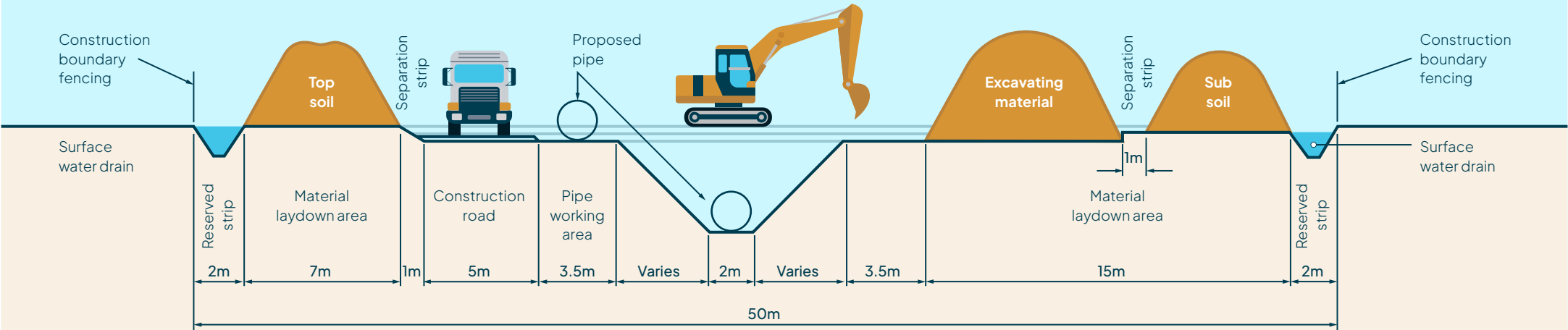
In addition, existing mooring sites may require temporary closure during construction or permanent closure as part of the Proposed Development. Where this is needed, lost mooring spaces will be replaced with temporary sites until the original moorings can be re-instated and will be upgraded, where possible. The aim will be to ensure no overall net loss of moorings.

Options for some works along the canal, such as bank raising, to be undertaken from work boats on the canal side of the bank are being explored. Transportation of materials and equipment via work boats will also be undertaken, where possible.

Construction of the proposed transfer locks will require canal closure and therefore, works are anticipated to be undertaken during the off-season periods (generally November-March, subject to timing of Easter) across two years with the canal re-opening during the boating season.

Environmental impacts during construction will be controlled through the implementation of a Construction Environmental Management Plan (CEMP) for different parts of the Proposed Development. The CEMP will set out the measures to be adopted by the appointed construction contractors to manage, for example, dust generation, noise and vibration levels, pollution to water courses and the movement of construction traffic. A Preliminary Outline CEMP is appended to the PEI Report.

The diagram below illustrates how we'll normally go about constructing the pipeline for a scheme.



Typical construction working width

# Assessments



# The Environmental Impact Assessment (EIA) process

**As part of the DCO process, a formal EIA is being carried out. The EIA considers the likely environmental impacts of the Proposed Development during construction and operation.**

Environmental impacts are described in terms of changes to the existing situation (the baseline). The EIA assesses environmental effects on a range of environmental receptors, including, for example, local residents, waterway users and community facilities, sites of heritage value, important ecological features and the species they support, and valuable landscape features such as hedgerows and trees. The outcomes of the assessment are then generally reported in terms of whether there's likely to be a 'significant' effect or not.



In March 2025, the Applicants submitted an EIA Scoping Report to the Planning Inspectorate. This report outlines how the Applicants propose to undertake the environmental assessment, including what topics will be studied, how data will be collected, and which environmental effects are likely to be significant.

In response, the Planning Inspectorate issued an EIA Scoping Opinion on behalf of the Secretary of State in May 2025, which included responses from consultees such as the Environment Agency, Natural England, Historic England and local authorities and parish councils. The ES will be based on the EIA Scoping Opinion.

**A summary of the preliminary assessment outcomes for each of the environmental topics included within the scope of the EIA is presented in the following sections.**





## Agriculture and Soils

This assessment considers the potential impact of the Proposed Development on agricultural land (including areas of high-quality agricultural land classified as Best and Most Versatile (BMV), which is highly valued for its versatility and productivity in farming) and soil resources (including the soil type, quality and quantity and resilience to damage). The assessment focuses on Parts 1b, 4a and 4b, i.e. where potentially significant effects on agricultural land and soils could occur.

The pipeline corridor routeing and refinement for Parts 1b and 4b has sought to avoid BMV land as far as possible. There are, however, some sections that pass through land, classified as BMV. This loss will be temporary only, as the land will be reinstated to its original condition.

Due to the potential for permanent loss of agricultural land for Part 4a of the Proposed Development, and to inform the ongoing design of the storage area and water treatment works, a field survey was undertaken. This identified that 11% of the land is classified as BMV. As the WTW and storage area will not extend into the BMV land, soils within that land will be conserved for use in landscape and habitat mitigation. The effect is therefore unlikely to be significant.

A Soil Management Plan (SMP) will be prepared by the appointed contractors to ensure proper handling, storage and restoration of soils during construction. The requirement to prepare the SMP will be specified in the CEMP. With the SMP in place, there's unlikely to be a significant effect on soil resources.

Further information can be found in **Chapter 7** of the **PEI Report Volume 2**.



## Air Quality and Odour

This assessment considers the potential impacts of the Proposed Development from emissions to air and odour generation during construction and operation. This includes impacts on residential properties, schools, moorings, ecological sites and existing air quality.

With the adoption of appropriate controls during construction, including the adoption of a Dust Management Plan(s) and an Odour Management Plan(s), it's considered unlikely that there will be any significant air quality or odour impacts due to construction activities. The Dust Management Plan will include site dust management such as stockpile covering, water spraying and wheel washing.

The currently expected number of construction vehicle movements is below the levels that would trigger a significant adverse effect on air quality.

There are no parts of the Proposed Development that are expected to give rise to emissions to air or odour during operation that would result in a significant effect.

Further information can be found in **Chapter 8** of the **PEI Report Volume 2**.



Aerial view of countryside near proposed southern pipeline route

## Climate and Carbon

One of the principal drivers for the Proposed Development is to counter the impacts of climate change and the predicted future shortfall in water resources due to more regular and longer periods of dry weather. In addition to providing a sustainable and reliable water supply for the future in the Southeast and reducing the reliance on water from other sources, it will also secure future water availability for canal navigation, ultimately acting as a measure to increase climate resilience by delivering a year-round supply of water.

The Proposed Development is designed so that it can deliver more water during the summer months when demand is at its highest. The Daventry and Drayton Reservoirs, which already provide a source of water for the canal, will provide additional storage if low river flows in the Rivers Tame and Trent mean that water can't be diverted to the Minworth AWTP for treatment.

As well as considering the impact of increasing temperature, the preliminary assessment also considers the effects of increased rainfall and the risk of flooding. This includes looking at the resilience of existing infrastructure along the canal and making sure this can cope with the additional volume of water that will be transferred plus the predicted changes in rainfall due to climate change. This has been assessed using modelling software that has examined various possible climate change events.

The preliminary assessment identifies two potentially significant climate change risks during the operational phase related to canal breaches and associated flooding. These risks, including the risks to certain culverts, cuttings and embankments, are the subject of ongoing investigation and will be reported in the ES. This will determine the need for, and type of remedial works, that may be required.

The preliminary assessment also looks at the potential release of carbon emissions during the construction and operation of the Proposed Development, and how the scheme can be designed to minimise these. Carbon emissions contribute to the greenhouse effect, trapping heat in the atmosphere and leading to global warming.

During construction, low carbon solutions, such as prioritising local sourcing of materials, will be adopted where appropriate. The CEMP will require the preparation of a Carbon Management Plan that will include measures to be adopted to minimise carbon emissions during construction.

To minimise carbon emissions during operation, measures to improve energy efficiency and introduce renewable energy, such as roof mounted solar panels, will be explored.

Overall, the Proposed Development is designed to support the UK's net zero goals and adapt to future climate challenges. The preliminary assessment of effects has identified that the carbon impacts of the Proposed Development would be minor and not significant for both the construction and operational phases.

Further information can be found in **Chapters 9 and 10** of the **PEI Report Volume 2**.



Example of solar panels on industrial building



## Cultural Heritage

This assessment looks at how the Proposed Development might affect built heritage features, such as scheduled monuments and listed buildings, and buried archaeology. The Proposed Development passes through areas with significant heritage value including historic canal features such as locks and bridges, industrial heritage sites and archaeological remains from prehistoric, Roman, and medieval periods.

There are a number of points along the canal network where the Proposed Development could impact important heritage assets, including:

 **Grade II listed Hawkesbury Engine House** – there's the potential to reuse this redundant engine house for a main control building as part of the proposed pumped lock bypass at Hawkesbury Junction. This would assist with the long-term preservation of this listed asset.

 **Grade II listed Stoke Bruerne Lock 14** – this comprises a pair of locks, one of which is now dry. The proposed lock bypass works in this location will involve re-watering the dry lock and then removing water via a pipeline or open channel under the towpath with water re-entering the canal, downstream of Grade II listed Lock

15. Any work on or near to the dry lock will be carefully managed and the heritage assets in the area protected.

 **Iron Trunk (Cosgrove) Aqueduct Scheduled Monument** – a modification may be required to this aqueduct to manage the additional volume of water that will flow over it. This is likely to comprise the reversible addition of a 100–150 millimetres high, removable bar fixed on top of the offside lip of the existing aqueduct trough.

These, and other proposed works in the vicinity of built heritage assets, are the subject of ongoing assessment and engagement with Historic England, Local Authority Conservation Officers and the Trust's own heritage experts. Although the preliminary assessment identifies some potentially significant effects on heritage assets during construction, with further design development and additional mitigation measures, it's anticipated that significant effects can be avoided.

The routeing and siting of the Proposed Development have sought to avoid areas of known archaeological interest. There are, however, parts of the development that could impact on undiscovered below ground archaeology; particularly where it's located on previously undeveloped land (such as agricultural land).

To help understand the potential for archaeological impacts, a detailed desk study and targeted site walk overs have been undertaken. A programme of geophysical survey is also planned, which is a non-intrusive method of detecting and mapping below ground archaeological remains and features. It's likely that this will lead to some targeted trial trenching that will further inform the refinement of pipeline corridors, temporary works areas (e.g. haul roads and compounds) and the siting of plant and buildings to avoid these features. Where areas of potential archaeological interest can't be avoided, it's likely that further investigation and recording of archaeological remains will

be required prior to construction. This would be agreed with the relevant local authorities. Details for the avoidance and preservation of archaeological areas will be set out in an Archaeological Mitigation Strategy and the requirements for, and scope of, archaeological control measures will be set out in an Overarching Written Scheme of Investigation. With these measures in place, it's expected that significant effects on archaeological remains can be avoided or minimised.

Further information can be found in **Chapter 11** of the **PEI Report Volume 2**.



Stoke Bruerne



## Ecology – Aquatic

This assessment considers the potential impact of the Proposed Development on designated sites of aquatic ecological value such as Special Areas of Conservation (SAC), Sites of Special Scientific Interest (SSSI), Local Nature Reserves (LNR) and Local Wildlife Sites (LWS), and on fish and other aquatic species, some of which are protected by legislation.

During construction, potential impacts will be managed through the adoption of best practice measures to be delivered through the CEMP. For the construction of the pipelines, main rivers will be crossed by trenchless techniques. The preliminary assessment identifies potentially significant effects on a small number of aquatic habitats, but with suitable controls on construction, it's expected that these adverse effects can be avoided.

Key considerations during the operation of the Proposed Development include:

- Impacts on the Rivers Tame and Trent and Humber Estuary SAC that could occur as a result of diverting recycled water that's currently discharged into the River Tame. Extensive modelling has been undertaken to look at the potential changes to the water levels and quality in the rivers Tame and Trent and how this might impact on aquatic ecological sites and species. Assessment work is ongoing, but it's expected that significant effects can be avoided.
- Controlling the quality and flow of water into the canal so that it doesn't adversely impact aquatic ecology, specifically in terms of water chemistry, turbidity, temperature, dissolved oxygen, and direct flow rate. The quality of the water into the canal will be controlled through a discharge licence to be issued by the Environment Agency. The outfall structure will control the rate at which the water is released into the canal. It's expected that with these controls in place, there'll be no adverse effect on the aquatic ecology of the canal.

- Where water is to be abstracted from the canal at Braunston and near to Great Brickhill, the abstraction structures may be designed with fish and eel screens and return systems, pending discussions with the Environment Agency, to prevent injury or mortality.

Although there are some potentially significant environmental effects, including fish passage at existing weirs on the River Tame, changes in connectivity between the Proposed Development and receiving watercourses, and effects on fish due to flow changes in the canals, these are the subject of ongoing assessment and consideration of additional mitigation measures. Similarly, there are potential beneficial effects of the scheme such as improvements in water quality in the canals and reservoirs, and improved water levels in the reservoirs.

Further information can be found in **Chapter 12** of the **PEI Report Volume 2**.



Great-crested newt (female)

## Ecology – Terrestrial

This assessment considers the potential impact of the Proposed Development on designated sites, habitats and protected species, including bats, badgers, great crested newts, dormice, birds, reptiles, otters and water voles. The assessment also considers invasive species such as Himalayan balsam and Japanese knotweed.

The Proposed Development will cross a range of landscapes and habitats, including farmland, woodland, grassland, and watercourses. Some parts of the route may affect woodlands, including areas near ancient woodland, which is highly protected. Hedgerows may need to be removed temporarily, which could impact wildlife corridors. Grasslands and farmland may be disturbed, and ponds or streams crossed by the pipeline could affect amphibians and water dependent mammals. Wherever possible, the routeing of pipelines and siting of plant and infrastructure has sought to avoid designated sites and features of ecological value. Trenchless pipeline construction will also be used where appropriate, including where the Part 4b pipeline crosses the Dunstable Downs and Whipsnade SSSI.

Extensive surveys have been carried out since 2023 and are ongoing to map habitats and identify species. Close engagement has been undertaken with the Environment Agency and Natural England on survey type, method and findings.

One of the key considerations is the potential impact on the water vole population that occupies large parts of the canal. The proposed bank raising work has the potential to affect areas of water vole habitat. Options for mitigating impacts are being explored with Natural England and could involve moving water voles to newly created habitats. Following the completion of construction, water voles would naturally recolonise disturbed areas from neighbouring populations. To aid successful long-term recolonisation, habitat enhancement would be undertaken.

Features suitable for water vole burrowing will be built into the construction elements wherever possible, including the like-for-like replacement of soft canal banks. The objective for the water vole mitigation strategy is a net positive for the conservation status of water voles.

Work affecting water voles and any other protected species will require licences to be issued by Natural England.

An Outline Landscape and Ecological Management Plan (OLEMP) will be prepared and submitted with the DCO application. This will set out the measures to protect ecology during construction and the plans for restoration and enhancement post-construction, including replanting hedgerows and woodland.

Although there are some potentially significant environmental effects during construction and operation, these are the subject of ongoing assessment and consideration of additional mitigation measures.

The Applicants are committed to delivering biodiversity net gain (BNG) which means leaving the natural environment in a better state than before the development was constructed and have set a target of a minimum 10% net gain. Opportunities for BNG and ecological enhancement currently being explored include:



Creating new and enhanced natural areas to support a wider range of plant species and increase overall biodiversity across all habitat types. Native species suited to local conditions will be prioritised, ensuring alignment with local biodiversity strategies and upcoming local nature recovery strategies.



Installing features that encourage and support local wildlife, such as nesting and roosting structures, to promote species diversity and long-term habitat sustainability.



Introducing additional planting to strengthen vegetation cover and support ecological resilience, with a focus on selecting native species that enhance habitat connectivity and ecological function.



Identifying opportunities to protect and restore existing ecological features and improve the quality of local habitats.

The DCO application will be accompanied by a report to inform a Habitats Regulations Assessment (HRA); this will be undertaken by the Secretary of State, to review effects on European (Habitat) sites.

Further information can be found in **Chapter 13** of the **PEI Report Volume 2**.



## Ground Conditions

The Ground Conditions assessment looks at how the Proposed Development could affect land and geology, including mineral resources, and areas with possible contamination and groundwater.

Pipeline routeing and siting of plant and buildings has sought to avoid, as far as possible, known sources of contamination, groundwater and surface water abstractions, historical and active landfills and important geological features or resources.

Ground investigations are ongoing in areas of known and potential contamination. This includes the proposed location of the AWTP, which was previously used for sludge drying and is adjacent to an existing landfill site. The risks associated with excavating material and constructing in potentially contaminated areas will be assessed and reported in the ES. The ES will also identify any requirements for remediation post-construction.

Measures contained within the CEMP will limit the potential for dispersal and accidental releases of potential contaminants and uncontrolled run-off to occur during construction. The CEMP will also establish procedures for dealing with unexpected soil or groundwater contamination that may be encountered. A Pollution Prevention and Emergency

Response Plan will be in place as part of the CEMP. Where there's a requirement to dispose of surplus excavated materials off-site as waste, the material will be characterised to determine firstly whether it's hazardous or non-hazardous waste, in accordance with Environment Agency guidance.

Where the Proposed Development impacts on Minerals Safeguarding Areas or Mineral Consultation Areas, there may be some temporary or permanent sterilisation of mineral resources, but this isn't currently expected to be significant. Consultation will be undertaken with the relevant Minerals Planning Authority as necessary.

The preliminary assessment does not identify any significant effects during construction or operation.

Further information can be found in **Chapter 14** of the **PEI Report Volume 2**.



Topographical survey equipment



## Human Health

The Human Health assessment looks at how the Proposed Development could affect the health and wellbeing of local communities during construction and operation. It considers factors such as air quality, noise, access to healthcare, recreational spaces, water quality, and climate related risks, aiming to identify and reduce any negative impacts.

With the adoption of measures set out in the CEMP, it's expected that significant effects on human health during construction can be avoided. The Noise and Vibration assessment is currently predicting some temporary impacts from construction noise, but this is the subject of ongoing assessment and further consideration of possible construction equipment and measures to control particularly noisy activities. There may be some loss of open space/recreation space and some restrictions on access to the towpath during construction, but access will be reinstated once construction in that location is completed.

The preliminary assessment concludes that there will be no significant adverse effects on human health once operational. The Proposed Development will deliver a positive effect in terms of water availability, which is one of the human health considerations.

Further information can be found in **Chapter 15** of the **PEI Report Volume 2**.



Family enjoying canoe trip on canal

## Landscape and Visual

The Landscape and Visual assessment considers how the Proposed Development could affect the character and appearance of the surrounding area, both during construction and operation. It also considers the impact on views from homes, public spaces, including the canal towpath, and sensitive locations such as National Landscapes.

Measures will be incorporated in the CEMP to reduce impacts on landscape features such as vegetation, hedgerows and trees and to minimise the visual impact on nearby receptors. This is likely to include:



Positioning temporary construction compounds in less visually conspicuous locations and enclosed by suitable fencing, as far as practicable.



Employing standard good practice construction techniques, such as minimising vegetation clearance, installing tree protection measures, and habitat reinstatement undertaken as soon as possible, following completion of construction works.



Reinstatement of hedgerows and field boundaries crossed by the pipeline routes as soon as possible, following construction.

The preliminary assessment reports some potentially significant environmental effects during construction across all parts of the Proposed Development. These are the subject of ongoing assessment and consideration of additional mitigation measures.

Integration of the above ground elements of the Proposed Development within the landscape will be aided by the adoption of the Applicants' draft Design Principles and Canalside Design Principles.



Countryside, Warwickshire

During the first year of operation, four significant visual effects have been identified:

- For the views of road users of Twenty One Oaks and Coleshill Road, as a result of the introduction of the BPT
- The views of nearby residents, moorings and users of the canal and towpath from Burtons Bridge (no. 71) over the Oxford Canal
- The views of nearby residents, moorings and users of the canal and towpath from Colehurst Lane adjacent to Grimes Bridge (no. 26) over the Oxford Canal
- The views of nearby residents, moorings and users of the canal and towpath at George Lane

Opportunities for additional mitigation, including landscape planting to help screen views, will be further reviewed and defined as part of ongoing design development. These views would not be significant after 15 years of the Proposed Development's operation.

The DCO application will be accompanied by an OLEMP which will set out the requirements for the protection of existing landscape features and the provision of new vegetation, hedgerow and tree planting, including planting to provide screening. This will be supported by an Arboricultural Impact Assessment that will look specifically at the trees to be removed, retained, and protected during construction works.

Further information can be found in **Chapter 16** of the **PEI Report Volume 2**.





Grey Heron



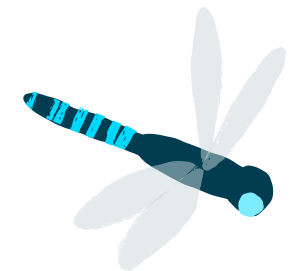
## Major Accidents and Disasters

The purpose of the assessment of Major Accidents and Disasters (MA&Ds) is to identify, assess, and mitigate the risks associated with MA&Ds risk events relevant to the Proposed Development that could cause serious harm to people, property and the environment.

Following the EIA Scoping Report, and subsequent EIA Scoping Opinion from the Planning Inspectorate, the only risk event considered to be potentially significant is the risk of boating incidents during construction and operation of the Proposed Development.

It's expected that these risks can be managed through existing Trust procedures, but this is the subject of ongoing assessment and will be reported in the ES. However, it's acknowledged that canal breach, although an extremely rare event, is also an issue that will require further assessment. The risk and associated sources of this risk will be reviewed as part of the ongoing assessment.

Further information can be found in **Chapter 17** of the **PEI Report Volume 2**.





## Materials and Waste

This assessment considers how the Proposed Development will manage the use of materials and the generation of waste to ensure sustainable practices and reduce environmental impacts. The Proposed Development will require large quantities of construction materials such as aggregates, concrete, and steel, which could potentially affect regional supply. Construction activities will also generate waste, including hazardous types, and may place pressure on landfill capacity. While safeguarded mineral and waste sites have been identified, impacts on these are expected to be minimal.

To understand these issues, the assessment has considered material availability and landfill capacity, mapped safeguarded sites, and estimated waste quantities using industry tools. Measures to minimise impacts include prioritising recycled materials, applying the waste hierarchy of 'prevention, reuse, and recycling', and developing detailed management plans for construction and waste handling. Excavated materials will be reused on site where possible, and ongoing monitoring will ensure compliance with environmental standards.

The DCO application will be accompanied by an Outline Site Waste Management Plan that will set out how waste will be managed during construction, and

how opportunities to prevent, reuse and recycle waste will be explored in accordance with the waste hierarchy.

During operation, the new Minworth AWTP and Galley WTW will both require use of materials for the water treatment process, which will also result in waste. The quantities and types of operational waste are subject to further assessment, although it's not anticipated to be significant.

The two pipelines, canal network and reservoirs will require ongoing maintenance during operation and will generate minimal volumes of waste relative to the scale and nature of the Proposed Development. Waste generated from the canal and reservoirs will be managed in accordance with operational procedures already in place.

The preliminary assessment identifies one potentially significant effect which relates to hazardous waste excavation requiring disposal for Part 1a. This is the subject of ongoing assessment and will be updated for the ES.

Further information can be found in **Chapter 18** of the **PEI Report Volume 2**.



Reinstating road after installing pipeline

## Noise and Vibration

This assessment considers the likely effects of construction noise and vibration from the Proposed Development on people and surrounding property during construction and once operational. Baseline surveys have been undertaken to identify sensitive receptors and establish existing noise conditions.

Measures to control noise and vibration during construction will be set out in the CEMP and will include, for example:

- Avoiding unnecessary revving of engines and switching off equipment when not required
- Locating plant as far from noise sensitive receptors as practicable
- Working within designated working hours
- Selecting quieter equipment and construction methods
- Using enclosures or screening where practicable

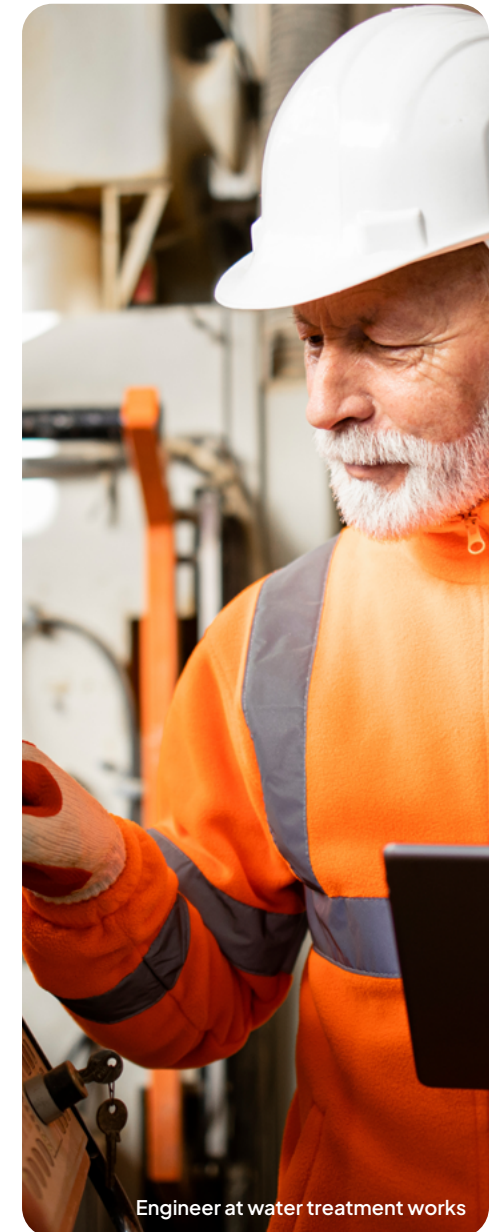
The preliminary assessment is currently predicting significant noise effects at a number of receptors across the route of the Proposed Development during construction. This is, however, based on a worst-case assessment of construction plant and equipment. It's expected that, through ongoing assessment and consideration of additional mitigation measures, significant effects can be minimised.

To manage potential vibration impacts during construction, the CEMP will set out the requirements for a vibration risk management process to be adopted. This would set a vibration limit that would be monitored by the appointed contractors to ensure that it's not exceeded. This limit may need to be reduced for particularly sensitive buildings and structures, including those of heritage value. If a risk of exceedance is identified, then alternative construction methods would be adopted.

The CEMP will require contractors to prepare a Stakeholder Management Plan to maintain effective community and stakeholder engagement throughout the construction phase. Prior to construction works being undertaken, occupiers of nearby premises that may be adversely affected by construction noise and vibration will be contacted by the contractor. All communications would contain contact details to direct any questions or issues to.

During operation, the majority of the noise generating plant, such as pumping stations, will be housed within appropriately designed buildings. This will help minimise the likelihood of noise disturbance at nearby receptors. Ongoing assessment will identify any requirement for additional noise reduction through the use of acoustic enclosures or acoustic barriers or screening. The preliminary assessment concludes that there no likely significant effects during operation.

Further information can be found in **Chapter 19** of the **PEI Report Volume 2**.



Engineer at water treatment works



## Socio-Economics

The assessment of socio-economic effects considers a number of matters, including employment, training, users of PRow and the canal network, local and private assets (including residential properties, development land, local businesses (including agricultural businesses), community facilities, open space, recreation and leisure and visitor attractions) and tourism.

The Proposed Development would support, on average, approximately 150 total net jobs per annum during the construction phase. Of these, approximately 110 jobs per annum would be expected to be taken up by residents within a 60-minute drive-time area. There are likely to be a small number of additional jobs during the operational phase.



The DCO application will be accompanied by an Outline Skills, Supply Chain and Employment Plan that will set out the Applicants' strategy for providing local training and apprenticeship opportunities.

One of the key considerations is the impact of the Proposed Development on canal users during construction.

Wherever possible, towpaths and PRow will be kept open during construction works. This may entail temporary signed diversions of floating railed walkways installed in the canal, to maintain access where appropriate. This is a common method used by the Trust to avoid towpath closures.

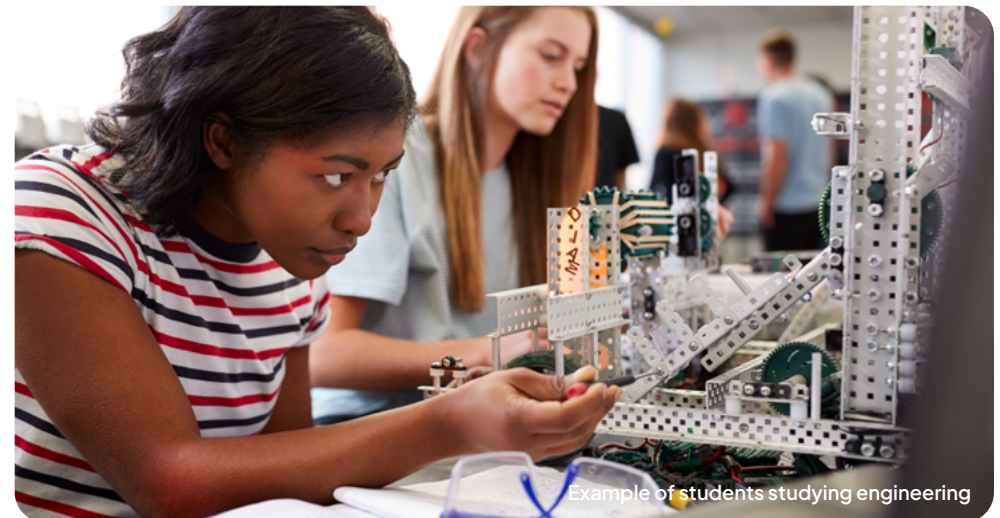
If a section of the canal needs to be closed for a period, this will be in line with the Trust's winter works and stoppage protocols. The winter period is generally when the Trust undertakes works that require navigations to be restricted or closed; this is because fewer boats are using the waterways in the winter. Any closures required outside the winter period may be agreed by the Trust in exceptional circumstances.

During construction, some existing moorings along the canal may need to be temporarily or permanently closed. In such cases, new moorings will be created nearby or at other appropriate locations along the canal section, to ensure there's no overall reduction in the total number of moorings along the canal.

The Proposed Development is being designed to ensure that adverse effects on canal users, by the additional volume of water or new infrastructure during operation, are avoided or minimised, wherever possible. Engineering design is ongoing and the outcomes of further environmental assessment will be reported in the ES.

Assessment is ongoing but it's not expected that the proposed works will have an adverse effect on tourism.

Further information can be found in **Chapter 20** of the **PEI Report Volume 2**.



Example of students studying engineering



## Traffic and Transport

The preliminary assessment looks at how the Proposed Development could affect local roads, PRoW, and canal towpaths during construction and operation, aiming to minimise disruption and maintain safety.

During construction, road traffic volumes, particularly from heavy goods vehicles (HGV), will increase temporarily. HGV routeing is currently being developed as part of the ongoing design and assessment process to minimise impacts.

It may be possible to carry out some work along the canal, such as bank raising, from work boats on the canal side of the bank. Where possible, the transportation of materials and equipment to and from those areas will be by workboats.

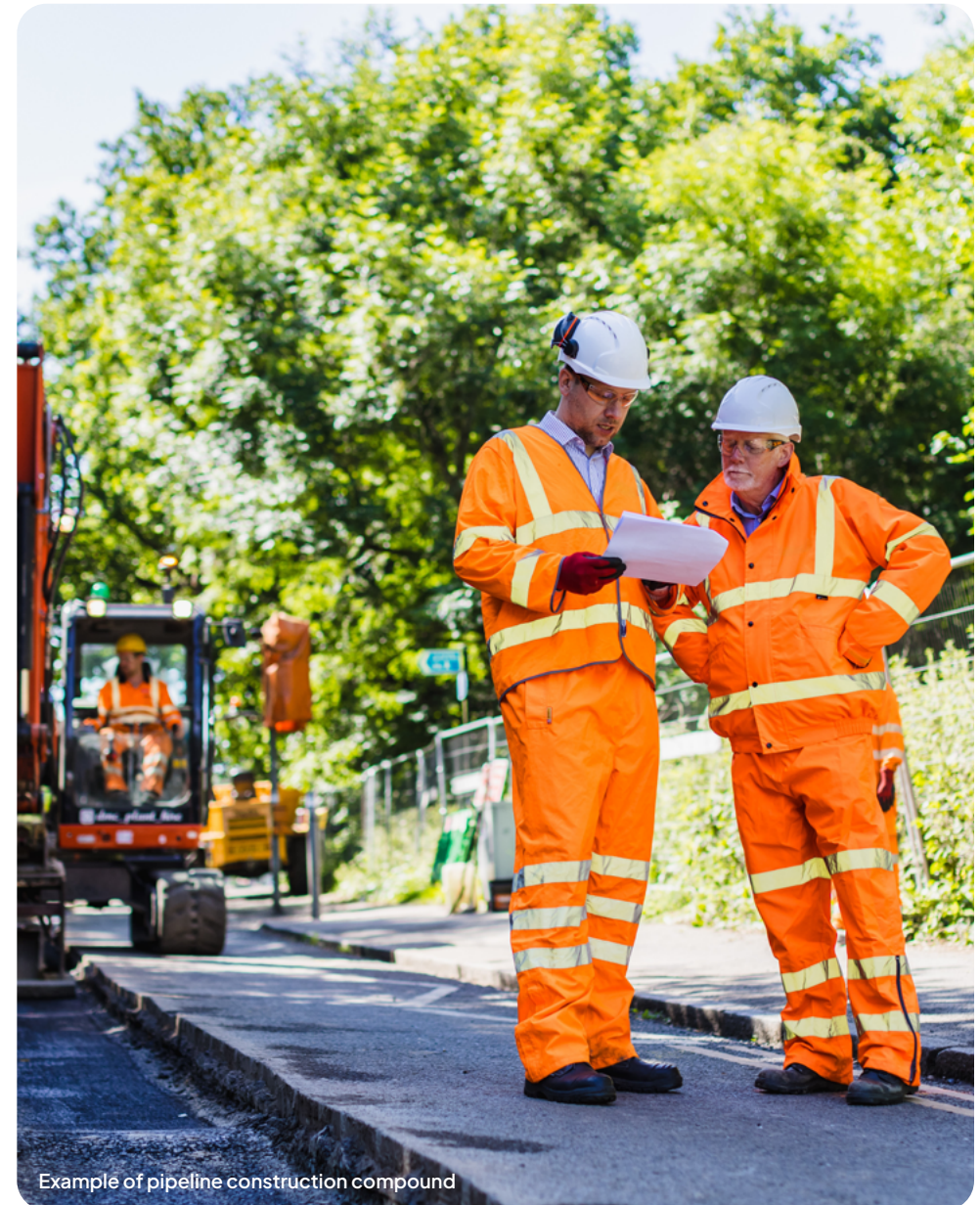
Some PRoWs, including footpaths, bridleways and canal towpaths, and roads, may be temporarily affected. Where this occurs, temporary diversions may be required.

The DCO application will be accompanied by an Outline Construction Traffic Management Plan (CTMP) that will set out the measures to be adopted by the appointed contractors, including identifying suitable routes for HGVs, avoiding canal bridges subject to weight limits and implementing traffic management (e.g. advanced signage to advise other users of the works).

The preliminary assessment has identified one potentially significant effect during construction, which relates to the temporary closure of part of Coleshill Road for the construction of the Minworth to Atherstone pipeline. This is the subject of ongoing assessment, and consideration of consultation feedback, to explore how the effects of this closure can be minimised.

Operational and maintenance traffic will be limited and unlikely to significantly impact on any road users.

Further information can be found in **Chapter 21** of the **PEI Report Volume 2**.



Example of pipeline construction compound

## Water Environment and Flood Risk

The Water Environment and Flood Risk assessment looks at how the Proposed Development could affect rivers, canals, reservoirs, groundwater, flood risk, and water dependent wildlife. It also considers impacts on people and businesses that rely on these water sources.

During construction, measures will be set out in the CEMP to manage potential impacts to the water environment, including setting out responsibilities with regards to water management, required water quality monitoring, pollution prevention measures, training requirements for construction workers with regards to the water environment, an outline of likely relevant permissions and consents required, and a Pollution Prevention and Response Plan. Where main rivers are encountered during pipeline construction, trenchless crossing techniques will be adopted to avoid impacts on these watercourses. Groundwater protection measures will be implemented to prevent contamination and manage dewatering safely. Temporary Drainage Systems and Sustainable Drainage Systems will be incorporated, where feasible.

With these measures in place during construction, it's expected that significant effects can be avoided. The only exception is potential impacts

on groundwater resources during construction of the Part 4b pipeline. This is the subject of ongoing assessment and will be further reported in the ES.

### During operation, key considerations include:

 **Reductions in flow on the Rivers Tame and Trent** – the diversion of some of the recycled water that's currently discharged into the River Tame to the proposed AWTP will impact flow and water levels in the Rivers Tame and Trent. Extensive modelling and consultation with the Environment Agency have informed measures to comply with the 'hands off flow' requirements on the River Trent, which is the minimum flow conditions below which water abstraction must cease to protect the river ecosystem.

 **Impact on water quality and velocity within the canal networks** – the outfall structure at Atherstone will provide a controlled discharge of the highly treated recycled water from the Minworth AWTP into the canal at a maximum flow that won't adversely impact navigation or disturb the canal bank or bed. The enhanced treatment that will be provided by the AWTP will ensure

that the water quality in the canal is not adversely impacted. The discharge to the canal will require an Environmental Permit from the Environment Agency.

 **Reservoir storage** – Daventry and Drayton Reservoirs will provide six days water storage to support transfers during low-flow periods.

 **Water levels within the canal network** – extensive modelling undertaken to date, indicates that additional water in the canal can be managed without causing overtopping and flooding, supported by interventions such as the proposed lock bypasses, transfer locks, weir modifications and areas of bank raising.

 **Flood risk** – the routing and siting of the Proposed Development has sought to avoid development within areas of high flood risk. Where this hasn't been possible, flood risk modelling will be undertaken and a Flood Risk Assessment Report with any proposed mitigation measures including climate change allowances will accompany the DCO application.



**Groundwater** – monitoring and mitigation will continue during operation to protect aquifers and dependent habitats.

The preliminary assessment identifies two potentially significant effects during operation. These relate to fish passage on the Rivers Tame and Trent and potential flood risk associated with the AWTP. These potential effects are the subject of ongoing assessment and consultation and will be further reported in the ES.

The DCO application will also be accompanied by a Water Framework Directive (WFD) Compliance Assessment that will consider the extent to which the Proposed Development could impact on the current and future target WFD status of water bodies, including those of the Rivers Tame and Trent.

Further information can be found in **Chapter 22** of the **PEI Report Volume 2**.





# Cumulative assessment

The EIA is assessing two types of cumulative effects:

1

## Effect interactions

The likely interaction of individual impacts arising from the topic assessments combining to result in a new or different significant effects. For example, this can happen during construction if a property is subjected to noise, dust, and visual impacts associated with construction works.

2

## Cumulative Effects with Other Developments

The likely effects of the Proposed Development together with those of other nearby large-scale developments. A list of developments identified within proximity of the Proposed Development that may lead to significant cumulative environmental effects is provided in Appendix 23–PD-1 of the PEI Report, Volume 4.

Due to the preliminary status of the topic assessments and requirement to agree the list of other developments, these two assessments will be completed for the ES.





# Next steps

# Next steps

**The preliminary assessments presented in the PEI Report are a snapshot based on the Proposed Development as currently defined, and using the environmental information gathered to date.**

The design of the Proposed Development is ongoing and will continue to be informed by feedback from engagement with stakeholders and the environmental assessment process.

Environmental surveys and modelling are also ongoing and will continue to shape the design and any measures required to avoid or reduce significant environmental effects.

The final environmental assessment will be reported in the ES that will accompany the DCO application.

## Providing your feedback

We encourage you to have your say on the scheme by giving us your written feedback in one of the following ways:



Visit our website: complete and submit a feedback form at [www.guctransfer.co.uk/consultation](http://www.guctransfer.co.uk/consultation)



Email us at: [contact@guctransfer.co.uk](mailto:contact@guctransfer.co.uk)



Write to us at: Freepost GRAND UNION CANAL TRANSFER (no stamp needed)

All responses must be received in writing by 11:59pm on Thursday 2 April 2026. Responses received after that date may not be considered. We can't guarantee acceptance of consultation responses submitted via other channels.

## Any questions?

If you have any questions before submitting your response to the consultation you can contact the team by emailing us at [contact@guctransfer.co.uk](mailto:contact@guctransfer.co.uk) or by calling us on 0121 270 5920, Monday to Friday 9am – 5pm.



Any personal information submitted to us during the consultation will be processed in line with our privacy policy, which can be viewed at [www.guctransfer.co.uk/privacy](http://www.guctransfer.co.uk/privacy).





Grand Union  
Canal Transfer

Moving water together

### Speak to the team

If you would like to ask any questions about the scheme, please feel free to get in touch with our engagement team:

 [contact@guctransfer.co.uk](mailto:contact@guctransfer.co.uk)  
 0121 270 5920