



SNC • LAVALIN

Manchester Bolton & Bury Canal

Restoration - Feasibility & Impact Study

Canal & River Trust

22 March 2021

5202009-XX-ZZ-CE-RP-S-0001



Notice

This document and its contents have been prepared and are intended solely as information for Canal & River Trust and Manchester Bolton & Bury Canal Society for use in relation to demonstrating the case for the restoration of the canal described.

SNC-Lavalin assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

This document has 67 pages including the cover.

Document history

Document title: Restoration - Restoration - Feasibility & Impact Study

Document reference: 5202009-XX-ZZ-CE-RP-S-0001

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
P01.1	FIRST DRAFT	NH	SB	-	-	12/11/2020
P01.2	AMENDED DRAFT	SB	DB			03/12/2020
P01	DRAFT ISSUE	SB/PM	DB	SB	SB	21/12/2020
P01	FINAL ISSUE	SB/PM	DB	SB	SB	08/02/2021
P02	SECOND ISSUE	SB/PM	DB	SB	SB	22/03/2021

Client signoff

Client	Canal & River Trust
Project	Manchester Bolton & Bury Canal
Job number	5202009
Client signature/date	

Contents

Chapter	Page
Executive Summary	5
Background	6
1. Engineering	7
1.1. Introduction	7
1.2. Bolton and Bury Termini	7
1.3. Restoring the navigable channel	9
1.4. Canal Feeder	11
1.5. Water Street Re-bridging	12
1.6. Cost estimates	18
2. Environmental	19
2.1. Consultation	19
2.2. Biodiversity	19
2.3. Air Quality	22
2.4. Noise and Disturbance	23
2.5. Geology, Hydrogeology and Soils	24
2.6. Cultural Heritage	25
2.7. Landscape and Visual Amenity	26
2.8. Surface Water	27
2.9. Recommendations	28
3. Consultation Responses	30
3.1. Introduction	30
3.2. Technical issues	30
3.3. Responses	30
3.4. Summary of Survey responses	30
4. Planning Policy Review	36
4.1. The National Planning Policy Framework – Ministry for Housing, Communities and Local Government, February 2019	36
4.2. Bolton Local Development Plan	38
4.3. Bury Local Development Plan	39
4.4. Conclusions	42
5. Socio-economic case for restoration	43
5.1. The Need for the MB&BC Restoration and Redevelopment	43
5.2. The Wider Regeneration Context	44
5.3. Regeneration Outcomes	47
5.4. Value of Economic Benefits	53
6. Restoration Options	56
6.1. Restoration Options	56
7. Funding Opportunities	59
7.1. Funding the Manchester Bolton & Bury Canal Restoration	59
8. Conclusions	61
Appendices	63

Appendix A. References	64
A.1. Documents provided as the basis for this study	64
Appendix B. Environmental Designations Plan	65
Appendix C. The Breach - Watson Homes proposals (not part of this study)	66

Tables

Table 2-1 – Summary of the key ecological constraints and potential impacts	21
Table 2-2 – Listed Buildings	25
Table 5-3 – Regeneration outputs and outcomes	46

Figures

Figure 1 - Showing the much wider scope of earlier studies and identifying this study's extent	6
Figure 2 Overview of key elements of work at Hall Lane Basin	8
Figure 3 Overview of key elements of work at Proposed Daisyfield Basin	9

Executive Summary

This feasibility report brings up to date earlier studies for restoration of the Manchester Bolton & Bury Canal but unlike earlier studies it focuses only on the 5 miles of canal between Bolton and Bury. The breach section at Little Lever and the adjacent infilled length from Nob End are not covered by this report because restoration here is being progressed as part of, and subject to planning approval for, a proposed residential development by Watson Homes.

The canal in this feasibility report terminates outside the centre of Bolton and of Bury. At Bolton the demolition of several aqueducts has resulted in the logical terminus being at Hall Lane Basin close to Moses Gate Country Park. At Bury the canal terminates south of Wellington Street although longer term ambitions could see the canal extend towards the centre as part of future redevelopments.

Since 1987 the Canal Society have successfully managed fund raising and volunteer working parties to maintain and keep much of the canal in water. Because the canal is severed in two places, the breach and Water Street, it has failed to make significant progress as a local amenity with this potential further held back by restriction on public spending since 2008.

This report examines the engineering challenges to be overcome to restore the canal as described above for amenity boating traffic and towpath use. This includes elements of maintenance and repair, dredging, leak repair and tree clearance but the most significant element of work required is the restoration of the canal under Water Street. Here a 60-metre length of canal has to be restored by raising and re-bridging the A665, a 4-lane carriageway near the centre of Radcliffe. Updated costs have been developed against all identified works totalling £6.06 million.

A targeted consultation with local stakeholders and other bodies was carried out to inform the report on local opinions concerning the canal restoration. In the time that was allowed for this process to feedback a total of 88no. responses were received which were overwhelmingly positive. Many of the consultation responses raised common points and concerns at how the restoration could be directed.

The planning policy framework for both Bury and Bolton is supportive of restoration of the canal and towpath along this route and such activity would help fulfil several of the national and local planning objectives. In particular improving the attractiveness of local environs and improving health and wellbeing through provision of accessible green/blue infrastructure and opportunities for recreation, walking and cycling. Measures to restore the canal should recognise its high wildlife and biodiversity value and ensure the canal is accessible to all users including those with disabilities.

Socio-economic benefits to the value of £1 million per annum will accrue to Bolton MBC and Bury MBC areas. This indicates that the cost of restoration can be recouped within the local economy within 8 years and will then continue on an annual basis. These benefits will flow, in particular, to Farnworth, Kearsley, Little Lever, Radcliffe, and Bury Town Centre as these areas are closest to the canal.

Although the restoration of the 5-mile length of the canal is the objective of this study a series of options are presented to make increased use of the canal while the obstacles at Water Street and the breach are being resolved. The source of funds to realise the restoration is discussed at the end of this study.

This report confirms the feasibility and overwhelming positive impacts that the restoration of this short section of canal can achieve. Opportunities for funding such a scheme have been limited for several years but now the many benefits that restoration can bring for the local community are better understood. With the clear support of local businesses and councils this scheme should have renewed impetus for delivery.

Background

The Manchester Bolton & Bury Canal was built between 1791 and 1808 at a cost of £127,700. It was originally planned to be for narrow boats but during construction it was redesigned as a broad canal. The canal was officially abandoned in 1961. A society was formed in 1987 with the intentions of restoring the canal so that it can be used for leisure and contribute to local regeneration. The canal's water is supplied by the Elton Reservoir via a feeder channel that although largely intact requires some refurbishment.

Earlier studies from 1996 and 2004 addressed the restoration of the full Manchester Bolton & Bury Canal whereas this study focuses on the approximately 5 mile stretch of canal from Wellington Street in Bury, through Radcliffe to Hall Lane Basin, Little Lever (outlined in red below). In this stretch of canal, there are no locks, and with the volunteer efforts of the society, 4 of the 5 miles are in-water.

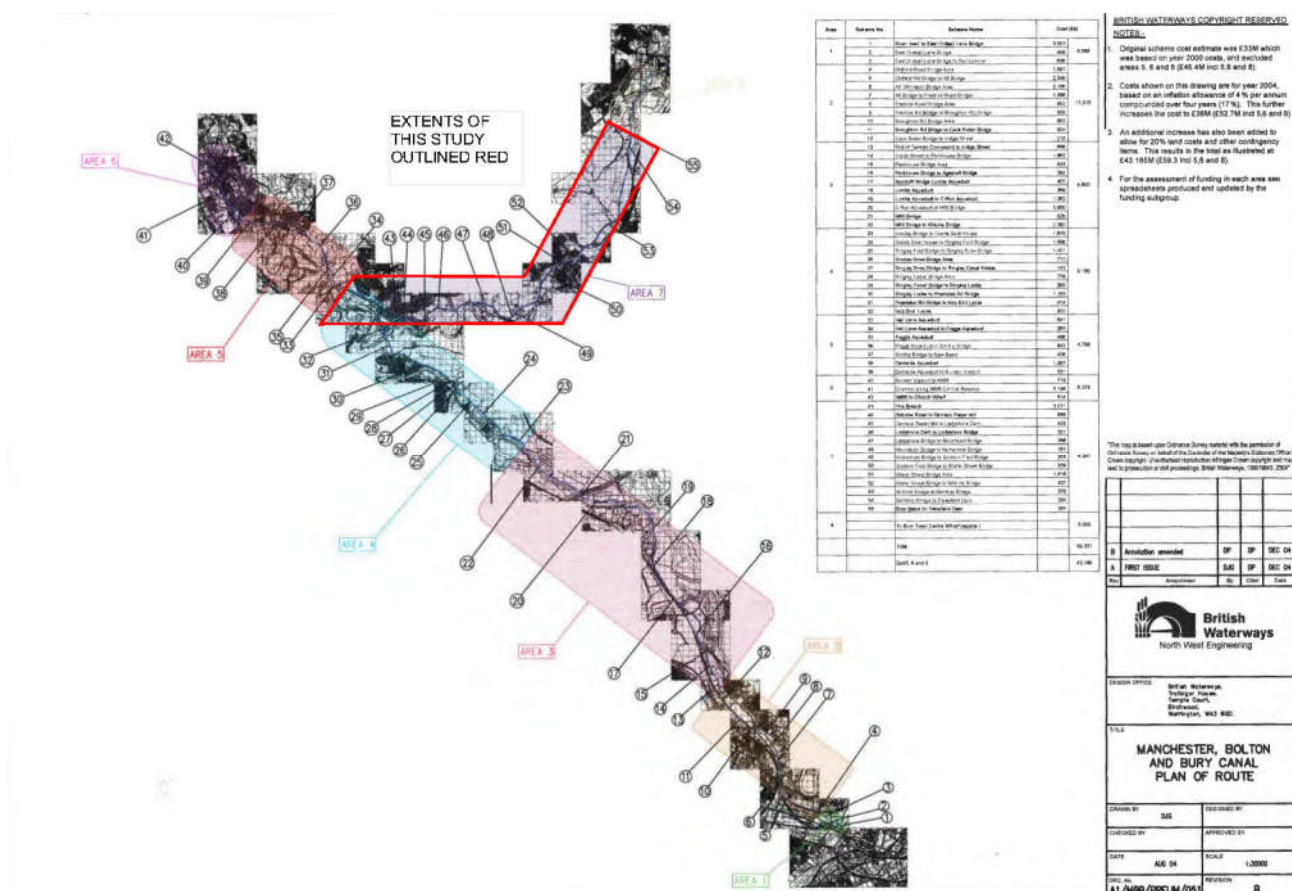


Figure 1 - Showing the much wider scope of earlier studies and identifying this study's extent

The majority of the land in the study area is owned by Canal and River Trust, some of the land is privately owned and the remainder is owned by the local authority. In the residential areas surrounding the canal, there are approximately 150,000 people that are within a 5-minute cycling distance; many of these residents have several deprivation needs which are above the national average.

There is a towpath alongside the canal which has been resurfaced for the majority of the length with some section a restored cobbled surface that is in good condition. The canal is also of heritage value and has multiple listed milestones along with a Grade II listed Steam Crane.

All areas of the canal that are in-water are Sites of Biological Interest (S.B.I.) and have significance as an environmental and ecological resource for wildlife with the consequent benefits for people. Furthermore, Nob End Nature Reserve is a designated SSSI and Local Nature Reserve.

1. Engineering

1.1. Introduction

The purpose of this study is to review and update relevant sections of the existing canal restoration studies listed in Appendix A and provide evidence for the Manchester Bolton & Bury Canal Joint Steering Committee in attracting external funding to complete the restoration of a continuous canal with a length of approximately 5 miles between Bolton and Bury.

Included is an overview and costing of the key engineering works and facilities required to achieve the objective with a discussion of some options that may be used for phasing delivery.

This report assesses the feasibility of the restoration with a summary of the potential impacts and outcomes of the restoration on the community, prosperity, area and wildlife, and a summary of the financial evidence behind the cost benefits coming from potential restoration options.

Approximately one third of a mile is under private ownership and therefore separate designs are being made for this part of the canal along with engineering options to dam the top of the Nob End Lock. This privately owned area also contains the site of the 1936 canal breach at Creams Paper Mill.

Effectively the proposed 5 miles of restored continuous canal presently comprises three lengths of canal in-water separated at two locations: the breach at Little Lever and the Water Street (A665) road crossing at Radcliffe.

Engineering aspects of the canal restoration are covered under the following headings.

1.2 Bolton and Bury Termini

1.3 Restoring the navigable channel

1.4 Canal Feeder

1.5 Water Street Re-bridging

1.6 Cost Estimates

1.2. Bolton and Bury Termini

For the purpose of this study the primary significance of the termini is that they mark the most likely end point for the canal restoration being considered and need to provide facility for boats to turn and moor. At least one terminus should provide for boat launching and if a continuous canal is not available at first then additional boat launching locations should be allowed for.

1.2.1. Hall Lane Basin Terminus

Any further extension of the canal towards Bolton is considered unlikely because the cost of the construction of a series of aqueducts would be prohibitive. This work was considered in earlier studies

The Hall Lane Basin is well placed to be developed to support recreational activities on the water. The basin, fed by surface water from the local catchment has ample space for moorings, boat turning and the development of boat launching facilities.

Access from the nearby public highway 90 metres (A6053) needs to be widened and upgraded to provide adequate safe turning for vehicles used to transport boats for launching. Access may also be better provided if the proposed Watson housing development goes ahead, reducing access costs. There are also opportunities to enhance active travel links through this terminus with the adjacent Moses Gate Country Park. Any proposals need to be reviewed to identify conflict with existing land ownership.

Parking for cars, welfare facilities and construction of a slipway for trailer mounted boat launch complete the basic provision at this location. It is assumed that cranes used to lift larger boats into the water can be sited away from the canal edge so a concrete slab to distribute load should not be needed.

Development of this terminus has little purpose until the breach section is restored because it enables access to less than 1 mile of canal. There may however be merit in developing the access at an early stage to support dredging and other engineering works and to enable some local boating.

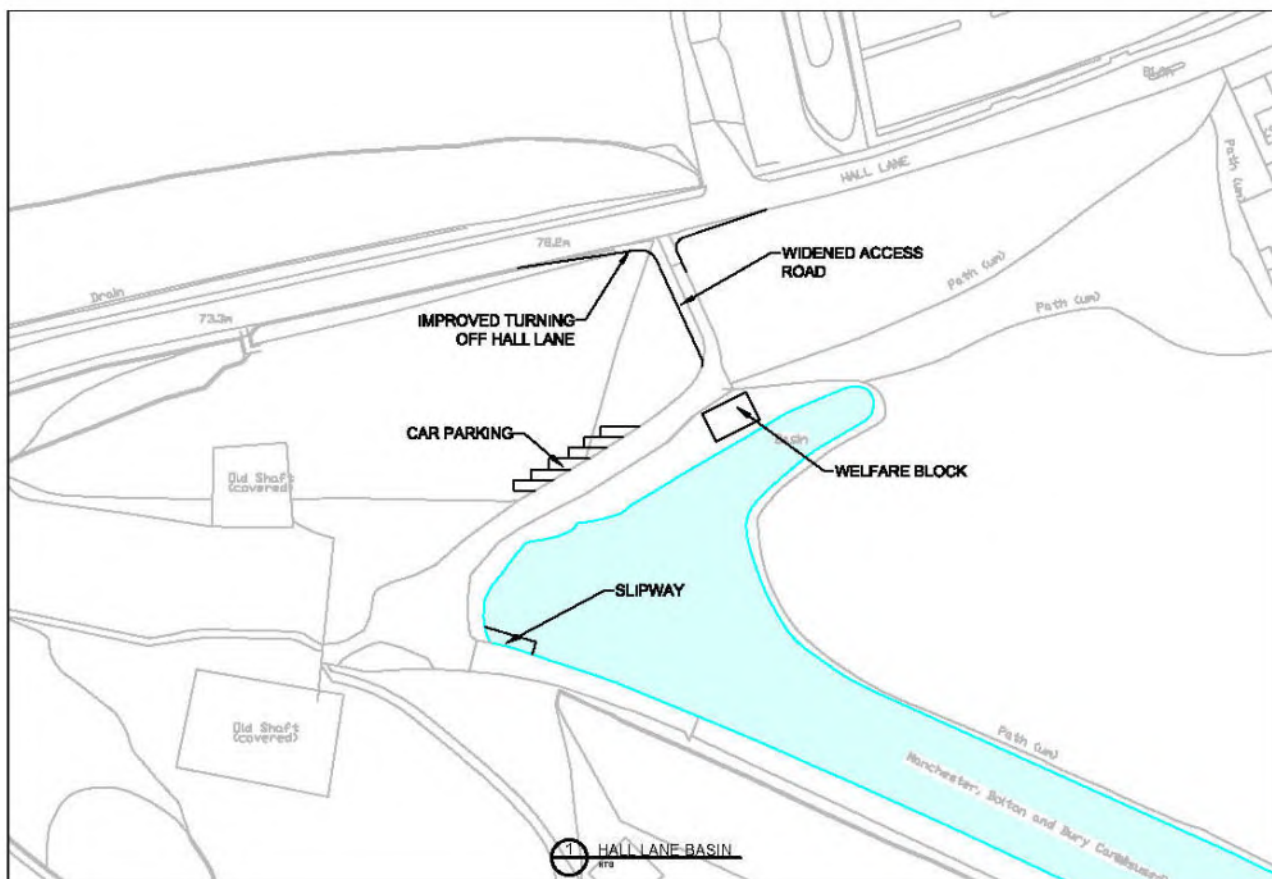


Figure 2 Overview of key elements of work at Hall Lane Basin

1.2.2. Daisyfield Terminus

Whilst there is some potential for developing an extension of the existing canal further north there are difficulties and limited clear benefits in doing so. For the purposes of assessing a baseline option this study considers the terminus to be located at or close to the existing end of the canal presently in-water.

There is no natural basin presently. This option requires the excavation and formation of a widened area that is sufficient for the turning and mooring of boats. This site could readily also include a slipway for boat launching.

Approximately 500m of new access from the public highway will be needed. This new access is likely to closely follow the previous line of the canal but consideration must be given for a future canal extension and impacts on adjacent land ownership.

Similar to the Hall Lane Terminus a provision for car parking and welfare facilities as a minimum have been allowed for as part of the feasibility requirement.

A viable option to improve access would be extending the towpath with a 3m wide shared use path including new shared use bridge across the River Irwell to link with Bury Town Centre.

An extension of the canal towards Bury is complicated by later property and highway developments that leave very limited space between Wellington Street and the River Irwell and buried utilities that may need to be diverted at significant cost.

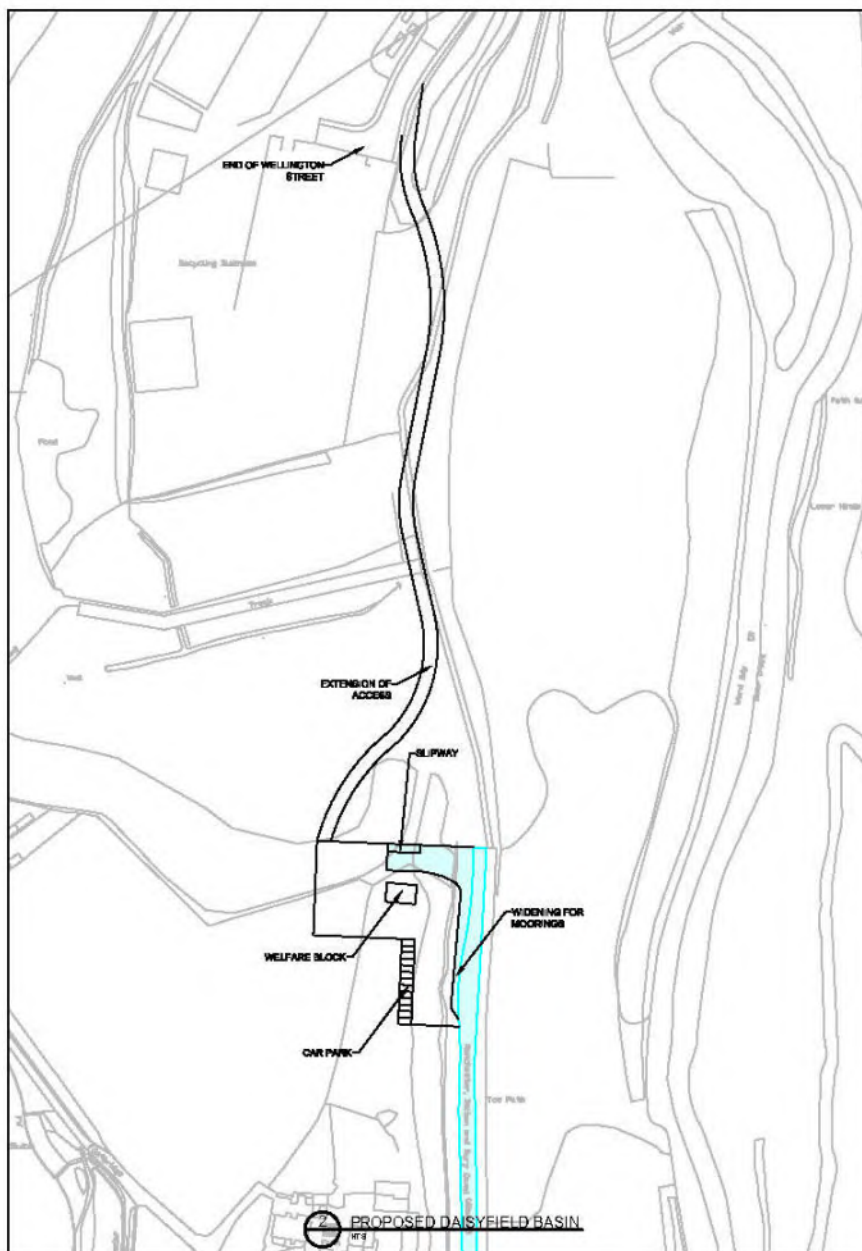


Figure 3 Overview of key elements of work at Proposed Daisyfield Basin

1.3. Restoring the navigable channel

This section addresses the works needed to achieve a navigable channel.

The main points here are:

- tree work to remove or cut back trees and other significant vegetation overhanging the channel and affecting retaining walls.
- dredging to ensure the channel is clear of debris and provides sufficient depth for all boats permitted to use the canal. This work to include for removing reed growth from the navigable channel only.
- water level security – identify any leaks in the wash walls resulting from tree removal and dredging and exploring optimum water level.

1.3.1. Tree Work

The scale of work required over the full 5 mile length is considerable through lack of maintenance over the years but the majority of work over and alongside the canal is between the breach and Radcliffe. Environmental considerations and surveys required are discussed in Section 2.



Photograph 1 - Trees encroaching across canal at Radcliffe

The majority of tree work required is on the north bank of the canal opposite the towpath. In some cases tree branches reach across almost the full width of the canal. In addition some crown lifting and further tree removal will be required to open up areas where the tow path is overshadowed. Also a full survey of retaining walls through Little Lever will be needed to identify areas compromised by tree roots.

Works can be phased to take advantage of access points developed at the Hall Lane and Daisyfield termini, at Water Street and at Creams Paper Mill.

1.3.2. Dredging

The objectives for dredging are to provide a navigable channel to an acceptable depth and width for users but maintaining reed margins to the north bank where possible. Typically dredging will include for removing isolated reed beds alongside the towpath. A bathymetric survey will be required to quantify the volumes of material to be removed.

It is not considered necessary to dredge to excess to achieve a healthy navigable depth so there will still be a significant depth of undisturbed sediment and leaf litter covering the original canal bed lining. Dredging depth will be guided to meet acceptable maintenance requirements in the development of this asset. In turn the operating water level needs to be established during restoration accepting that higher water levels are likely to expose more wash wall leaks.

1.3.3. Water Level Security

It is assumed that leaks through the wash walls will need to be managed during the restoration works. These leaks may be caused by the removal of bankside vegetation or existing leaks may be exposed by increasing the water level. Water lost to leaks in the canal need to be minimised because (a) it can put an unnecessary demand or exceed demand for the canal feed and (b) leaks can disturb the stability of structures or embankments that support the canal.

Following dredging and after all identifiable leaks have been repaired it is assumed a programme of incremental water level raising and leak location. This work will identify a suitable water level for operation within the constraints an acceptable rate of loss.

1.4. Canal Feeder

The canal feed from Elton Reservoir is the main feed for the canal and is maintained by Canal & River Trust however under present conditions the feed is not regulated for canal use and in the Summer water levels drop below the main spillway opposite the feed entry.

The feed to Elton Reservoir from Burrs Country Park has benefitted from some maintenance and a recent community clean up between Brandlesholme and Tottington Roads but this was not included as part of the scope for this study.

Earlier studies have been prepared on the basis of a wider regeneration of the canal system including for the locks at Nob End. Water demand for this restoration will be considerably less but would ideally see an increase in the flow of fresh water along the canal. This in turn will require a raising of water levels managed by refurbishment of stop planks and sluices.

Opportunities for the canal contributing to flood risk management, particularly where this may generate funding, should also be explored where the canal and Elton Reservoir might be used for flood storage or for dispersal of peak flows.

Assessment of the potential for Elton Reservoir confirms that the 5-mile section of canal between Bury and Bolton covered by this study can be adequately served. Survey of the sluice and controls for the discharge from the reservoir will be required along with modest maintenance work to the channel to secure this asset for the purposes of the canal.



Photograph 2 – Canal Feeder looking toward Elton Reservoir

1.5. Water Street Re-bridging

1.5.1. Background

Re-bridging at Water Street has been considered before and some detail has been provided here for updating from the studies in 1996 and also in 2004.

The 1996 study presented an outline design for a new bridge comprising steel beams and a concrete deck with retaining walls extending 120 metres each side to allow for raising the carriageway a maximum of 1.5 metre for adequate canal headroom. The cost was estimated at £2m, this allowed for utility diversions but excluded the cost of resolving uncertainty for the foundations needed and the difficulties maintaining access to some local roads. This 2020 update is based on the detail provided for the 1996 study.

Less information is available about the 2004 study but the outline design is changed to be a large concrete culvert with a similar vertical alignment and need for retaining walls and a cost estimate of £1.816m.

1.5.2. 2020 Update

The 1996 estimate is reproduced below with comment and updated values as assessed.

ESTIMATED COST FOR RADCLIFFE CANAL BRIDGE

<u>(1) MAIN BRIDGEWORKS</u>	£	£
Bill Part 1: Preliminaries		
(i) Preliminaries	150,000	
(ii) Traffic Management & Temporary Bridge	115,000	
TOTAL BILL PART 1:	265,000	265,000

The updated estimate for Bill Part 1 is **£400,000** – which excludes the use of a temporary bridge – see observations below.

Bill Part 2: Main Bridgeworks

(i) Roadworks	150,000	
(ii) Substructure	220,000	
(iii) Superstructure	220,000	
(iv) Retaining Walls	120,000	
(v) Canal Works	80,000	
(vi) Accommodation Works	80,000	
(vii) Landscaping Works	20,000	
TOTAL BILL PART 2:	890,000	890,000
TOTAL (MAIN BRIDGEWORKS)		1,155,000

The updated estimate for Bill Part 2 is **£1,400,000**

The updated estimate for the Total Main Bridgeworks is therefore **£1,800,000**.

(2) OTHERS: SERVICES DIVERSION & INVESTIGATION

Site Investigations (Boreholes etc.)	20,000	
British Gas Diversion	60,000	
North West Water Diversion	50,000	
British Telecom Diversion	300,000	
Norweb Diversion	15,000	
Nynex Diversion	150,000	
TOTAL (OTHERS)	595,000	595,000
TOTAL WORKS COST		1,750,000

Advice was sought from the Atkins Utility team who provided the following:

Being as the report is from 25 years ago or more and that networks have changed considerably during that time it is difficult to estimate the potential additional cost. Some of these companies have changed hands and increased/upgraded their networks during this time and fibre is now prevalent where it may not have previously been. There is likely to also be additional utilities in the area too. To accurately quantify utility costs a new Utility Search Report would be required, completing a conflicts assessment and by sending out C3 applications for the proposed scheme.

As a high level estimate the costs could be double or triple the previous costs.

Further Site Investigations will also be required.

The updated estimate for Total (others) is **£1,500,000**.

(3) FEES

Design Fees	105,000	
Site Supervision Fees	85,000	
CDM Regulations (including Planning Supervisor)	35,000	
Administration (including Traffic Orders, Temporary Easements & Legal Costs)	25,000	
TOTAL (FEES)	250,000	250,000
TOTAL ESTIMATED COST		2,000,000

The updated estimate for Total (Fees) is **£450,000**.

The updated Total Estimated Cost is £3,750,000

1.5.3. Observations

- Assumed that the proposed bridge is approx. 60m in length, with a square internal span of 7m.
- Potential cost savings should be developed during the detailed design and delivery of the works. Savings could be made by limiting the navigable width to the 3 metres proposed for the repair at the breach (see Appendix C) and further economies may be realised by delivering alongside any planned modernisation and resurfacing of the Water Street carriageway, footway and verges.
- We question why a temporary bridge is required, could the bridge not be constructed in two halves – to maintain traffic and pedestrian flow. Updated estimate does not include for a temporary bridge.

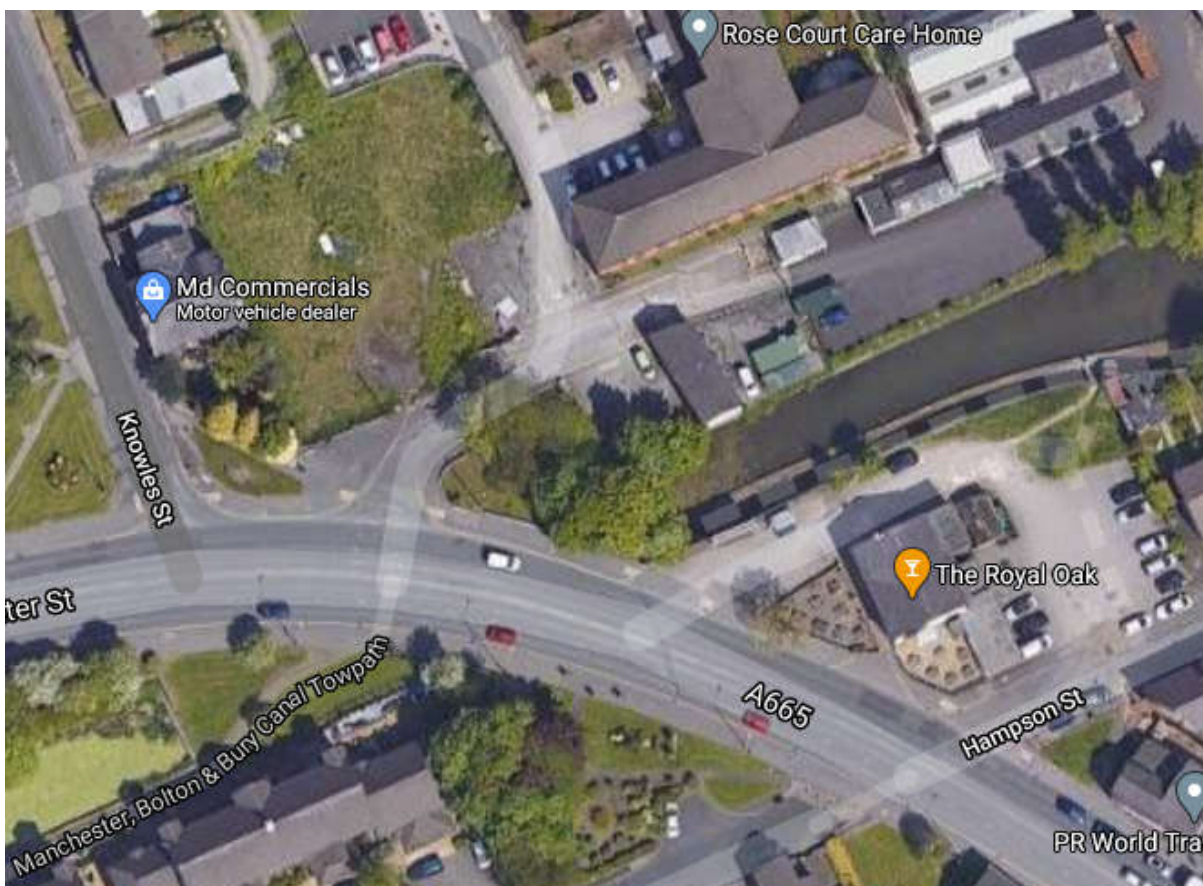
- In relation to the current highway standards, there are no significant changes from TD9/93 that would affect this proposal.
- The updated estimated costs do not include for significant ground works if poor ground conditions are encountered.
- Where diversions are carefully planned and adequately notified Canal & River Trust may be in a position to utilise existing lift and shift agreements for diversion / removal at the undertaker's cost.
- The extract below from the 1996 report outlines the approach with regards to the affected adjacent roads and properties due to the road levels at the structure being increased by 1500mm. It is difficult to see how vehicular access can be maintained without any significant and costly reprofiling and junction adjustment works as stated in paragraph 1 below, with such a change in levels. The updated cost estimate in Section 1.6 includes a contingency sum for these works that may include Knowle Street maintaining access for residents and businesses along the adjacent unnamed road.

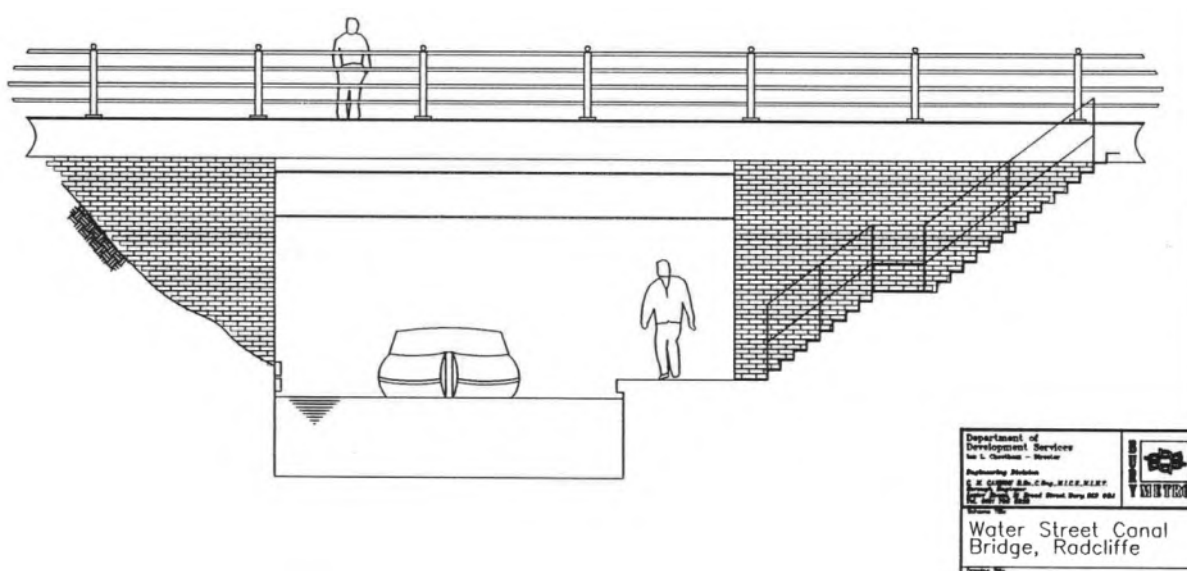
Extract from 1996 Report.

ACCOMMODATION WORKS

Accommodation works will have to be undertaken to private land alongside the northern boundary of Water Street where four private concerns are affected by the change in levels. Vehicular / pedestrian access will be accommodated to these private concerns. Negotiations with private owners.

It will be necessary to prohibit vehicular access at the junction between Water Street and Knowles Street, northwest of the new bridge. Pedestrian access will be accommodated at this point. Initial discussions have been held with the Highway Authority and objections have not been raised by them at this stage.





Canal

- Navigable width under proposed structure 5200 mm
- Navigable height under proposed structure 2500 mm
- Tow path headroom 2200 mm
- Tow path width under proposed structure 1800 mm
- Current canal water level 225 mm below operating level

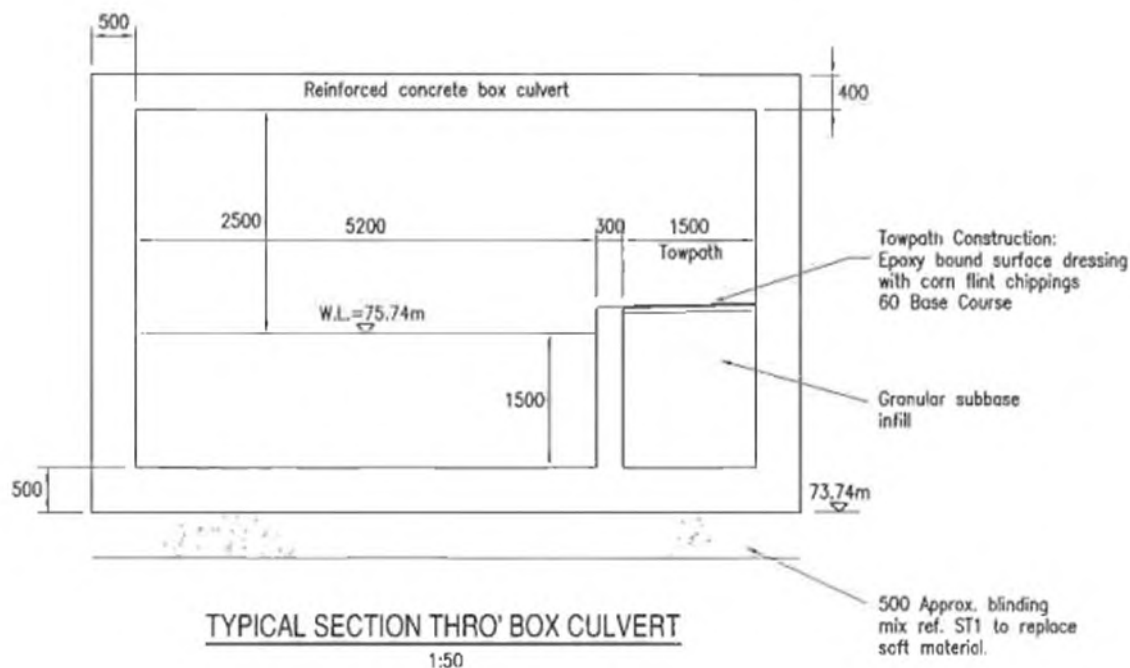
Bridge

- Construction - Composite (steel beams, concrete deck)
- Mass concrete abutments with facing bricks
- Skewed span approximately 14000 mm
- Service bay(s) to accommodate diverted utilities equipment

Highway

- Preserve existing carriageway layout and horizontal alignment
- Raise levels over the existing structure by approximately 1500 mm
- Vertical realignment of existing highway in accordance with TD 9/93 to form new bridge approaches for a total length of 120m either side of the structure.

Extract from proposed GA drawing 2004 – showing a proposed rc box culvert.



1.5.4. Summary

- The re-bridging works at Water Street is estimated to cost £3.75m at 2020 prices.
- Utility diversions contribute most to increased costs compared to previous estimates.
- The existing carriageway, footways and verge footprint is considered adequate for the required works and could realistically accommodate temporary diversions during construction.
- Land take outside of the existing highway boundary will be required to accommodate changes to affected local roads. This will be primarily at Knowles Street and some further work to reconnect with the towpath next to The Royal Oak and at Hampson Street.
- Opportunities to minimise the overall length of the canal underpass, maximise natural light and ensure accessible links from the towpath to Water Street are maintained should be explored during detailed design.
- Options to reduce the navigable width and headroom were ruled out on account of the significant length of the culvert and long-term safety considerations however this should be confirmed by detailed design.

1.6. Cost estimates

Hall Lane Basin Terminus (Bolton)

Improvements to access from highway	120,000	
Welfare facilities	40,000	
Parking/Active Travel facilities	20,000	
Boat access	20,000	
		£200,000

Daisyfield Terminus (Bury)

New access from highway	250,000	
Development of basin for turning and mooring	100,000	
Parking/Active Travel facilities	20,000	
Welfare facilities	40,000	
Boat access	20,000	
		£430,000

Dredging

Hall Lane to Nob End	50,000	
Creams Paper Mill to Water Street	150,000	
Water Street to Daisy Field	200,000	
		£400,000

Tree work

Hall Lane to Meccano Bridge	20,000	
Creams Paper Mill to Water Street	80,000	
Water Street to Daisy Field	100,000	
		£200,000

Feeder from Elton Reservoir

Survey of feed control	5,000	
Channel and sluice maintenance	20,000	
		£25,000

Water Street Re-bridging

	3,750,000	
Contingency for junction tie-ins	300,000	
		£4,050,000

Miscellaneous Works

Wash wall leak repairs	100,000	
Masonry Repairs Various	200,000	
Feeder/Stop Planks	50,000	
Fencing	20,000	
Towpath	50,000	
Ground Investigations	100,000	
Environmental Surveys, Licences, Mitigation and Consents	200,000	
Retaining Walls	35,000	
		£755,000

Total		£6,060,000
--------------	--	-------------------

2. Environmental

This section provides an overview of the existing baseline and the environmental constraints and opportunities associated with the proposed canal restoration project. It is a high-level appraisal of environmental constraints within the study area and identifies opportunities and recommendations for the next stage. The baseline data has been collected by a desk-based review of readily available data from veritable sources such as the Multi-Agency Geographic Information for the Countryside (MAGIC) website, ATKINS GO!¹, Environment Agency's Flood Map for Planning Services and interactive maps available on Bury Metropolitan Borough Council and Bolton Metropolitan Borough Council websites for Tree Preservation Orders (TPO) and Conservation Areas (CA). The study area has been selected based on professional judgement. The study considers the following environmental aspects:

Biodiversity

Air quality

Noise and disturbance

Geology and soils

Cultural heritage

Landscape and visual amenity

Water environment

Appendix B shows the locations of the identified environmental designations and constraints in relation to the canal.

2.1. Consultation

As part of the environmental study, some limited consultation has been undertaken with Tom King, an ecologist working for the Canal and River Trust, and David Dutton an ecologist working for the Greater Manchester Ecology Unit. The information that they provided has been incorporated into the following sections.

2.2. Biodiversity

2.2.1. Desk Study

2.2.1.1. Study Area

The study area has been defined individually for each potential receptor based on best practice guidance, as follows:

- Statutory designated sites of nature conservation importance² were considered within 2 km of the site.
- Notable habitats, these being 'Habitats of Principal Importance for the Conservation of Biodiversity' included in the England Biodiversity List and ancient woodland, were identified within 500 m of the Site. Sites of Importance for Nature Conservation (SINC) and waterbodies were also identified within 500 m from the Site. Waterbodies were identified to 500 m as Great Crested Newts typically use suitable terrestrial habitat up to 500 m from a breeding pond³.

2.2.1.2. Statutory Designated Sites

There are no internationally important sites for nature conservation (Special Areas of Conservation (SAC), Special Protection Areas (SPA) or Wetlands of International Importance (Ramsar Site)) within 2 km of the proposed red line boundary of the Scheme.

¹ Atkins GO! is a geospatial tool developed for in-house use by Atkins with the ability to view some of the thousands of freely available open datasets

² Sites of nature conservation importance include: Special Protection Areas (SPAs), Wetlands of International Importance (Ramsar sites), Special Areas of Conservation (SACs), Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs).

³ English Nature (2001). Great Crested Newt Mitigation Guidelines

Sites of Special Scientific Interest (SSSI)

- Nob End SSSI is noted approximately 40 m south of the canal, close to Prestolee Road, at Grid Reference (GR): SD75010649.
- Ashclough SSSI is noted approximately 180 m south of the canal at GR: SD758063 and 450 m south of the canal at GR: SD762062, close to Prestolee Road.

Local Natural Reserve (LNR)

- Moses Gate LNR is located on either side of the canal in Little Lever, covering Moses Gate Country Park to the south at GR: SD746069 and small areas to the immediate north of the canal at GR: SD749069 and GR: SD75040678.
- Nob End LNR is located approximately 40 m south of the canal, close to Prestolee Road, at GR: SD75010649.
- Chapelfield LNR is located 1 km south of the canal, in Chapelfield, at GR: SD78920639.
- Leverhulme LNR is located approximately 1.5 km northwest of the canal, close to Lever bridge in Darcy Level, at GR: SD73610855.
- Clifton Country Park LNR is located approximately 2 km south of the canal, in Clifton, at GR: SD77240450.

There are no other nationally important sites for nature conservation (National Nature Reserves (NNR)) within 2km of the proposed canal route.

2.2.1.3. Waterbodies / Watercourse

- The Manchester Bolton & Bury Canal
- River Irwell, an Environment Agency (EA) designated main river, runs parallel to the canal boundary to its south and appears closest approximately 70 m south of the canal at GR: SD773065 and GR: SD793092.
- Elton Reservoir is noted approximately 100 m west of the canal in Bury. Reservoir acts as a feeder for the canal.
- Several ponds and ditches are also noted within 500 m of the Scheme.

2.2.1.4. Sites of Biological Importance

From west to east, the following Sites of Biological Importance are located within 500 m of the site:

- Darcy Lever Gravel Pit approximately 450 m north west of the canal
- Bull Hill approximately 400 m west of the canal
- Moses Gate approximately 400 m south west of the canal
- Manchester Bolton & Bury Canal (West) located within the site
- Nob End approximately 40 m south of the canal, overlapping designation with the LNR
- Shore Top Reservoir approximately 240 m south of the canal
- Manchester, Bolton & Bury Canal (East) located within the site
- Withins Reservoir approximately 300 m west of the canal
- Elton Reservoir approximately 100 m west of the canal
- Elton Goyt immediately west and adjacent to the canal
- Daisyfield immediately west and adjacent to the canal
- Lower Hinds approximately 120 m east of the canal
- Swan Lodge approximately 360 m east of the canal

2.2.1.5. Notable Habitats and Species

No Ancient Woodland was identified within 500 m of the canal boundary. The closest designated Ancient Woodland is located at Prestolee Wood, approximately 800 m south of the canal at GR: SD76100590.

The canal extents close to Nob End - Prestolee and Little Lever – Bury have important submerged plant communities such as spiked water-milfoil, frog-bit, broad-leaved pondweed, water starwort and greater and ivy-leaved duckweed.

A variety of freshwater invertebrates such as great pond snail, whirlpool ramshorn, fresh water shrimp, and a wide variety of smooth newt breeds and GCNs are also observed in both the canal and reservoir.

The canal also supports a variety of birds such as mute swan, mallard, coot, reed warbler, snipe, redshank, grey heron and Canada goose. Lapwing, song thrush, tit, linnet and bullfinch are UK Biodiversity Priority Species.

No species surveys have been undertaken or data obtained from the Greater Manchester Ecological Unit, but the vegetation lining the canal has the potential to be habitat for a range of protected species including birds and bats.

The canal and nearby waterbodies and watercourses have the potential to support amphibians, otters and water voles.

There is potentially suitable badger habitat within the site.

2.2.1.6. Consultation

The limited consultation exercise revealed that the quality of aquatic habitats within the canal were generally very good and are amongst the best examples within the Greater Manchester area. Notwithstanding this there are issues with Invasive Non-Native Species (INNS), including giant hogweed and Himalayan balsam, which are present across large areas of the canal and River Irwell corridor.

Parts of the canal suffer from eutrophication which has resulted in extensive stands of duckweed.

Otters have been recorded, using camera traps, in the vicinity of the canal and they are therefore likely to be present along the canal. Further surveys would need to be undertaken to confirm this.

2.2.2. Potential Impacts

The restoration works will be temporary and localised, within the canal boundary. There will likely be a requirement for vegetation clearance, excavation, dredging and construction etc., during the restoration works which may have potential to impact ecological receptors.

Delivering the project's overarching objective has the potential for an increase in traffic of boats and socio-economic activities, with the potential for increased disturbance to wildlife.

It is noted in the previous studies related to the canal restoration works that the restoration will ensure the flow of clean water is maintained to support and enhance the surrounding ecological features.

The possible ecological issues that could arise as a result of the proposed restoration works are summarised in Table 2-1.

Table 2-1 – Summary of the key ecological constraints and potential impacts

Ecological Constraints / Features	Potential Impacts
Statutory Designated Sites	<ul style="list-style-type: none"> No direct impacts to any statutory designated sites. Potential for indirect effects to Nob End SSSI and LNR due to the close proximity of the works to the site. Other statutory designated sites are sufficiently far from the proposed works that indirect impacts are unlikely.
Sites of Biological Importance	<ul style="list-style-type: none"> The Manchester Bolton & Bury Canal will be directly impacted. Vegetation clearance will reduce habitat for some species, e.g. nesting birds, but the resulting improvement of the water quality could be beneficial for some aquatic species. Dredging will be a direct impact to aquatic communities for which the canal is designated resulting in the loss of some aquatic habitats and the disturbance of others. Other canal restoration projects in the Greater Manchester area have resulted in a decline in biodiversity value. This is believed to be due to the wash from boats disturbing bottom sediments, increasing turbidity and sedimentation which will limit plant growth. There could be other factors at play as well, but increased boat traffic is a likely explanation. Whilst boat traffic is likely to be limited in the MB&BC, there could be a decline in the quality of retained aquatic habitats. Potential for indirect effects to Nob End. Other Sites of Biological Importance are sufficiently far away from the proposed works that they are unlikely to be affected.

Ecological Constraints / Features	Potential Impacts
Waterbodies and Watercourses	<ul style="list-style-type: none"> • There is a possibility of contamination of surface waterbodies/watercourses within and adjacent to the canal boundary, such as River Irwell, during the restoration works, particularly during any dredging and silt removal.
Habitats and protected species	<p><u>Habitats</u></p> <ul style="list-style-type: none"> • Submerged plant communities in the canal will be disturbed and potentially lost during dredging works to remove silt. • Potential for a decline in quality of aquatic habitats during operation due to boat traffic disturbing sediments, increasing turbidity and sedimentation. <p><u>Protected Species</u></p> <ul style="list-style-type: none"> • Bats – Vegetation loss could directly impact bat roosts if any are present within trees lining the canal. The canal could also be a foraging corridor for bats and the loss of vegetation might impact this function. Any noisy construction works could cause a disturbance to bats if near to roosts. • Amphibians – Works within the canal water body could disturb or kill any amphibians present in the canal. Some amphibians are known to travel long distances from their resident waterbodies if suitable connecting habitats are present. Great crested newts have been recorded in nearby ponds and are a European Protected Species. • Otters / water voles – The canal is understood to support otters and has potential to support water voles. Works could impact burrows and disturb animals. The loss of vegetation from the banks could also impact the suitability of the canal for these species. Loss and deterioration of aquatic habitats could reduce the value of the canal for these species. • Nesting birds – vegetation clearance could disturb nesting birds, if clearance works are undertaken during bird breeding season (typically April to July). • Common species of reptile - loss of grassland and scrub, within the Scheme extent could result in the loss of habitat for foraging and refuge opportunities for reptiles. There could also be a direct impact if reptiles are present in areas proposed to be cleared. • Badgers – excavation and clearance works within the soft estate could impact on any badger setts potentially located within or near to the site.

2.3. Air Quality

2.3.1. Desk Study

2.3.1.1. Study Area

Given the nature of the works, air quality impacts are not anticipated beyond 200 m from the proposed Scheme. The desk based high level screening assessment was carried out for 200 m radius area from the Site.

2.3.1.2. Air Quality Management Area (AQMA)

The Greater Manchester Combined Authority AQMA crosses the canal at Water Street, in Radcliffe. The same AQMA is also close to the canal (approximately 120m northwest) at Church Street, in Little Lever. The AQMA has been declared for nitrogen dioxide NO₂ associated with traffic emissions.

2.3.1.3. Sensitive Receptors

The following receptors sensitive to air quality are located close to the canal:

- Residential properties:
 - Residential properties are located along the Bury road, connecting Radcliffe and Redvales, the nearest properties to the canal are located approximately 50 m east on Withins Avenue at GR: SD791082
 - Several properties are located on either side of the canal in Radcliffe, the closest properties are towards the immediate south in Canalside Gardens at GR: SD784075 and Great Hall Close GR: SD784076 and Gorsefield Close SD783076 on the northern bank of the canal
 - In Little Lever, properties are noted along the north of the canal boundary from GR: SD784075 to SD746070, with the nearest properties being located on Boscow road at GR: SD752065, and Ascot road to the extreme west at GR: SD747069
- Schools:
 - Gorsefield Primary School and St Mary's RC Primary School are located approximately 150 m north of the canal on Lowton street in Radcliffe, at GR: SD782077
 - Millwood Primary Special School is located approximately 50 m southeast on School Street in Radcliffe, at GR: SD77910714
 - Little Lever School is located approximately 200 m northwest of the western end of the canal boundary, on A6053, at GR: SD746073
- Cygnet Hospital is located on Buller Street in Bury, approximately 200m west of the canal boundary, at GR: SD79100989
- Rose Court Care Home, approximately 30m north of the canal boundary, is located on Water Street in Radcliffe at GR: SD7817507498
- Places of Worship:
 - St Thomas Vicarage is located approximately 180m south of the canal on Spring lane in Radcliffe, at GR: SD784073
 - St Mary & St Philip Neri Roman Catholic Church is located approximately 280m north of the canal on Belgrave street in Radcliffe, at GR: SD782078

2.3.2. Potential Impacts

Due to the nature of the works, it is not anticipated that there will be much of an impact to air quality and any impacts will occur during construction. Potential impacts include fugitive dust emissions from any demolition, cutting, grinding, excavations etc. and combustion emissions from any diesel plant and construction traffic.

2.4. Noise and Disturbance

2.4.1. Desk Study

2.4.1.1. Study Area

Noise could be an issue where noisy construction works are undertaken in close proximity to sensitive receptors (normally considered within 300m although most construction noise will not be discernible further than 100m from the source). Given the nature of the works, noise impacts to sensitive receptors more than 300 m from the canal are not anticipated. Hence, the desk based high level screening assessment was carried out for a 300 m radius area from the Site.

2.4.1.2. Noise Important Area (NIA)

There are 5 Noise Important Areas (NIA) noted within 300 m of the canal boundary:

- NIA 1748 is noted along Water Street, in Radcliffe. The canal flows beneath Water Street;
- NIA RI284 is noted approximately 40m east, RI285 and RI283 are noted approximately 150m east of the canal, along the railway track, running parallel to Bury road; and
- NIA 10710 noted approximately 300m north of the canal on Church Street in Little Lever.

2.4.1.3. Noise Sensitive Receptors

The list of sensitive receptors identified for air quality impacts in Section 2.2.1.3 above, also applies for noise.

2.4.2. Potential Impacts

Noise and disturbance issues have only been identified during the construction phase and it is unlikely that the restored canal will be a source of noise nuisance or disturbance. Construction activities where the use of any plant or power tools are likely to be the main cause of construction noise, particularly if any demolition, ground breaking or piling is required.

2.5. Geology, Hydrogeology and Soils

2.5.1. Desk study

2.5.1.1. Study Area

For geotechnical and hydrogeological considerations, the study area has been limited to within 50m of the scheme boundary.

2.5.1.2. Geology

Bedrock Geology

The underlying bedrock geology comprises the Pennine Lower Coal Measures Formation consisting of Mudstone, Siltstone and Sandstone.

Superficial Geology

Superficial geology overlying the bedrock comprises Alluvium deposits consisting of Clay, Silt, Sand and Gravel; Glaciofluvial Sheet Deposits; Devensian deposits consisting of Sand, Gravel and Glacial Till.

2.5.1.3. Hydrogeology

The canal boundary is underlain by Secondary A (bedrock) aquifer, Secondary A, Secondary (undifferentiated) and Unproductive (superficial) aquifers and does not fall within any Source Protection Zone (SPZ). The Groundwater vulnerability is classified as Medium and Medium-low.

2.5.1.4. Soil

The Cranfield Soil and Agrifood Institute's GIS web viewer⁴ shows that there are two main soil types within the scheme boundary:

- Soilscape 17: Slowly permeable seasonally wet acid loamy and clayey soils with a loamy and clayey texture – Present under the central section of the scheme but covering most of the site
- Soilscape 20: Loamy and clayey floodplain soils with naturally high groundwater with a loamy and clayey texture – present under the western and easternmost extents of the scheme

2.5.1.5. Land Contamination

There are four Historic Landfill sites noted adjacent to, or within the canal site boundary - close to Wellington street in Bury, Hinds Lane, Boscow Road in Little Lever and between Aintree road and Fontwell road.

Furthermore, outside 50m radius of the canal boundary, there are close to 20 Historic Landfill sites in Elton, Bury, Radcliffe, Moses Gate Country Park, Farnworth Cemetery and Little Lever School.

2.5.2. Potential Impacts

Potential impacts are dependent on the nature of the planned construction works. Any ground breaking, earthworks, excavations, piling or other intrusive ground works increases the risk of encountering contamination if any is present. The risk of encountering contamination will be higher in the areas where historic landfill sites are present, but other areas of contamination that have not been identified in this study may also be present.

There are not anticipated to be any impacts to soils or geological resources.

At this stage the main risks relate to unknown ground conditions and the interaction and impact of the proposed scheme.

⁴ <http://www.landis.org.uk/soilscales/>

2.6. Cultural Heritage

2.6.1. Desk Study

2.6.1.1. Study Area

A radius of 300 m has been applied for the cultural heritage study area.

2.6.1.2. Historic Assets

The Manchester Bolton & Bury Canal is itself of heritage value. The canal has many interesting and important historical and architectural features such as the buildings and the flight of six locks at Nob End and the various bridges, aqueducts and other structures along the length of the canal. There are 13 Listed Buildings noted within the study area some of which are directly associated with the canal. There are no World Heritage Sites, Schedule Monuments, Registered Parks and Gardens, Registered Battlefields, or Conservation areas within the study area.

Listed Buildings

There are a total of thirteen listed buildings within the study area. One is graded as II* whilst the rest are all grade II. The below table provides the details.

Table 2-2 – Listed Buildings

Name	Grade	Distance from the canal
Radcliffe War Memorial	Grade II*	Approximately 180 m south on Heber Street at GR: SD78370736
Mount Sion Steam Crane, adjacent to the Manchester Bolton & Bury Canal	Grade II	Adjacent to and south of the canal at GR: SD76820657
Manchester Bolton & Bury Canal Milestone	Grade II	Adjacent to and east of the canal at GR: SD75050661
Manchester Bolton & Bury Canal Milestone Approximately 230 Metres North of Prestolee Road	Grade II	Adjacent to south of the canal at GR: SD74850689, located towards far western end of the canal in Little Lever
Manchester Bolton & Bury Canal Milestone Approximately 220 Metres South East of Hall Lane	Grade II	Adjacent to north of the canal at GR: SD74510706, located towards far western end of the canal in Little Lever
Manchester Bolton & Bury Canal Post Approximately 220 Metres East of Hall Lane, Opposite Milestone	Grade II	Adjacent to the north east side of the canal at GR: SD74540708, located towards far western end of the canal in Little Lever
Manchester Bolton & Bury Canal Milestone Approximately 60 Metres East of Prestolee Road	Grade II	Adjacent to and north of the canal at GR: SD75310650
Ladyshore House	Grade II	Approximately 50 m south of the canal, on Ladyshore Road at GR: SD76290678
Scotson Fold Farmhouse	Grade II	Approximately 80 m north of the canal, on Leek Street at GR: SD77700701
Manchester, Bolton & Bury Canal Milestone Approximately 50m South of Prestolee Aqueduct	Grade II	Approximately 50 m south of the canal at GR: SD75190623
Manchester, Bolton & Bury Canal Aqueduct Over River Irwell	Grade II	Approximately 170 m south of the canal at GR: SD7516906284
Prestolee Bridge Over River Irwell	Grade II	Approximately 180 m south of the canal at GR: SD75140625
Water Powered Beam Pump	Grade II	Approximately 200 m south on Mount Sion Road at GR: SD76820657

2.6.2. Potential Impacts

It is assumed that the proposed restoration works are intended to restore the historical setting of the canal and this would be a beneficial impact of the scheme. However direct impacts could occur to the historic fabric of the canal and associated structures. The restoration works are also likely to improve the setting of the various listed buildings associated with the canal that are present within the site boundary. Care needs to be taken to ensure that no damage occurs to any of these assets during construction works.

All of the construction works will be carried out within the close proximity of the canal, with the bulk of the works taking place on made ground or ground that has been previously disturbed. As such, the potential for archaeological remains to be present within the works area is considered to be very low. It should be noted that no Historic Environment Records (HER) has been obtained for this appraisal, therefore the likelihood of archaeological remains being present within the vicinity of the site is unknown.

2.7. Landscape and Visual Amenity

2.7.1. Desk Study

2.7.1.1. Study Area

For landscape and visual amenity considerations, the study area has been set at 300m.

2.7.1.2. Landscape Character

The canal is located within the Manchester Pennine Fringe National Character Area.

Situated on the southern edges of Bolton, Little Lever, Radcliffe, and Bury, the canal is within a peri-urban landscape. The canal runs broadly parallel with the River Irwell and can be considered part of the river corridor except in Radcliffe where the two watercourses deviate.

At the north eastern end, the canal is in a narrow wooded corridor incorporating the River Irwell sandwiched between school playing fields and a small, light industrial estate. Moving south as the canal leaves Bury the wooded corridor thins, expanding views into the surround fields and across to Elton Reservoir to the west and residential properties to the east. As the canal approaches Radcliffe the landscape becomes significantly more urban with built development up to the boundary of the canal comprising residential properties, warehousing and light industrial units. As the canal leaves Radcliffe, the landscape adopts a more rural character with belts of trees and blocks of woodland interspersed with fields and open areas of grassland. This peri-urban landscape continues to the western extent of the scheme.

2.7.1.3. Tree Preservation Order (TPO)

There are no known TPOs within the site. The nearest known TPO is located to the immediate north of the canal's western extent in Little Lever, close to Ascot Road.

2.7.1.4. Visual Receptors

Numerous visual receptors with direct views of the canal are located along its length. These include:

- Residential properties located towards extreme west on Ascot Road and Newbury Road
- Residents on Boscow road and users of Prestolee Road close to the canal boundary,
- Properties in Radcliffe, on either side of the canal
- Users of Public Rights of Way (PROW), particularly the canal's tow path. The following PROWs directly cross the canal or are adjacent to it:
 - 16ST#3, #2 and #1 footpath run alongside the canal's southern boundary connecting Wellington street in Bury and Mount Sion Steam Crane, from GR: SD793095 to SD764068
 - 8ST footpath crosses above the canal, close to Mount Sion Road, at GR: SD793095 and close to School street in Radcliffe, at GR: SD778070
 - 11ST footpath crosses above the canal, on Cams lane, at GR: SD774067
 - 3SA footpath crosses above the canal at GR: SD785077
 - 6SA footpath runs alongside the northern boundary of the canal at GR: SD790081
 - 7SA, footpath crosses the canal at GR: SD790082
 - 9SA footpath crosses the canal at GR: SD791084
 - 1SM footpath crosses the canal at Hinds Lane, at GR: SD792092

- LIL 037 and 034 footpaths lie adjacent to south of the canal, on Ladyshore road, at GR: SD763067
- LIL 038 and 040 footpaths run along the southern boundary of the canal, close to Boscow road in Little Lever, from GR: SD756065 to SD758066

2.7.2. Potential Impacts

The nature and extent of the proposed works are not currently known but are likely to include some limited vegetation removal along the banks of the canal. It is unlikely that landscape character will be impacted by the works as the canal is a strong existing feature in the landscape and most of the wooded areas along the canal extend beyond the canal boundaries and would be retained. The restoration of the canal could enhance the landscape character.

Similarly, visual impacts are likely to be limited as the belts of screening vegetation along the canal, although thinned, will be retained.

Temporary, reversible visual impacts may potentially result from construction activities, including any required site compound and the presence of plant, machinery and construction vehicles.

2.8. Surface Water

2.8.1. Desk Study

2.8.1.1. Study Area

The desk based high level screening assessment was carried up to a 500 m radius surrounding the site boundary.

2.8.1.2. Surface Water Bodies

The following surface water bodies have been identified within the study area:

- River Irwell, an Environment Agency designated main river, runs parallel to the canal boundary to its south and appears closest approximately 70m south of the canal at GR: SD773065 and GR: SD793092.
- Elton Reservoir is located approximately 100m west of the canal in Bury. The reservoir acts as a feeder for the canal.
- Numerous smaller reservoirs including:
 - Crompton Lodges
 - Dingle Reservoir
 - Farm Lodge Reservoir
 - Withins Reservoir
 - Deardens Lodge
- Numerous ponds, lakes, ditches and streams of various sizes throughout the study area

2.8.1.3. Flood Risk

A desk search of the Environment Agency's flood mapping has indicated that the canal falls within Flood Zone 1, defined by the Environment Agency as having less than 1 in 1000 annual probability of fluvial flooding, south of the Water Lane in Radcliffe. However, areas of the canal which are north of the Water Lane, extending towards Wellington Street in Bury, fall within Flood Zone 2, an area with a medium probability of flooding, until the point where it flows adjacent to Hinds Lane.

The eastern extent of the canal is also within an area that would be flooded should the Elton Reservoir fail. However, it should be noted that there is a very low likelihood of this event occurring.

The risk from surface flooding along the length of the canal varies between high (meaning greater than a 3.3% chance of occurring each year) and very low (meaning less than a 0.1% chance of occurring each year).

2.8.1.4. Water Quality

The limited consultation exercise revealed eutrophication to be an issue in some parts of the canal, with dense stands of duckweed forming. The source of nutrients is unconfirmed but likely to be from a combination of diffuse sources including runoff from neighbouring land, decay of leaf litter from overhanging trees, and potential inputs from the River Irwell.

2.8.2. Potential Impacts

Potential impacts are likely to be limited to the construction phase where works could result in contamination of the canal and adjoining water bodies. This could be easily managed through the application of best practice measures as set out in Pollution Prevention Guidance (PPG) Notes 5 and 6.

Flood risk in most of the scheme is low but there is an increase to medium at the eastern extent. Restoration of the canal could change the current flood risk to surrounding areas by introducing new pathways for surface water flows and connecting water bodies.

The removal of overhanging trees could result in an improvement to water quality by reducing the amount of organic material that ends up in the canal and by allowing more sunlight to penetrate the water column due to the removal of shading.

The re-linking of the discreet areas of canal currently separated by dry areas could improve water circulation in the canal which might help with alleviating the problems with eutrophication currently being experienced.

2.9. Recommendations

The following actions and studies are recommended to minimise environmental impacts, capitalise on opportunities, comply with legal requirements and ensure that the canal restoration achieves a positive environmental outcome:

2.9.1.1. Further studies / surveys

- A Preliminary Ecological Appraisal (PEA) undertaken in accordance with the Chartered Institute of Ecology and Environmental Management guidelines should be undertaken by a suitably qualified ecologist to identify any species specific surveys and protected species licences that might be required.
- An assessment of air quality impacts during construction should be undertaken in accordance with the Institute for Air Quality Management's guidance on the assessment of dust from demolition and construction⁵ to identify any specific mitigation measures that may need to be implemented during construction.
- A detailed contaminated land desk based study should be undertaken at the next stage if any intrusive ground works are planned. This would identify any risks and scope out any intrusive or non-intrusive surveys that may be required.
- At the next stage of works it is recommended that a detailed historic environment study be undertaken by a suitably qualified expert, to identify the historical significance of the canal and associated structures and any other historic assets that are within the vicinity of the canal. This should include a more detail research based desk study, purchase of Historic Environment Record data, a site walkover and an archaeological risk assessment with recommendations for further steps that could be required. The study should inform any option appraisal and selection process and the emerging design.
- A tree survey should be carried out by a suitably qualified arboriculturalist to identify trees to be removed or cut back, the value of these trees and identify any constraints to tree removal.
- A preliminary flood risk assessment should be undertaken by a suitably qualified hydrologist to identify and scope any further detailed assessments or modelling that may be required to inform the design.

2.9.1.2. Design considerations

- Minimise dredging in areas of valuable aquatic habitats and protecting retained habitats during construction.
- The scheme should seek to retain and avoid disturbance to important ecological features identified during the PEA.
- There may be opportunities for biodiversity net gain within the site and these should be identified as early as possible and incorporated into the design. If the scheme requires planning permission, this could be a planning policy requirement.
- There are opportunities to incorporate interpretation, such as information boards, into the design at suitable points along the canal to aid the public's understanding of the historical significance of the canal and associated structures.

⁵ <http://iaqm.co.uk/text/guidance/construction-dust-2014.pdf>

- The proposed works should include a landscape design that enhances views and integrates the canal into the surrounding landscape.
- The most sensitive aquatic habitats should be identified and protected from the effects of boat traffic disturbing sediments. Examples of habitat protection from this impact have been installed on the Rochdale Canal.
- There are opportunities to compensate for the loss of aquatic habitats within the vicinity of the canal. In particular, the feeder stream from the Elton Reservoir to the canal could be reengineered into a wetland habitat with marginal vegetation and aquatic plant communities. If designed and sequenced correctly this new habitat could become a receptor site for rare and protected plant specimens that would be lost from the canal during construction. This would require additional land take either through purchase of land or management agreement with the landowner.
- Rotational clearance of some vegetation during the maintenance period could be ecologically beneficial.

2.9.1.3. Consultation

- Natural England should be consulted on the requirements for Section 28(H) assent, under the Wildlife and Countryside Act 1981 in relation to potential impacts to Nob End SSSI and Ashclough SSSI.
- Consultation with statutory and non-statutory stakeholders should be undertaken throughout the design development stage to ensure that all ecological issues and concerns have been identified and addressed through the design as far as possible.
- Consultation with the Environmental Health Officers in Bolton Council and Bury Metropolitan Borough Council should be undertaken in relation to potential air quality impacts during construction
- Construction details are not known at this point, but the implementation of best practice measures and community consultation will minimise any potential noise impacts and complaints. Should particular construction activities create a risk of noise complaints, the contractor should consult with the relevant local authority Environmental Health Officer, and if considered necessary entering a Section 61 agreement under the Control of Pollution Act 1974 with them.
- Consultation with the Conservation Officers at Bolton Council and Bury Metropolitan Borough Council should be undertaken, and their views taken into consideration as the scheme develops. They will also be able to advise on the need for any Listed Building Consent that may be required to carry out the works.
- Consultation with the Lead Local Flood Authority and Environment Agency should be undertaken to identify any permitting requirements associated working in or near a watercourse.

3. Consultation Responses

3.1. Introduction

A consultation was targeted at stakeholders and other relevant parties. Following discussion with the client this took the form of an email circulation to a selected list of addressees with an online survey embedded within the email. The questionnaire and details of responses are given in section 3.4.

The initial list of consultees included 50 individuals ranging from local politicians to businesses and community groups. The list was further subdivided so that 14 addressees received a more personal email inviting them to contact the study team and discuss the proposals. These 14 were identified by the Manchester Bolton & Bury Canal Society. These individuals are identified in the schedule of consultees.

3.2. Technical issues

The email address for the identified consultee for Greater Manchester Fire Service, who own the bed of the canal at Daisyfield, proved to be invalid. The individual was later contacted by phone

Although the survey was not placed in the public domain, a link to it appeared on the Rochdale Branch Canal Facebook page. This resulted in unsolicited responses to the survey. After some deliberation, during which distribution of the link to other interested groups was considered, it was decided not to distribute the link further but to analyse the responses and assess whether any skewing of the outcomes had occurred.

3.3. Responses

Eight-eight responses were received: these were overwhelmingly positive towards the restoration not only in that they all supported it but they were all enthusiastic about the proposals. With regards to the issue of the link appearing on Facebook, there was no obvious group of responses that differed in character, and thus we conclude that the respondent sample is coherent and the extra unsolicited responses have not skewed the findings.

3.4. Summary of Survey responses

This survey received 88 responses many of which were not garnered from the targeted campaign as intended. As a result not all the participants had access to the background information which was included in the targeted email (this information was not duplicated on the survey page as this was not intended to be a public consultation). This has led to some misunderstandings arising in the responses, for example some participants were unaware that this survey was being conducted on behalf of Canal & River Trust, Bolton Council, Bury Council and MB&BC Society and expressed concern that they were being left out of the process, similarly there is a lot of distrust of developers expressed in the responses which might not have been so strong had the respondents been aware of the origin of the proposals.

Recurring Themes

Q1: We propose that a new facility at Hall Lane Basin in Bolton will be a place where visitors, boaters (inc. paddlers) and volunteers can park, launch, work, rest, and store equipment safely. What do you think about this proposal?

Positive: 88%

Concerns

- Antisocial behaviour, vandalism/theft, proximity to traveller encampment
- 7% of respondents expressed concern that the development would be impacted by antisocial behaviour and vandalism/theft, a subset of these expressed this concern as a direct consequence of proximity to the traveller encampment.
- Environmental damage: 3%
- Lack of car parking: 3%
- Risk to future restoration of the canal
- 3% of respondents expressed concern that this development would obstruct the line of the canal thus infringing on future restoration work beyond this point.
- Possible conflict of interest with the Rock Hall development

- 2% of respondents expressed concern that this development would clash with the proposed improvements at Rock Hall.

Commentary

- Angling should be included in the proposals. There is an active angling association: Little Britain Anglers who will need to be included in the project for it to succeed.

Q2: We propose that the Hall Lane Basin be an accessible hub for volunteers, green social prescribing (non-medicine-based treatment within the community), and community events. What do you think of this proposal?

Positive: 80%

Concerns

- Risk to the Rock Hall development through duplication
- 3% of respondents were concerned that having two very similar developments “within 5 minutes” of each other would negatively impact on both of them.
- This is the most strident of the responses “[...] as much as the idea is great, locals want Rock Hall to be a community hub, Rock hall (sic) is held dearly by locals and is 5 mins away from the basin, Bannana Enterprise have put very similar proposals forward which the community welcome.” This heavily suggests that there may be community pushback over aspects of the project which could be seen to negatively impact on the Rock Hall development therefore subsequent community engagement activities should seek to address these concerns.
- Appropriate management/staffing of the facilities
- 2% of respondents expressed concern that the facilities be set up with enough staffing and run by an “appropriate” body.
- The project will be abandoned before completion
- 3% of participants believe that the project will be abandoned before completion or mutated into something the local community don’t necessarily want such as more housing.

Commentary

- Tie in with either or both the Moses Gate and Rock Hall developments was mentioned by 3% of participants.
- Better facilities for Little Britain Anglers were mentioned by 3% of participants.

Q3: We propose that that a new facility at Wellington Street, Bury will be a place where visitors can park, meet, refresh, and start their day out. What do you think about this?

Positive: 82%

Concerns

- Obstruction to the further restoration of the canal.
 - 2% of participants expressed concern that the development might obstruct future restoration of the canal beyond the scope of these works.
- Security
- 5% of participants mentioned concerns about fly tipping and renovation of the area to a point where people felt safe leaving their cars there.
- Viability/trust in developers

3% of participants expressed concern about the source of funding for this development and the potential for it to be abandoned by developers once the more profitable aspects had been completed.

Commentary

- Little Britain Anglers have put forward a proposal to Bury Council to develop the canal into a marina (with dry dock) at the Bury end[1]. This being a good location for a marina was mentioned by 2% of participants.
- “[N]eeds to be integrated with the proposed development nearby as outlined in the GM Spatial Framework. Further improvements away from the canal are needed to this neglected area including the river, local businesses premises and the street scene.” Included verbatim.
- 2% of participants mentioned the need for food and beverages at this location.

- GM Fire and Rescue have plans in the area which will need consideration [\[2\]](#)

[\[1\]](#) It is worth noting that there is nothing about this on Little Britain Anglers website and they **appear** not to be registered as either a charity or company.

[\[2\]](#) A quick search of GM Fire and Rescues website and twitter feed didn't reveal which plans were being referenced here.

Q4: We propose the Wellington Road basin be a hub for volunteers to organise canal landscape maintenance, visitors to meet for guided walks and other community events such as species surveying. What do you think about this proposal?

Positive: 88%

Concerns

- That there is insufficient funding to bring the canal back into water given the sewer issues.
- Viability/trust in developers
 - 5% of respondents expressed concern about the source of funding for this development and the potential for it to be abandoned by developers once the more profitable aspects had been completed.
- Volunteer recruitment issues and community engagement:
 - 2% of respondents expressed concern that it wouldn't be possible to find volunteers to utilise the new facilities.

Commentary

Community ownership and expert input (for example guided walks, wildlife surveys) has been highlighted as a requirement for making this aspect of the project work.

Q5: We propose two outdoor classrooms (single storey sustainable building) at suitable locations (near parking at centres of habitation e.g. Radcliffe, Little Lever) along the line of the restored canal. What do you think about this?

Positive: 83%

Concerns

- Under-utilisation, antisocial behaviour and vandalism:
 - 7% of respondents expressed concern that the classrooms might be under-utilised if not developed in collaboration with future user groups and that they might subsequently fall into disrepair and be targets for vandalism.
- Lack of accessibility/community engagement:
 - 3% of respondents expressed concern that the classrooms might be inaccessible to some groups and that they might not be developed in collaboration with their potential users resulting in a lack of community engagement with the restoration and potential community development opportunities afforded by it.
- Financing (both initial funding and long term):
 - 5% of respondents expressed concern about the source of funding for this development, both initially and long term covering maintenance/staffing. One expressed concern that the development be owned by the community and not funded by "developers", while another appeared to conflate this proposal with potential housing.

Commentary

- 6% of respondents mentioned the potential for an educational hub at Nob End.
- 5% of respondents mentioned the potential for an educational hub at Radcliffe. 2% explicitly mentioned sharing new facilities with existing organisations such as Little Britain Anglers and [Elton Sailing Club](#).

Q6: We propose the following learning opportunities could take place within the outdoor classrooms. Which of these do you think would be the most popular or successful? [list of choices offered in survey]

76 people answered this question. Of those who did:

- 40.8% chose formal learning for school children including topics such as: ecology and biodiversity; canal engineering and the industrial revolution; the social history of 19th century boat people. (31 responses)

- 31.6% chose bookable courses for adult informal learning. Subjects could include: willow crafts; sustainable living; angling; paddle sports; photography. (24 responses)
- 27.6% chose volunteer training centre, including courses such as: landscape maintenance; Species Surveying; Health and Safety; Hedge-laying. (21 responses)

Q7: We propose a joined-up business plan between the stakeholders and support from the local authorities to help independent businesses to set up along the length of the canal. What do you think of this?

Positive:69%

Concerns

- This might damage the ecology and tranquility of the canal:
 - 10% of respondents were concerned that too much business development would occur and that it would have a negative impact on the environment and appeal of the canal restoration.
- New building along the line of the canal:
 - 4% of respondents were opposed to the construction of new buildings along the canal, 2% mentioned that they would only support plans to utilise existing buildings/sites for this purpose.

Commentary

- This plan needs to include information about the types of businesses being encouraged, respondents specifically mentioned the following types of businesses: food and beverage (6%), crafts/artisan shops (3%).
- 7% of respondents mentioned the need for community involvement in the plans/development.
- 2% of respondents questioned why housing wasn't included in the proposals while 1% explicitly stated that they would not support the development of housing and specifically mentioned a plan in Bury to build "nearly 3000 houses near the canal".

Q8: We propose the following types of business would add to the attractiveness for visitors. Which do you think will be most popular or successful? [list offered in survey]

86 people answered this question. Of those who did:

- 54.7% felt that all of the proposed businesses would be popular/successful (47 responses)
- 23.3% felt that a trip-boat with on-board refreshments, comfort facilities and learning sessions would be most successful/popular (20 responses)
- 14% felt that refreshment kiosks or pop-up cafes would be most successful/popular (12 responses)
- 8.1% felt that facilities and services for house-boat moorings would be most successful/popular (7 responses)

Q9: We propose that strong, new 'Manchester Bolton & Bury Canal' branding should be developed to be used at both canal terminus hubs, the classrooms, for the signage and information panels. What do you think of this?

Positive: 83%

Concerns

- Over use of signage:
 - 1% of respondents were concerned that this might result in the overuse of signage along the route, detracting from the natural environment.
- Waste of money/unnecessary:
 - 2% of respondents were concerned that branding for the canal would be a waste of money.

Commentary

- One respondent suggested that links be made with the [East Lancs Railway](#) which is a short walk from the canal in order to promote industrial history in the area.

Q10: "Restoration will include actions and mini-projects to improve the following: - Biodiversity along the 5-mile length of restored canal e.g. community-led species surveying and habitat creation. - Facilities, information

points and opportunities for paddlers, swimmers, cyclists, walkers, boaters, anglers. What do you think about this?"

Positive: 74%

Concerns

- Conflict between biodiversity and activities:
 - 6% of respondents were concerned that too many activities would conflict with attempts to increase biodiversity in the area.
- Potential conflict between user groups e.g. canoeists and anglers
 - 3% of respondents were concerned that the various user groups had conflicting needs and that they would need careful management in order to share the space effectively.
- Swimming in the canal is dangerous
 - 9% of respondents expressed strong concerns about swimming in the canal, these ranged from the presence of blue/green algae in the area to concerns about the lack of flow and safety for swimmers near boats. [*Note: we share these concerns, swimmers were included in part as a control, to demonstrate that the survey could elicit negative responses*]
- Cyclists pose a threat to other towpath users:
 - 6% of respondents expressed concerns about the presence of cyclists on the towpath, frequently citing speed and lack of courtesy to other users.

Commentary

- One respondent suggested that links be made with the [East Lancs Railway](#) which is a short walk from the canal in order to promote industrial history in the area.

Q11: Restoration will include actions and mini-projects to improve the following: Which projects do you think will be the most popular or successful?

Positive: 74%

88 people answered this question. Of those who did:

- 62.5% felt that all the proposed activities would be popular/successful (56 responses)
- 19.3% felt that interpretation of the environmental and heritage assets would be popular/successful (17 responses)
- 10% felt that oral history and archiving projects would be popular/successful (9 responses)
- 8.2% felt that youth public art engagement projects would be popular/successful (7 responses)

Concerns

- Conflict between biodiversity and activities:
 - 6% of respondents were concerned that too many activities would conflict with attempts to increase biodiversity in the area.
- Potential conflict between user groups e.g. canoeists and anglers
 - 3% of respondents were concerned that the various user groups had conflicting needs and that they would need careful management in order to share the space effectively.
- Swimming in the canal is dangerous
 - 9% of respondents expressed strong concerns about swimming in the canal, these ranged from the presence of blue/green algae in the area to concerns about the lack of flow and safety for swimmers near boats.
- Cyclists pose a threat to other towpath users:
 - 6% of respondents expressed concerns about the presence of cyclists on the towpath, frequently citing speed and lack of courtesy to other users.

Commentary

- Navigation needs to be a priority:
 - 3% of respondents expressed concern that biodiversity and activities might be prioritised over navigation of the canal

Q12: "We propose cataloguing and recording of the heritage and environmental assets along the length of the canal to feed into schemes such as: - Adopt a Canal - Local Nature Reserve - Local Heritage List What do you think about this?"

Positive:89%

Commentary

- Radcliffe litter pickers are active along the route of the canal.
- Historical information should be available digitally on site giving access to interpretation in context.
- Some of the historical information may have already been curated by MB&BC Society in collaboration with British Waterways - this information may still be available within Canal & River Trust.
- These proposals could leverage existing resources developed by Canal & River Trust, MB&BC Society, local wildlife groups and [Greater Manchester Ecology Unit](#)

4. Planning Policy Review

The restoration of the canal will constitute development under the terms of the 1990 Town and Country Planning Act and thus it must be demonstrated that it complies with planning policy and that works associated with the restoration should be granted planning consent. The purpose of the UK land use planning system is to achieve sustainable development. As such any development taking place in, on or under land must comply with the proposals and policies set out in statutory planning policy documents. In England, the statutory documents in place to guide development are the National Planning Policy Framework (NPPF, 2109) and the Local Development Plan for the area in which development is taking place.

Restoration of the canal will require a significant amount of development and will likely result in changes of use along the canal. As such proposals must comply with the regulatory framework for the site set by the planning system, namely the NPPF, the emerging Greater Manchester Spatial Framework (which will become a statutory planning document once formally adopted) and the Local Development Plans for Bury and Bolton.

4.1. The National Planning Policy Framework – Ministry for Housing, Communities and Local Government, February 2019

The National Planning Policy Framework sets out the Government's planning policies for England and how these are expected to be applied when writing local planning documents and making decisions regarding land use and development. The document was originally published in 2012 but updated in 2019 to give greater emphasis to the presumption in favour of sustainable development in order to give communities the housing and infrastructure they need, as well as promoting overall net gain in biodiversity where development takes place.

The document clearly states that the main purpose of planning system is to achieve sustainable development. Three overarching objectives of the planning system are identified (in summary): building a strong, responsive, and competitive economy, supporting strong, vibrant, and healthy communities, and contributing to protecting and enhancing our natural, built, and historic environment, improving biodiversity, using resources prudently and adapting to climate change. Whilst these objectives are interdependent, they need to be pursued in mutually supportive ways

With regards to local plan making the document notes that local plans should make sufficient provision for "Leisure and other commercial development... conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation" (NPPF, 2019, pp.9).

After addressing local plan and decision making the document goes on to identify several core planning principles. Restoration of the Manchester Bolton & Bury canal would fulfil a number of these including: Promoting healthy and safe communities, by providing social, recreational and cultural facilities, accessible green infrastructure and layouts that encourage walking and cycling; Promoting sustainable transport by pursuing opportunities to promote walking and cycling; Achieving well-designed places that are safe, inclusive and accessible; Conserving and enhancing the natural environment by protecting and enhancing valued landscapes, sites of biodiversity, priority habitats, ecological networks and green corridors that connect them; and Conserving and enhancing the historic environment so that such assets can be enjoyed for their contribution to the quality of life of existing and future generations.

The Greater Manchester Spatial Framework 2020-2027 (2020 Publication Draft for Approval)

[Note – at the time of writing Stockport, one of the ten boroughs of Greater Manchester, has withdrawn from the GMSF and it is possible that the text that follows will be superseded in time as the framework is adjusted to reflect this]The Greater Manchester Spatial Framework (GMSF) document is in the latter stages of preparation. It is one of a suite of documents setting out how Greater Manchester can achieve the ambition set out in 'Our People Our Place – The Greater Manchester Strategy'. The role of the document is to provide a spatial plan which will provide certainty to guide development, investment, and infrastructure and deliver sustainable development. Once adopted the document will become a strategic statutory development plan document for the local authorities of Greater Manchester and will replace some of the existing policies in the local authority's current local development plans.

The vision of the Greater Manchester Strategy is “to make Greater Manchester one of the best places in the world to grow up, get on and grow old”. To help deliver this the overall aim of the GMSF is to manage growth so that Greater Manchester is a better place to live, work and visit. The plan places great emphasis on delivering key infrastructure and a significant growth in jobs and housing and competitiveness. With regards to the environment there is a strong preference for development of brownfield land and seeking to protect and enhance Greater Manchester’s extensive network of blue and green spaces.

The GMSF contains ten strategic objectives, three of which are particularly relevant to this study: **Objective 8** - Improve the quality of our natural environment and access to green spaces; **Objective 9** - Ensure access to physical and social infrastructure; and **Objective 10** – Promoting health and wellbeing of communities.

Objectives are followed by a series of strategic policies which provide guiding principles for development, those which are particularly relevant to this study are: **Policy GM-Strat 6 Northern Areas** which seeks to increase competitiveness in the Northern Districts, Measures include improving accessibility by cycling and walking, protecting and enhancing the natural and historic environment and improving local character: **Policy GM-Strat 13 Green Infrastructure** which identifies waterways as key green infrastructure assets of Greater Manchester that should be protected and enhanced; and **Policy GM-Strat 14 A Sustainable and integrated transport network** which aims to enable half of all daily trips to take place by public transport, walking or cycling.

Chapter 8 of the GMSF addresses creating a ‘Greener’ Greater Manchester. Waterways are recognised for their role in generating economic growth, addressing issues of climate change and pollution mitigation, improving quality of life for residents and as important wildlife habitats. **Policy GM-G 3 River valleys and waterways** states “River valleys and waterways will be protected and improved as central components of Greater Manchester’s green infrastructure network and a vital part of a Nature Recovery Network, making a major contribution to local identity, quality of life and the natural environment”. (GMSF, pp.147). Priorities include promoting public enjoyment whilst protecting tranquillity and natural habitats and increasing the use of canals for active travel. Further to this **Policy GM-G 9** seeks **A net enhancement of biodiversity and geodiversity**, whilst **Policy GM-G 10 The Greater Manchester Green Belt** affords strong protection to the Green Belt, noting that positive beneficial use will be supported.

Chapter 9 of the GMSF is about delivering a more ‘inclusive’ Greater Manchester. Policies which are of particular relevance are: **Policy GM-E 2 Heritage** which seeks to maintain and enhance the historic environment, heritage assets and their setting, promoting their enjoyment and understanding, **GM-E 5** which aims to improve **education, skills and knowledge**, **Policy GM-E 6** which aims to improve residents **Health** by supporting active lifestyles, and **Policy GM-E 7 Sport and Recreation** which aims to protect and enhance a network of high quality and accessible sports and recreation facilities including by improving “access to, and connections between different parts of, the green infrastructure network”. (GMSF, pp.183).

Site Allocations are identified in **Chapter 11**. The only specific Policy Allocation applicable to this study is **GM7 Elton Reservoir** where the route of the canal runs along the eastern edge of the site. The policy notes that any proposals for the site must be in accordance with an approved masterplan and include phased delivery of blue green infrastructure and provision for recreation and social infrastructure. Text accompanying the policy notes that there is the “opportunity to significantly enhance the green infrastructure and biodiversity value of the allocation, enhance and incorporate existing assets such as the priority habitats and the water features of Elton and Reservoirs and the Manchester and Bolton & Bury Canal”, (GMSF, pp 259).

It is worth noting that the canal also runs through several areas allocated as green belt although these are not specifically addressed in site allocation policies. Further policy areas which are worthy of note include **Policy GM-S 5 Flood risk and the water environment** which aims to minimise flood risk, and **Policy GM-N 5 Walking and Cycling** which supports a range of measures including utilising and enhancing green infrastructure, including canals.

Whilst the GMSF does not specifically address the restoration of canals, it can be seen that restoration of the canal would comply with and help to fulfil several the strategic and topic specific policies within it, most notably the desire to improve access to, quality and the amount of green and blue infrastructure, enhance biodiversity as well as improve opportunities for walking and cycling.

4.2. Bolton Local Development Plan

The Local Plan for Bolton is formed of two documents, the Bolton Core Strategy (2011) and the Bolton Allocations Plan (2014) and accompanying Policies Map.

Bolton Core Strategy 2011

The Bolton Core Strategy Development Plan Document was adopted in March 2011 and forms the strategic tier of policy guidance for the District to 2026. It presents a spatial vision for the area, identifies key objectives and a series of strategic policies to help deliver these. This is followed by several area specific policies, details of infrastructure and planning contributions and planning policy maps.

The spatial vision for Bolton is based around ensuring economic prosperity, narrowing the gap between the most and least well off, maximising the use of transport links, addressing climate change, and creating high quality environments. 16 Strategic objectives are identified, those which are relevant to this study include (in summary):

- Maximising access to sporting, health and recreational facilities and increasing opportunities for walking and cycling;
- Providing opportunities for learning and education;
- Conserving and enhancing the best of Bolton's built heritage and landscapes and improving the quality of open spaces;
- Protecting and enhancing biodiversity;
- Reducing the likelihood and managing the impacts of flooding; and
- Encouraging community cohesion and ensuring access for all to community and cultural facilities.

Chapter Four of the Core Strategy contains fourteen strategic policies, which focus heavily on delivery of the spatial vision by defining what the Council will do or require when development takes place. Those which are relevant to this study can be summarised as: **Policy H1**, which aims to improve the health of, and health provision for Bolton's residents; **Policy A1**, which aims to ensure development is accessible by a range of transport modes, **Policy CG1**, which aims to safeguard and enhance the rural areas of the borough, the borough's biodiversity and its recreational green spaces as well as reduce flood risk; and **Policy CG3**, which promotes the use of innovative, sustainable and high quality urban design to conserve and enhance local distinctiveness, enhance the significance of heritage assets and ensure areas are accessible and inclusive.

Chapter 5 of the Core Strategy describes how the strategic objectives will be achieved in each part of the borough through a series of area specific policies. The area of Little Lever is covered under **Policy OA6** which addresses the whole of Little Lever, those parts of Kearsley to the east of the A666, and the open areas between them. The policy identifies several principles for managing development in the area including protecting significant open recreational areas in the Croal Irwell Valley at Moses Gate Country Park, and along the line of the Manchester Bolton & Bury Canal, from adverse development, and conserving and enhancing the character of the existing physical environment. With regards to links to other areas, **Policy LO1** states that the council and its partners will protect green infrastructure of sub-regional importance and reduce the impact of flooding on areas downstream. Text accompanying the policy notes the important role of Bolton's green infrastructure in providing a location for recreation, wildlife habitat and as a resource to mitigate and adapt to climate change.

Finally, **Policy IPC 1** addresses infrastructure and planning contributions. It notes that contributions will be sought for additional types of infrastructure necessary to remedy site-specific deficiencies.... including contributions towards the wider plans to restore the Manchester Bolton & Bury Canal.

[Bolton's Allocation Plan \(December 2014\)](#)

The Bolton Allocations plan sets out how the strategic policies of the Core Strategy will be implemented on a proposals map for the Borough and contains some additional policies to be used in conjunction with the map. A review of the proposals map has been undertaken to identify policy allocations for the canal corridor and surrounds. Most of these site-specific allocations apply policies contained within the Core Strategy 2011 document and are explained below.

Significant stretches of the canal are designated as 'sites of biological importance' (Manchester Bolton & Bury Canal West) and the very western end of this canal section runs through the Moses Gate Local Nature Reserve (LNR). The LNR includes a site of special scientific interest (SSSI) at Nob End. All these designations are addressed under **Policy CG1** of the Core Strategy which aims to safeguard and enhance the Borough's biodiversity and improve the quality and interconnectivity of wildlife corridors and habitats whilst reducing the risk of flooding.

The canal lies within the Croal and Irwell Valley landscape area which is addressed under Core Strategy **Policy CG3**. Proposals for development within such areas should deliver a high standard of design quality, be accessible to all and respect and enhance heritage assets and the landscape character of the surrounding area. Further to this, **Policy CG6 AP** of the Allocations Plan specifies criteria for appropriate development within such areas, including the use of screening and good quality landscape design. With this in mind it would be sensible for any development proposals to be *supported by a Landscape Character Assessment and design statement*.

The length of the canal runs through an area designated as Green Belt. **Policy CG7AP** of the Allocations Plan protects the green belt from inappropriate development but notes that provision of appropriate facilities for outdoor sport and recreation which preserve the openness of the Green Belt are acceptable. The only other policy allocations which are notable is that the entire stretch of canal and surrounds is allocated as a minerals safeguarding area site of the old Paper Mill is now allocated for housing under Core Strategy policy SC1.

Overall, it can be concluded that restoration of the Manchester, Bolton & Bury canal would sit favourably with the Local Development plan for Bolton. It would support its aims to preserve the heritage of the area and improve local character distinctiveness. Restoration proposals must take note of the ecological and wildlife importance of the canal and surrounds and enhance rather than jeopardise its role in nature conservation. Ecological assessments may be required to support any proposals planning applications for restoration and development. Proposals to enhance the recreational value of the canal are supported but they must be accessible to all members of the community.

4.3. Bury Local Development Plan

The Bury Unitary Development Plan (UDP) 1997 acts as a guide for the future development or protection of land in the Borough. Its policies and proposals currently form the basis for the Council's decisions on planning applications, however as it was adopted in 1997 the plan is somewhat out of date. Whilst the UDP remains the statutory local planning document for the borough, the weight given to policies in the UDP is dependent upon their consistency with those set out in the NPPF.

Bury Council are currently in the process of preparing a new Local Plan to replace the existing UDP. Consultation on the policy directions of the local plan took place in 2018. This was the second stage of consultation, the feedback from which is being incorporated into the Local Plan proposed submission document. Once adopted the new Local Plan and the GMSF will form the development plan for Bury. The current anticipated timeframe for adopting of the new local plan is late 2021. With this in mind it is diligent to review both the policies of the Bury UDP and the emerging Local Plan (consultation document 2018).

Bury Unitary Development Plan 1997

The strategy of the UDP is set around accommodating development pressures whilst protecting environmental interests. Key themes include enhancing prosperity, encouraging development which will foster a positive identify for the Borough and protecting aspects of the borough which are vital to quality of life. With regards to the local environment, the strategy promotes the conservation, enhancement, and management of sites of nature conservation importance, linking them to form wildlife corridors wherever possible.

Part 1 of the UDP contains more strategic 'General' policies which set out the overriding principles for guiding development within the Borough. Those which are of particular relevance to this study include: EN2 which seeks to preserve the Borough's build heritage, EN6 which aims to protect and enhance the natural environment, especially in areas of ecological and wildlife importance, EN9 which seeks to conserve and improve the landscape character, OL1 which protects the Green Belt, OL3 which retains valuable areas of open space, and OL6 which recognises the increasing and conflicting pressures on the countryside, and aims to protect the countryside and the benefit it offers the community.

Part 2 of the plan contains more detailed topic and area specific policies. These policies are allocated spatially on the accompanying UDP proposals map. Site specific policy allocations for the canal corridor and the immediate surrounds are addressed below, along with a summary of the strategy and policy direction of the chapter in which they are contained.

'The Economy' of Bury is addressed in Chapter 4 of the plan. Development of the local economy is seen as central to the future success of the Borough, objectives include improving employment opportunities and conditions in deprived areas, supporting small and growing businesses and maximising the economic benefits of the borough's attractive environment. The UDP proposals map identifies the area where the canal enters urban Radcliffe as an 'Employment Generating area' under policy EC2/1/13 and as 'Radcliffe Renewal area' under policy H5/1/2. Provision of employment uses and regeneration of housing in this area is particularly supported.

Chapter 6 of the plan addresses 'The Natural Environment'. The overall aim is to conserve and enhance the built and natural environment, reduce pollution, and prevent flooding. Large sections of the canal are allocated as Sites of Nature Conservation Interest (Sites of Special Scientific Interest, National Nature Reserves and Grade A Sites of Biological Importance) under policy EN6/1 which protects such sites from any development which would either directly or indirectly cause adverse effects to their nature conservation interest. Further to this Policy EN6/4 identifies the canal as a wildlife link or corridor, which the council will seek to strengthen and consolidate, including through new development proposals.

The canal runs through large stretches of 'Open Land' as addressed in Chapter 7. In addition to protecting the Green Belt and open spaces, the plan promotes the positive management of the countryside to integrate traditional rural activities alongside demands for leisure and tourism, nature conservation and landscape protection. Policy OL1 aims to protect the integrity of the Green Belt, limiting development except for appropriate uses (including outdoor sport and recreation) whilst policy OL5/2 applies similar principles to development in river valleys not designated as Green Belt. Further to this policy OL5/3 - Riverside and Canalside Development in Urban Areas, seeks to maintain and provide open land corridors to help to re-establish the continuity of the river valleys. Measures include requiring development to include open land/access corridors alongside water frontages.

The bulk of policy allocations which apply to the canal corridor are contained within Chapter 8 – 'Recreation and Tourism'. The main aims for the policies within this chapter are to safeguard and improve existing land and facilities used for sport and recreation, to improve provision of such facilities (policies RT1 and RT2) to increase public access to the countryside for informal recreation, and to encourage the further development of tourism in the Borough. Policy RT3 addresses recreation in the countryside. Much of the line of the canal and land around Elton Reservoir is allocated under sub-sections of this policy as follows:

Policy RT3/1/6 safeguards the reservoir and surrounds for their recreational value;

Policy RT3/2 - Additional Provision for Recreation in the Countryside encourages recreation in the countryside, in particular the re-use of vacant or derelict land or water provided proposals would not have detrimental effect on the environment, nature conservation, agriculture, or the amenity of residents. Sub-policy RT3/2/6 - Elton Reservoir Area, Bury (122.34 ha.) notes that the site, which includes part of the Manchester Bolton & Bury Canal, "is already popular, but could be developed further to provide an important focus for informal recreation". It will be important that any proposals take account of the presence of SBI's (sites of biological interest) within this area; and

RT3/4 - Recreational Routes seeks to establish and safeguard a network of designated recreational routes to provide access to the countryside, where appropriate, for pedestrians, cyclists, and horse riders. Sub-policy RT3/4/4 - The Irwell Valley South of Bury Town Centre safeguards the route which follows the canal towpath and a former railway line linking Prestwich Forest Park with Radcliffe and Bury Town Centres.

Whilst not an allocation on the UDP proposals map, it is worth noting that RT3/3 - Access to the Countryside seeks to improve and extend opportunities for all to gain access to the countryside, in particular at focal points identified for informal recreation, through the provision of facilities such as waymarking and car parks.

Policy RT4 – Tourism is of particular importance to this study, the overall aim of which is to promote and facilitate the development of tourism in the Brough. Sub-policies include RT4/1 - Tourism Development, which encourages proposals for the development of appropriate visitor related attractions and facilities; RT4/2 – which safeguards tourism assets; and RT4/4 - Tourism Support Facilities which aims to improve facilities for tourists by ensuring adequate signposting, car, and coach parking, and giving favourable consideration to proposals for visitor related facilities in appropriate locations.

Perhaps the most important policy allocation in the UDP is sub-policy RT4/7 - The Manchester, Bolton and Bury Canal as this is the only policy within the plan which is dedicated to the canal and states: "The Council will protect and safeguard the Manchester, Bolton and Bury Canal and support proposals for its restoration.

Proposals for canalside development will be expected to enhance the canal environment and not prejudice its restoration". In accordance with this policy, the following sites are allocated for canal related development:

RT4/7/1 - Land South of Daisyfield, Bury- The northern end of the Manchester Bolton & Bury Canal now terminates south of Daisyfield and a site is allocated for the development of a boat turning area and terminus facilities at this point. RT4/7/2 - Water Street, Radcliffe. The canal has been culverted beneath Water Street in Radcliffe. It is proposed to reconnect the main lengths of the canal still in water by re-bridging Water Street to allow the passage of boats beneath.

Text accompanying the policy notes that: “the canal has been seen as having an important role to play in the environmental improvement, recreational development and economic regeneration of the Irwell Valley...The canal has considerable potential for recreational uses...in terms of a linear recreation route for walking and cycling and as progressively restored to navigable status, boating. The canal is also important for fishing and represents the most important aquatic habitat in the Borough. Restoration of the canal and towpath, where appropriate, will not only provide an important recreational resource, but should maintain and increase the wildlife interest in the waterway and will attract visitors to the area. It will make an important contribution to the regeneration of the middle Irwell Valley.”

The final chapter of relevance is Chapter 10 ‘Highways and Transportation’. Due to the date of the plan there is a somewhat strong focus on managing road traffic, however, objective 7 is to ensure that the needs of pedestrians, cyclists, the mobility impaired and those with special needs are properly catered for as identified in policies HT5 and HT6. Further to this sub policy HT6/1 aims to ensure that pedestrians and cyclists are able to move safely and conveniently through provision of direct and convenient routes that are well lit and clearly signed and have secure cycle parking. Finally, Policy HT6/3 - Cycle Routes states that the Council will give consideration to the establishment of designated cycle routes. Parts of the canal line are identified as having potential as a defined cycle route under sub-policy HT6/3/4 - The Irwell Valley south of Bury Town Centre. This route follows the canal tow path and a former railway line linking Prestwich Forest Park with Radcliffe and Bury Town Centres.

Whilst the UDP is now 23 years old, it can be seen from the policies above, that restoration of the canal is supported especially due to its potential as a tourism and recreation resource. Protection and enhancement of landscape and ecology feature strongly thought the plan, therefore any proposals for restoration must be in keeping with the landscape setting and provide a gain in nature conservation value of the canal and its surrounds. Ensuring the canal and towpath are accessible to all and cater for walking and cycling must also be considered.

[Bury Local Plan, Second Draft Policy Directions 2018](#)

As noted above Bury Council are currently in the process of producing a new local plan. The current stage of the plan (Policy Directions) sets out the proposed scope and a more refined direction for the planning policies that the Local Plan will contain. Consultation on this stage of the plan ended on 30 November 2018, the results of which will inform the next stage of the plan making process (proposed submission/pre-examination). It is anticipated the final version of the plan will be adopted in late 2022.

Note: This stage of the plan does not set out defined policies but rather identifies the direction policy should take with regards to a specific topic or area. As this stage of the plan does not have a proposal map, proposed policies will be reviewed on topic and theme only unless an area which the canal runs through is specifically mentioned.

The vision of the Bury Local Plan is that by 2037 the Borough will have embraced sustainable growth in a managed way and become a well-connected place with a strong and competitive local economy, strong, vibrant, and healthy communities, and a high quality natural and built environment that is resilient to the effects of climate change. Eighteen broad objectives are set out to help deliver this vision, 11 of which are particularly relevant to this study (in summary):

- Deliver sustainable development;
- Promote health and wellbeing within the Borough’s communities;
- Ensure that the Borough is resilient and adaptive to the effects of climate change;
- Manage flood risk;
- Safeguard amenity;
- Deliver a competitive and diverse local economy;
- Safeguard existing and promoting new tourism and cultural development in appropriate locations;
- Ensure that the Borough’s residents have access to a sufficient amount of good quality open space, sport and recreation facilities;
- Encourage sustainable transport choices;
- Protect and enhance the Borough’s natural environment; and
- Protect and enhance the Borough’s built heritage.

The plan identifies several overarching principles that should be applicable to the decision-making process for all forms of development including (but not limited to) sustainable development, health and wellbeing, climate change, pollution control, flood risk management and amenity. Policy directions for these general principles are then identified, including **OP2 Health and Wellbeing** which identifies measures to help alleviate some of the Borough's key health and wellbeing issues, such as promoting active travel and making provision for local green spaces, and **OP5 Floor Risk Management** which aims for new development to reduce flood risk.

Topic specific policies are then addressed in each chapter of the plan. Chapters which are most relevance to this study are addressed in turn below.

Chapter 7 'Tourism and Culture' recognises the role the Borough's tourism and cultural assets play in creating a vibrant living environment and in the wider economy. Policy direction **TO1 Cultural and Tourism Assets** proposes a policy that supports development of the Borough's tourism and cultural offer, recognising the significant contribution they make towards the competitiveness and diversity of the local economy, and in improving quality of life.

Chapter 8 of the plan addresses 'Open Space, Sport and Recreation'. Acknowledges the many forms such facilities can take, and the role they play in nature conservation and landscape setting. A key local issue is significant and rising levels of obesity in children and adults, as such there is a need to increase opportunities to travel by walking and cycling and other forms of physical activity. Policy Directions identified include **OS1 'Open space, sport and recreation provision'** which seeks to retain a good supply of open space, sport and recreational assets and supports proposals for enhancement of such facilities: and **OS3 'Recreational Routes'** which seeks to establish a network of designated recreational routes to provide access to the countryside.

Accessibility is addressed in Chapter 10 of the plan which aims to reduce congestion and associated pollution, encourage sustainable transport choices (policy direction **AC1**), and ensure new development improves accessibility and prioritises the use of public transport, cycling and walking.

Chapter 11 'Natural Environment' recognises the Borough's varied landscape characters and ecological assets and the need to protect, enhance and restore water bodies. Policy proposals include; policy direction **NE1 Green Infrastructure** which suggests the plan should seek to protect and enhance multi-functional green infrastructure and support proposals to improve the connectivity and quality of the network; policy direction **NE2 Biodiversity** which aims to ensure development proposals do not damage the Borough's biodiversity but provide net gains where possible; policy direction; policy direction **NE4 water resources** which suggests consideration should be given to whether there are opportunities for a development to contribute towards restoring and improving water resources; and policy direction **NE6 Landscape Character** which seeks to protect and enhance the landscape character of the borough.

Further to this is worth noting that much of the length of the canal runs through areas currently designated as Green Belt. Policy directions contained within chapter 12 aim to protect the green belt from inappropriate development (**GB1**) but seek to promote beneficial uses of the green belt including active travel, outdoor sport and recreation, and the retention and enhancement of landscape character, biodiversity, and visual amenity (**GB2**).

Finally, whilst the Manchester Bolton & Bury canal is not specifically listed as a heritage asset, the plan does seek to protect and enhance the Borough's built heritage including local non-designated heritage assets (policy direction **BH6**).

Whilst the emerging local plan does not specifically mention the Manchester Bolton & Bury canal it can be seen that, subject to careful planning, proposals for restoration could complement many of the proposed policy directions within it. As the plan develops further, more detailed policies will be developed. As such it would be diligent to review the next stage of the plan when it is published.

4.4. Conclusions

Overall, the planning policy framework for both Bury and Bolton is supportive of restoration of the canal and towpath along this route. Whilst there are very few specific references to canal restoration within these documents, such activity would help fulfil several the national and local planning objectives, in particular improving the attractiveness of local environs and improving health and wellbeing through provision of accessible green/blue infrastructure and opportunities for recreation, walking and cycling. Any measures to restore the canal should recognise its high wildlife and biodiversity value and seek to protect and build upon this linking to other blue/green infrastructure wherever possible. It will also be important to ensure the canal is accessible to all users including those with disabilities. Finally, as some of the statutory planning policy documents are still being produced (GMSF and Bury Local Plan) it would be diligent to review these documents once adopted.

5. Socio-economic case for restoration

5.1. The Need for the MB&BC Restoration and Redevelopment

The Manchester Bolton & Bury Canal passes through both urban and rural areas in Bury and Bolton local authority districts. Although disused, the majority of the canal is extant and acts as a network connecting Bury with Radcliffe and Little Lever.

Bolton, Bury and the surrounding areas are defined by their industrial textile heritage. The canal is part of this industrial history as it served to transport raw materials and coal to the mills and take finished product to the ports at Hull and Liverpool. Along its line there are many heritage features reminding us of the importance of the canal to this story including the Mount Sion Steam Crane and Prestolee Aqueduct.

The canal is strategically positioned to provide a service to existing residential areas, including Bury's 15% and Bolton's 21% social rented housing.^[1] 51% of Bury residents and 36% of Bolton residents are in Council Tax Band A, which is far from the UK's 24.8% average.^[2]

The redevelopment of the Manchester Bolton & Bury canal will attract visitors to the area and greatly impact local residents across the main centres of population in Bolton, Bury, Radcliffe, Farnworth, Kearsley and Little Lever.

The Bury wards of Church, Redvales, Radcliffe East and West are characterised by high levels of deprivation. The canal passes through two LSOAs which are amongst the 10% most deprived neighbourhoods in the country (009B and 016B).^[3] Three neighbourhoods in the 20% most deprived category will also be directly affected (013A, 015D and 016D). The deprivation for these areas is particularly focused on poor employment, with other challenges including crime, health and disability and income.^[4]

The Bolton wards of Little Lever, Farnworth and Kearsley would also be impacted by the redevelopment. 25.8% of the population of Little Lever and Darcy Lever are aged 60+. 39.6% of the ward population are not living as part of a couple, 9.3% are separated or divorced and 6.9% are widowed.^[5] 28.2% of ward households are single person households, 12.4% of which have single people aged 65 and over. 11.9% of ward households are single parent households. The canal can serve these demographics, providing volunteering opportunities and chances to socialise to help combat loneliness and isolation for vulnerable residents. We are aware that this data is 10 years old and are looking forward to the next census in 2021.

The Bolton wards of Kearsley and especially Farnworth suffer from high deprivation. Farnworth has six LSOA which are amongst the 10% most deprived neighbourhoods in the country (033A, 033B, 033C, 027C, 027D and 032B). The five remaining LSOA in Farnworth are amongst the 20% most deprived neighbourhoods in the country (027A, 027B, 029B, 032A and 032C). This is significant deprivation across all aspects of life measured by the IMD. Kearsley also has three LSOA amongst the 20% most deprived in the country (032D, 032E and 034D) and three which are amongst the 30% most deprived (034C, 034D, 034A).

Average yearly income is £20,977 for Bolton and £21,669 for Bury residents, below the national average of £24,937.^[1] As of 2011, 12.9% of Farnworth and 8% of Kearsley residents were unemployed, higher than the UK average of 7.6%.^[2] 8.4% of Radcliffe East and 9.7% of Radcliffe West residents were also suffering from unemployment.^[3] The regeneration of the MB&BC canal will create volunteering and skills development opportunities and attract businesses to the area, both at the Bury and Bolton terminuses and along the length of the canal close to centres of habitation. Independent businesses directly supported by the canal include kiosks and cafes, trip-boats and facilities for house-boat moorings. The proposed outdoor classrooms at Radcliffe and Little Lever will provide education and training for young people and adults, helping to boost the confidence and employability of participants.

Canal projects bring with them innumerable health benefits, improving the local environment and the wellbeing of residents through increased access to green space. The current towpath will be revitalised by the restoration of the canal, making it more appealing to walkers and cyclists. Locals and visitors will have access to sports equipment at the terminuses at Bury and Bolton, with provisions for canoeing, kayaking and paddle boarding. The terminuses will also act as hubs for volunteers, offering inclusive events to create a sense of community ownership.

The development of a green lung for Bury and Bolton will improve the wellbeing of local residents and help address the health inequalities they face. Life expectancy is 12.6 years lower for men and 8.5 years lower for women in the most deprived areas of Bury compared with the least deprived areas.^[4] Life expectancy in Bolton is 11.3 years lower for men and 8.9 years lower for women in the most deprived areas compared with the least deprived areas.^[5] The need to take every opportunity to improve urban air quality is highlighted by the recent (December 2020) ruling by inner south London coroner, Phillip Barlow, that air pollution was the cause of death of a 9 year old girl in Lewisham in February 2013.

The Audience served by the MB&BC Redevelopment

Bury 009B Among the 10% most deprived neighbourhoods (Church Ward)
 Bury 011A Among the 50% most deprived neighbourhoods (Redvales Ward)
 Bury 013A Among the 20% most deprived neighbourhoods (Redvales Ward)
 Bury 015A Among the 40% most deprived neighbourhoods (Radcliffe East)
 Bury 015D Among the 20% most deprived neighbourhoods (Radcliffe East)
 Bury 016D Among the 20% most deprived neighbourhoods (Radcliffe West)
 Bury 016B Among the 10% most deprived neighbourhoods (Radcliffe West)
 Bury 016A Among the 30% most deprived neighbourhoods (Radcliffe West)
 Bolton 024F Among the 30% most deprived neighbourhoods (Little Lever and Darcy Lever)

^[1] Office for National Statistics, Earnings by local authority 2019, <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/placeofworkbylocalauthorityshetable7>

^[2] Office for National Statistics 2011 Census, Ward Labour Market Profile Farnworth, <https://www.nomisweb.co.uk/reports/lmp/ward2011/1140856929/report.aspx?town=farnworth>

^[3] Office for National Statistics 2011 Census, Ward Labour Market Profile Radcliffe, <https://www.nomisweb.co.uk/reports/lmp/ward2011/1140856952/report.aspx?town=radcliffe>

^[4] Fingertips, Public Health England, <https://fingertips.phe.org.uk/static-reports/health-profiles/2019/E08000002.html?area-name=Bury>

^[5] Fingertips, Public Health England, <https://fingertips.phe.org.uk/static-reports/health-profiles/2019/E08000001.html?area-name=Bolton>

^[1] 2011 Constituency housing tenure, <https://commonslibrary.parliament.uk/constituency-data-housing-tenure/>

^[2] Table CTSOP4.0: number of properties by Council Tax band, <https://www.gov.uk/government/statistics/council-tax-stock-of-properties-2020>

^[3] IoD2019 explorer, http://dclgapps.communities.gov.uk/imd/iod_index.html

^[4] 2019 deprivation by postcode data (BL8 2BD, M26 3DE) <http://imd-by-postcode.opendatacommunities.org/imd/2019>

^[5] Office for National Statistics 2011 Census, <https://www.nomisweb.co.uk/reports/localarea?compare=E05000664>

5.2. The Wider Regeneration Context

Bury Council's Cabinet endorsed the Radcliffe Strategic Regeneration Framework (SRF) in September 2020 [9]. The SRF is helping to build upon Radcliffe's strengths and past regeneration activity by shaping the direction of Radcliffe's growth over the next 15 years with a series of short, medium and longer actions.

The SRF contains a wide range of proposals for the town, but early work has already started on the SRF's priority projects, which the Council intend to deliver in the short-medium term, including:

A new Hub in central Radcliffe, which will bring together a mix of civic functions at the core of the town centre;
 Expansion of the Market Hall and the revamping of Market Chambers;

- New leisure facilities;
- A Secondary School on the Coney Green site;

- A “whole town approach” to housing, bringing forward a comprehensive approach to residential development in Radcliffe; and
- A rationalised car parking and transportation strategy.

The SRF demonstrates the appetite and need for wholesale regeneration within Radcliffe, and presents an opportunity to integrate with the MB&BC, particularly with regards to transportation and green infrastructure.^[9] The MB&BC canal will make a lasting improvement to the area, improving the quality of the environment through green infrastructure for local residents.

Greater Manchester has been awarded £160m from the Transforming Cities Fund to encourage healthier lifestyles through walking and cycling. A link from the canal at Elton to Bury town centre is anticipated, as is the development of multiple active neighbourhoods around Bury.^[10]

The Growth Deal between Greater Manchester Combined Authority and the Central Government includes a drive for Active Travel Networks, which involve walking and cycling routes. The Radcliffe East Cycleway project has been allocated £650,000 over three years to complete the Bury Bolton Railway path, with the third phase to be delivered imminently.^[11]

Little Lever

Little Lever is one of four Bolton district centres which were allocated a £12m budget from the £100m Town Centre Strategy Fund and an additional £4m of funding from the 2019/20 Capital Programme. This budget was approved in 2019 to deliver ambitious district strategies with the aim of securing the immediate futures of town centres for the benefit of Bolton residents. Work is already underway in Little Lever Town Centre on a new library and health centre and there are other projects in the pipeline although not yet fully adopted.

The District Centre Strategy and Masterplan for Little Lever town centre, approved in November 2020, has identified seven Key Development Proposals to transform the centre.^[1] These include a new town square, redevelopment of an existing and underused precinct, increased pedestrian crossing phases for a safer environment, redevelopment of the former library site, a facelift for businesses on Market Street, and the development of new homes on vacant land. The council organised a community consultation in early 2020, the results of which have been included in the final strategy and masterplan report.

Both Little Lever and Farnworth town centre strategies feed into the wider Community Strategy and Vision for Bolton 2030.

Farnworth

Farnworth is one of four Bolton locations marked for targeted intervention. Little Lever, Farnworth, Horwich and Westhoughton currently have £16m budget for redevelopment. The council approved the current Masterplan and new town centre Strategy for Farnworth in July 2019, following wide-scale consultation with residents.^[1]

Proposed interventions in Farnworth include the creation of a new community hub in the town centre, the redevelopment of the market precinct, an extension of Farnsworth Leisure Centre and steps to generally improve the public environment. This strategy will be delivered in phases across several years, with the intention of ultimately attracting private sector investment to secure more development.

Farnworth town centre has also been successfully awarded £13.3m (of a bid for £19.25m) from the Future High Streets Fund, with work ongoing to complete the business case, which has been reprofiled to match the lower budget figure and submitted to MHCLG for approval.^[2] There are also exciting £50m plans to redevelop the former market precinct with social impact developer CAPITAL&CENTRIC: these have been submitted to Bolton MBC and it is stated that approval is expected in Summer 2021.^[3]

^[1]<https://www.democracy.bolton.gov.uk/CMIS5/Document.ashx?czJKcaeAi5tUFL1DTL2UE4zNRBcoShgo=mP%2bVLKolwWwydxfblgwEqSijayCdd%2bKjbrIjAW8Oln6RabxfInKOG%3d%3d&rUzwRPf%2bZ3zd4E7Ikn8Lyw%3d%3d=pwRE6AGJFLDNih225F5QMaQWctPHwdhUfCZ%2fLUQzgA2uL5jNRG4jdQ%3d%3d&mCTIbCubSFfXsDGW9IXnlg%3d%3d=hFflUdN3100%3d&kCx1AnS9%2fpWZQ40DXFvdEw%3d%3d=hFflUdN3100%3d&uJovDxwdjMPoYv%2bAJvYtyA%3d%3d=ctNJFf55vVA%3d&FgPIIEJYlotS%2bYGoBi5oIA%3d%3d=NHdURQburHA%3d&d9Qjj0ag1Pd993jsyOJqFvmyB7X0CSQK=ctNJFf55vVA%3d&WGewmoAfeNR9xqBux0r1Q8Za60lavYmz=ctNJFf55vVA%3d&WGewmoAfeNQ16B2MHuCPMRKZMwaG1PaO=ctNJFf55vVA%3d>

^[2] <https://investinbolton.com/news-events/news/farnworth-receives-133m-christmas-present/>

^[3] <https://investinbolton.com/news-events/news/capital-centric-to-deliver-50m-community-in-farnworth-town-centre/>

^[1]<https://www.investinbolton.com/wp-content/uploads/2020/08/Little-Lever-Masterplan-Proposals-FINAL.pdf>

Conclusions on the Wider Regeneration Context

Bringing the MB&BC back into usage would not only promote boating, canoeing and kayaking, it would ensure the upkeep and maintenance of the MB&BC towpath for walkers to take in the beauty and diversity of the area. The maintained MB&BC towpath will add to the variety of routes already being developed for local residents. If paired with the revival of MB&BC, the combined impact of these projects will be a lasting and positive change in the quality of life of the local community.

This length of the Manchester Bolton & Bury Canal passes through some of the most deprived areas of Greater Manchester and of the North West of England. This is a key part of the justification of restoring the canal as the benefits will identified later in this report will accrue to these Local Super Output Areas (LSOA) that are struggling economically. The most important factor in building the case for restoration is knowing what change will come about through the restoration. Using the Canal and River Trust's '*Outcomes Measurement Framework for people, prosperity and places*' we have broken the proposed outcomes down as follows:

- Health, Wellbeing and Happiness
- Engaged People and Cohesive Communities
- Learning and Enhancing Skills
- Prosperous and Connected Places
- Green and Blue Futures
- Cultural and Environmental Assets

5.3. Regeneration Outcomes

5.3.1. Regeneration Outputs and Outcomes

Regeneration outputs and outcomes are shown in the table below which covers each by geographical location and by project heading. Outputs are generally physical and material items that are delivered as a result of the restoration whilst outcomes are the use made of outputs and the benefits delivered.

Table 5-3 – Regeneration outputs and outcomes

Mission and Vision / Ultimate Goal	To restore and enhance a green and blue heritage asset which brings people together to enjoy, learn and be enriched through their interactions with it.			
Activity	Outputs	Short-term outcomes	Long-term outcomes	Outcome Indicator
Bolton Terminus – This is set to become a place where visitors, boaters (inc. paddlers) and volunteers can park, launch, work, rest and store equipment safely.	Accessible launch point for narrow boats, paddle boats i.e. boards, canoes, kayaks.	The terminus will be designed to enable small boats to be slipped into the canal and larger boats to be craned into the MBBC for to use as leisure boats, house-boats or commercial boats	Improved physical and mental well-being.	Site is well-used and cared for over a long period.



Activity	Outputs	Short-term outcomes	Long-term outcomes	Outcome Indicator
	Lock-up facility for boards, canoes, kayaks and/or angling equipment	Increased usage of the canal as a facility of paddlers and anglers	Improved physical and mental well-being.	Site is well-used and cared for over a long period.
	Paddle boats hire and training business, supplies and services for boaters.	Income generation for the canal maintaining organisation from sales and mooring fees.	Opportunities for boating and living on the canal	maximum uptake of available moorings
	Accessible changing places toilets, showers and refreshments	A hub for volunteers, green social prescribing and community events.	Increased mental and physical health for those on green social prescription pathways	Site is well-used and cared for over a long period.
	Signage	Increased awareness of the canal facilities	Canal will become a source of local pride and a recognised feature of the area's overall character	Used on all visitor information publicity and as a means of projecting a positive image of the area
	Carpark (with space to crane a narrowboat onto the canal)	Increased usage of the canal as a facility for boaters, walkers, paddlers and anglers	Increased happiness and well-being for those involved in canal maintenance, those using the paddle sports facilities and those part-taking in community walks and events.	Site is well-used and cared for over a long period.
Bury Terminus - A place where visitors can park, meet, refresh, start their day out.	Children's play area	Increased access to a fun space for families as a destination or to start days out along the canal or to	Improved physical and mental well-being.	Site is well-used and cared for over a long period.



Activity	Outputs	Short-term outcomes	Long-term outcomes	Outcome Indicator
		visit Elton Reservoir		
	Benches and planting for aesthetic, sensory and biodiversity purposes	Increased access to an enjoyable, sensory area for visitors to start days out along the canal or to visit Elton Reservoir	Improved physical and mental well-being.	Site is well-used and cared for over a long period.
	Accessible changing places toilets, information panels and notice boards, refreshments,	Increased access for those with disabilities and others users to enjoy a day out in comfort.	Increased awareness and engagement amongst visitors and consequently increased respect and support for the Canal, its heritage and environment.	Site is well-used and cared for over a long period.
	Signage	Increased awareness of the canal facilities	Canal will become a source of local pride and a recognised feature of the area's overall character	Used on all visitor information publicity and as a means of projecting a positive image of the area
	Carpark	Increased usage of the canal as a facility for volunteering, learning and days out	Increased happiness and well-being for those involved in canal maintenance, enjoying a day out and part-taking in community walks and events.	Site is well-used and cared for over a long period.



Activity	Outputs	Short-term outcomes	Long-term outcomes	Outcome Indicator
	Trip boat start point	Income generation for the canal maintaining organisation from tourist business.	Sense of pride in local area in terms of heritage and environment	Sustainable business created.
	A hub for volunteers, landscape maintenance, guided walks and other community events	Volunteers enjoy maintaining the canal and new volunteers get involved in community events	Sense of pride in local area in terms of heritage and environment	Site is well-used and cared for over a long period.
Provision of outdoor classrooms (single storey sustainable buildings) at suitable locations near to reasonable parking at Radcliffe and Little Lever is proposed	Formal learning for school children, topics could include: <ul style="list-style-type: none"> o Ecology and biodiversity o Canal engineering and industrial revolution o Social history of 19th century boat people. 	Children would gain knowledge and understanding about other people's lives and their environment.	Inspire new generation to work in conservation, heritage or environment sectors	Schools and clubs book the facility over a sustained period and report increased understanding of their local area as a result of their visit.
	Volunteer training centre <ul style="list-style-type: none"> o Landscape maintenance o Health & Safety o Hedge-laying 	A well-maintained towpath and canal line for the enjoyment of all users.	Work placements and short-term volunteers would move into paid employment following their training and placements.	Uptake on courses sustained over a period and users report success in their job-seeking or increased satisfaction in their worklife.
	Bookable courses for adult informal learning <ul style="list-style-type: none"> o Willow crafts o Sustainable living o Angling o Paddle sports o Photography 	People with and without means to pay to attend a special interest workshop or course will gain knowledge and skills which they can use to improve their quality of life.	New career possibilities and improved quality of life.	Uptake on courses sustained over a period and users report success in their job-seeking or increased satisfaction in their worklife.



Activity	Outputs	Short-term outcomes	Long-term outcomes	Outcome Indicator
Independent Businesses scheme	<p>A joined-up business plan between the stakeholders and local authority incentives to support independent businesses to set up the following along the length of the canal near to centres of habitation such as Radcliffe and Little Lever:</p> <ul style="list-style-type: none"> • Kiosks or pop-up cafes • Trip-boat with on-board refreshments, comfort facilities and learning sessions. • Facilities and services for house-boat moorings 	<p>A prosperous economic corridor which provides services to visitors and locals alike in a seamless fashion where the quality of the end product is prioritised over the administrative divisions within the operation.</p>	<p>A regeneration project which would serve as an outstanding model of multi-agency working.</p>	<p>Other projects use these outcomes as a model when developing their own programmes.</p>
		<p>A varied and dynamic offer of activities and refreshments for visitors and locals to enjoy on their visit.</p>	<p>A thriving community of commercial businesses who are invested in the canal as a catalyst for wider economic and cultural regeneration in the communities along the line.</p>	<p>Businesses thrive over a sustained period.</p>
	<p>Powerful and individual MBBC Branding across the terminus sites and along the length of the canal on signage, interpretation, outdoor classrooms and online.</p>	<p>Collaboration of the signage, as on the business plan, will encourage joint working in all areas of delivery; This will result in a better end-product as well as increased chances of success for funding applications and campaigns.</p>	<p>Sustainability for the project and broader improvement of the local area and communities.</p>	<p>Other projects use these outcomes as a model when developing their own programmes.</p>



Activity	Outputs	Short-term outcomes	Long-term outcomes	Outcome Indicator
Green and Blue Futures restoration work	Restoration will include actions and mini-projects to improve the following: <ul style="list-style-type: none"> o Biodiversity along the 5-mile length of restored canal e.g. community-led species surveying and habitat creation. o Facilities, information points and opportunities for paddlers, swimmers, cyclists, walkers, boaters, anglers. 	People will be involved in caring for and promoting the green and blue assets of the MBBC which will result in the long-term success of the MBBC as a destination.	People will be invested in the green and blue assets and will experience increased mental and physical well-being from active involvement in their community.	Canal and its built and natural environs are well-used and maintained.
Cultural and environmental assets	Oral history and archiving projects	Our knowledge and understanding of the heritage assets will be extended and shared with a wide range of audiences through permanent, temporary, digital and face to face interpretation	Greater community engagement with local heritage and social history. Future care for canal.	Consultation post project will show increased understanding and appreciation of the canal and its environs
	External interpretation of the environmental and heritage assets (informed by the oral history and archiving projects)			
	Youth public art engagement projects			
	Cataloguing and recording of the heritage and environmental assets along the length of the canal to feed into schemes such as: <ul style="list-style-type: none"> o Adopt a Canal o Local Nature Reserve o Local Heritage List 	Those involved in the process of cataloguing and applying for greater protection via the above schemes will feel a sense of pride and achievement in what they have done leading to improved wellbeing overall.	Increased knowledge of the heritage and environmental assets and greater protection for them will lead to their preservation for the benefit of future generations to enjoy.	Most sustainable preservation schemes will have been adopted and are maintained over a sustained period.

5.4. Value of Economic Benefits

The proposals have been costed at £6 million (excluding the work to undertake the work to repair the breach). Whilst this section is not a true cost/benefit analysis it is important to remember that (a) value for money has to be presented even if the benefits are non-fiscal and (b) money spent on restoration has some benefit to the local economy, as a proportion of the construction costs are spent locally.

We have defined benefits at this stage under the following headings

- Construction benefits
- Benefits from bankside users
- Benefits from users on the water

5.4.1. Construction Benefits

At this stage we are making a standard assumption that 60% of the cost of construction will be spent in the local economy. To achieve a figure such as this it is necessary to enter into some local employment conditions (which funding bodies may insist on anyway if economic benefits are a key outcome) and local procurement agreements. Construction benefits are short term only but they do result in increased spend within the economy during the construction period, before the long term annual benefits are available. They also effectively add to the Net Present Value (NPV) of any cost-benefit analysis as the construction cost appears on both sides of the equation.

5.4.2. Benefits from bankside users

Bankside users are those that don't actually venture onto the water but enjoy time alongside the canal. These fall into many categories from ardent canal enthusiasts on special interest visits through cyclists, walkers and anglers to "gongoozlers" who simply find a pleasant spot to sit and watch the world go by. Economic benefits from this group come from (a) an increase in the number of users, (b) an increase in the opportunity for them to spend money and (c) an increase in money spent as a result of the restoration. Not all increased expenditure comes from extra visitors but all such expenditure requires the opportunity for spend. At present the canal presents no opportunities for expenditure along the route.

5.4.3. Benefits from users on the water

Users on the water step off the bank onto a vessel of some kind be it a paddle board or canoe, a self-steer leisure boat or a trip or restaurant boat. Often these activities involve spend of some kind simply to undertake them, for example the fare payable on a trip boat or the maintenance of a private pleasure boat. Further, nearly all result in the visitor/user spending other money in the local area just as bankside visitors do.

5.4.4. Quantification of benefits

A full benefit analysis of canal restoration is a study in its own right: however experience from other schemes can give some indication of what can be expected on an isolated 5 mile waterway. Navigable isolated waterways are comparatively unusual and generally (but not always) occur as an interim stage on a larger restoration project. One of the most successful examples was the Rochdale Canal above Tuel Lane lock that, prior to reopening 2001 hosted a small hire cruiser fleet that shared management with a fleet on the nearby Calder and Hebble Canal, and an isolated length of the Montgomery Canal has hosted hire cruisers in recent years. In the present time, a very successful isolated canal is operated by the Chesterfield Canal Trust between Chesterfield and Staveley, where two trip boats operating summer weekends and school holidays give a total traffic comparable to some quieter waterways on the connected network, and feed a brisk trade in the adjacent (canal society operated) cafes.

The figures given in the table below are very preliminary and need further exploration. It should also be noted that these represent income to the local economy NOT to the operator of the canal. Indeed, construction and maintenance are a COST to the operator of the canal that then acts as a revenue into the local economy.

Visitor Type	Category	Expenditure/unit	Units	Total
Construction and maintenance benefits	Restoration Cost	£6 million	60% (over five years)	£3.6 Million (over five years)
Visiting boats	Maintenance	£15,000 pa	60%	£9,000
	Launch Fee/licence	£100 per vessel	50	£5,000
	Spend during trip	£40 per boat per night	150	£6,000
Informal Boating (paddleboards etc)	Licence*	£30	200	£6,000
	Spend on trips*	£10 per trip	5000	£50,000
Trip boats	Passenger/trip	£5	30,000	£150,000
Angling/walking/ Cycling	Spend per visit	£8 (average)	100,000***	£800,000
Health Benefits etc	Savings to NHS etc	£7 per £1 spent on towpath	TBD	TBD
Total				£1,026,000 Per annum

This assumes that many paddleboarders/canoists are either members of the BCU or already have a licence for Canal & River Trust waters

***this applies to all such boaters whether or not they need a separate licence for the MB&BC*

**** this represents 100,000 visitors spending money not previously spent – some will be new visitors, some will be existing visitors taking advantage of new opportunities*

A very crude cost benefit analysis using the above figures, with restoration over 5 years, indicates the scheme would yield a positive NPV in year 13, or 8 years after restoration is complete.

^[1] Bury Council, Housing Needs and Demand Assessment, <https://www.bury.gov.uk/CHttpHandler.ashx?id=21560&p=0>

^[2] Bury Council, Housing Needs and Demand Assessment, <https://www.bury.gov.uk/CHttpHandler.ashx?id=21560&p=0>

^[3] IoD2019 explorer, http://dclgapps.communities.gov.uk/imd/iod_index.html#

^[4] 2019 deprivation by postcode data (BL8 2BD, M26 3DE) <http://imd-by-postcode.opendatacommunities.org/imd/2019>

^[5] Office for National Statistics 2011 Census, <https://www.nomisweb.co.uk/reports/localarea?compare=E05000664>

^[6] Office for National Statistics 2011 Census, <https://www.nomisweb.co.uk/reports/lmp/ward2011/1140856952/report.aspx?town=radcliffe>

^[7] Bury JSNA report, <https://www.bury.gov.uk/CHttpHandler.ashx?id=14238&p=0>

^[8] Fingertips, Public Health England, <https://fingertips.phe.org.uk/static-reports/health-profiles/2019/E08000002.html?area-name=Bury>

^[9] Bury Council, Radcliffe Action Plan Projects, <https://www.bury.gov.uk/index.aspx?articleid=15248>

^[10] Bury Council, GM Mayor's Cycling and Walking Challenge Fund, <https://www.bury.gov.uk/index.aspx?articleid=14315>

^[11] Bury Council, Bury Bolton Railway Path, <https://www.bury.gov.uk/index.aspx?articleid=13484>

[12] non-medicine based treatment whereby GPs can refer patients to receive personalized activity plans which help them to take part in community based projects such as walking, gardening or other volunteering to improve their health and well-being

6. Restoration Options

6.1. Restoration Options

Within the brief there are really no variants in the restoration proposals. The two major obstacles have clearly defined solutions that have limited scope for variance and the brief is clear on the length of canal to be restored. There only two areas where variants need to be considered, these are:

- Options for additional boater facilities on the canal to increase the utility and amenity offered
- Options for use of the canal before restoration is complete

There are also options for the development of the canal as an attraction to be considered, these are discussed as follows

- Key Locations
- Trip Boats

Additional facilities

Launching sites

Although not required to make the canal navigable, these are required if craft are to navigate as at present there are no boats on the water and no places to launch them. Launching sites fall into three distinct categories

Canoes., paddleboards and dinghies – these can be carried by one or two people and simply require easy access between a vehicle or trailer and the water. At the canal edge a low landing stage is useful for launch and retrieval and also for getting on and off the vessel. A slipway is of limited use for launch of these vessels

Trailable boats – cars can pull trailers up to 23 feet long on the condition that the whole tow train (car, trailer and boat) does not exceed 3.5 tonnes (post 1997 driving licence), those holding older licences or who have taken a second test can trail with a tow train up to 8.5 tonnes MGW. In practice, there are contractors available to move boats so the owner does not need to have a suitable car or indeed a suitable licence for this. Whilst the trailer length is limited an indivisible load can be carried in excess of this.

This means that there are many boats of lightweight construction (usually GRP, but sometimes wood or aluminium) up to 23 feet long, and a few up to 31 feet long, that are readily moved to isolated waterways at minimal cost. These are launched from their road trailer via a slipway and retrieved in the same way. The IWA have specification for a slipway that enables launching of these boats with minimum difficulty. If the canal is to attract these boats such a slipway is necessary and one is proposed at Hall Lane. The main constraint is finding suitable sites with road access, room to turn and reverse the tow train and a parking area for the tow train once the boat is on the water.

Larger Vessels – boats that are suitable for road trailers are unlikely to be suitable as trip boats, even for 12 passengers, and thus any trip boat operation will need to be craned in. Normally, once a trip boat is in the water it will stay on the canal until needing to be lifted out for inspection and maintenance. This means that a crane would normally be hired for the occasion rather than a permanent facility being in place, all that is needed is a hard standing at the water's edge away from trees and power lines, and manoeuvring room for the crane and the lorry carrying the boat. This may be reserved for the purpose by the navigation authority or may be rented for the occasion, although obviously the latter offers less security of tenure and would have to be negotiated on each occasion

Secure moorings

Boats that are occupied but not moving are normally moored to the towpath, this is generally a safe practice as the boats being occupied keeps them secure. However boats that are unoccupied for significant lengths of time are vulnerable to vandalism, break-in and worse and thus secure moorings are needed for any boats based on the canal. These should, as a minimum, be on the non-towpath side and would ideally either be offline or under cover in a boat house. Whilst towpath side moorings do exist on the main canal network, these are generally in rural areas not prone to vandalism.

Water/sewerage disposal

Any boat based on the canal for more than a few hours will need access to drinking water and to sewage disposal facilities. These cannot readily be serviced by vehicle and involve access to taps for water and a facility to empty toilets to the sewers or to a holding tank/septic tank. On the completed scheme it is likely only one location for such is required, but if there is a long period when the canal is in two navigable sections separated by an obstacle then provision of more than one point may be needed. Logically facilities could be provided at both termini as otherwise a boat at one end might face a ten-mile round trip to get access to water and sewage disposal

It is also suggested that any base for a trip boat should have water and sewage disposal available.

It should be noted that boaters will also need access to fuel and refuse disposal, but whilst these are highly desirable servicing by vehicle is at least possible, and for petrol outboards it is normal for boaters to have to walk or drive for fuel

Use of the canal

At present the canal is effectively unusable due to silting, vegetation growth and the difficulty of getting a vessel, even a canoe or a paddleboard, onto the water. As restoration commences the canal will gradually be made navigable and use for navigation can commence in a limited way. It would be possible for limited navigation to occur as soon as a few hundred metres have been dredged.

The first restriction is perceptual, to make it clear that navigation is now possible for any boat that can be got on the water. In addition a means of launching should be provided at an early stage: canoes and paddleboards ideally need a landing close to water level, and early provision of a slipway would enable trailed boats to launch. With only a limited length available numbers would be limited but there would still be the scope for a boat festival to promote use of the canal and further restoration.

It is likely that there will be an interim stage when lengths of canal have been dredged but one or both of the two main obstacles has not been cleared. In this instance local navigation along dredged lengths should be practical and should be encouraged. It is foreseeable that Water Street might be the last obstacle remaining and this might be the case for a couple of years, in which case as far as navigation is practical (there are issues with water supply through the present culvert) it should be encouraged.

During interim situations, trail boats and smaller vessels will have little difficulty navigating any cleared length so long as they can be launched, as these vessels are short enough to turn around in the ordinary width of the canal. However trip boats may well be too long to do this as the canal is typically around 30-40 feet wide and the maximum length of boat on the canal is 68 feet.

Taking Water Street as an example, there is a winding hole on the Bury Side a few metres short of the bridge, thus a longer boat could come from a new Bury terminus and turn. This would give a round trip from the proposed Bury Terminus of about 7km. A rather longer trip from Hall Lane would be possible but there is no opportunity to turn a boat longer than about 35 feet anywhere near Water Street, and only limited opportunity to create a winding hole. Boats could turn at Scotson Fold, a short distance west of Water Street.

Hall Lane to Nob End is a short distance, only about 1.5km a trip that would take about twenty minutes each way. This may be a very appealing early operation as restoration progresses.

Key Locations

Certain locations along the route are likely to attract visitors and provide opportunities to cater for and derive revenue from increased dwell time. It is not the role of this study to be prescriptive about locations or numbers of outlets but there are some obvious opportunities described below

The two termini are where many people will start or finish a visit to the canal as bankside visitors or waterspace users. The proposals in this report include parking and facilities such as toilets but with an existing urban population nearby and the arrival of people by car facilities such as a coffee kiosk and similar may be drawn to these sites and that should be facilitated

Water Street is an obvious point where the canal interacts with the urban environment around it – it is likely a lot of people will join the towpath here and also that people travelling along the canal may look for refreshment or supplies here. There are opportunities for the existing public house and for other outlets. In the long term this may even be a focus for regeneration with a “canal quarter” being developed.

Nob End, with a junction, the disused locks, the Meccano Bridge and the row of cottages is already a magnet and a visitor centre has been proposed here in the past. Lack of road access is a significant constraint although this can (and is) overcome for basic service traffic to the cottages. The restoration presents an opportunity to encourage non-car travel to the site, the flagship (pardon the metaphor) being the possibility of running a trip boat from Hall Lane where there is parking. A trip from Hall Lane terminus to Nob End and back would be about 40 minutes, a good length for a cruise as it is both sufficient for those with a casual interest and allows one boat to operate an hourly service. In this instance passengers could board and disembark at both ends and the vessel could act as a “park and sail”. In practice, far more people will walk from the car park than the boat could carry, but the presence of the boat would add greatly to the interest for those walking.

It should also be noted that part of the attraction at Nob End is off the restored canal, as a walk along the locks and aqueduct is practical and it is possible to approach the site from this direction. In fact, approaching along the third arm of the canal from Kearsley Ward should be actively encouraged

If all the above came about refreshment would be available at four places along the canal and it is doubtful that visitor demand would be sufficient to support a fifth, although if a new facility serving a neighbourhood were established it might also benefit from canal related trade. In practice, only Nob End is entirely dependent upon canal visitors, the other three locations will see a proportion of visitors who have come for the catering outlet and appreciate being by the canal, Nob End will be driven by people who have come for the canal but make use of the outlet.

Trip Boats

Not strictly speaking part of the restoration, however likely to be one of the key benefits (and certainly one of the more obvious and high profile ones) the following options may be developed on the restored canal

- End to End – 8km: around 3 ½ hours return or 1 ¾ hours one way with return on bus, train or foot
- Hall Lane to Nob End – 1.5 km: 40 minutes return
- Bury to Water Street – 3.5km: 2 hours return

We refer to previous comments that any trip boat will need a secure mooring and operational base. The termini are well placed to provide this but other options may be available.

Extensions to navigation

This report considers navigation between Hall Lane, Bolton and Daisyfield, Bury. It is immediately apparent that navigation could be extended towards Bury Town Centre and also down Nob End/Prestolee Locks, although extending navigation beyond the proposed Hall Lane Terminus in Bolton would appear to be very problematic. However this study does not pass comment on the feasibility of such extensions nor is anything within this study intended to preclude such extensions to the navigation.

7. Funding Opportunities

7.1. Funding the Manchester Bolton & Bury Canal Restoration

The fundraising landscape looks very different in December 2020 to the way it did in December 2019 owing to the Covid-19 Pandemic Emergency and Britain's exit from Europe. For the majority of 2020 the National Lottery Heritage and Community Funds (NLHF and NLCF) were closed to new applicants and many of the traditional Trusts and Foundations were, by inclination if not by formal policy, favouring projects which directly contributed to the Covid-19 Emergency response. Once NLHF and NLCF re-open to major grant applications again in Spring 2021 their priorities may well have changed in favour of outdoor and environmental projects which would be positive for the MB&BC restoration, however there will be increased demand to compete with.

Due to Brexit, funds such as the RDPE Growth Programme (Grants funded by the European Agricultural Fund for Rural Development (EAFRD), which is part of the European Structural Investment Funds (ESIF)), closed to new Expressions of Interest in February 2020 in order to allocate the budget before Brexit occurred.

There are myriad smaller funding streams which were supported through the European Union which will, of course, now dry up. This will perforce put additional pressure on British funds such as NLHF and NLCF.

However, in his most recent budget, the Chancellor announced a £4B 'levelling up' fund for regeneration projects in England which is positive news however it is impossible to say at this point how the fund will be administered and there are fears that the competitive bidding process hinted at by the government could pit communities against each other which would not be compatible with the type of joint-partnership project that we have outlined above.

Traditional sources such as the Landfill Community fund remains a steady, if unwieldy, source of funding for environmental and landscape improvement projects and these could certainly prove useful for the Bolton terminus and the Bury terminus hubs. However as we have recommended that the hubs be the responsibility of the local authorities then applications to the Landfill Community Funds would be more likely to succeed if they came from a partnership between the LA and one of the Charity partners i.e. Canal & River Trust or MB&BC Society.

Smaller Trusts and Foundations, for example 'The Big Bolton Fund', are also a potential source of funding, but the extraneous factor of Covid-19 Emergency projects make it difficult to rely on these sources as many of their priorities are shifting at the moment. Careful consideration should be made before making applications to these sources and pre-application conversations with grant giving bodies is essential to establish their most up to date funding priorities.

Local Enterprise Partnerships will also be under more pressure over the coming years due to the economic impact of Covid-19 and they will have a key role to play in rebuilding the economy within the hardest hit communities. Support for local businesses should find favour with LEP funding if the political will is there to advocate this at the highest level of decision making.

Individual giving in 2020 has remained on a par with previous years, despite fears over the economy, job security and future income, but median donations have hugely increased (a record high of £30 per donor was reached in May 2020) during the Covid-19 Pandemic^[1]; The psychology and socio-economic reasons for this are still being researched within the fundraising and academic sectors, however early hypotheses indicate that the Pandemic has encouraged people to reflect on the needs of others more deeply and this has encouraged them to support causes close to their heart and close to them geographically. The arts have been extremely successful in promoting their need for support over social media in 2020 which has led to more people supporting individual artists as well as larger arts organisations. This could be a lesson for other causes which are typically less prolific on social media and focus less on individual giving.

Conclusions for the MB&BC Restoration

First and foremost we would like to stress the importance of a strong formal partnership being established to fundraise for this project. The different sources of funding may not be available or accessible to all the various parties involved however applications, bids and other fundraising approaches would be made possible through one or other of the partners taking the lead with the backing of the others.

For example;

“Bid to NLHF by Canal & River Trust may be strengthened by it’s engagement with community groups such as MB&BC Society and through the security of match funding 5% by Bolton LEP”

“Bid to BIFFA Award by MB&BC Society may be strengthened by designs developed and funded by Canal & River Trust and with the 10% third party contribution provided by the Local Authority which owns the land”

To make this fundraising strategy work it will be vital to have a dedicated fundraising leader who co-ordinates the efforts to ensure all the strands tie together.

It will be vital for this project to consider a diverse fundraising mix for the key elements of the project. Allocating responsibility for securing target amounts for different elements to be secured by the different stakeholders is recommended but this approach will only work if the fundraising strategy is laid out, early on, with clarity and complete agreement between the parties as this will eliminate the possibility of the same project competing against itself to different funding sources.

We recommend that responsibility be allocated as follows;

- The local authorities bid for central government funds such as the ‘Levelling up’ fund of £4M for the hubs at each end of the canal.
- The local authorities and councillors lever any S106 and LEP funding sources towards the business initiatives and the outdoor classrooms.
- The Canal and River Trust bid to the National Lottery Funds for restoration of the canal, towpath and heritage assets as well as the engagement and learning resources.
- The MB&BC Society concentrate on individual giving to support the future maintenance, education programmes, volunteering schemes and courses.

[iii](#) CAF Online ‘UK Giving and Covid-19. A Special Report October 2020’

8. Conclusions

This report has examined the costs, constraints, opportunity, and overall feasibility of restoring to navigation the Manchester Bolton & Bury Canal between Hall Lane (Bolton MBC) and Daisyfield (Bury MBC). This length includes the junction with the line down to Manchester at Nob End, the breach at Little Lever and the culverted road crossing at Water Street Radcliffe. This length of approximately five miles is lock free and largely unobstructed save for the breach and the culverted road crossing.

This report does not comment on the feasibility of restoration beyond the length identified, and nothing in this report should be taken as being obstructive of restoration beyond the two termini mentioned or down Prestolee Locks towards Kearsley, Ringley and Salford.

The repair of the breach at Little Lever was not included as part of this study and this report assumes that this will be undertaken and paid for by a third party. Nor were we asked to study the mechanism or cost of providing a dam at the top of Prestolee Locks.

Findings

The engineering works are feasible using standard techniques for dredging, leak repair, bridge construction and towpath works. The estimated cost is just over £6 million pounds, of which £4 million is for Water Street Bridge. As instructed in the brief these costs do not include the breach as these costs are being met by a third party.

The environment and habitat impacts relate mainly to the construction phase and are not thought to be insurmountable. The study considers the following environmental aspects:

- Biodiversity
- Air quality
- Noise and disturbance
- Geology and soils
- Cultural heritage
- Landscape and visual amenity
- Water environment

Further studies are recommended in paragraph 2.9.1.1.

A consultation exercise including survey was emailed to 50 individuals, but subsequently appeared on Facebook posted by a 3rd party who had not received the survey from us. This boosted the response rate although it was clear some respondents were not aware of the context of the survey. Overall, the survey response was very positive about the proposals.

The proposed restoration is a development under the terms of the 1990 Town and Country Planning Act and a review of national and local planning policy is included in this study. The review concludes that policy is broadly supportive of the restoration of the canal.

Socio-economic benefits to the value of £1 million per annum will accrue to Bolton MBC and Bury MBC areas, this is made up of increases to the local economy by visitors and users of the canal and includes maintenance expenditure in the local economy. This is a rudimentary figure at this stage but indicates that the cost of restoration will be recouped within the local economy within 8 years and will continue on an annual basis. These benefits will flow, in particular, to Farnworth, Kearsley, Little Lever, Radcliffe, and Bury Town Centre as these areas are closest to the canal.

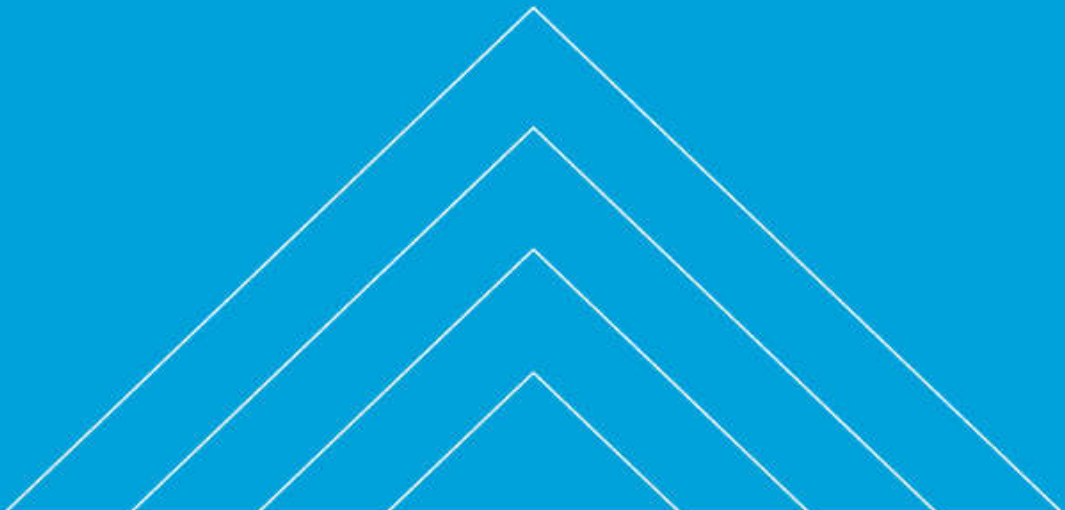
The canal will provide opportunities for water-based recreation through the provision of clear, well maintained waterscape, launching sites including slipways and encouragement for trip boats and activities such as canoe and paddle board groups. It is suggested that two visitor centres should be developed at or near each terminus and that the canal should be used for educational opportunities and training. These opportunities arise as soon as the first length is dredged and access to the water facilitated thus the canal will see beneficial use even before the major obstacles are tackled.

There are numerous funding opportunities which are described in the report. It will be vital for this project to consider a diverse fundraising mix for the key elements of the project. Allocating responsibility for securing target amounts for different elements to be secured by the different stakeholders is recommended but this approach will only work if the fundraising strategy is laid out, early on.



Overall, the restoration is achievable and will represent value for money bringing benefits into some of the most economically deprived wards of England. The regeneration of the Manchester Bolton & Bury canal will create volunteering and skills development opportunities and attract businesses to the area, both at the Bury and Bolton termini and along the length of the canal close to centres of habitation. The proposed outdoor classrooms at Radcliffe and Little Lever will provide education and training for young people and adults, helping to boost the confidence and employability of participants.

Appendices



Appendix A. References

A.1. Documents provided as the basis for this study

Bolton, Bury and Salford Councils (1988) 'Manchester Bolton & Bury Canal – abandoned waterway – future asset?'

MB&BC Society, Bolton, Bury and Salford Councils and British Waterways (1996) 'Irwell Valley Connections – The Manchester Bolton and Bury Canal' (bid to the Millennium Commission)

British Waterways (2001) 'Economic benefits of restoration of the Manchester Bolton and Bury Canal', DTZ Consulting

British Waterways (2002) 'Manchester Bolton and Bury Canal Restoration – reconnecting people and opportunities' (promotional folder)

British Waterways (2002) MB&BC Restoration Project Plan

British Waterways (2003-4) Preliminary engineering proposals (construction drawings and cost estimates) for the restoration of the MB&BC

British Waterways (2005) Documents for restoration funding bid to North West Regional Development Agency

Greater Manchester Ecology Unit (2009) Sites of Biological Interest in Greater Manchester – District: Bury. C1-1 & C1-3

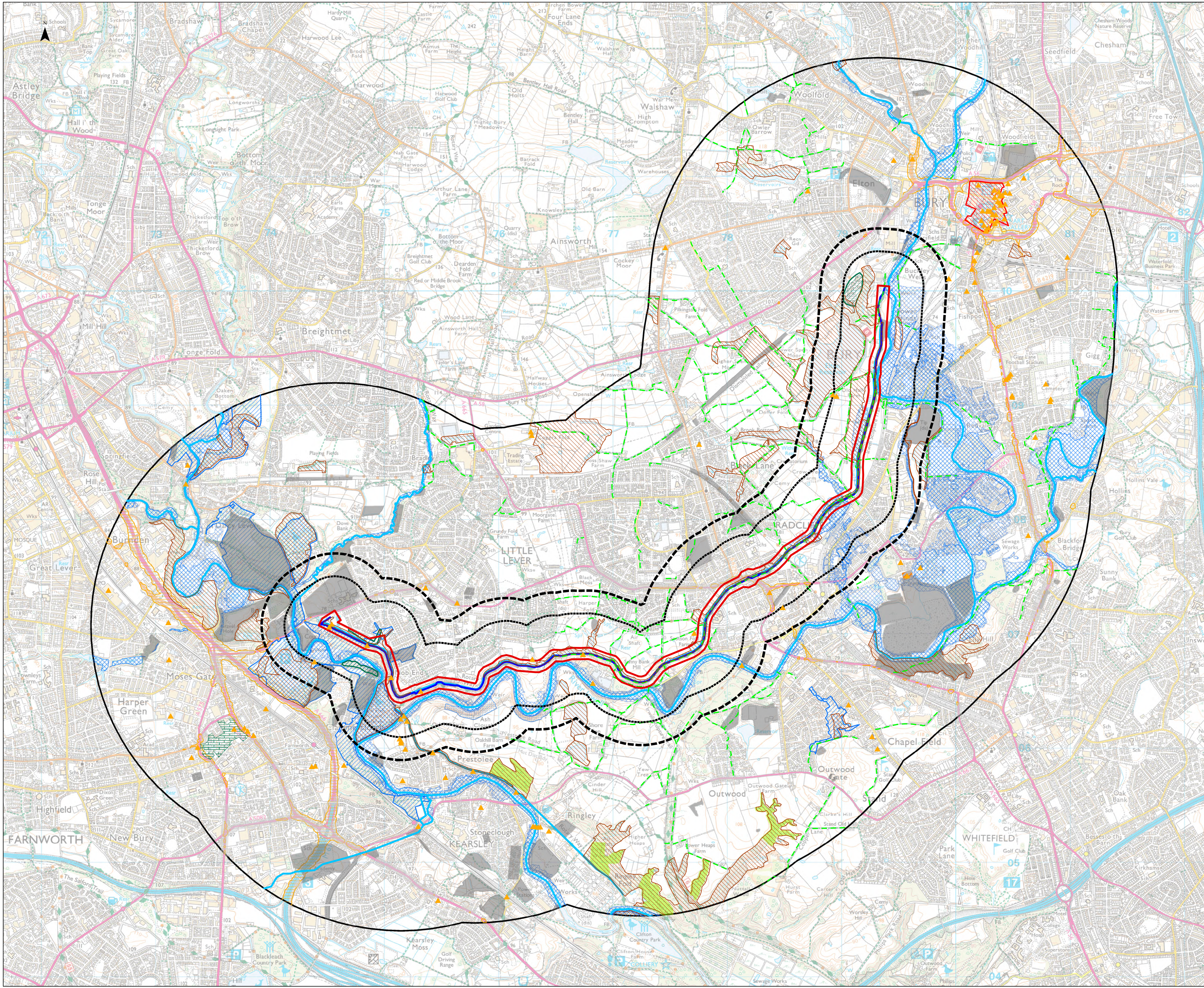
Greater Manchester Ecology Unit (2010) Sites of Biological Interest in Greater Manchester – District: Bolton. B54-1 & B54-3

HR Wallingford (2020) Elton Reservoir Flood Studies – Phase 2: Impact of Proposed Development

MB&BC Society Towpath Guide

Manchester Bolton & Bury Canal Through Time

Appendix B. Environmental Designations Plan



SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

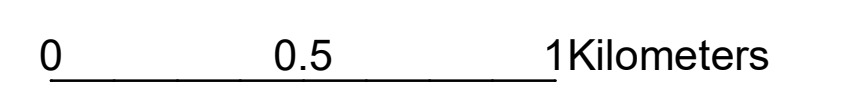
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following:

- CONSTRUCTION
- MAINTENANCE/CLEANING
- DECOMMISSIONING/DEMOLITION

NOTES:
 1. RED LINE BOUNDARY OFFSET AT 50M FROM CANAL CENTER LINE EXCEPT AROUND WATER STREET WHERE THE OFFSET IS 75M FOR POTENTIAL EXTRA WORKS.

KEYS:
Legend

- LISTED BUILDINGS
- RED LINE BOUNDARY 500m buffer
- RED LINE BOUNDARY 300m buffer
- SITES OF BIOLOGICAL INTEREST
- RED LINE BOUNDARY
- BURY PUBLIC RIGHT OF WAY
- MBB CANAL
- RIVER IRWELL
- CONSERVATION AREAS
- TREE PRESERVATION ORDERS
- SSSI
- SCHEDULE MONUMENTS
- REGISTERED PARKS & GARDENS
- NOISE IMPORTANT AREAS
- HISTORIC LAND FILL
- LOCAL NATURE RESERVES
- ANCIENT WOOD LAND
- AIR QUALITY MANAGEMENT AREAS
- FLOOD ZONE3
- FLOOD ZONE2
- RED LINE BOUNDARY 2km buffer



Rev	Date	Description	By	Chk	App

Drawing Status: WORK IN PROGRESS
 Suitability: S0

SNC-LAVALIN
 Member of the SNC-Lavalin Group

ATKINS
 Member of the SNC-Lavalin Group

Client: Chadwick House, Birchwood Park, Warrington, WA3 6AE
 Tel: +44 (0)1925 238000
 Fax: +44 (0)1925 238500
 www.atkinsglobal.com
 © SNC-Lavalin (2020)

Canal & River Trust
 Making life better by water

Project Title: MANCHESTER BOLTON & BURY CANAL RESTORATION 5202009

Drawing Title: RED LINE BOUNDARY

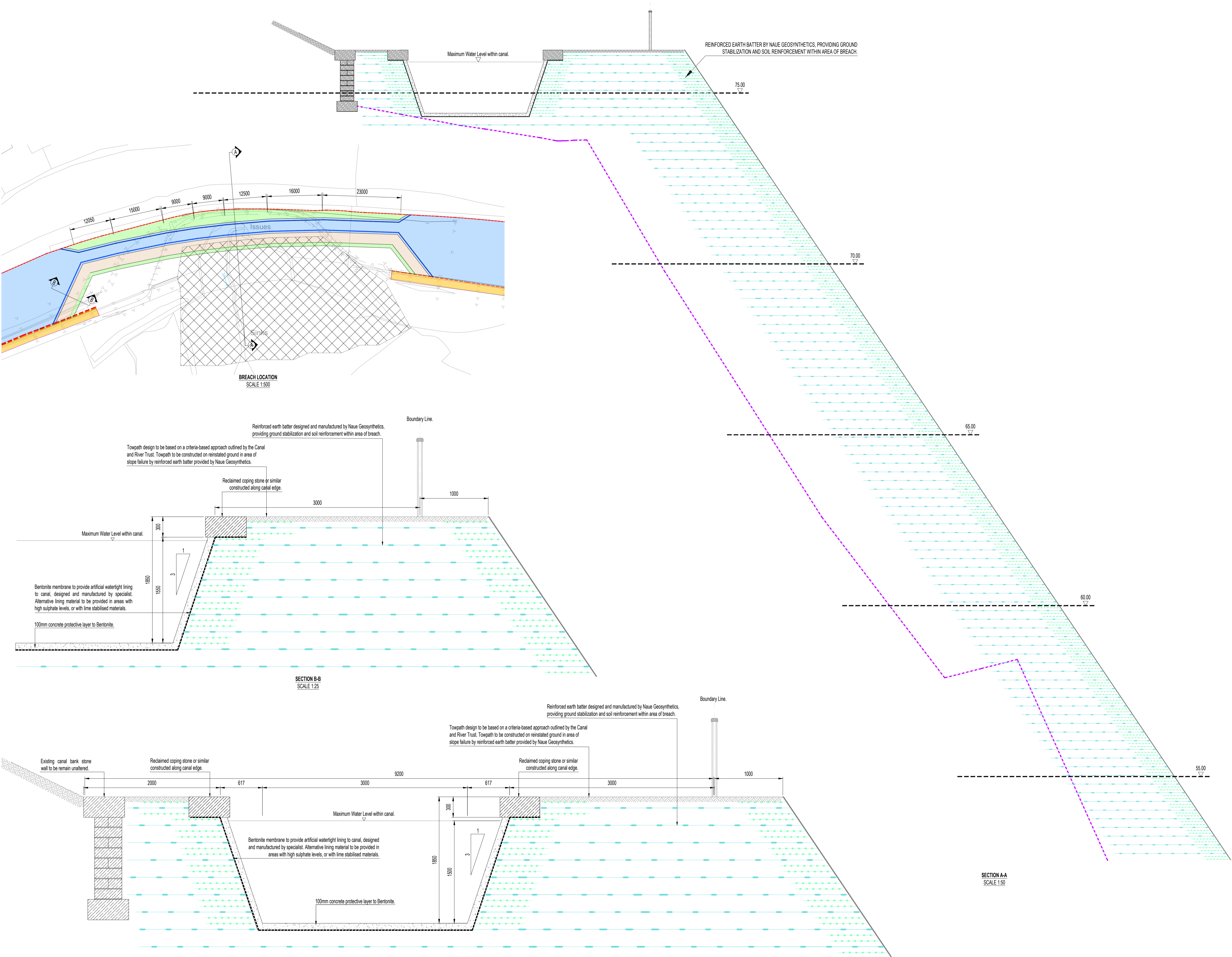
Scale	Designed	Drawn	Checked	Authorised
1:15,000	NH	NH	--	--
Original Size	Date	Date	Date	Date
A1	02/02/2021	--/--	--/--	--/--
Drawing Number	Revision			Rev

Appendix C. The Breach - Watson Homes proposals (not part of this study)

- NOTES:**
1. This drawing is to be read in conjunction with all relevant Architects and Engineers drawings and specifications.
 2. Do not scale this drawing. All details and dimensions are to be checked by the contractor prior to commencement of construction. Any discrepancies to be reported to the engineer.
 3. All dimensions are in millimeters unless noted otherwise.

LEGEND

- Denotes the Manchester, Bolton and Bury Canal Route.
- Denotes existing canal towpath.
- Denotes proposed canal route via precast channel units.
- Denotes proposed towpath route via precast channel units.
- Denotes additional earth batter area to be reinstated.
- Denotes existing ground level from provisional topo.
- Denotes extent of proposed navigable channel.



A01	Issued for Preliminary.	30.09.20	SR	DE
Rev:	Description:	Date:	By:	Chkd:
Status:	PRELIMINARY			
Client:	WATSON HOMES			
Project:	CREAMS MILL LITTLE LEVER, BOLTON			
Dwg Title:	REINFORCED EARTH CHANNEL MANCHESTER, BOLTON & BURY CANAL BREACH REPAIR			
ELLUC Projects				
ELLUC PROJECTS 763 MANDARIN COURT CENTRE PARK WARRINGTON CHESHIRE WA1 1GG		Phone: (01925) 24 3333 Email: info@ellucprojects.co.uk Website: www.ellucprojects.co.uk		
Scale:	Size:	First Issue:	Drawn:	Checked:
SHOWN	A1	30.09.20	SR	DE
Rev:	Alt:			
Drawing No:	20040-EPW-00-F-DR-S-0100b-GA-S4			

