

Pocklington Canal

Conservation Management Plan

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1. Introduction



Church Bridge (HA22) and Thornton Lock (HA19)

1.1 The Pocklington Canal

- 1.1.1 The Pocklington Canal ('the Canal') is an early nineteenth century broad canal stretching 9 ½ miles (15 km) through idyllic rural countryside from the Derwent Navigation at East Cottingwith to the outskirts of Pocklington on the western edge of the Yorkshire Wolds in the East Riding of Yorkshire. Along its length the Canal possesses 9 locks, 8 accommodation bridges, and 4 public road bridges. The Canal was originally designed for Yorkshire Keel type boats and has a standard width and length at the locks of 57' by 14'3" (17.4 x 4.3 m) with an original navigational depth of 4'6" (4.4 m).
- 1.1.2 The Pocklington Canal connects Canal Head, south of Pocklington, to East Cottingwith and the River Derwent (**Figure 1**). The study area lies between National Grid coordinates 469771 442523 and 479994 447327 and passes from east to west through Bielby and Melbourne. The Canal and towpath are in the ownership of The Canal & River Trust ('the Trust'). The Lock Keepers house at Canal Head and the Bielby Arm are in private ownership.
- 1.1.3 Historically the Canal served the booming agricultural economy of the region, enabling trade of agricultural produce from the farms of the Yorkshire Vale and market of Pocklington to the cities of York, Leeds and beyond. The Canal also brought goods in, from resources (including lime for fertilising the fields and bark for the tanning industry in Pocklington) to everyday household goods.
- 1.1.4 Following a gradual decline into abandonment and disrepair the future of the Canal has been saved by the work of energetic local volunteers and campaigners, and through the conservation aspirations of the Trust.
- 1.1.5 The Canal currently provides a focus for leisure activities, with visitors attracted by its beautiful surroundings, accessible location and historical character. The Canal is also a haven for wildlife, falling within a number of nationally and internationally designated areas of nature conservation.

1.2 Production of the Conservation Management Plan

1.2.1 This Conservation Management Plan (CMP) was commissioned by the Trust to inform future considerations of maintenance and improvement of Pocklington Canal, and to accompany future applications for potential sources of funding. This document was prepared by Ecus Ltd in collaboration with Natural England and the Trust. The research and condition survey for the project was undertaken in April 2015.

1.2.2 The principal consultant contributors to the CMP are as follows:

- Editor: Paul White Ecus Ltd
- Cultural Heritage: James Thomson Ecus Ltd
Jennifer Oliver Ecus Ltd
Judy Jones Canal & River Trust
- Natural Heritage: Phillippa Baron Canal & River Trust
Simon Christian Natural England
Emma Baxter Ecus Ltd

1.2.3 The process of delivering the CMP has been managed by:

- Canal & River Trust: Jane Thomson
Rachel Walker

1.2.4 In addition consultation was undertaken with:

- Pocklington Canal Amenity Society

Summary of Designations

1.2.5 The majority of the Canal length lies within designated areas of nature conservation, including three Sites of Special Scientific Interest, a Special Protection Area, a Special Area of Conservation (SAC) and Ramsar Site and a Local Wildlife Site.

1.2.6 Furthermore the Canal incorporates a total of 13 nationally designated Listed Buildings comprising elements of the historical canal infrastructure.

1.2.7 The National Heritage List for England (NHLE) designation descriptions for these assets and details of all component SSSIs and other nature conservation designations are reproduced in **Appendix I** of this report. A summary of the main designations is given below (in geographic order from Canal Head to East Cottingwith);

- Pocklington Canal – Site of Special Scientific Interest
- Derwent Ings Site of Special Scientific Interest
- Canal Head and Top Lock No.9 (HA 4) – Grade II Listed Building, List no. 1084122
- Silburn Lock No. 8 (HA 5) – Grade II Listed Building, List no. 1251052

- Giles Lock No. 7 (HA 6) – Grade II Listed Building, List no. 1083876
- Sandhill Lock No. 6 (HA 8) – Grade II Listed Building, List no. 1084127
- Coates Lock No. 5 (HA 10) – Grade II Listed Building, List no. 1084126
- Coates Bridge (HA 11) – Grade II Listed Building, List no. 1393980
- Walbut Lock No. 4 (HA 15) – Grade II Listed Building, List no. 1083859
- Walbut Bridge (HA 16) – Grade II Listed Building, List no. 1309793
- Melbourne and Thornton Ings – Site of Special Scientific Interest
- Lower Derwent Valley – Special Area of Conservation
- Lower Derwent Valley – Ramsar
- Lower Derwent Valley – Special Protection Area
- Thornton Lock No. 3 (HA 19) – Grade II Listed Building, List no. 1162050
- Church Bridge (HA 22) – Grade II Listed Building, List no. 1346430
- Gardham Lock No. 2 and No. 3 Swing Bridge (HA 30) – Grade II Listed Building, List no. 1393979
- Hagg Bridge (HA 33) – Grade II Listed Building, List no. 1393978
- Pocklington Canal Local Wildlife Site
- Cottingwith Lock No. 1 (HA 40) – Grade II Listed Building, List no. 1162005

1.3 General Scope and Purpose of the Plan

1.3.1 The scope of the CMP comprises the description and assessment of the cultural and natural heritage of the cut, embankments, locks, bridges, drains and canal-side features along the length of the Canal between Canal Head at its northern end and East Cottingwith to the south. Original canal buildings and structures in the adjacent plots of land, including the former Lock House which is now in private ownership, have also been considered due to their association to the historical significance of the Canal.

1.3.2 The aims of the CMP for Pocklington Canal are to:

- Set out a description of the Canal route and its condition;
- To identify natural and cultural heritage assets pertinent to the significance of the Canal;
- To make a statement identifying the significance of the Canal;
- To identify vulnerabilities to the Canal and its individual heritage assets, threats to its survival, and to identify opportunities for preserving or enhancing its significance; and

- To set out the guiding principal for preserving and enhancing the natural and historic environments, so to inform an appropriate management action plan.

1.4 Previous Studies

Cultural Heritage

1.4.1 The historic baseline for the CMP was established through consideration of recorded heritage assets and a desk-based review of existing sources of publically accessible sources of information, including:

- The Humber Archaeology Partnership Historic Environment Record comprising a database of all recorded archaeological sites, find spots, and archaeological events within the county.
- Historic Maps and Documents held at the East Riding of Yorkshire Archives Service, the National Waterways Museum and Canal & River Trust Archive (Leeds).
- National heritage datasets including The National Heritage List for England (NHLE), Images of England, Pastscape, Historic England Archive, Viewfinder, NMR Excavation Index, and Parks and Gardens UK.

1.4.2 The only specific work produced detailing the history of Pocklington Canal originates from previous work associated with the restoration of the Canal:

- Blockley, M. (2011). Pocklington Canal Audience, Conservation and Interpretation Plan. British Waterways.

1.4.3 There are a number of general works that consider the history of the Pocklington Canal, including:

- Priestley, J. (1831). Historical Account of the Navigable Rivers, Canals and Railways of Great Britain.
- Duckham, B.F. (1973). *The Inland Waterways of East Yorkshire*. East Yorkshire Local History Series no. 29.
- Paget-Tomlinson, E. (2006). *The Illustrated History of Canal & River Navigations*. Ashbourne, Landmark Publishing.

1.4.4 In addition, detailed research notes were provided by John Nottingham of the Pocklington History Group.

1.4.5 A bibliography of documentary, archive, and cartographic sources consulted is included in the References section of the Plan.

Ecological Surveys

1.4.6 Details of all ecological studies associated with the Canal are provided in the Bibliography of the References section. The first comprehensive survey of the Canal's plant interest was undertaken in 1986:

- Tolhurst, S A. (1987). A survey of the aquatic flora of the Pocklington Canal, Yorkshire 1986. (Nature Conservancy Survey Report)

1.4.7 Additional aquatic plant survey were undertaken in 1991 and 1997:

- Head, R. M. (1991) A survey of the aquatic flora of the Pocklington Canal 1990: A comparison with the NCC survey of 1986 (British Waterways internal report)
- Scott Wilson Consultants (1997). Pocklington Canal Macrophyte Survey (British waterways/English Nature Joint Report)

1.4.8 An ecological review of these plant surveys was undertaken by British Waterways in 2004 (Brickland and Silver 2004). This review did not consider historic data that was collated at the time of SSSI notification or a botanical survey from 2002 (Goulder 2002) and, therefore, represents an incomplete picture of the Canal. However, comparison of the three comprehensive plant surveys undertaken prior to the 2004 report indicates a decline in aquatic plant diversity throughout the Canal.

1.4.9 Since the 2004 report a number of additional surveys have also been undertaken including;

- Weston, T. (2004). Pocklington Canal Dragonfly Survey 2003-2004
- Scott Wilson Ltd. (2008). *A botanical survey of the Pocklington Canal* (Natural England internal report)
- Goulder, R. (2014). Aquatic Plants in the Pocklington Canal : a decade of change.
- Tate, D. (2014). *Melbourne and Thornton Ings breeding Bird survey* (Unpublished Natural England report).

1.4.10 Further information on the Dragonflies associated with the Canal can be obtained from the Yorkshire Branch of British Dragonfly Society at <http://www.yorkshiredragonflies.org.uk/?p=450>

1.5 Distances and Directions Referred to in the CMP

1.5.1 Within this CMP the study area is discussed from east (Canal Head) to west (East Cottingwith) in consideration of the flow of water along the Canal.

1.5.2 Distances, where mentioned, are recorded in miles, chains and yards in accordance with the units used in the design and construction of the line.

1.6 Structure of the Conservation Management Plan

1.6.1 The CMP is set out in four main sections together with an *Introduction, Adoption and Review* and *Appendices*. The main sections are sequential and each builds upon information included in its predecessors. The CMP is divided into three sections, comprising:

- ***Understanding the Cultural and Natural Heritage of Pocklington Canal (Chapter 2)*** provides a summary of the key information known about Pocklington Canal. It sets out the geographical context, the archaeological and historical evidence, the setting and other background information such as condition of the study area, access and interpretation.

- **Significance (Chapters 3)** builds upon the Understanding section and seeks to assess what is important about the Canal in the context of its built and natural heritage.
- **Risks and Opportunities (Chapter 4)** identifies the current key problems and opportunities inherent along the Canal. Some of these arise from the Understanding section, others from information gathered informally during the research phase.
- **Vision and Policies and Management Recommendations (Chapters 5 & 6)** set out the direction for the future conservation, sustainable management and enhancement of the monument arising from the risks and opportunities presented in the previous section. There is an overarching vision for the management of the site. The long-term management is presented as a series of statements followed by more specific short-term objectives or actions having a 'one-off' character. The policies include recommendations for future review.

2. Understanding the Cultural and Natural Heritage of Pocklington Canal



1815 Survey of Proposed Canal Route by George Leather junior (see Figure 9)

2.1 Introduction

- 2.1.1 This section of the CMP identifies the various elements and components (heritage, landscape and ecological) that contribute to the values of Pocklington Canal.
- 2.1.2 In order to facilitate the description and discussion of Pocklington Canal, unique Heritage Asset (HA) numbers (HA 1-40) have been assigned to each Cultural Heritage Asset along the route of the Canal, numbered sequentially (illustrated on [Figures 1-8](#)). A hierarchy of Heritage Assets are presented in [Appendix I](#) with detailed descriptions provided in the gazetteer ([Appendix III](#)).

2.2 Location, Topography and Geology

- 2.2.1 The study area extends from Canal Head just south of Pocklington, East Yorkshire south-westwards towards the village of East Cottingwith and the River Derwent. The study area follows the length of the Pocklington Canal which is approximately 9.3 miles (15 km long).
- 2.2.2 The Canal ascends approximately 60 ft (18.3 m) through largely flat terrain, rising towards the east with almost two thirds of the ascent covered within the final 3 miles to Canal Head.
- 2.2.3 The Canal is fed by two feeder culverts, one at Canal Head and one at Thornton. A dyke runs parallel with the Canal for its entire length and is culverted at a number of points underneath the Canal.
- 2.2.4 The British Geological Survey records the underlying geology along the route of the Canal as mudstone of the Mercia Mudstone Group, overlain with superficial deposits belonging to the Pocklington Gravel Formation to the northeast and alluvium to the southwest.

2.3 Natural Heritage Context

- 2.3.1 The Pocklington Canal has long been considered one of the most important canals in the country for wildlife and is one of 19¹ canals in England that have been notified for their aquatic plant interest (**Appendix II: Table 8**). In addition to its plant interest the Canal is also recognised for its outstanding dragonfly and damselfly assemblage, with 15 species recorded in recent years including the nationally notable red-eyed damselfly. The Canal is also noted for a number of uncommon reed beetles and other invertebrates and its breeding bird community.
- 2.3.2 Pocklington Canal was first proposed as a Site of Special Scientific Interest (SSSI) in 1972 (Natural England 1965-1981). This was in part, prompted by a proposal put forward by the former British Waterways Board for restoration. This in turn led to a re-appraisal of the importance of the Canal for nature conservation. However, it was not until the first comprehensive survey of the Canal for its aquatic plants in 1986 (Tolhurst 1987) that the importance of the Canal was fully recognised.
- 2.3.3 This survey identified aquatic, fringing swamp and tall fen communities and an associated diverse plant community, including a number of nationally scarce and uncommon species e.g. flat stalked pondweed (*Potamogeton friesii*), Fan-leaved water-crowfoot (*Ranunculus circinatus*) and Lesser water plantain (*Baldellia ranunculoides*) (**Plate 1**).



Plate 1: The Pocklington Canal; a diverse mix of open water and emergent vegetation.

¹ Note a number of canals have more than one SSSI, e.g. Pocklington Canal comprises three separate SSSIs

- 2.3.4 This combined with information on its breeding bird and invertebrate interests collated at this time led to the non-navigable section being designated as a SSSI in 1987. At the same time the Canal's importance was recognised by it being considered of sufficient interest to merit being included within a Nature Conservation Review , an inventory of the most important sites in the country for nature conservation.
- 2.3.5 The conservation importance of the navigable sections has also long been recognised. The section of Canal in the vicinity of Melbourne has been included with the Melbourne and Thornton Ings SSSI since 1985 and those further downstream at Storwood and East Cottingwith have been included within the Derwent Ings SSSI since 1981. Both these SSSIs are designated for their wider interest, particularly adjacent floodplain meadows, however, the importance of the Canal for its vegetation, bird and invertebrate communities are integral to both designations. **Plate 2** shows the location of the various SSSIs associated with the Canal.
- 2.3.6 A short section of the Canal in the vicinity of Hagg Bridge has not been designated as SSSI, although this stretch also supports a diverse plant community and has been proposed as a Local Wildlife Site (LWS) by the East Riding of Yorkshire Council in its recent Local Plan Strategy. It is also thought likely that this part of the Canal would merit SSSI notification in any review of the boundaries of the existing SSSIs. Consequently regardless of its designation the entire length of the Canal is recognised to be of high value for nature conservation.

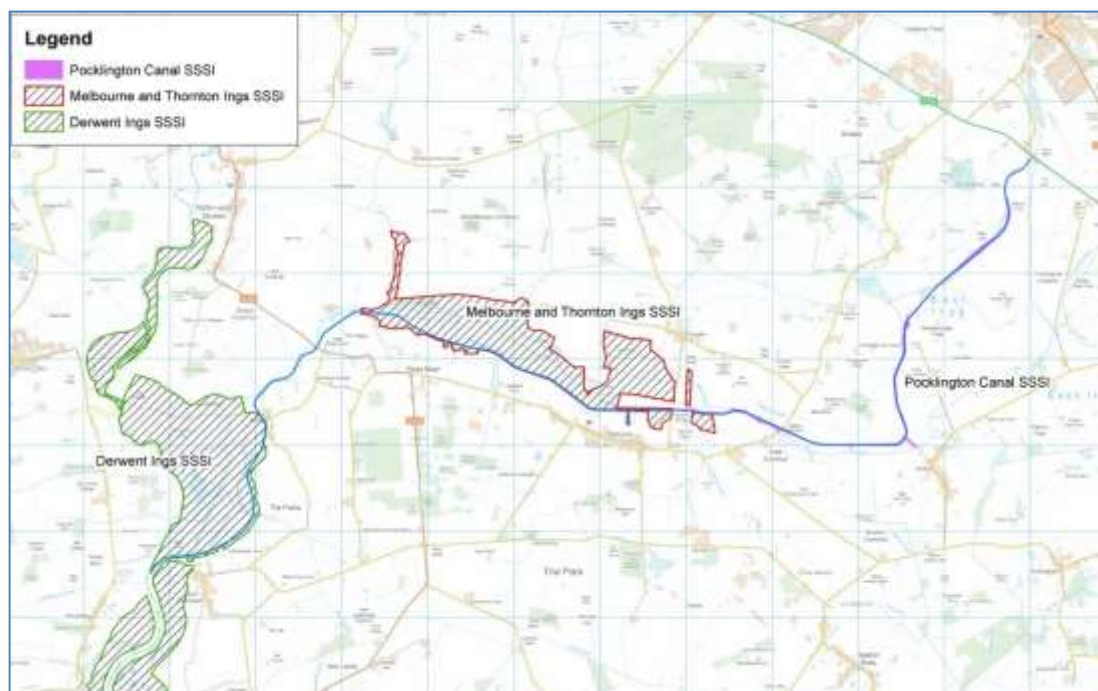


Plate 2: Map showing Pocklington Canal SSSIs

- 2.3.7 In Yorkshire, the Canal & River Trust manage the following canals: Ripon Canal, Pocklington Canal, Leeds & Liverpool, Huddersfield Broad Canal, Huddersfield Narrow Canal (East), Calder & Hebble Navigation, Sheffield & Tinsley Canal, Stainforth & Keadby Canal, Aire & Calder Navigation and New Junction Canal. However the Pocklington Canal is one of only three canals with sections designated as SSSIs for their aquatic plant interest, the others being the privately owned Leven Canal in East Yorkshire and the Leeds & Liverpool Canal. In addition it is the only canal that has been designated for a range of other interests including its breeding bird assemblage and invertebrate interest.

2.3.8 The Pocklington Canal is also unique in Yorkshire in having both navigable and non-navigable lengths. The navigable section passes through the Lower Derwent Valley Special Protection Area (SPA), Special Area of Conservation (SAC) and Ramsar Site, an internationally important nature conservation site for its wintering and breeding birds, invertebrates and grassland communities. As such the Canal should not be viewed in isolation it being very much part of a wider area of importance for wildlife and nature conservation at a landscape scale.



Plate 3: Aerial photograph of the canal within its wider landscape. To the left of the picture Storwood & Wheldrake Ings, a traditionally managed hay meadow can be seen, along with the Bielby Beck.

2.3.9 The intrinsic value of the Canal and its surrounding landscape has also been recognised with much of the Canal falling within an Important Landscape Area as defined in the emerging East Riding of Yorkshire Local Plan.

2.4 Cultural Heritage Context

2.4.1 As with other regions across the entire country, the East Riding of Yorkshire shared in the growth of waterborne transportation systems in the eighteenth and nineteenth centuries, which developed on existing navigable waterways serving Beverley, Hedon and Patrington that originated during the medieval period. Between 1702 and 1814 nine navigation schemes were enacted within the region, comprising:

- 1707 Derwent Navigation

- 1727 and 1732 Ouse Navigation
- 1727 Beverley Beck
- 1761 Patrington Haven
- 1767 Driffield Navigation
- 1772 Market Weighton Drainage and Navigation
- 1801 Leven Canal
- 1814 Pocklington Canal

2.4.2 Pocklington Canal was the last canal to be built within the East Riding of Yorkshire, although nationally canals continued to be constructed right through the nineteenth century. The Pocklington Canal formed part of an expansion of the early canals serving towns in the North and Midlands into more rural areas, with the promotion of the Canal to Pocklington inspired by the witnessed growth of local economies from the Canals into Great Driffield and Market Weighton.

2.4.3 The principal financial focus for the region's navigations was in the transportation of agricultural produce, from the insular market towns situated in a dominantly rural landscape to supply the growing industrially dominated cities. This movement of produce accounted for almost 40 per cent of all trade (Noble 1996, 96). The navigations of the region enjoyed a century of relative prosperity, their importance waning from the mid-nineteenth century as railways took an ever increasing share of the trade (*ibid.*).

2.4.4 The Pocklington Canal never saw great financial success, however the outlay for its construction should be viewed in terms of its perceived long term benefit in a world where locomotives were yet to reveal their potential. Whilst its commercial prospects were curtailed by the arrival of the railway to Pocklington in 1847, the Canal did have a beneficial impact on the lives of the local residents in the time it operated. This was not only through lowering the cost of important everyday commodities such as coal, but also through lowering the cost of industrial products like lime. Lime was spread on fields as artificial manure which enabled farmers to increase the productivity of their land, the increased yield from which they could then ship along the Canal to reach much wider markets.

2.4.5 Within the East Riding the Pocklington Canal holds the highest number of nationally designated structures of any other canal. Other canals with nationally designated structures include the Driffield Navigation, and Market Weighton Canal.

2.5 History of Pocklington Canal

Early History

2.5.1 There is a long history of human activity within the area surrounding the Canal. The earliest evidence is in the form of chance discoveries of prehistoric flint artefacts in the vicinity of East Cottingwith and Bielby (**Figures 4 and 8**) and cropmarks relating to possible prehistoric enclosures near Marketbridge Farm and round barrow cemetery near Eller Carr (**Figures 3 and 6**). First evidence of settlement in the vicinity of the Canal dates to the Romano-British period, with an occupation site west of Storwood which likely had a connection to the route of the Brough to York Roman road passing north of Canal Head (**Figures 2 and 7**).

- 2.5.2 By the medieval period the principal form of current settlements in the area had been established, with Pocklington, Bielby, Melbourne, and Cottingwith appearing in the Domesday Survey of 1086 with activity around Bielby at least corroborated by finds of Anglo-Saxon date (**Figures 3-4**). Whilst Storwood does not appear by name, the settlement of Chetelestorpe which is listed in the Domesday Survey is believed to have been located in the vicinity of Storwood (**Figure 7**). Furthermore to the south of the hamlet is a medieval moated manor house site, designated as a Scheduled Monument, which is believed to have belonged to the De Roos family who built Helmsley Castle.
- 2.5.3 Pocklington grew during the late seventeenth and early eighteenth centuries into the principal town for the area, in notable contrast to a wider decline in population of nearly 19 percent throughout the East Riding of Yorkshire over the same period (Neave and Neave 1996, 44). This decline has been attributed to the direct effect of landowners reducing their number of tenants through enlargement of deer parks, enclosure of open fields, and the engrossment of farm holdings as part of the improvements of the agricultural revolution (*ibid.*).
- 2.5.4 The growth of Pocklington during this period partly reflects the pull of the town to the displaced rural communities, but more significantly illustrates the role the town played as a centre for the trade of agricultural goods. For whilst the number of workers in the region was in decline, the output of produce was actually increasing owing to the agricultural improvements of the era. By the end of the seventeenth century the town possessed a regular Saturday market and six annual fairs (Noble 1996, 77).
- 2.5.5 Trade in the town also undoubtedly benefited from the construction of the turnpike in 1764-5 between Beverley and York which passed just to its south. Turnpikes were established under private Acts of Parliament, which were managed by a turnpike trust that had powers to levy tolls on travellers to pay towards the roads improvement and upkeep. The road would have provided an excellent link for local traders to the larger markets of the region.

Inception

- 2.5.6 Interest in establishing a canal from the Derwent to Pocklington dates back to around 1767 inspired by the promotion of the Market Weighton canal. At the time nothing came of this due to the plans securing little support from principal landowners in the area, such as Lord Egremont. In the end it was not until 1801 that anything was seriously considered (Duckham 1973, 58; Paget-Tomlinson 2006, 164).
- 2.5.7 During 1801 several meetings were held by East Riding landowners and Pocklington merchants in an effort to promote the construction of a canal. Following discussions it was resolved on the 16th November 1801 at a meeting in the Back Bull Inn in Pocklington, to form a committee and commission a survey of two different lines for a canal to Pocklington. It was unanimously agreed:
- “That a NAVIGABLE CANAL towards the Town of POCKLINGTON, would be of great public Utility”*
- British Transport Commission Archives ref. Poc 1/3.*
- 2.5.8 The committee comprised a number of prominent landowners including *Marmaduke Constable Maxwell* of Everingham, *Robert Dennison* of Kilnwick Percy and *Sir Henry Vavasour* of Melbourne; and several local farmers including *Messrs Jno. Bell, Thomas Clarke, Bagley and Hugh Nottingham* (Nottingham 2015). Other proponents of the Canal included Major Vavasour, Rev. Read, Rev. Plummer and Messrs Robert Wilson, George Bagley and Thomas Lee (*ibid.*).

- 2.5.9 In the same year *Henry Eastburn* was requested by the committee of interested parties to provide a survey from the Derwent to Pocklington. The resulting report was presented by *William Chapham* in 1802, an engineer who was active in the area having been involved in surveying the Keyingham navigable drains southeast of Hull in 1797, consulted on extensions to the Derwent Navigation in 1800, and was advising the Driffield Navigation. In his report Chapham provided three possible lines; one to the Derwent at East Cottingwith, a second to the Derwent at Bubwith, and a third to the Ouse at Howden.
- 2.5.10 Chapham estimated that the route to East Cottingwith, if passing Sir Vavasour's mill at Walbut, would be of comparable length to the route to Bubwith but would bring a smaller area of agricultural land into its influence. Furthermore he considered that the route of the Canal would have to labour under the inconveniences arising from the shallows above Bubwith. In his opinion the route to Howden was the better as it would avoid the tolls of the Derwent Navigation, attract more tonnage, and be of great benefit to Howden.
- 2.5.11 The latter course would certainly have been heavily objected to by *Earl Fitzwilliam* who owned the Derwent Navigation as it would be he who would be deprived of tolls, and possibly also the loss of water to the Derwent from diversions of tributaries to feed the Canal (Paget-Tomlinson 2006, 164). This disagreement, and a period of financial depression during the Napoleonic Wars was likely responsible for the subsequent delay in progressing the plan further.

Design

- 2.5.12 It was then not until 1813 that efforts restarted with S.H. Copperthwaite, as agent to the Earl Fitzwilliam, ordering *George Leather* (Junior) to provide a second survey of Derwent to Pocklington, although the results of the survey were delayed until 1814 due to Leather falling ill (Crowe 1994, 18). George Leather was an engineer from Bradford who principally worked in the Yorkshire area and had been involved in the modernisation of the Aire and Calder with his father, George Snr, and in 1810 had surveyed the Derwent for Earl Fitzwilliam (Paget-Tomlinson 2006, 302). Following his work on the Pocklington George went on to work on the Aire and Calder, constructing the Knottingley-Goole canal (completed 1826), which was one of the principal events in the development of the port and town of Goole (*ibid.*). Whilst his work on the Pocklington Canal comprises the majority of his structures to have been nationally recognised for their architectural interest, his most significant work is considered to be the cast iron Stanley Ferry Aqueduct on the Calder line to Wakefield (Grade I Listed Building and Scheduled Monument) which was completed in 1839.
- 2.5.13 When commissioned, George Leather was initially asked to survey a line from above Sutton Lock to Pocklington. Leather indicated that this route would be impracticable and proposed instead that the Canal should join the Derwent at East Cottingwith following the line of The Beck. By this route George Leather estimated that the Canal could be brought from Cottingwith to the intersection of the turnpike and Pocklington Beck at a cost of £43,630.
- 2.5.14 Whilst it was considered that continuing the Canal up as far as Pocklington Mill would be of much greater advantage to the town, the necessary works to achieve this sharply increased the cost of the Canal to £51,887. Leather conjectured that about 48 square miles of country would be likely to make use of the Canal (**Plate 4**) generating an anticipated toll revenue of £1,246 10s a year (approximately equivalent to £42,000 in modern terms) principally deriving from the export of corn and import of lime and coal (BTC archive Poc 1/2).

2.5.15 The initial projected cost for the shorter length was as follows:

| | |
|--|------------|
| To excavating the Canal 8 Miles in length at £956 per. Mile | £7600.0.0 |
| To 8 Locks at £2250 per lock..... | £18000.0.0 |
| To 12 Occupation Bridges at £450 each..... | £5400.0.0 |
| To 3 Bridges for Public Highways at £600..... | £1800.0.0 |
| To 1 Aqueduct Bridge where the Canal would cross the Pocklington Beck..... | £900.0.0 |
| To 6 Culverts for small steams at £100 each..... | £600.0.0 |
| To purchase of land 58 acres at £50 per acre | £2900.0.0 |
| To towing path forming and fencing off 8 miles at £308 per mile | £2464.0.0 |
| Contingent for unforeseen expenses | £3966.0.0 |
| | £43630.0.0 |

Letter from George Leather to Earl Fitzwilliam 07/09/1812 (BTM Archive ref. Poc 1/2)



Plate 4: Approximate area envisaged as potentially making use of the Pocklington Canal, based on estimate of 48 square miles by George Leather in 1815.



Plate 5: Extract of 1815 survey of the proposed route of Pocklington Canal (in red) by George Leather showing existing waterway at Cottingwith

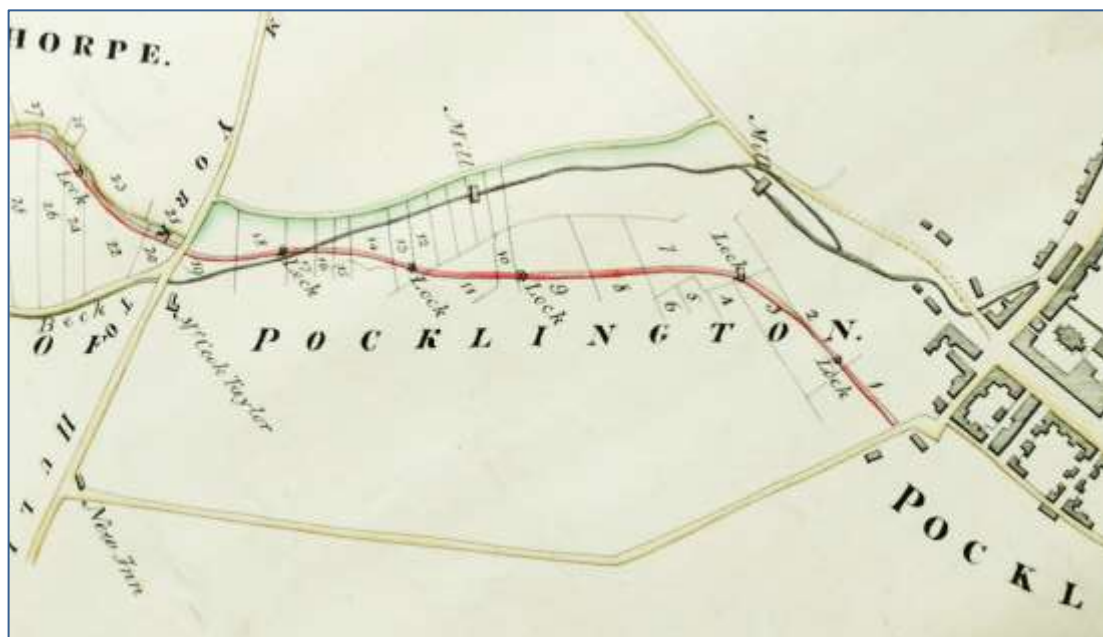


Plate 6: Extract from 1815 survey showing the proposed route from the York to Hull turnpike into Pocklington

2.5.16 The survey ultimately provided by George Leather (**Figure 9**) closely matches the course of the Canal as it was evidentially constructed (shown as a pale blue line on **Figure 9**). The line started at the junction of the confluence of The Beck at East Cottingwith, within the line of an old meander of the Derwent. Of interest the survey of 1815 illustrates that there was an existing waterway and wharf from the Derwent into Cottingwith which was retained following the construction of the Canal but was infilled

in the 1960s (Plate 5).

2.5.17 From East Cottingwith the Canal turned north passing west of Storwood then northeast following the line of the Beck to the existing crossing of Hagg Bridge. From this point the Canal then went east, passing north of Melbourne. The alignment of the Canal here took a slightly wider bend than was originally proposed and ran north past Walbut Mill Farm rather than between it and the mill as was originally intended. Beyond Walbut Mill Farm the Canal ran in a straight line towards Bielby then taking a tight turn north before following a north-easterly line towards the Hull to York turnpike. The survey also included the possible continuation into Pocklington itself (Plate 6) which would have required five additional locks and an aqueduct to carry the Canal over the Pocklington Beck.

2.5.18 With the results of the survey in hand the decision to proceed with the construction of the Canal was ultimately made at a meeting held on the 25th August 1814 at The Feathers Hotel in Pocklington. A subscription was raised for the purpose of carrying out the works, with £20,500 put up in £100 shares in August and sufficient other funds raised by the end of the year to justify going ahead with a petition to Parliament. Amongst the initial subscribers were:

£3,000 promised from Robert Denison; £2000 from Earl Fitzwilliam (by S.H. Copperthwaite); £1600 Marmaduke Constable Maxwell; £1000 each from Lord Muncaster, General Sir H.M. Vavasour Mary Dewsbury, Hannah Tate; £600 Thos. Shield; £500 from John Lockwood, Cook Taylor, Thos. Johnson, Henry Hudson, Wm. Bayldon and Ralph Creyke jnr; £400 from Thos. Laycock; £300 from Francis Fallowfield, Elizabeth, MaryAnne and Catherine Overend; £200 from Timothy Overend, Thos. Smith, Wm. Collinson, Bessy Stables, Jas. Silburn, John Weddall, Thos. Clark; £100 Barnard Smith, Jas. Beal, Thos. Abbey, John Hart, Matt. Houlden Robt. Gibson, Luke Fleming, Jas. Scaife, Richard Hardy, Thos. Knowlton Wilton, Davd Holtby, Thos. Collingwood, George Bagley, Jas. Powell, Natnl. Holmes, Hugh Ibbetson, Robt. Catton, John Linwood, Robt. Judson, Matt. Jackson, Thos. Staveley, Richard Hall, Thos. Brown, Thos Beal, Wm. Ullathorne, Saml. Elliott, Wm. Moor, Jas. Chaplen, Sam. Fenteman, Matt. Whitfield, Ric. Becket, Eliza. Webster, Geo. Wilson, Thos. Wilson, Wm. Massey jnr., John Ireland jnr., Roger Whip, Ed. Stephenson, Geo Clarkson jnr.

Notice for Proposal of Pocklington Canal, 25/08/1814 (BTC archive ref Poc 1/3)

2.5.19 The wide attraction of the Canal is illustrated by the listed subscribers, as enrolled in the company's financial records, who include amongst the major landowners: fourteen yeomen, four merchants, four innkeepers, four widows of spinsters, three bricklayers, three joiners, three clerks, two brewers, a druggist, a parson, a tallow chandler, ironmonger, saddler, blacksmith, grocer, miller, confectioner, tanner and a gardener (Duckham 1973, 61).

2.5.20 A Parliamentary Bill was drawn up, and after only minor amendments to its wording, the Pocklington Canal Act received Royal Assent on May 25th, 1815, under the title of:

'An Act for making and maintaining a navigable Canal from the River Derwent, at East Cottingwith, in the East Riding of the county of York, to the Turnpike Road leading from the city of York to the town of Kingston-upon-Hull, at a certain Place there called Street Bridge, in the township of Pocklington, in the said Riding'

2.5.21 As is evidenced by the title, the proposed route of the Canal was decided to go between East Cottingwith and the turnpike, and not into Pocklington itself.

2.5.22 The proprietors of the Canal were incorporated as The Pocklington Canal Company, with powers to execute the proposed work. The work was to be funded through the sale of £100 shares, or parts thereof, to the value of £32,000 with an additional sum of

£10,000 to be raised if necessary amongst the stakeholders or through mortgage of the works. In order to afford the maintenance of the Canal, and the payment of shares, interest and other charges, the Canal Company was authorised to demand tonnage rates for use of the Canal.

Construction

- 2.5.23 In June 1815 a Committee of Management was appointed to be responsible for the day to day running of the affairs of the Canal Company. By the 7th July 1815 the full required subscriptions had been met, and the powers and provisions given in the Act were immediately put into effect. George Leather was appointed engineer and tenders were invited for the first stage of the construction work.
- 2.5.24 Notice was given on the 31st July, 1815, that the cutting of the Canal from East Cottingwith to Hagg Bridge was to be let by ticket.
- 2.5.25 Whilst no record has been identified detailing the construction techniques employed in the cutting of the Pocklington Canal, it is anticipated that it would have utilised what were in 1815 tried and tested practices. Typically the route and level of the canal would be surveyed in by laying level pegs at every two to three chains along the proposed upper bank. The middle of the canal was then staked out from this baseline and trial excavations made to ascertain ground conditions. The water level and slope of the cutting would then be marked through digging regular slope holes, comprising small holes either side of the proposed route linked by a narrow spade depth trench.
- 2.5.26 Once marked out labourers would begin the work of cutting the canal, following the line and gradient of the slope holes with up-cast spoil used to form the lower embankment. Excavation would have been by hand with pick, spade, shovel, wheelbarrow, and horse and cart. As the cutting deepened planking and block horses (open-ended stoutly strutted rectangular boxes) were used to construct barrow runs obliquely up the side of the slope. Evidence for this practice at Pocklington exists in the survival of records for equipment bought from Richard Hardy by the Pocklington Canal Company in 1815, including the recorded purchase of planking, 50 wheelbarrows, 20 box horses, 12 trustles and 12 gang ladders.
- 2.5.27 Depending on the porosity of the ground, either the base and sides of the cutting would be lined with puddling or a puddle ditch would be cut along either side. Puddling was a lightish loam or clay mixed with coarse sand or gravel and water and applied in thick layers 9 to 10 inches thick. The principal was that the puddling would comprise a water impregnated layer that could hold no further water and therefore resist further ingress. With the puddling complete the water could be let in, the final task being the planting of rushes at the water's edge to consolidate the bank (Paget-Tomlinson 2006, 35).
- 2.5.28 A letter from George Leather to Mr Copperthwaite, agent to Earl Fitzwilliam, named the main contractor for the excavation of the first cut as Thomas Hamer with costs provided for the digging of canal floor, the flagging of canal floor and puddling (ERYA ref YE/386.46). Whether parts of the Canal were flagged is unknown, however the inclusion of costs in Hamer's tender suggests part of the Canal may have been. It is considered that the most likely point for flagging of the Canal floor was at Canal Head. William Marley of Sutton undertook the carpentry for the locks, bridges and tunnels or culverts for passing water under the Canal. This included formation of platforms, planking, sheet piling, bearing piling and lock gates. George Brittain of Walling Fen, James Grant of 'Milbourne' (more likely referring to Melbourne rather the Milbourne in Northumberland) and William Whitehead of Bramley undertook the masonry and brick work for locks, bridges and tunnels. Both Grant and Brittain were likely local tradesmen and may have been involved in the construction of Market Weighton Navigation.

- 2.5.29 In August 1815 the Committee of Management set about the construction of a bridge to carry the public road over the Canal at Hagg Bridge (Hull Packet 15/08/1815). Records relate that William Marley was contracted to excavate the foundations and a culvert thereunto, John Newton with James Nelson providing the masonry and brick work, and John Glover of York providing the ironwork (ERYA ref YE/386.46). This latter inclusion potentially suggests Hagg Bridge was constructed with an iron fenced parapet, unlike other road bridges along the Canal which were built with brick parapets.
- 2.5.30 At the Second General Assembly in August 1817 the Committee reported that the Canal was navigable up to Walbut, and soon would be open to within two miles of its termination, and had already raised £239 5s 6½d in dues. The tolls were collected by a Mr Mark Swann who had been appointed Lock Keeper and Collector of Tolls at a salary of £50 per annum plus the use of a house. Work was scheduled for completion by the end of year, but was delayed by consequence of “very unseasonable weather for brickmaking” (ERYA ref YE/386.46).
- 2.5.31 By the time the Third General Assembly met in August 1818, the Committee reported the “Canal is now completed”. The accounts showed that expenditure had amounted to £32,715 11s 2½d and that there was a probable expenditure still to come of £2,494 13s 9d. The sum total expenditure was within the original estimate of George Leather and he was paid special tribute at the meeting.
- 2.5.32 The next requirement of the committee was to provide appropriate provision of commercial facilities at Canal Head including a public wharf warehouse, granary and crane to be built by Thomas Johnson of Pocklington who was likely appointed Wharfinger as he was entitled to charge wharfage (ERYA ref. YE/386.46). There are several possibilities for the buildings erected by Thomas Johnson, comprising either the two storey warehouse structure still extant on the eastern side of the Canal, or a collection of smaller buildings depicted to the east of the Canal on the 1854 OS map (Figure 10; Plate 9). It is generally held that the former comprises the original warehouse. With full completion imminent it was resolved that notice be given in the York, Hull and Leeds newspapers that the Pocklington Canal was fully open, and in business (Plate 7).



Plate 7: Advert in the York Herald – Saturday 15 August 1818

Operational Life

- 2.5.33 The chief objective proposed in constructing the Canal was to provide coal and lime for land enrichment to Pocklington and its vicinity, and in return convey the corn produced in the area to manufacturing districts. The Canal also ran a regular service for general merchandise by 1821 provided by a packet, likely the *Union Packet* mentioned in Baines' East Yorkshire Directory in 1823, between Pocklington and Hull (Duckham 1973, 65).

2.5.34 Examination of the proposed tonnage rates produced in 1815 illustrates the anticipated range of goods that could be transported along the Canal, whilst not actually indicating whether they actually were. These goods included:

| | |
|--|--|
| <i>Wheat, Barley, Beans, Rye, Mastlin, Peas, Vetches, Linseed, Mustard and Rapeseed</i> | <i>Flour, Shelling, Pearl barley, Nuts, Clover, and other heavy seeds</i> |
| <i>Oats and Malt</i> | <i>Lime for Manure</i> |
| <i>Cheese, Hemp, Flax, Lard, Madder and Tow</i> | <i>Apples, Onions, Pears, Potatoes, Carrots and Turnips</i> |
| <i>Coals, Slack and Cinders</i> | <i>Butter</i> |
| <i>Chalk, Flags, Flints, Fuller's-earth, Kelp, Ling, Oil Cake, Plaster, Rugs, Ropes, Slate, Stone and Whitting</i> | <i>Boxes, Cloth, Coffee, Dying Woods, Dry Goods, Fruit in Chests or Boxes, Glass, Groceries, Hides, Hops, Paint, Parcels, Pitch, Rice, Saltpetre, Spirits, Starch, Sumach, Tar, Tea, Tin, Tobacco, Turpentine, Wines, Welds and Yarn</i> |
| <i>Brass, Copper, Currants, Nails, Pelts Wet, Salt, Shot, Pots, Soap, Sugar and Treacle</i> | <i>Alum, Copperas, Fish, Grease, Iron manufactured, Lead ditto, Tallow and Wood</i> |
| <i>Manure, Gravel and Sand</i> | <i>Bricks and Tiles</i> |
| <i>Hay and other light Seeds, Mill Dust and Bran</i> | <i>Oak, Ash and Elm Timber, Forty Feet; Fir Timber, Fifty Feet; Battens, Deals and Pipe Staves</i> |
| <i>Bones, Cobbles for paving, and Horns</i> | <i>Iron, Pig and Bar Lead, Pig and Sheet</i> |
| <i>Household Furniture</i> | <i>Rape Dust, Ashes, Soot and Whale Blubber</i> |
| <i>Bundle of Laths and Willows</i> | <i>Dried Pelts, Spetches, and Wool</i> |
| <i>Lime for Building and other Uses</i> | <i>Bark</i> |

2.5.35 The Canal was never financially successful, although it was by no means uniquely poor for a canal founded on transportation of agricultural produce (Duckham 1973, 65). Early endeavours to increase trade along the Canal were likely stifled by the agreement under that Act that the vessels commuting between canal and the Derwent were to pay river tolls as though they had navigated the Derwent alone, thereby depriving the Pocklington Canal of tolls.

2.5.36 After 1823 the Canal Company made an agreement to instead make regular payments in lieu of any lost tolls to the Derwent Navigation. The Company also aimed to encourage traffic by awarding concessions, for instance, on corn brought up the Canal for milling and sent back down as flour or shelling (*ibid.*). Toll receipts improved following these actions, from around £600-900 p.a. in 1818-1822 to around £1000-1500 p.a. in 1822-1848, peaking in 1838-9 at £1,753. These figures were close to the forecast potential revenue of the Canal indicated by George Leather in 1814. It was not until during the 1830s and 1840s that the Canal Company was able to pay dividends to its shareholders, typically at around 2.5-3.5 per cent (Duckham 1973, 66-67).

2.5.37 The principal benefit of the Canal was likely felt more by the merchant, farmer and residents along the course of the Canal rather than the shareholders, through allowing access to wider markets and reducing the cost of imports. The effect of the latter was such that it was reported on in the Carlisle Patriot in 1817 which stated that:

It will be an additional proof to the benefits of Inland Navigation, when we inform our readers, that in the thinly inhabited country on the line of the Pocklington Canal, in the East Riding of Yorkshire, even at Kexby (seven miles from the finished part of the Canal,) coals, which formerly sold for 27s per chaldron, are now to be had for 18s 6d. What an advantage is this, to the poor labourers, and others, in that district!

Carlisle Patriot – Saturday 1st November 1817

Canal Head at Pocklington

- 2.5.38 Following the opening of the Canal development around Canal Head gradually intensified. The extent of development in the years prior to the construction of the Canal is evidenced by a plan produced of the area in 1815 (Figure 9) which indicates the area was occupied almost singularly by the residence of Mr Cook Taylor, with New Inn (now the site of the Yorkway) a little away towards the southeast at the junction of The Balk.
- 2.5.39 The extent of bulk trade at Canal Head is not considered to have grown significantly during the early operational years of the Canal. Thomas Johnson is believed to have held a warehouse at the wharf from 1815, and White's Trade Directory of 1831 lists three coal merchants (one also dealing in lime) as located at Canal Head, in addition to two pubs (The Canal Inn and The Wellington Oak).
- 2.5.40 Not until 1834 was any substantial addition to accommodation at the head made, when Robert Denison took land for a coal yard and warehouse (Duckham 1973, 64). A plan of the Canal head in that year shows that in addition to Robert Denison, William Ellis, Mr Hodgeon and Mr Peart had leased wharfage (Waterways Museum archive).

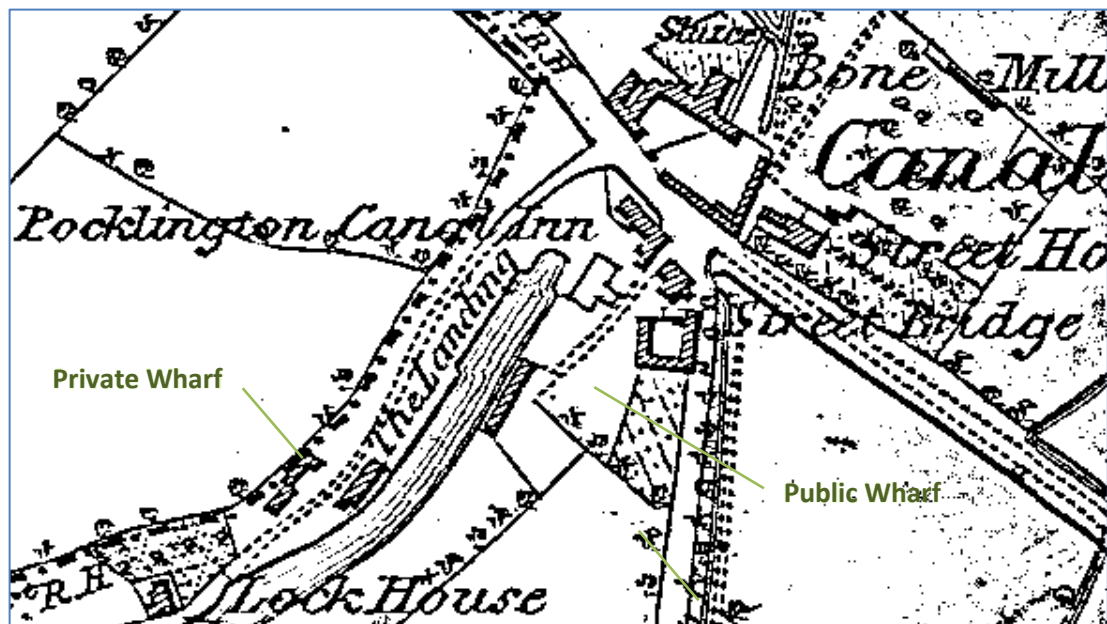


Plate 8: 1854 Ordnance Survey Map of Canal Head



Plate 9: Plan of Canal Head in 1909 showing the site of a warehouse likely built in 1834 for Robert Denison (CRT archives, Leeds, ref: 7522)

- 2.5.41 Denison's building is likely to be that shown in red on the plan of Canal Head produced in 1910 (**Plate 9**). Denison was also responsible for the construction of the Wellington Oak Public House, which was described in sales particulars from 1836 as comprising (Blockley 2011, 7):

WELLINGTON INN, with four grass and one tillage field adjoining, being on the high road between Hull and York, and well calculated for taking in cattle for the York markets. Also, large and commodious warehouses, granaries, lime-sheds, coal wharves and cottage, joining onto the Canal, capable of carrying on a very extensive business, being in the middle of a large corn district.

- 2.5.42 By 1846 trade directories still list three coal merchants and two pubs at Canal Head, with the further addition of William Massey and Cook as timber merchants and bone crushers. Massey and Cook likely occupied the bone mill to the north of the road sold by Denison in 1836, and were likely also responsible for the extension of Thomas Johnson's warehouse into a saw mill. Two farmers were also listed, comprising Charles Weddall and William Ward (who also ran the Wellington Oak). Interestingly Henry Swann, the lock keeper was listed as a painter. This period likely reflects the high point of development at Canal Head, and the 1854 Ordnance Survey (**Figure 10, Plate 8**) likely provides the best indication of the extent of development, showing a modest collection of mixed use buildings, including several wharf buildings, a bone mill, a saw mill, the Canal Inn, several detached houses and a terrace. The Wellington Oak, whilst not labelled, was in operation to the west of the Bone Mill.

- 2.5.43 A sale notice in the Leeds Mercury on January 12th 1856 (Nottingham 2015) provides additional details of the function of buildings assumed to be to the north and east of the Canal head:

Also, all that well-built substantial and commodious DWELLING HOUSE, used as an inn, known by the sign of the Pocklington Canal Inn, at the Canal head, with the convenient Dwelling house adjoining, and the brewhouse, barn, stables, granaries, farm buildings, fold

yard, stack yard, gardens, grass bank, warehouses, coal yards, crane, and wharf places, comprising all the ground on that side of the Canal to the first lock.

2.5.44 The effect of the arrival of the railway between York and Market Weighton in 1847 on businesses at Canal Head is clearly evident from the significant drop off in traders active in the area in White's directory of 1851. By this date only one coal and corn merchant was listed as operating at the head (Musgrave and Scott) in addition to one farmer and the two pubs. Furthermore by the production of the 1892 OS the two mills were marked as disused and the small irregular group of wharf buildings west of Canal Head had been cleared.

Bielby, Melbourne, Storwood and East Cottingwith

2.5.45 The villages along the Canal at Bielby, Melbourne, Storwood and East Cottingwith all benefited in some way from the construction of the Canal but never to such an extent that they developed as specialised centres of industry. Rather, the Canal provided access to an improved trade network that allowed existing trades to flourish.

2.5.46 The Canal linked existing water powered mills in Bielby and at Walbut, the former serviced by a branch canal arm and the latter by a wharf to the southwest of Walbut Bridge. Other wharfs included: a private wharf to the northeast of Church Bridge; a wharf off of a branch canal arm in Melbourne; Gardham Wharf which likely acted as a coal wharf for a pumping house on the drains near Eller Carr; and a wharf at East Cottingwith.

2.5.47 Bielby was listed in Baines' directory of 1823 as possessing, in addition to the mill, a coal merchant, shoemaker and 15 farmers. Melbourne at the same date was listed with two joiners, two blacksmiths, a bricklayer, cattle dealer, shopkeeper, brick and tile maker (Ogle Henry) and 13 farmers. Storwood was listed as occupied solely by farmers.

2.5.48 In East Cottingwith the 1823 directory listed a corn miller (John Tasker), a blacksmith, wheelwright, taylor, brick layer, two cattle dealers, and six farmers. The location of the John Tasker's mill is unknown, however it was likely to have been a windmill as no other watermills are illustrated in the area on historic mapping.

2.5.49 Within the wider area, examination of historic mapping illustrates there was a windmill southeast of Thornton; brick works both sides of Melbourne Hall; and a brick works at Hagg Bridge. An advert in the Hull Packet in 1818 illustrates the wider use of the Canal for movement of goods, with the sale of a quantity of trees in Londesborough Park making reference to the proximity of the site to both Pocklington and Market Weighton Canals (Hull Packet 15/12/1818).

Repairs

2.5.50 Keeping the Canal in good operation would have required regular maintenance, and whilst there is little record for the majority of this, notice was given in May 1835 for the drawing of water from the Canal on 16th of June, 1835, for the purposes of repair works (Yorkshire Gazette 30/05/1835), although the exact nature of the works was not recorded. The draining of the Canal for repair work would have had a significant effect on trade, preventing vessels from navigating the Canal.

Decline

2.5.51 Transport along the Canal came under significant competition during the 1840s, initially as the cities of York and Kingston upon Hull became linked into the national railway network and more directly when the York and North Midland Railway (YNMR) opened

a line between York and Market Weighton in 1847. This line passed directly through Pocklington, which received its own station, and its effect on the value of the Canal would have been devastating resulting in its sale to Mr George Hudson, owner of the YNMR, in 1848 for the sum of £18,000 (Western Times 30/12/1848). Canal companies bitterly opposed railway proposals until the period of Railway Mania between 1845-7 when an increasing number were encouraged to sell out with attractive offers. The motives of these buy outs were simultaneously to overcome opposition to their proposals, and to control or destroy the competition (Simmons and Biddle 1997, 67).

- 2.5.52 Between 1861 and 1931 the population of Pocklington stagnated (falling by 1 per cent over the period) as the town failed to diversify beyond its traditional agricultural supply industry, which made the town highly sensitive to the ‘Great Agricultural Depression’ of the 1870s. This period saw cereal production stifled by a series of wet summers during a time when competition from foreign imports was growing. The agricultural industry of East Riding was heavily affected, with 92,000 acres of crop land being grassed down or laid to waste, including the loss of 49 percent of its wheat and 21 per cent of its barley acreage (Wild 1996, 47).



Plate 10: Pocklington Canal in 1959 showing an abandoned barge at Thornton Level (© Waterways Museum)



Plate 11: Pocklington Canal in 1959 showing a derelict lock, possibly Walbut (HA 15; © Waterways Museum)

- 2.5.53 Unable to close the Canal by law, the railway company raised dues to both reduce traffic and encourage use of the railway, and thus were able to gradually reduce the frequency of lock repairs and dredging (Austin 1959, 3 and Duckham 1973, 68). By 1890 traffic was significantly reduced, and by 1906 it was reported that the upper reaches of the Canal had become derelict (*ibid.*). In 1858 toll receipts had dropped to £617, which by 1888 had further dropped to £31, demonstrating the impact which the ownership of the railway company had on the Canal with total expenditure on the Canal ordinarily significantly outstripping its income.
- 2.5.54 Under the YNMR, and subsequently the North Eastern Railway, the Canal through lack of investment moved slowly towards decline ultimately falling into disuse in the early twentieth century. The last recorded commercial trade along the Canal was in August 1932 comprising 64 tons of road stone aboard the keel Ebenezer operated by Mr J.W. Brown, a resident of East Cottingwith. Whilst the Canal was still in commercial use the LNER were also liable to pay demurrage claims due to delays caused by its condition, and in the end purchased Mr Brown a lorry to avoid any further costs (Double Nine March 1969, 5).
- 2.5.55 Pleasure traffic on the Canal ceased shortly after. A recorded journey up the Pocklington Canal in 1931 records how thick the water was with weeds and the poor state of Sandhill Lock which prevented movement beyond that point. A final combined visit of ten cruisers to Melbourne Basin in 1934 was the last recorded pleasure cruise of the Canal until restoration efforts of the 1970s.
- 2.5.56 The Canal was never formally abandoned, and with the nationalisation of the railways in 1947 its ownership passed to the British Transport Commission, and then in 1963 to

the British Waterways Board.

- 2.5.57 In 1959 plans were discussed between the British Transport Commission and Sheffield Corporation to allow the infilling of the Canal with sludge from a water treatment plant over the following 30 years. Writing at the time Arthur Austin (Austin 1959) records the condition of the Canal as in a ruinous state (**Plates 10-11**), the Canal head in a derelict condition, and all the bottom gates destroyed. The upper gates were all still more or less intact however, which enabled water levels to be maintained. Many of the lower pounds were heavily silted up. Arthur however saw the Canal as still performing three important functions, namely drainage, water supply and provision of amenity.
- 2.5.58 The proposals met with strong resistance from landowners, local residents, the Inland Waterways Association and The York Angling Association. Due to this vigorous opposition the Canal was not abandoned and the scheme to infill the Canal was not proceeded with. Subsequent plans soon followed although neither plans for its ownership to be transferred to Yorkshire Ouse River Board or its suggested conversion to a reservoir for boating and angling were successful. The Canal did become a test site for Dowpon weedkiller trials in 1961, however there were fortunately no major environmental effects (Double Nine, March 1969, 5).
- 2.5.59 The Transport Act 1968 extinguished the Right of Navigation on all canals, and reclassified the Canal network. This identified Pocklington Canal as a Remainder Waterway to be dealt with as economically as possible, consistent with public health, amenity and safety.

Repairs

- 2.5.60 Whilst the railway companies gradually ran down maintenance on the Canal, they did incur some expenses. The known significant repairs were as follows:
- In 1863 the NER paid for winter dredging (Duckham 1973, 67).
 - Possibly during the early twentieth-century the balance beams of East Cottingwith Lock and Thornton Lock (**Plate 12**) were replaced with railway rails. Those at East Cottingwith were removed by PCAS during restoration work in 2009 and were formed into a bench now sited at Canal Head.
 - In 1906 Walbut and Coates Bridges (**Plate 13**) were repaired including the reconstruction of parapets and newels and to pick out and repoint brickwork on the wing walls on both bridges. In addition the buttressing pilasters were to be rebuilt on Walbut Bridge, and the brickwork of the soffit of Coates Bridge was to be picked out and repointed.
 - In 1928-9 the LNER enacted a programme of renewal, replacing the lock gates at East Cottingwith (**Plate 14**) and a number of the accommodation swing bridges (**Plate 15**). The lock repairs retained the clough lifting gear, hill pints, top anchorage straps and balance beams from the old gates, whilst the swing bridges only retained the former pintle casting.
 - In 1962 the swing bridges along the route were replaced with fixed spans.



Plate 12: Railway line balance beam with hydraulic paddle gear at Thornton Lock

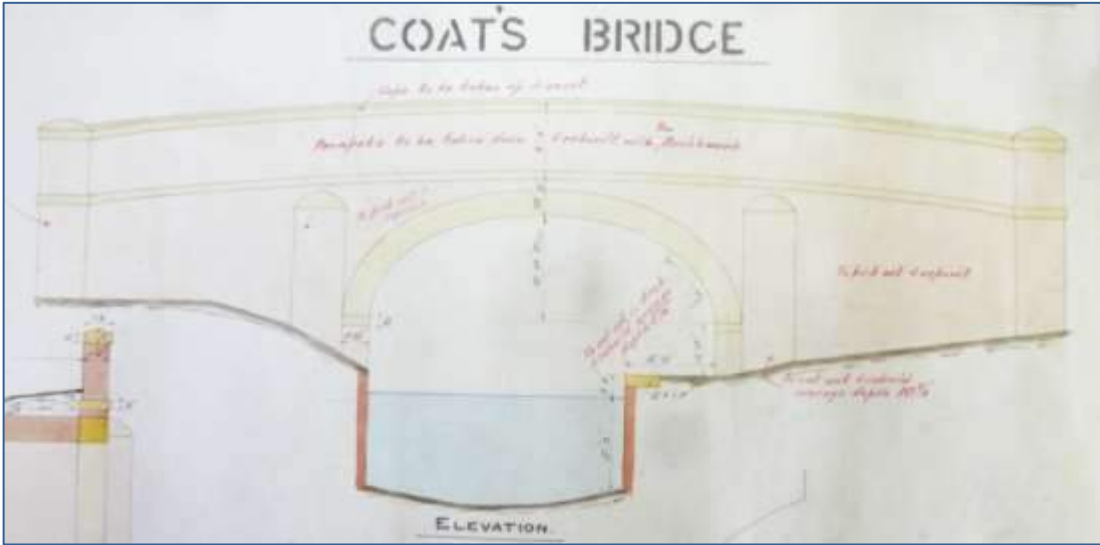


Plate 13: Detail of Coates Bridge, as surveyed for repairs in 1906 (CRT archives, Leeds, ref 7488)

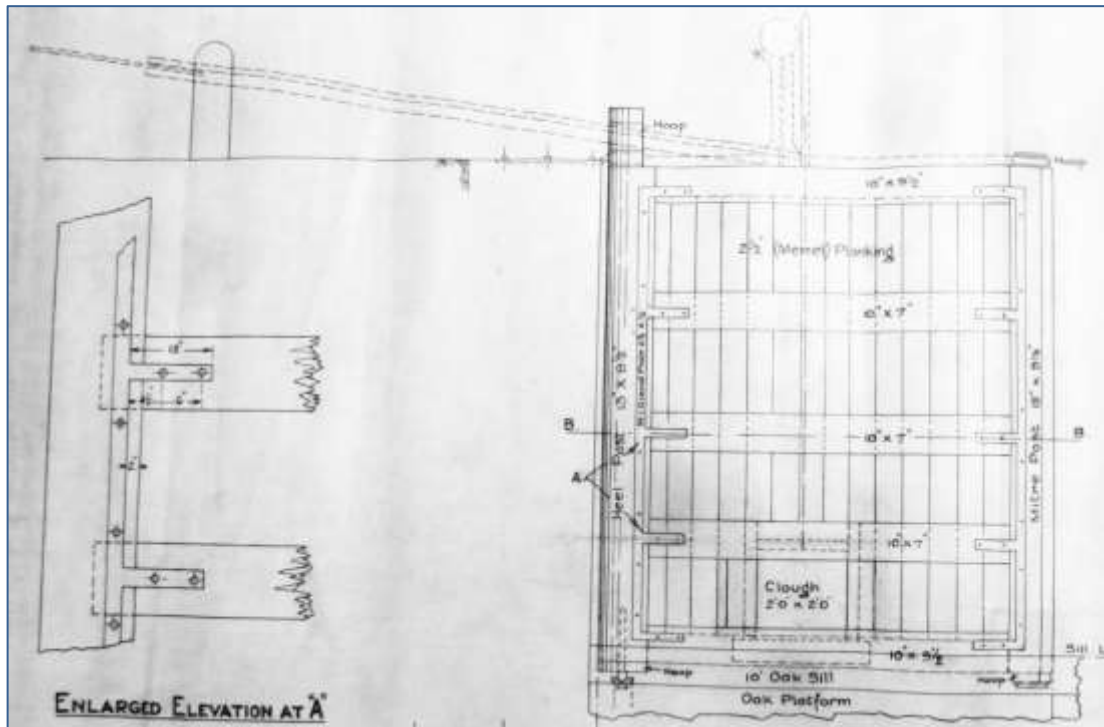


Plate 14: Details of the proposed 1928 renewal work to East Cottingwith Lock gates (CRT archives, Leeds, ref: 7518)

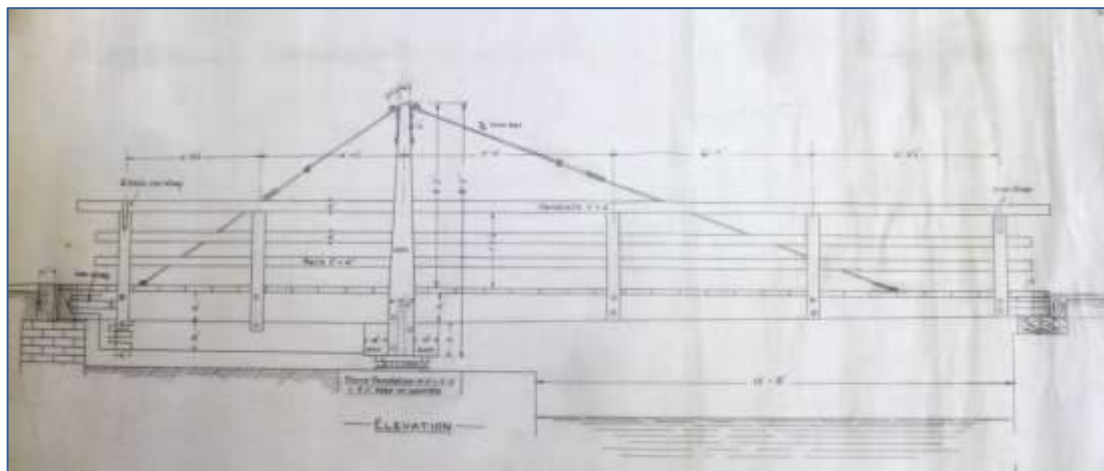


Plate 15: Details of the proposed 1929 renewal work to swing bridges (CRT archives, Leeds)

Restoration and Preservation

2.5.61 The events of the 1950s and 60s encouraged waterways enthusiasts to explore the possibility of restoring the Canal. The Pocklington Canal Amenity Society was founded in January 1969 following two meetings in 1968 of local people interested in the future of the Canal and keen to take practical action to develop the waterway as an attractive amenity (Double Nine March 1969, 2). From 1970 PCAS began a regular monthly voluntary working party on the Canal, and steady progress has been made in improving the overall condition of the Canal as well as re-establishing navigation to Melbourne Arm.

2.5.62 Progress was initially made repairing banks, dredging the locks and canal bed, repairing masonry and in clearing the feeders. More significant repairs were undertaken to repair locks over a longer period, with Cottingwith Lock and Gardham Lock being repaired in the 1970s, Thornton Lock in 1990, Walbut Lock in 1992-3, Top Lock repaired in 2002, and Coates Lock was repaired in 2001. In 2010 emergency repair work was undertaken to Sandhill lock chamber which was in a state of collapse.

2.5.63 During the 1970s the ecological importance of the Canal also began to be considered, touted as a potential Site of Special Scientific Interest as early as 1972. By 1975 part of the canal had been designated as part of Derwent Ings SSSI due to the importance of it as a freshwater habitat alongside one of the most important examples of agriculturally unimproved species-rich alluvial flood meadow habitat remaining in the UK. In 1985 another section of the canal was designated as part of the Melbourne and Thornton Ings SSSI, although the significance of the canal in its own right was not fully recognised until aquatic surveys were undertaken in 1987. The Canal was then notified in 1988, when the Canal was described as:

“...one of the most important canal sites in England, notable for its assemblage of aquatic, fringing swamp and tall fen plant communities which include a number of rare and local species.”

Pocklington Canal SSSI citation

2.5.64 In 2012 the Canal & River Trust was formed to care for over 2,000 miles of historic waterways in England and Wales. Today the Trust continues to work towards the preservation and promotion of the Canal’s cultural and natural qualities, and is dedicated to securing the future of the waterway for generations to come.

Table 1: Timeline of Events

| Timeline | | |
|-----------------------------|------|---|
| Planning | 1767 | First mention of interest in establishing a canal to Pocklington |
| | 1772 | Act for construction of Market Weighton Navigation passed |
| | 1801 | Henry Eastburn commissioned to survey possible routes |
| | 1802 | William Chapham completes a report advising a route to the Ouse at Howden |
| | 1813 | George Leather commissioned to survey possible routes |
| | 1814 | George Leather completes his survey proposing a route to the Derwent at East Cottingwith |
| Construction | 1815 | May: Act for construction of Pocklington Canal passed July: Construction of canal cut begins August: Construction of Hagg Bridge begins |
| | 1817 | Canal reported as navigable up to Walbut |
| | 1818 | Canal reported as complete Construction of facilities at Canal Head begins |
| Operation | 1834 | Robert Denison builds a warehouse at Canal Head |
| | 1838 | Highest reported toll receipts from trade along the Canal |
| | 1847 | York and North Midland Railway York and Market Weighton Branch opens |
| | 1848 | York and North Midland Railway buy Pocklington Canal |
| | 1906 | Upper reaches of the Canal reported as derelict |
| | 1931 | Canal reported as unpassable beyond Sandhill Lock |
| | 1932 | Last reported commercial use of the Canal |
| | 1934 | Last reported pleasure craft on the Canal prior to restoration |
| Dereliction and Restoration | 1947 | Ownership transferred to British Transport Commission |
| | 1959 | Plans to infill the Canal with sludge successfully defeated |
| | 1963 | Ownership transferred to British Waterways Board |
| | 1968 | Canal classified as a 'Remainder Waterway' |
| | 1969 | Pocklington Canal Amenity Society formed |
| | 1970 | PCAS working party formed and gradual restoration of canal begins |
| | 1975 | Derwent Ings SSSI designated |
| | 1985 | Melbourne and Thornton Ings SSSI designated |
| | 1987 | Pocklington Canal SSSI designated |
| | 2012 | Ownership transferred to Canal & River Trust |

2.6 Built Structures

- 2.6.1 A notable characteristic of Pocklington Canal, likely owing to its rural location, is that it survives in much the same form as when it opened in 1815. The principal structures along the Canal all originate to the first phase of construction and no later crossings, cuttings, or locks were ever created. Whilst the main road bridges survive with good preservation of historical form and character, many of the other structures (especially the accommodation bridges) have seen substantial alterations during their lifetime. Allowances for such alterations should be made, however, when viewing working structures due to the necessities of upkeep and health and safety on movable structures such as the locks and swing bridges. In consideration of this, the level of preservation along the Canal is considered to be excellent.
- 2.6.2 Another feature of interest along the Pocklington Canal is the absence of trim, such as mile posts, bridge and lock numberplates, boundary markers, and bollards. The schedule of charges in the Act of Parliament for the Canal indicates that rates were applied based on travel between locations, comprising East Cottingwith, Street Bridge (Pocklington Canal Head), Storwood, Melbourne and Thornton, and Bielby. This appears to have been instead of tolls on mileage and thus did not require mile posts to be erected along the Canal. The absence of numberplates and boundary markers is also unusual, and appears to have been a peculiarity of the Pocklington Canal Company although one would expect there to have been a boundary marker at the confluence with the Derwent Navigation. In comparison the absence of bollards for slowing and mooring boats is more likely to comprise an actual loss rather than historical omission, with posts and mooring posts labelled on historic OS maps at Cottingwith Lock, Peacock Bridge, Dale's Bridge, Melbourne Arm, Coates Lock, Sandhill Lock, Giles Lock, and Silburn Lock.
- 2.6.3 The banks of the Pocklington Canal are unprotected by any form of masonry wall or sheet piling, which is likely a reflection of the low volume of traffic along the Canal and the fact that it was likely already in decline by the proliferation of powered boats in the mid to late nineteenth century which could otherwise have increased the risk of bank erosion. It was likely that reeds were planted to consolidate the banks at Pocklington Canal, although no records were located to confirm this.



Plates 16-17: Canal Head (left) and detail of ring cleat (right)



Plates 18-19: Former saw mill warehouse (left) and the PCAS Information Centre (right)



Plates 20-21: Bielby Wharf (left) and Melbourne Wharf (right)

- 2.6.4 The architecture of the Canal follows the standard forms common to the Canal Age, but with significant differences that have elevated them to national interest. Of interest is that the Pocklington Canal Company decided at a meeting in August 1815 not to appoint an architect for the work, instead relying on their engineer George Leather to design the structures with an architect only commissioned to inspect his work (Duckham 1973, 63).
- 2.6.5 Materials typically comprise handmade red brick (likely made at sites alongside the canal) with lime mortar and sandstone ashlar to coping, quoins and arches. Modern machine-made red brick and concrete have been used to make repairs at Hagg Bridge and in the alteration of swing bridges.

Wharfs

- 2.6.6 There are three principal canal wharfs along the Pocklington Canal at Canal Head (historically known as Street Bridge), Bielby and Melbourne. A wharf at East Cottingwith was actually part of the Derwent Navigation and pre-dates the construction of the Pocklington Canal. In addition there were several smaller wharfs including a wharf to the southwest of Walbut Bridge; a private wharf to the northeast of Church Bridge; and Gardham Wharf which likely acted as a coal wharf for a pumping house on the drains near Eller Carr.

Canal Head

- 2.6.7 Canal Head (**Plate 16**) has the greatest survival of historical features, including a brick lined and ashlar coped wharf with several surviving ring cleats for mooring boats (**Plate 17**). The wharf incorporated a long bay and a winding hole at its northern end for

turning boats. On the western side of the wharf lies a warehouse structure (**Plate 18**), now in private ownership and which historically formed part of a saw mill. On the western side of the Canal is the PCAS Information Centre, formerly known as the Piggery (**Plate 19**), which comprises a small single room structure with pitched tiled roof. Whilst the building appears to be of nineteenth century origin, it is not depicted on historical Ordnance Survey maps. It is however located in the vicinity of the first wharf warehouse and granary constructed in 1818 and may represent a surviving fragment of this complex.

Bielby

- 2.6.8 Bielby Wharf (**Plate 20**), in separate ownership, survives as an arm off the Canal which widens at its terminus, which is likely to have incorporated a winding hole for turning boats. The sides of the arm are overgrown but appear to be unsecured by any edging structure. Surrounding the arm is a good amount of level open space, although no evidence of wharfside structures remains. The wharf is likely to have principally served Bielby Mill which survives a short distance to the south as a private residence.

Melbourne

- 2.6.9 Melbourne Wharf is located along an arm of Pocklington Canal and has been converted into a marina. The sides of the arm have been reinforced with corrugated sheet piling with concrete coping into which are set a number of bollards (**Plate 21**). The arm has been widened in the 1970s to the east to increase the number of possible moorings. As at Bielby the arm is surrounded by an ample amount of level land, likely having facilitated storage of goods loaded onto and off boats. Although no original wharfside buildings survive there is a modern facilities building situated to the southeast of the Canal arm.



Plates 22-23: Minor wharfs at Walbut Bridge (left) and Church Bridge (right)

Other Wharfs

- 2.6.10 The locations of three small wharfs were illustrated on plans produced for the NER of the Canal based on drawings of 1815-47 (CRT archives, Leeds, ref. 55530 and 7597). These were located at Walbut Bridge (**Plate 22**), northeast of Church Bridge (**Plate 23**), and Eller Carr towards East Cottingwith. It is possible that there were other wharfs in use at different times for which no record was found. The wharfs at these locations are overgrown and exhibit no readily appreciable evidence of their former use.

Bridges

Road Bridges

- 2.6.11 There are four road bridges across (all Grade II Listed) the Pocklington Canal,

representing the most visible built structures along the route. These were all constructed in the narrow-waisted, humped-back design so common of the era, their wing walls featuring a gently curve to both elevation and plan.

- 2.6.12 The principal structure of Coate's Bridge, Church Bridge (**Plate 24**) and Walbut Bridge was of brick with broad ashlar basket arch, rounded ashlar coping and plain ashlar string course at parapet level. Brickwork is of handmade red bricks laid in English Wall bond (alternating rows of headers and stretchers) with lime mortar bed. In addition to these architectural features the bridges also feature segmental brick buttresses with rounded stone caps either side of the arch, and newel posts at the end of each parapet which are of square in section on Coate's Bridge and Walbut Bridge, and circular in section at Church Bridge.
- 2.6.13 Hagg Bridge (**Plate 25**) diverges from this pattern, comprising similar basic form and materials put with a fenced parapet, square pilasters and no newel posts. Brickwork is in a similar handmade red brick to the other bridges along the Canal, however it is laid to an irregular England Garden Wall bond. Furthermore the bridge extends with an additional span to the north with an ashlar semi-circular arch (**Plate 26**). This was the first bridge to be built on the Canal, and its different style suggests that a standard design had not been arrived at by the date of its construction. It also possibly incorporates elements of an earlier bridge structure, the original Hagg Bridge across The Beck, with the proposed plans of 1815 showing the Canal passing this bridge just to its south.
- 2.6.14 All the bridges have seen some degree of alteration in terms of reconstruction work to the parapets and extensive picking out and repointing. This work has on the whole been sensitively undertaken, except for the reconstruction of the southeast wing of Hagg Bridge which has been rebuilt by the Local Council in a modern red brick.



Plate 24: Church Bridge



Plate 25: Hagg Bridge



Plate 26: Hagg Bridge, northern span over The Beck.

Accommodation Bridges

- 2.6.15 Unfortunately there are few records that survive that record the form of original accommodation bridges along the route of the Canal. It is recorded in historical records that accommodation bridges were swing bridges, but no original structures remain to identify their form. The only potential remnants of the original swing-bridges are the abutments to the east of East Cottingwith Lock at the bottom of Canal Lane (HA 39; **Plate 27**). These remains comprise two abutments constructed of brick with ashlar coping stones with chiselled margins and pecked face. The corners of the abutments curve in plan.
- 2.6.16 A survey of transverse and longitudinal sections through the Canal in 1859 illustrated the side elevation of no.2 swing bridge at Gardham Lock (**Plate 28**; then known as Luddington Lock; Grade II Listed). The bridge is illustrated as possessing a timber bed with warren lattice parapet. No details of the swing mechanism are shown.
- 2.6.17 A photo taken of no. 7 Swing Bridge c.1909 (**Plate 31**) shows the bridge at the time as comprising a timber lattice parapet with two posts support suspension wires. A gate is also possibly visible between the posts.
- 2.6.18 The accommodation bridges were likely rebuilt in the late 1920s, and then completely removed and fixed bridges installed in the 1960s. Subsequently Bridge no.5 (**Plate 29**)

was raised in the 1970s by PCAS on embankments to allow boat passage, and the remaining fixed bridges were replaced with swing bridges between 1970 and 1995 (**Plate 30**). The current swing bridges are of steel construction and partly reuse the original abutments, although with moderate alterations in concrete.



Plate 27: Remains of former accommodation swing bridge (HA 39)

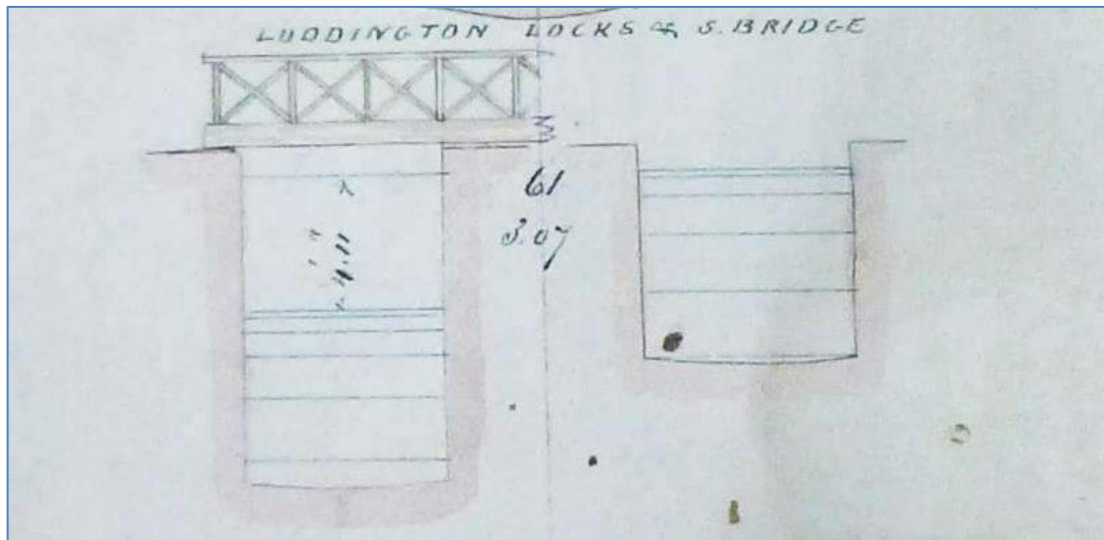


Plate 28: Profile of no.2 Swing Bridge at Gardham Lock from survey in 1859 (CRT archives, Leeds, ref: 7453)



Plates 29-30: Bridge no. 5 and Bridge no. 1



Plate 31: Image of Dales Bridge (Swing Bridge No.7), taken c. 1909



Plate 32: Walbut Lock

Locks

2.6.19 The locks along the Canal (all Grade II Listed) are all broadly of similar construction, although small differences existing in the fabric of the structures and wider differences in the form of the locks. The essential structure of the Canal chamber comprises four skin thick brick built walls with curving wing walls at either entrance (**Plates 32-33**). The sills of the gates are formed from shaped ashlar blocks, and there appears to be an ashlar foundation course to the chamber walls which likely rests on timber piles. The coping along the walls is formed of substantial ashlar blocks with chiselled faces which descend in steps along the lower wing walls. Lead fixed iron staples are used to fix the coping. Recesses with ashlar quoins are situated within either end of the chamber walls to accommodate the gates, and the quoins are shaped at the point where the heel post of each gate sits.

2.6.20 There is evidence on a number of locks for timber bumping pieces set vertically within

recesses in the chamber walls and approach walls of the lower wing walls. These would have served to protect the brickwork of the chambers against damage from boats striking the structure. In numerous cases these have been bricked in, although they are clearly visible at the Top Lock (**Plate 34**). Within a number of chambers, modern steel ladders have also been installed (**Plate 35**).

- 2.6.21 A culverted by-wash channel runs along the side of most of the locks lock with a low rectangular weir in the upper wing wall (**Plate 36**), and a low rectangular or circular outfall in the lower wing wall (**Plate 37**).
- 2.6.22 Paddle gear varies along the course of the Canal, likely reflecting piecemeal repairs and replacements during the Canal's operational lifetime. At Top Lock, Silburn Lock, Giles Lock, Sandhill Lock, Coates Lock and Walbut Lock there is ground paddle gear at the upper locks with the majority comprising rack and pinion gearing mounted on cast iron stanchions operating a rising shuttle below water level (**Plate 38**). At Giles Lock, Silburn Lock and Sandhill Lock the gearing was mounted on wooden posts (**Plate 39**), which appears to have been the original design for the upper six locks.
- 2.6.23 Where the lower lock gates are in place on Top Lock, Walbut Lock, Gardham Lock and East Cottingwith Lock there are gate paddle gear comprising cast iron stanchions with six spoke wheel turned rack and pinion gear (**Plate 40**). This design of gear is very similar to the potentially later ground paddle gear discussed above, and may be of a similar date. This gearing mechanism is thought to be unique to the Pocklington Canal and forms an important part of its modern character. In the recent past PCAS have commissioned the production of replicas in refurbishing the locks.
- 2.6.24 Other variations in paddle gear comprise the gate mounted boxed paddle gear on both the upper and lower gates of Gardham Lock (**Plate 41**), and the hydraulic paddle gear systems to the lower gate at East Cottingwith Lock and on both gates at Thornton Lock.



Plate 33: Silburn Lock



Plates 34-35: Evidence for bumper pieces in Top Lock (left) and modern ladder in East Cottingwith Lock.



Plates 36-37: Example of square profile (left) and circular (right) outfalls from by-washes at Walbut Lock and Silburn Lock.



Plates 38-39: Ground paddle gear at Top Lock (left) and Sandhill Lock (right)



Plates 40-41: Gate paddle gear at Cottingwith Lock (left) and Gardham Lock (right).

Culverts

- 2.6.25 Prior to the construction of the Pocklington Canal, The Beck followed a meandering line from Pocklington to the Derwent at East Cottingwith. The Beck has several names as it moves through the landscape, being known as Pocklington Beck, Bielby Beck, Black Drain, and The Beck. All these are referred to here as “The Beck” in the interests of clarity.
- 2.6.26 The Pocklington Canal is principally fed from The Beck at Canal Head. The culvert serving the Canal is shown on a plan of the buildings in the area in 1909 as drawing water from both the beck and the tail race of the water powered bone mill to the north (**Plate 42**). The culvert then runs beneath the Hull to York road and enters Canal Head at its northernmost end. The Canal roughly followed the line of The Beck and whilst much of its route was straightened, it was necessary for the Canal to cross it at one point between Walbut Bridge and Thornton Lock.

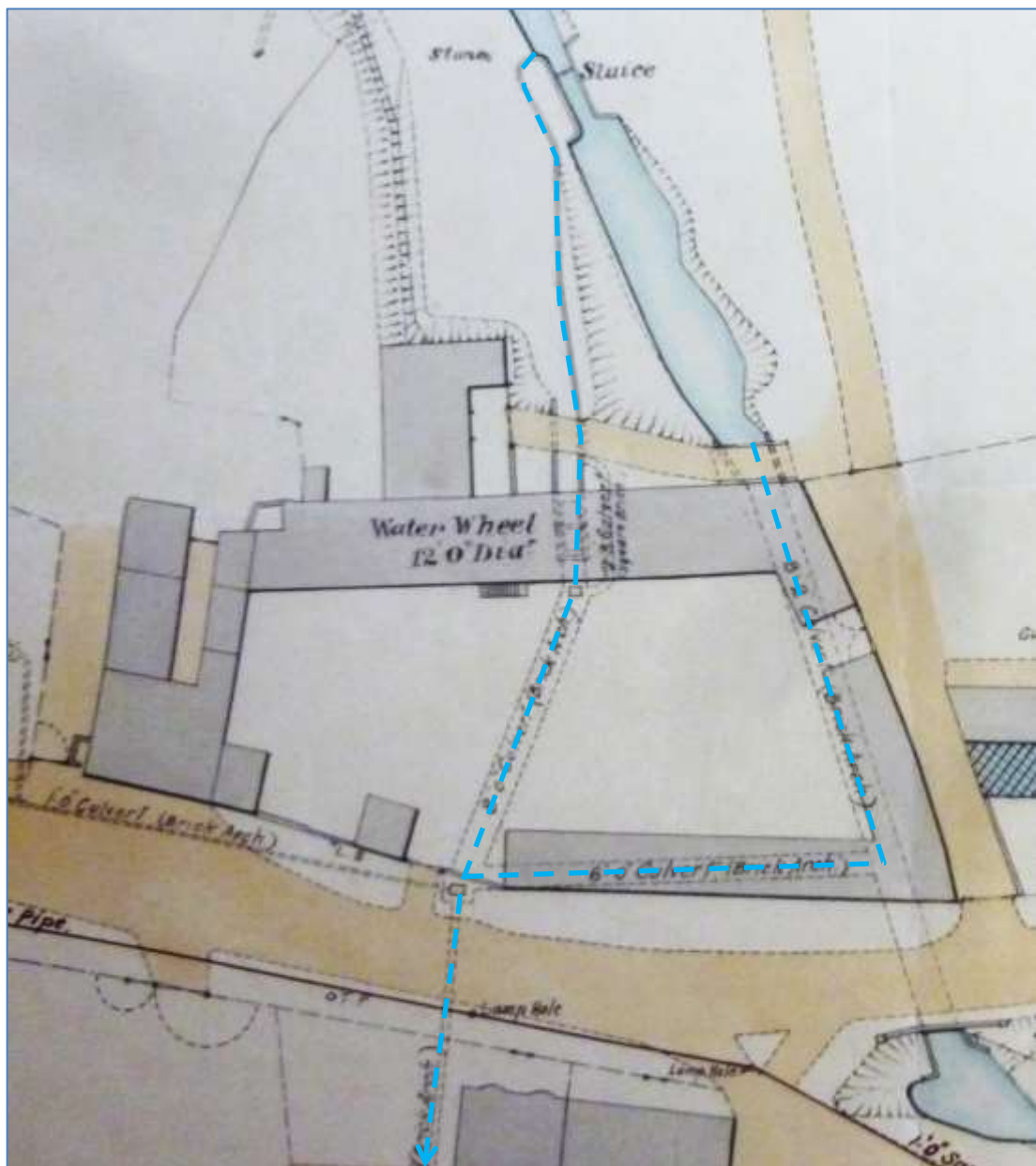
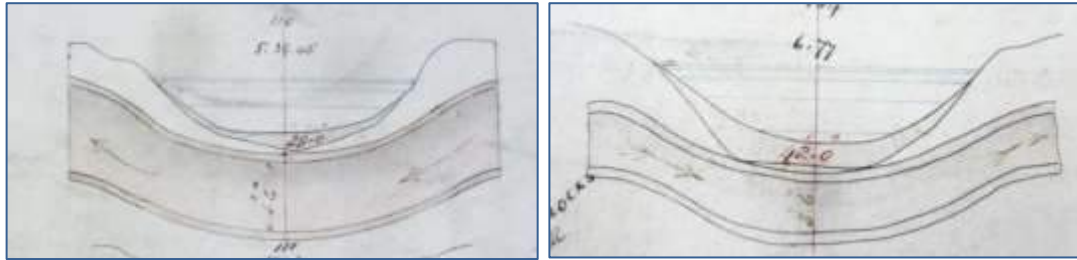


Plate 42: Route of the feeder culvert from Pocklington Beck to Canal Head in 1909 (CRT archives, Leeds, ref: 7522)

- 2.6.27 In total there are nine culverts associated with the Canal, one providing water at Canal Head from Pocklington Beck (HA 1), one carrying the Canal over The Beck (HA 18), and seven carrying minor drains and streams under the Canal (HA 9, 12, 27, 32, 34, 37 and 38).
- 2.6.28 In principal the structure of the culverts is largely the same, comprising a brick arched channel with arched brick built wing walls at either entrance with plain ashlar coping (Plates 43-46). Variations include the culvert that carries the Canal over The Beck (HA 18) which possesses an ashlar arch. In addition, it was not possible to view three culverts, comprising HA 9, 32, and 37 as their entrances lay within private land.



Plates 43-44: Sections of culverts beneath the Canal in 1859, showing The Beck (HA18) and Mossick Dike (HA12) (CRT archives, Leeds, ref: 7453)



Plates 45-46: Culvert entrances, showing The Beck (HA18; left) and Black Drain (HA27; right)

Lock House

- 2.6.29 There is a single non-designated Lock House situated on Pocklington Canal (HA 3; Plates 47-48), situated adjacent to the Top Lock near Canal Head. The house was purpose built as a lock house between 1815 and 1818 and was initially occupied by Mark Swann, the first lock keeper and toll collector on the Canal. The building is now in private ownership but retains an important relationship with the Canal.
- 2.6.30 The building is of rendered brickwork, formed of two storeys with hipped pantiled roof with two chimney stacks, one on the ridge stack and one on the northern gable. A single storey lean-to runs along the western elevation. The building forms three bays to its eastern elevation with central ground floor door flanked by small paned sash windows. On the first floor there is a single central sash window with blind windows to either side. In the south elevation there is a canted bay window with hipped leaded roof to the ground floor with sash centred above on the first floor. Windows in the western elevation are small and less ordered.



Plates 47-48: Lock Keepers Cottage (HA 3)

2.7 Current Management Arrangements

Cultural Heritage

2.7.1 The Canal is currently principally owned and managed by the Canal & River Trust (formerly British Waterways). The Bielby Arm is the only part of the Canal in private ownership.

2.7.2 The Trust undertakes a policy of inspection, comprising:

- Length Inspectors – Inspect canal and all structures once a month to highlight any defects and check for any change in condition.
- Annual Inspection – Once a year an engineer will visit each canal and structure to determine the causes of any defects, consider consequences and determine priorities.
- Principal Inspections – Carried out around every 10 years only to principal structures to do a more thorough inspection and assess the grading for each structure.

2.7.3 The Trust carries out Planned Preventative Maintenance to principal structures approximately every six months. This is very basic maintenance to ensure the structures are operating correctly and to try and prolong the structures life expectancy. Other works are carried out on a priority basis as resources and time is available.

2.7.4 Ad hoc works proposed by Trust are notified to, and assented by Natural England and Historic England (where required) on a case by case basis. Examples of such works in recent years include Lock refurbishment at East Cottingwith, repairs to a by-wash at Gardham Lock and the installation of additional wharf moorings adjacent to locks and swing bridges.

2.7.5 In 2009 a Heritage Partnership Agreement (HPA) was formed between British Waterways, English Heritage (now Historic England) and East Riding of Yorkshire Council to facilitate a consistent high standard approach to the management of heritage structures along the Pocklington Canal. This was reviewed in 2015.

2.7.6 Restoration work has historically been largely funded through private donations and fundraising by the Pocklington Canal Amenity Society, who play an active part in the Canals maintenance and restoration through their Working Group.

Natural Heritage

- 2.7.7 The Canal is currently managed under a variety of arrangements and agreements.
- 2.7.8 As with the Trust’s project works, much of the routine maintenance undertaken by the Trust is carried out with assent from Natural England under the terms of the Wildlife and Countryside Act 1981 (as amended). Routine operations include towpath grass cutting, annual maintenance of locks and swing bridges. At present much of this follows the Trust’s Towpath Mowing Guidelines (2007) (See **Figure 33** for current specification). However, towpath management is in the process of being reviewed by the Trust and Natural England, with a view to identifying opportunities to enhance biodiversity and enhance the visitor experience. Further information on this is provided in section 6.
- 2.7.9 Specific works to improve the site’s nature conservation are also undertaken by the Trust both under their own auspices and under the terms of a Conservation Enhancement Scheme with Natural England. These works have to date included activities such as tree and scrub removal and in-channel vegetation clearance. However, funding constraints means that the quantity of work able to be undertaken in any year is limited.
- 2.7.10 In addition to the Trusts operations, works and activities are also undertaken or organised by the Pocklington Canal Amenity Society (PCAS). These works include conservation works (both built and natural heritage) undertaken by volunteers and the operation of a weed cutting boat. As with the Trusts works, Natural England issues consent for these activities under the Wildlife and Countryside Act (as amended) on an individual project basis. Recent activities have included scrub clearance, bank stabilisation and in channel weed cutting.
- 2.7.11 All assents and consents issued under SSSI legislation take account of the SSSI interests in order to ensure that proposals do not result in detriment to the Canal’s interest features. Furthermore works are assessed under the Habitat Regulations (2010) in order that there are no adverse impacts upon the internationally recognised interest features. Any proposals resulting from this management plan will be subject to such assessments.

2.8 Overview of Current Condition

Cultural Heritage

- 2.8.1 A detailed condition survey was carried out of the study area, including an assessment of the heritage value of the Canal and associated structural and earthwork features. The condition was based upon HBSMR categories (REP93) (**Table 2**) and Heritage at Risk were defined, as well as the overall trend of the condition based upon observed impacts.

Table 2: HBSMR Condition Categories

| Condition | Definition |
|-----------|--|
| Good | All or nearly all features of interest are well preserved for the period they represent. No sign of active damage. |
| Fair | Some damage or part destruction of features of interest apparent, or some features of interest are obscured by more recent additions/alterations. For buildings, indicates structurally sound, but in need of minor repairs. |

| Condition | Definition |
|-----------|---|
| Poor | Damage to the majority of the original features of interest is apparent, some significant features are missing. Some features of interest remain. Active damage apparent (e.g. for buildings water penetration, rot etc). |
| Very Bad | The majority of features of interest are so damaged as to be not surveyable or are missing. For buildings, this indicates structural failure or evident instability, loss of significant areas of roofing, or damage by a major fire or other disaster. |
| Uncertain | Features of interest can not be investigated at the time of the assessment for any reason, e.g. obscured by cloud-cover, vegetation, ongoing building work, below ground services etc or the site could not be found. |
| destroyed | All features of interest have been destroyed. No further information can be gained from future investigation of the site. Includes demolished buildings unless foundations, basements etc. exist which are of interest, for which use very bad. |

- 2.8.2 The Canal is currently classed as a Remainder Waterway, however, the Canal remains watered and approximately half the Canal is now navigable. As a result of the large stretch of the Canal from Canal Head to Melbourne which is no longer navigable and the condition of the Locks located towards Canal Head the overall condition of the Canal is considered to be poor. The Canal has been partially restored (between East Cottingwith and Melbourne) by the Pocklington Canal Amenity Society and in these locations the condition of the Canal is considered to be fair. Overall the route can be broadly considered as generally satisfactory but with significant localised problems.
- 2.8.3 The maintenance of the Canal by the Pocklington Canal Amenity Society and the Canal & River Trust has established a level of stability to the condition of the Canal and its heritage assets; although issues with vegetation, weathering, water ingress, water availability and debris represent a threat to the historical structures and buildings along the route. Whilst inappropriate historical repairs to bridges and other structures may also result in further loss of historic material.
- 2.8.4 The structural condition survey identified a total of 42 heritage assets along the route of the Canal ([Appendix II: Table 9](#)). Of these heritage assets a total of 9 were considered to be in a stable condition, 19 were considered to be in satisfactory condition with minor localised problems, 7 were considered to be in generally satisfactory condition with significant localised problems and 2 were considered to be in unsatisfactory condition with major localised problems. The condition of 5 of these heritage assets could not be ascertained.
- 2.8.5 Of the 42 identified heritage assets 16 were classed as in a declining trend and 21 were classed as stable. The trend for 5 of the heritage assets could not be ascertained during the survey. Of these features the majority are suffering structural decline as the result of water ingress and vegetation growth.
- 2.8.6 The stability and trend for the 13 Listed Buildings situated in the study area is summarised in [Table 3](#) below. Of these 6 were considered to be in a declining trend. Whilst none of the Listed Buildings have been included within the Heritage at Risk Register, it is considered that those assets in very bad condition with declining trend would meet the requirements of being classed as ‘at risk’. These are highlighted in red in the table below.

2.8.7 Due to the maintenance undertaken by the Pocklington Canal Amenity Society and the Trust and the continued use of the western stretch of the Canal as a navigable route, approximately 50% of the heritage assets are considered to be stable.

Table 3: Condition Survey Results for Listed Buildings

| Heritage Asset | Survival | Condition | Heritage at Risk Code* | Trend |
|----------------------------------|----------|-----------|------------------------|-----------|
| HA4 Top Lock and Canal Head | Fair | Fair | 3 | Stable |
| HA5 Silburn Lock | Poor | Very bad | 2 | Declining |
| HA6 Giles Lock | Poor | Very bad | 2 | Declining |
| HA8 Sandhill Lock | Poor | Very bad | 1 | Declining |
| HA10 Coates Lock | Poor | Poor | 3 | Declining |
| HA11 Coates Bridge | Fair | Fair | 3 | Stable |
| HA15 Walbut Lock | Fair | Poor | 2 | Declining |
| HA16 Walbut Bridge | Fair | Good | 3 | Stable |
| HA19 Thornton Lock | Fair | Fair | 3 | Stable |
| HA22 Church Bridge | Good | Fair | 3 | Stable |
| HA30 Gardham Lock & Swing Bridge | Fair | Fair | 3 | Declining |
| HA33 Hagg Bridge | Fair | Fair | 4 | Stable |
| HA40 Cottingwith Lock | Fair | Good | 3 | Stable |

* Heritage at Risk codes: 1 = Generally unsatisfactory with major localised problems. 2 = Generally satisfactory but with significant localised problems. 3 = Generally satisfactory but with minor localised problems. 4 = Stable. 5 = Unknown.

Natural Heritage

2.8.8 Like many canals in England designated on account of their nature conservation interest (**Appendix II: Table 10**), much of the Pocklington Canal is currently assessed as being in unfavourable condition.

2.8.9 An assessment of the upper non navigable upper reaches of the Pocklington Canal in 2010² indicated that the non navigable sections of the Canal were in unfavourable declining condition. Reasons contributing to the unfavourable conditions included; excessive shading of the channel by trees and scrub (**Plate 49**), the presence of filamentous algae, and the low species diversity of the associated plant communities.

2.8.10 Of particular concern was the decline in aquatic macrophytes (larger plants). This decline in species diversity was documented in Brickland and Silver (2004) and further evidence of a decline in plant diversity within the non-navigable sections was provided by Goulder (2014).

² [https://designatedsites.naturalengland.org.uk/ReportUnitCondition.aspx?SiteCode=S1001799&ReportTitle=POCKLINGTON CANAL](https://designatedsites.naturalengland.org.uk/ReportUnitCondition.aspx?SiteCode=S1001799&ReportTitle=POCKLINGTON%20CANAL) based on the 2007 survey (Scott Wilson 2008)



Plate 49: A heavily shaded section of the Canal, note lack of aquatic plants in channel. (S. Christian – Natural England)

- 2.8.11 Goulder surveyed sections of the Canal in 2002 and repeated the survey using the same methodology in 2013. The results showed a continued decline in species diversity within the non-navigable Canal, over the ten year period. Within the non-navigable section, 10 species were not seen in 2013 that were found in the 2002 survey and no new species were found in this section. In contrast to this, from 2002 to 2013 in the navigable section only one species was not re-found and 12 additional species were noted in 2013.
- 2.8.12 In addition, Goulder's results indicated that the navigable section of the Canal was more diverse than the non-navigable section: 27 species of aquatic plants were recorded in the non-navigable canal compared to 44 species in the navigable canal. This is a reversal of the situation prevalent at the time of notification; both the 1986 and 1990 surveys indicated the non-navigable section to be more diverse. The decline in species demonstrated graphically, **Plates 50-51**.
- 2.8.13 Both the 2007 botanical survey and Goulder's surveys also failed to find many of the rarities previously recorded on the Canal. In 2013 *Potamogeton friesii* was the only nationally scarce species recorded.

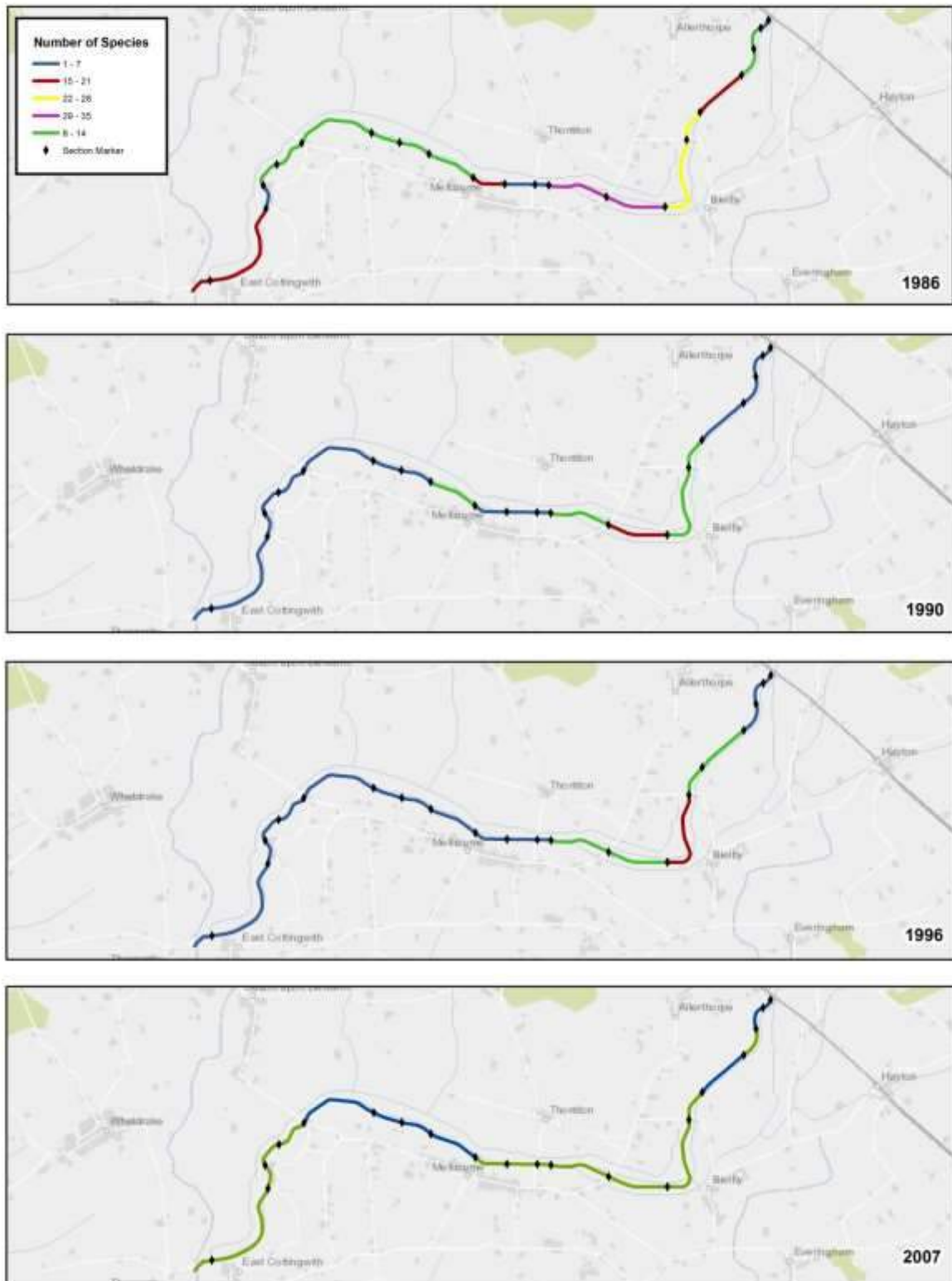


Plate 50: Emergent Vegetation diversity on the Pocklington Canal

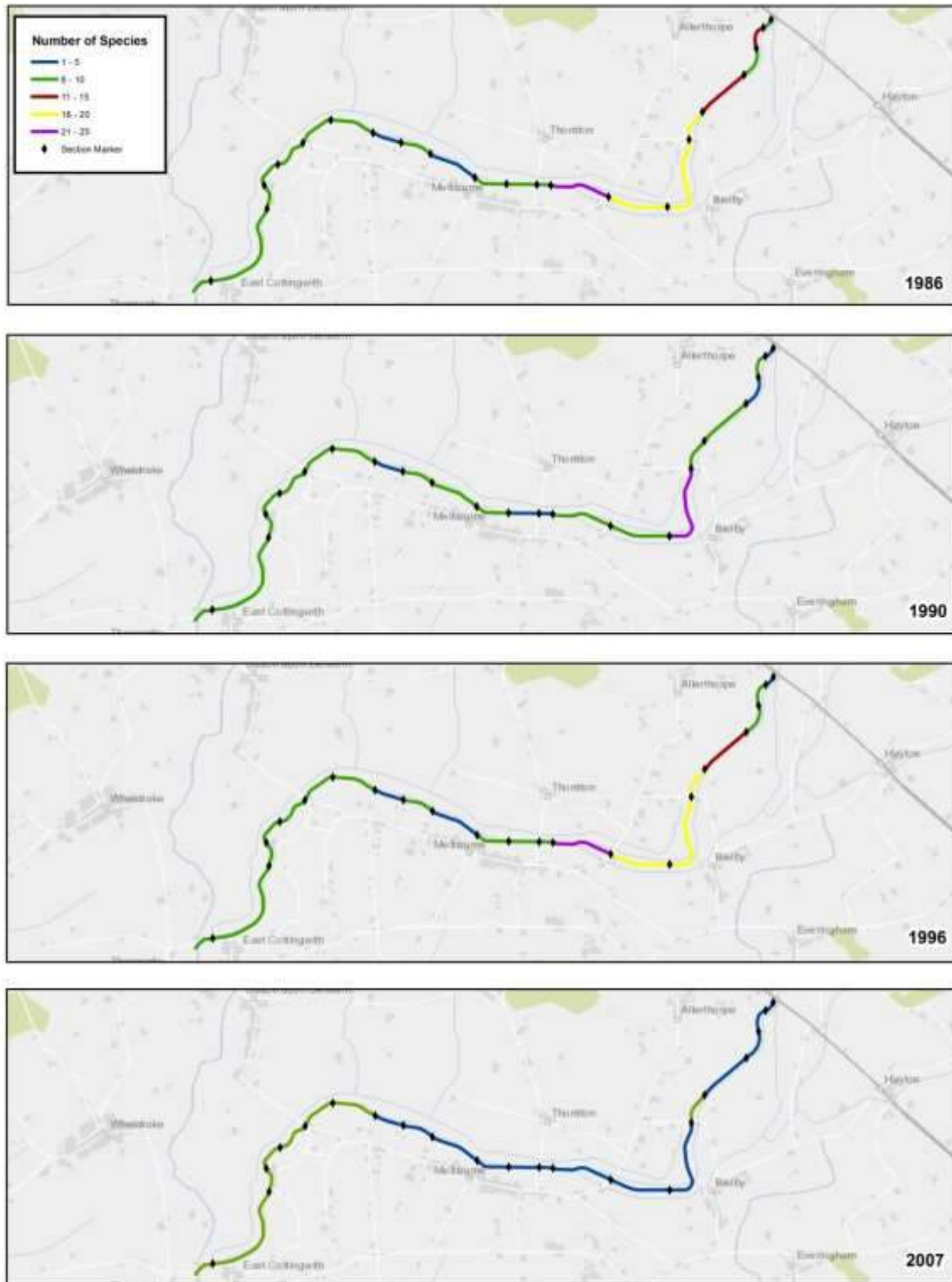


Plate 51: Aquatic Vegetation diversity on the Pocklington Canal

2.8.14 Although shading was identified as an issue in the 2010 assessment and clearly contributes towards reduced aquatic plant diversity, it should be noted that many sections of the non-navigable section were shaded at the time of notification. Both Tolhurst (1987) and Head (1991) reported a greater degree of shading in this part of the Canal than in the navigable section.

Consequently whilst shading undoubtedly contributes to the lower diversity, and has increased since notification of the various SSSIs, it is clearly only one factor determining the decline in aquatic plant diversity within the navigable section of Canal.

- 2.8.15 In addition to shading, Goulder (2014) also drew attention to trends in succession taking place within the Canal, with areas of previously open water now becoming colonised by emergent species. Although a valuable component of the community, if left unchecked emergent species can outcompete the truly aquatic plants. This is particularly apparent in stretches of the Canal downstream of Walbut Lock (**Plate 52**).



Plate 52: Emergent vegetation (Common Reed) dominating channel in Walbut Lock to Thornton Lock section.

- 2.8.16 This section has historically supported some of the most diverse plant communities on the Canal, however in recent years this stretch of the Canal has become dominated by common reed (*Phragmites australis*). These observations are illustrated by **Plate 50**. This is not the only section of canal experiencing this problem and it is considered that successional trends are a significant threat to plant diversity in the non-navigable section.
- 2.8.17 The sections of canal that pass through Melbourne and Thornton Ings were also judged to be in unfavourable condition on account of aquatic plants at the time of the 2007 survey. Once again shading, presence of filamentous algae (**Plate 53**) and low species diversity being the attributes failed. That said, it should be noted that this section of Canal has historically been shaded and supported a less diverse flora than other stretches of the Canal. Consequently, this historic situation will need to be reflected when the targets for favourable condition on this section of Canal are next reviewed by Natural England.



Plate 53: Section of Canal near Melbourne showing excessive growth of filamentous algae (Natural England (Scott Wilson 2007))

2.8.18 The 2010 assessment indicated that phosphate levels were within accepted parameters for favourable condition within all units associated with the non-navigable section. The Canal was however, judged to be in unfavourable condition on account of the presence of filamentous algae. Excessive growths of filamentous algae can result in the competitive exclusion of submerged aquatic species and a decline in overall species diversity. The presence of excessive filamentous algae is often an indication of eutrophication. Further evidence of eutrophic conditions was also provided by Hyder (2013), which reported high nitrate levels. Consequently, there remains a concern relating to water quality and several studies (e.g. Jacobs 2008) suggest that diffuse pollution is a major factor. It should also be noted that spot samples undertaken by Ecus in 2015 indicated high levels of phosphates, particularly at Canal Head where levels were ten times higher than that recorded in 2010. If this were a typical reading this would also indicate either diffuse pollution or unknown point sources of pollution. Further consideration to the vulnerabilities of the Canal with respect to water quality is given in Section 4.

2.8.19 On a positive note stretches of the Canal within the navigable section where it flows through the Derwent Ings SSSI (Unit 117) were judged to be in favourable condition in 2012 with diverse aquatic and emergent plant communities³. Species such as Flowering rush are common (**Plate 55**). Here the Canal flows through agriculturally unimproved floodplain meadows which receive limited amounts of fertilizers and herbicides, and the nearest feeder (at Thornton Lock) is some distance upstream

³ <https://designatedsites.naturalengland.org.uk/ReportUnitCondition.aspx?SiteCode=S1002114&ReportTitle=DERWENT%20INGS>

perhaps resulting in better water quality within the Canal at this point. There is also limited shade and the low levels of navigation and channel maintenance keep succession in check (**Plate 54**)



Plate 54: Pocklington Canal at Storwood Ings. An open unshaded channel with good aquatic and emergent plant diversity. (S. Christian – Natural England)



Plate 55: Flowering rush, an abundant emergent plant in vicinity of Storwood, water lilies in background (S. Christian – Natural England)



Plate 56: Banded demoiselle; one of 15 species of dragonflies and damselflies found on the Canal (Natural England)

- 2.8.20 The assessment of condition has so far only considered plant interest. As stated previously the Canal is also recognised for its bird and invertebrate interests. Little systematic assessment has been made of these interest features in recent years. That said, the British Dragonfly Society (Yorkshire Branch) report 14 species regularly occurring along the Canal, and Weston (2004) recorded 15 species (**Plate 56**). This compares with the 12 species reported at the time of notification. It is considered that in northern England a site supporting 10 species of dragonflies would be considered an outstanding dragonfly assemblage (JNCC 1996). It is thought likely, therefore, that the dragonfly and damselfly populations associated with the Canal would be considered in favourable condition. However, it is interesting to note that Weston (2004) also reported lower numbers of individual dragonflies on the non-navigable section perhaps suggesting that the shading and successional trends reported earlier were also impacting upon the dragonfly populations. Additional survey work would be required before firm conclusions could be made. Natural England will be undertaking this as part of future SSSI condition assessments.
- 2.8.21 No detailed species survey work on wider invertebrate populations is available for any of the SSSIs since the time of notification. SSSI condition for invertebrate assemblages is now assessed on a number of key habitat attributes and judging whether there is sufficient habitat to support an important assemblage (JNCC 2008). This will be incorporated into future SSSI condition assessments undertaken by Natural England. Although incomplete, the 2010 assessment of the non-navigable section of the Canal again identified shading and eutrophication as potential threats to the invertebrate assemblage.
- 2.8.22 There is no recent survey work for breeding or wintering birds associated with the non-navigable section of the Pocklington Canal. Consequently it is not possible to attribute a condition assessment of the bird populations associated with this section. Charismatic species such as barn owl and kingfisher (**Plates 57-58**) are however known to breed in the vicinity of the Canal. Full surveys will be commissioned to inform future SSSI condition assessments.



Plates 57-58: Barn Owl (left) and Kingfisher (right) (Natural England)



Plate 59: Curlew one of several species of wading birds associated with meadows adjacent to the Pocklington Canal (T. Weston - Natural England)

- 2.8.23 A breeding bird survey of those species associated with wet grasslands and open water within Melbourne and Thornton Ings was undertaken in 2014. This indicated that the SSSI supported a diverse breeding bird community associated with these two habitat types. It is not however possible to make comparisons with the variety of species bird criteria under which the Melbourne and Thornton Ings SSSI was notified (NCC 1983).
- 2.8.24 A full condition assessment has been undertaken for the breeding, wintering and passage birds associated with the Derwent Ings SSSI (Christian 2015, unpublished report in prep). This indicated that bird features of the SSSI were in favourable condition, but a threat was identified relating to a decline in breeding wader species.
- 2.8.25 The breeding birds associated with the Pocklington Canal within the SSSI obviously contribute to this favourable condition. It is however important to note the threat associated with breeding waders (**Plate 59**). One of the possible reasons put forward for this decline is recreational human disturbance.
- 2.8.26 In summary there are concerns about the condition of the SSSI with respect to its aquatic plant communities (**Table 4**). There are also potential issues relating to dragonfly assemblage. It is proposed that significant SSSI improvement works will be undertaken on the Canal in order to restore the Canal to favourable condition and

improve nature conservation interests, subject to appropriate funding being secured..

2.8.27 The possible threat posed to breeding waders should also be noted in order that proposals associated with other aspects of the HLF bid do not contribute to this threat.

Table 4: Summary of Condition of SSSIs

| Area | Condition | Trend | Negative Failure |
|----------------------------------|--------------|------------------|--|
| Pocklington Canal SSI | Unfavourable | Declining | Shading Water quality Succession |
| Melbourne and Thornton Ings SSSI | Unfavourable | Stable/No Change | Water quality Shading |
| Derwent Ings SSSI | Favourable | Improving | n/a |

2.9 Gaps in Understanding

Cultural Heritage

2.9.1 As part of this assessment, the following gaps in the understanding of Pocklington Canal have been identified.

- The full extent of survival of the fabric of Heritage Assets HA1, HA9, HA29, HA32 and HA37 is unknown due to restricted access and/or visibility.
- The survival of archaeological remains relating to wharf buildings at Canal Head within the vicinity of the picnic area and PCAS Information Centre.
- It is not known whether earlier elements of the post-medieval Hagg Bridge across The Beck have been incorporated into the Canal bridge of 1815.
- The arrangement of the feeder culvert (HA 1) in relation to the former water management system of the Bone Mill is not fully understood in terms of either its historical or current status.
- Possibly survival of abandoned keels / barges in canal as an important survival of boats that used to work the Canal (e.g. shown on 1950's photo)

Natural Heritage

2.9.2 The decline in aquatic plant diversity maybe partially attributed to shading and succession trends, however, water quality issues are still a cause for concern. The Canal has two feeders one at Canal Head and one at Thornton Lock. Jacobs (2008) suggested three possible sources of nutrient enrichment into the Canal; agricultural runoff, the Pocklington Sewage Treatment Works and the Melbourne Sewage Treatment Works (STW).

2.9.3 The influence of the Pocklington Sewage Treatment Works discharge is well understood, however, the effect of the Melbourne Sewage Treatment works needs further clarification. Williams 2010 concluded that there was no discharge to the Canal and map based investigations undertaken as part of this management plan support this conclusion. It appears the sewage works discharges into Hoplecarr Drain which in turn feeds the Bielby Beck downstream of the Thornton feeder. However this map based assessment requires ground truthing to confirm that discharges from the Melbourne STW do not enter the Canal. Given the high phosphates level reported in

2015 further investigations into sources of agricultural runoff either through field drains or other pathways should be undertaken through catchment walkovers and wet weather sampling. Investigations into other combined sewage outfalls (CSOs) within the catchment should also be undertaken.

- 2.9.4 Comprehensive surveys of SSSI features other than aquatic plants have not been undertaken in recent years. Consequently collation of existing data and commissioning of new surveys of invertebrates and bird features are required to inform future SSSI condition assessments.

3. Statement of Significance



Walbut Lock (HA 15) and Walbut Mill Farm

3.1 Introduction

3.1.1 The following statement of significance considers criteria for determining cultural and natural heritage significance broadly covered by five values⁴, comprising:

- **Evidential value:** derives from the potential of a place to yield evidence about past human activity. Considers age/period, rarity, survival/condition, diversity, and potential of the site.
- **Historical value:** derives from the ways in which past people, events and aspects of life can be connected through a place to the present. It tends to be illustrative or associative. Considers documentation, wider context, regional factors, and group value of the site.
- **Aesthetic value:** derives from the ways in which people draw sensory and intellectual stimulation from a place. Considers architectural and artistic merit, selectivity, and national interest of the site.
- **Ecological value:** derives from the importance of a particular habitat or site to nature conservation, based upon notable or protected plant or animal species present, or the general diversity of the species found there.
- **Communal value:** deriving from the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory. Communal values are closely bound up with historical (particularly associative), ecological and aesthetic values, but tend to have additional and specific aspects. It can also relate to the amenity value of a building or landscape.

⁴ Based on national guidance documents, including: the Department of Culture, Media and Sport's Principles of Selection for Listed Buildings (2010a) and Scheduled Monuments (2010b); and Historic England's Conservation Principles (2008) and designation selection guides for Transport Sites (2012) and Transport Buildings (2011)

Levels of Significance

- **National:** Aspects of the site considered as seminal to the archaeological, historic, architectural, artistic or natural environmental significance of the site, the alteration or development of which would destroy or significantly compromise the integrity of the site.
- **Regional:** aspects that help to define the archaeological, historic, architectural, artistic or natural environmental significance of the site, without which the character and understanding of place would be diminished but not destroyed.
- **Local:** aspects which may contribute to, or complement, the archaeological, historic, architectural, artistic or natural environmental significance of the site but are not intrinsic to it or may only have a minor connection to it, and the removal or alteration of which may have a degree of impact on the understanding and interpretation of the place.
- **Unknown:** aspects where the significance is not clearly understood possibly because it is masked or obscured and where further research may be required to clarify its significance.
- **None:** aspects which may make a negative contribution or a neutral contribution where it would make no difference to our understanding or interpretation of the place.

3.2 Overall Significance

- 3.2.1 Pocklington Canal is considered to be of regional to international significance owing to the international importance of its natural environment, the nationally important architectural value of its locks, bridges and surroundings, its regionally important historic value in the economic development of the region and its regional value as a focus for social history and tourism.
- 3.2.2 The Canal includes three Sites of Special Scientific Interest, a Special Protection Area, a Special Area of Conservation (SAC), a Ramsar Site, a Local Wildlife Site, and 13 Listed Buildings.

3.3 Assessment of Values

Evidential Value

- 3.3.1 The evidential potential of the Pocklington Canal principally derives from its potential to provide evidence about the construction and use of the Canal, and the lives of those individuals and businesses that used it.
- 3.3.2 The locks and swing bridges along the route of the Canal have seen significant alterations during their lifetimes, with many retaining very little of their original fabric or operational components. It is to be anticipated that further evidence relating to the construction, repair and adaptation of these heritage assets will remain behind or encased within the extant structures. The value of such evidence is significant owing to the national interest of the locks and the general lack of historical documentation relating to their construction.
- 3.3.3 Whilst the locks have seen piecemeal or total repairs to their chamber walls, and have all had their lock gates replaced, the ashlar components have generally been retained and certain elements in the form of anchor collars and paddle gear do survive in

places. The partial survival of early paddle gear within the ruinous upper locks of Silburn, Sandhill and Coates is of particular value. The evidence within the chamber walls for bumper pieces of many locks and the partial ashlar build of Thornton Lock are also of interest.

- 3.3.4 The degree of alteration to swing bridges along the route of the Canal is extensive. In all cases the bridges have been replaced on at least two or three occasions, and the most recent renovations have resulted in significant reconstruction of the abutments. Elements of historical brickwork does survive, as does the coping, however it is considered highly unlikely that the original swing mechanisms will survive on any of the currently operable bridges. The potential survival therefore of remains relating to the first phase swing bridge at East Cottingwith (HA 39) is of particular evidential value, as to a lesser extent the potential remains at Baldwin's Bridge (HA 26) which are considered more likely to have been impacted.
- 3.3.5 The use of railway tracks for the balance beams of Thornton Lock (and formerly Cottingwith Lock) are of local-regional evidential value in illustrating the history of railway ownership and is indicative of the principals of cost cutting and minimal investment in maintenance that characterised their management. It is however recognised that they have limited practicality in their adopted use and the creation of a public bench from those removed from Cottingwith Lock is identified as positive mitigation of their loss.
- 3.3.6 Beyond the structures that form the Canal, there is also potential for archaeological remains to survive relating to activities along the Canal. Wharf sites are considered to be sites of highest archaeological potential in that they were traditionally the focal point of activity. The majority of the wharfs on the Pocklington Canal do not appear to have developed the warehousing, weigh bridges, stabling or other facilities common on more heavily utilised canals, however there is the potential that some temporary or ephemeral structures were erected that could provide evidence on how wharf side activities were carried out. The Canal Head represents the only site where there is considered to be a high potential for encountering archaeological remains. This principally comprises of the footings and associated deposits of former warehousing and granaries constructed between 1818 and 1840 within the vicinity of the PCAS Information Centre and picnic area. These remains would be anticipated to be of local to regional evidential value in increasing knowledge of the goods transported along the Canal and the methods in which the wharfs operated.
- 3.3.7 The abandonment of the upper reaches of the Canal from the 1930s, and the subsequent lack of dredging within these areas presents the potential for remains of sunken keels and barges to survive within the silts. Any such remains would be of local-regional evidential value in illustrating the form of craft used to conduct trade along the Canal. Dredging during its historic operational period, and more recent dredging in the lower reaches will have prevented similar survival from these periods and areas.
- 3.3.8 Further areas of potential outside of the ownership of the Trust comprises the former public wharf areas west of Canal Head, the site of the Pocklington Canal Inn and the site of the former water-powered bone mill north of Canal Head. Further along the Canal is the site of Walbut Mill, the extant Bielby Mill, and the site of a former brickworks alongside the Canal near Hagg Bridge. All these remains are considered to be of local to regional evidential value in their potential to inform how the Canal shaped the local economy of its immediate area.
- 3.3.9 The site of a Romano-British settlement is also recorded in proximity to the Canal to

the west of Storwood (HSMR 16409). The settlement was situated on the northern side of The Beck and likely utilised it as a source of water for both household and agricultural activities. The Beck, and now the Canal, also lie along the line from the settlement to the Roman road that ran from Brough to York at Canal Head, and thus may have formed a focus for further as yet unknown activity during this period. These remains, and the potential for other as yet unknown remains, provide an interesting historical parallel to the current rural and agricultural area within which the Canal is situated.

3.3.10 Finally, the remains of the moated manor site of White House (NHLE: 10047974) south of Storwood are recognised as of national importance as a Scheduled Monument and shares a historical connection with The Beck which would have formed part of its water management system. Whilst no remains are known to extend into the area of the Canal, the likely impact to any such remains that were present from the construction of the Canal is likely to be substantial.

3.3.11 Overall it is considered that the Canal possesses considerable evidential value due to its potential to contribute to the understanding of the process that led to the design of its route, its later development and decline.

Historical Value

3.3.12 The historical resource for the Canal provides an invaluable insight into the economic and political background of the region, and the lives of the people who lived alongside it. From its inception in the eighteenth century to its rescue in the recent past the Canal has mixed the stories of the lords and landowners of the area with its more humble farmers and merchants.

3.3.13 The Canal was designed and its construction overseen by George Leather Jnr., an important figure in the history of canals both regionally and nationally. It is often stated that George Leather brought the Pocklington Canal in under his initial estimate, and it should be appreciated that this was no mean feat and very few engineers of the period could likely claim the same. As a youth, Leather worked with his father in constructing colliery railways for the Fenton family at Rothwell, near Leeds. Pocklington Canal formed one of his earliest solo projects, the success of which likely helped propel his subsequent long and successful career in canal construction. In 1820 Leather was appointed consultant to the Aire and Calder Navigations, becoming responsible for both navigational works and the design of several cast-iron structures. He was also responsible for the planning and construction of basins and wharves on the Goole Canal. His works at Goole included the production of plans for the setting out of the town, and whilst they were not fully adopted he did go on to design and construct two three-acre docks there which opened in 1828. In addition to his work on canals, Leather was also consulted concerning docks and railway projects and during the 1830s and 40s he was involved in the construction of the Clarence Railway and Stockton and Hartlepool Railway (Skempton 2002, 399).

3.3.14 Pocklington Canal represents the last phase of canal building in the East Riding, and is illustrative of the extent of interest of those merchants and landowners around Pocklington in developing the area as a major agricultural centre.

3.3.15 The degree of survival of the bridges and lock chambers of Pocklington Canal, in terms of both the fabric of individual structures and as a designed group, is exceptional. Due to the lack of modernisation along the Canal network, the survival rate of much of its infrastructure is often remarkably high however bridges and locks have been found to have more often been subject to radical repair or rebuilding (Historic England 2011a, 6). The significance of the survival of the features along the Canal is demonstrated by

the listing of every road bridge and lock as Grade II Listed Buildings, making the Canal the most significant linked group of listed canal structures in the region.

- 3.3.16 Whilst the Canal's brief success and subsequent long drawn out decline was a fate shared by many canals in England, the survival of its principal structures and the character of its surroundings are much rarer. The Canal's survival owes a lot to the actions of both local residents and national interest groups, and the history of its struggle back to its present condition is testament both to their success and dedication as well as illustrating the level of interest people in the area have in the Canal and its history.
- 3.3.17 The extent to which local histories were shaped by the Canal was certainly significant in terms of reducing the cost of the everyday essentials such as coal through to allowing the regional farmers and industrialists to more easily reach the national marketplace.
- 3.3.18 In respect of this the Canal is considered to be of at least regional historical importance as being illustrative of the historical development of the area at a time when the region was going through considerable change.

Aesthetic Value

- 3.3.19 The rural setting of the route contributes to the aesthetic appreciation of the Canal, as the tranquillity, scenery and wildlife make the Canal a popular walking destination and a source of inspiration to photographers and artists. The linear nature of the Canal creates a sense of continuation which enhances and links experiences as the landscape changes along its length.
- 3.3.20 The navigable length of the Canal falls within the Lower Derwent Valley. This is an extensive open, wetland landscape characterised by traditional managed meadows and pastures, divided by ditches dykes with few hedges.
- 3.3.21 The aesthetic quality of the Canal is greatly enhanced by its setting, deriving from the excellent survival of the rural character of the surrounding countryside, the very low number of modern developments, and the high quality of its natural heritage. The character and experience of the Canal is most commonly defined by its landscape setting. The traditionally managed farmland bordering the Canal is considered to have essentially changed very little since the construction of the Canal. Furthermore the settlements along its route retain a high quality historic townscape character, both East Cottingwith and Pocklington being designated Conservation Areas that are considered to draw significance from their relationship with the Canal.
- 3.3.22 The Canal offers a varied visual experience to the visitor. Due to the gently rising topography of the site, views along the Canal can in places be extensive, whilst in other areas the presence of mature trees and hedgerows provide a greater sense of enclosure. The aesthetic quality of the Canal from being situated near few busy roads or other infrastructure and as such is often tranquil and undisturbed. It is also important to note that there is an important link between the aesthetic value of the Canal and its ecological qualities, the sight of birds and dragonflies amongst the reeds and floating mats of water lilies in particular greatly enhancing the visitor experience.
- 3.3.23 The landscape value of the Canal also derives from the structures along the line which are typically to a high architectural standard, built in local brick and reflecting the wider architectural styles of the area. The locks and bridges illustrate the engineering challenges faced during the planning and construction of the Canal and demonstrate the proficiency with which the challenges were met. Whilst in many ways their

architecture is typical of their type and period, the road bridges in particular demonstrate an individual style unique to the Canal, described in English Heritage's book on canals as both "strange and rare" (Crowe 1994, 124). Church Bridge is widely considered to be the Canal's most iconic structure. Within mid-distance views from the west the elegant humped back design of the bridge forms a visually striking landmark, standing proud above the low lying fields of its open rural setting. Within the setting of the Canal the locks and bridges therefore contribute aesthetic value as focal points and also provide a tangible link for the visitor to better appreciate the historic value.

- 3.3.24 The intrinsic importance of the landscape of this area has been recognised by its designation as "Important Landscape Area" in the emerging East Riding of Yorkshire Local Plan. This designation seeks to ensure that any development proposals are sensitive to the landscape and that opportunities to restore and enhance the existing landscape are taken. Overall the aesthetic value of the Canal is considered to be of regional value.

Ecological Value

- 3.3.25 The Canal is considered to be one of the most important canals for wildlife in England supporting diverse bird, invertebrate and plant communities. This importance has been recognised through various designations at local, national and international level. In addition the Canal supports a number of nationally protected species.
- 3.3.26 The Pocklington Canal SSSI, which runs from Canal Head to Thornton Lock, is noted for its assemblage of diverse aquatic flora, birds and invertebrates. The Canal is bordered in places by neutral grassland along the towpath, usually in association with a mosaic of ditch, scrub and hedgerow habitats which in addition to their intrinsic interest provide habitats for breeding birds and invertebrates.
- 3.3.27 Between Thornton Lock and Hagg Bridge the Canal falls within the Melbourne and Thornton Ings SSSI. As with the Pocklington Canal SSSI, the Canal in this section is noted for its breeding birds and dragonfly communities. Otters are also a feature of the SSSI. The Canal here is contiguous with a series of traditionally managed flood meadows and pastures which support a rich diversity of plant and bird species, particularly breeding and overwintering wildfowl and waders.
- 3.3.28 The section of Canal from Storwood to where the Canal meets the River Derwent is part of the Derwent Ings SSSI. This SSSI comprises one of the most important examples of agriculturally unimproved species rich alluvial flood meadows still remaining in the UK. In addition to its botanical interest the SSSI is also renowned for its breeding, overwintering and migratory waterfowl and wader populations. The Canal is an integral part of the SSSI and is noted for its aquatic plants, and invertebrate communities.
- 3.3.29 The small section of Canal not notified as an SSSI in the vicinity of Hagg Bridge has been recognised as a Site of Interest for Nature Conservation by the East Riding of Yorkshire Council also on account of its aquatic plant communities. It is likely that any review of SSSI boundaries would result in this section also being designated as a SSSI.
- 3.3.30 Both the Derwent Ings and the Melbourne and Thornton Ings SSSI's are component parts of the Lower Derwent Valley Special Protection Area (SPA) designated under The Conservation of Habitats and Species Regulations (2010) (referred to as the "Habitat Regulations") and as a Ramsar Site for the internationally important numbers of wintering, passage and breeding birds and their rich assemblage of wetland invertebrates and flood meadow habitats.

- 3.3.31 The Lower Derwent Valley is also designated as a Special Area of Conservation (SAC) under the “Habitat Regulations”. It is designated for its extensive area of lowland hay meadows and alluvial forests. The regular presence of Otter is also an important feature of this designation.
- 3.3.32 The Pocklington Canal sits within a mosaic of distinctive landscape and high quality habitats while retaining itself a quite unique and distinctive character which complements the valuable landscape it sits within. A summary of the main interest features is provided below and summarised in **Table 5**.

Aquatic vegetation

- 3.3.33 The Canal supports a diverse plant community with a number of uncommon and scarce species including *Potamogeton friesii* and narrow-leaved water plantain. Striking species such as the flowering rush (*Butomus umbellatus*), arrowhead (*Sagittaria sagittifolia*) and yellow water lily (*Nuphar lutea*) are also common. Some sections of Canal are dominated by common reed (*Phragmites australis*) and reed sweet grass (*Glyceria maxima*). Despite the declines documented by Goulder (2014) and others the Canal remains one of the most diverse in the country.

Invertebrates

- 3.3.34 At the time of SSSI notification the Canal was considered to be of national significance for its invertebrates particularly its reed beetles (*Donacinae*) along with its dragonfly and damselfly populations. The Canal was listed in the Invertebrate Site Register (a national register of sites known to be of conservation importance for invertebrates that was produced by the statutory nature conservation agencies. See <http://jncc.defra.gov.uk/page-2102> for more information). Although systematic surveys of invertebrates in general have not been undertaken in recent years, dragonflies and damselflies are still regularly recorded. At least fifteen species of dragonflies and damselflies have been recorded on the Canal in recent years, including the nationally notable red-eyed damselfly, and the Canal remains one of the most important sites in northern England for dragonfly and damselflies.

Birds

- 3.3.35 The Canal and its margins support a breeding bird community typical of lowland water and fringing habitat. Species such as kingfisher, grey wagtail, reed and sedge warblers all occur. Passing as it does through a rural farmed landscape, a wider variety of commoner species have also been recorded. At the time of notification 26 species were recorded as breeding including willow tit in addition to those already mentioned. Along the navigable section the Canal passes through traditional flood meadows and the bird interest here is even greater. The adjacent meadows supporting nationally important breeding wader and wildfowl including snipe, curlew, teal and shoveler and internationally important over wintering populations of waterfowl.

Communal Value

- 3.3.36 With commercial trade on the Canal ending in the 1930s, the Canal was still operational within living memory although for the majority of people the Canal is associated with its semi-ruinous condition, its gradual regeneration, and as a haven for natural heritage.
- 3.3.37 The Canal was rescued from plans proposed in the 1950s to use the Canal as a dump for sludge from a water treatment plant by the combined efforts of landowners, local residents, the Inland Waterways Association and The York Angling Association.

- 3.3.38 The communal interest for the Canal continued beyond its rescue, with the interest built up and leading to the formation of the Pocklington Canal Amenity Society (PCAS) in 1969 with the aim to protect and restore the Canal and promote it as an amenity for everyone to enjoy. The PCAS currently has approximately 300 members. The activities undertaken by PCAS in restoring and maintaining the Canal, preserves and passes on knowledge and techniques of traditional skills.
- 3.3.39 The Canal is still navigable from Melbourne Arm to East Cottingwith and the Derwent and as such is still visited and used by boaters. Events such as the bicentennial celebrations held in 2015 also attract visitors. As such those who may be considered to attribute value to the Canal include not only the local population, but also day trippers and holiday makers from further afield. PCAS also operate a trip boat that can take visitors from Melbourne down to Cottingwith and back.
- 3.3.40 The cultural and natural heritage of the Canal is of interest to not only specialist interest groups (such as PCAS), but to a wide range of heritage groups, individual researchers, ecologists, bird watchers, anglers, and many others. The Canal also supports a nationally important ecological environment, with a great variety of wildlife both within the Canal linking habitats along its edge.
- 3.3.41 The ecological and historical value of the Canal is also a resource for local schools and educational groups. In the past York University used Bielby Arm for training students in aquatic ecology.
- 3.3.42 The scenically attractive surrounds of the Canal are a significant attraction, and are popular both with local residents in their leisure time and with day trippers and walkers. The Canal is included in several walks, including one listed by the Walk4Life website which was formerly part of the Governments Change4Life scheme, Yorkshire Post Walking Guide and is further advertised on the visit Pocklington Website and three walks which include the Canal are listed on the ERYC website.
- 3.3.43 It is for the above reasons that the communal value of the route is considered to be of national value.

Table 5: Natural Heritage Assets

| Designation Status | International | | | National | | | Regional | Local | Protected Species |
|--|---------------|------|--------------|------------------------|--------------------------------|-------------------|----------|-------|-------------------|
| | SAC* | SPA* | Ramsar Site* | Pocklington Canal SSSI | Melbourne & Thornton Ings SSSI | Derwent Ings SSSI | SINC | | |
| Designation | | | | | | | | | |
| Feature associated with Canal | | | | | | | | | |
| Habitat; | | | | | | | | | |
| Aquatic & emergent plant communities. | | | | ✓ | | ✓ | ✓ | | |
| Neutral grassland communities | | | | | ✓ | ✓ | | ✓ | |
| Birds | | | | | | | | | |
| Wintering waterfowl | | ✓ | ✓ | | | | | | |
| Wigeon (non-breeding) | | ✓ | ✓ | | | | | | |
| Teal (non breeding) | | ✓ | ✓ | | | | | | |
| Shoveler (breeding) | | ✓ | ✓ | | | | | | |
| Variety of breeding and wintering birds. | | | | ✓ | ✓ | | | | |
| Breeding bird assemblage lowland wet grasslands and pastures | | | | | | ✓ | | | |
| Barn owl | | | | | | | | | ✓ |
| Invertebrates | | | | | | | | | |
| Damselfly/dragonfly assemblage | | | ✓ | ✓ | ✓ | ✓ | | | |
| Wetland invertebrate assemblage | | | ✓ | ✓ | ✓ | ✓ | | | |
| Mammals | | | | | | | | | |
| Otter | ✓ | | | ? | ✓ | | | | ✓ |
| Water Vole | | | | | | | | | ✓ |
| Landscape | | | | | | | ✓ | | |

* Pocklington Canal falls within wider Lower Derwent Valley SPA/SAC/Ramsar, only features associated with the Pocklington Canal are listed.

4. Risks and Opportunities



Plate 60: Collapse occurring at Sandhill Lock (HA 8)

4.1 Introduction

4.1.1 There are various 'risks' identified to the Canal and its overall natural and cultural heritage value, which could be addressed in addition to the current management arrangements. The risks also include 'vulnerabilities', which are those ways in which the Canal can be threatened by change or pressure from outside causes e.g. inappropriate development. The risks and opportunities, including gaps in knowledge, are presented under three broad headings:

- Management and Condition
- Access and Interpretation
- Conflicts of Interest

4.2 Management and Condition

Ownership

4.2.1 The Bielby Arm of the Pocklington Canal is not in the ownership of the Trust. As a result, although the condition of this area is safeguarded by its designated status, there is potential for inconsistent management to arise between the different ownership areas. In the long term this could result in divergent conditions that may degrade the quality of the cultural and natural heritage contribution of this area to the importance of the Canal.

4.2.2 Property boundaries between the tow path and adjacent agricultural fields have been eroded in places and work is required with neighbouring landowners to re-establish them to pre-empt the possibility of future issues.

Restoration and Repairs

4.2.3 The aesthetic and evidential values of canal structures are sensitive to unsympathetic restoration and repairs. Repairs have historically been undertaken in materials that are not in keeping with the historic character or inappropriate to its long term conservation. This is best evidenced by the repairs undertaken to Hagg Bridge which utilised modern brickwork and concrete that does not fit with the historic architectural design or

materials of the structure.

Structural Deterioration

- 4.2.4 The structural condition survey identified a total of 42 heritage assets along the Canal. Of these heritage assets a total of nine were considered to be in a stable condition, 19 were considered to be in satisfactory condition with minor localised problems, seven were considered to be in generally satisfactory condition with significant localised problems and two were considered to be in unsatisfactory condition with major localised problems. The condition of five of these heritage assets could not be ascertained.
- 4.2.5 Of the 42 identified heritage assets 16 were classed as in a declining trend and 21 were classed as stable. The trend for five of the heritage assets could not be ascertained during the survey. Details of condition of each asset are presented in the gazetteer in **Appendix III**.
- 4.2.6 Threats to the structural condition of the Canal's navigation and structures can be characterised under five broad categories:
- Vegetation;
 - Water Damage;
 - Lack of water.
 - Vehicle Strikes; and
 - Former Management Legacy



Plate 61: Detail of vegetation damage to Giles Lock (HA 6)

Vegetation

- 4.2.7 Whilst vegetation and saplings have clearly been removed from some elevations of the locks, bridges and culverts in other areas vegetation has become well established and threatens the structural stability of some features (**Plates 60-61**). On the whole the risk

appears to be from windborne and waterborne seeds growing in areas where there is long standing water penetration.

- 4.2.8 Woody vegetation growth on these structures, especially between coping stones and voussoirs forming arches has the potential to loosen and dislodge masonry and brickwork. Where this has set in, it will have had a detrimental affect upon structural integrity and will require consolidation once vegetation has been removed. Well established vegetation within the Canal bed also has the potential to increase debris in the water and may result in the blocking of by washes leading to the overflow of lock gates (as has occurred at Walbut and Thornton Locks: HA 59 and 19). This in turn may increase water damage to the structure of the locks.
- 4.2.9 Where structures have remained in continual use, (i.e., the occupied lock house, bridges still currently used by the surrounding land owners and road network, as well as the locks used by boaters), the active management of these assets has resulted in very limited damage as the result of vegetation growth.

Water Damage

- 4.2.10 Whilst a certain degree of water damage to structures is inevitable on a canal, the rate and degree of damage to the abandoned locks is considered to be reducible. Currently at Giles Lock, Silburn Lock and Sandhill Lock timber weirs have been established in place of the top locks, causing the chamber to be permanently dewatered. This has allowed vegetation to grow in the walls but has also led to damage to brickwork from water freezing at a low level across the structures. By reinstating lock gates, or creating the weirs at the bottom locks as a medium-term measure, these impacts could be reduced, and damage from water limited to the upper parts of the chambers which would be easier to repair.
- 4.2.11 Currently the level of boat activity is not considered to pose a risk to the stability of the banks of the Canal due to wash.

Lack of Water

- 4.2.12 De-watering of the canal is a risk as a result of drought or breeching. Lack of water could have a significant impact on the ecology of the canal. There would be no water to support the fish and invertebrate population. The loss of water would also expose and dry out submerged aquatic plants for which the canal is designated. As well as having a huge impact upon the ecology of the canal, it would also impact on the fabric of the historic structures themselves through drying out and cracking of puddling and timber structures (including possible timber piled foundations).

Vehicle Strikes

- 4.2.13 A risk to bridge structures comprises the risk of being struck by vehicles which applies both to the parapet walls of the narrow waisted road bridges, and canal boats striking lock chambers and bridges. A targeted 'Halt your speed, protect our heritage' PR campaign to promote awareness to drivers of important structures is currently being proposed.

Former Management Legacy

- 4.2.14 The condition of the structures along the Canal has suffered as a result of previous conservation strategies. This can be seen to have started following the gradual winding down of the canal under the ownership of the railway companies from the nineteenth century. The managed decline of the waterway continued following its classification as

a Remainder Waterway under the curatorship of British Waterways, resulting in over a century of decline bringing a substantial legacy of issues resulting for absence or under investment in the canal's infrastructure. Actions undertaken since the 1970s have arrested or reversed the decline in areas, however significant issues still remain.

Succession of Non-Navigable Lengths

- 4.2.15 Goulder (2014) identified the significant impact succession was having on the aquatic plant communities within the non-navigable section of the Canal. As stated previously an increasing dominance of emergent species is leading to the loss of many of the less robust and truly aquatic plant species and a decline in aquatic plant diversity overall.
- 4.2.16 Loss of open water and habitat diversity may also be impacting the abundance of dragonflies and other aquatic invertebrates.
- 4.2.17 If left unchecked reeds and rushes and then trees would eventually extend over the whole area of the Canal (**Plate 62**). In extreme situations silt and decaying vegetation would build up resulting in the loss of open water and the Canal eventually drying up.



Plate 62: Common reed completely dominating the Canal channel (Natural England)

- 4.2.18 It is important active management occurs to maintain the biodiversity of the Canal and retain open water and habitat diversity. Limited works to reverse succession have been undertaken in 2014 with the removal of in-channel vegetation between Canal Head and Silburn Lock and upstream of Thornton Lock. However, further management works are urgently required in order to maintain the Canals status as one of the most important in the Country for the plant and invertebrate communities it supports.

Shading

- 4.2.19 As highlighted by the Inland Waterways Advisory Council (IWAC 2008), attitudes to trees and shade can often vary between different user groups. Although trees and associated shade often provide refuge for fish in hot weather and important invertebrate and bird habitat, the accumulation of leaves can exacerbate siltation and consequently rates of succession. Increased shading can restrict plant growth and reduce the diversity of both emergent and aquatic plants.
- 4.2.20 As stated previously trees and shade have been associated with the Canal since its

nature conservation interest was first identified. However, the lack of management since this time has undoubtedly led to an increase in shading along some stretches of the Canal and a corresponding decline in aquatic plant diversity.

- 4.2.21 Hyder (2013) identified areas that could benefit from tree and scrub management works to increase light penetration to the Canal. These areas have been ground truthed by more recent walk through studies by the Trust and Natural England and priority areas identified. These are shown in **Figures 14-32**.
- 4.2.22 Given that the Pocklington Canal is designated for its rare and scarce aquatic plants, it is important that the issue of shading is addressed.
- 4.2.23 As with all types of management though this needs to be targeted to specific areas and undertaken in a sympathetic manner. Pre-consultation with all user groups should be undertaken in order that the rationale for tree works, are fully understood. Clearly it must be recognised that trees are an important landscape feature of the Canal, valued by many users. It is therefore important that management doesn't adversely affect this landscape and achieves a balance for the benefits of all wildlife, from wintering birds, trees for fish to shelter under and of course perching points for kingfishers.

Water quality

- 4.2.24 Reports into water quality undertaken by Mott Macdonald (2006) and Jacobs (2008) have investigated possible sources of pollution to the Canal. Jacobs identified both point and diffuse sources as possible causes of sedimentation and eutrophication of the Canal. Eutrophication is a term used to describe the process whereby high levels of nutrients are available in a waterbody. To be classified as eutrophic, the total phosphorus levels in a waterbody are normally in the region of 0.03-0.1mg/L. Generally speaking, eutrophic waterbodies are found in fertile catchments in lowland areas.
- 4.2.25 There are two main feeders of the Canal, one at Canal Head and one at Thornton Lock (**Plates 63 & 64**). The Jacobs report highlighted sedimentation and diffuse pollution to the Pocklington & Bielby Beck which provides water for the Canal from agricultural land both upstream of Canal Head and in the fields surrounding the upper reaches of the Canal as probable causes of water quality problems. This has also been identified in the Diffuse Water Pollution Plan for the River Derwent SSSI and Pocklington Canal SSSI (Environment Agency/Natural England 2013).



Plates 63-64: The Thornton Feeder

4.2.26 Further studies were undertaken by Williams (2010) and confirmed that diffuse pollution may be an issue but failed to locate additional entry points for agricultural runoff.

4.2.27 Evidence of diffuse pollution being an issue was also presented by Hyder (2013) which reported high levels of “N” as nitrate throughout the Canal, these high levels being attributed to agricultural runoff. Nitrates from agricultural runoff were also suggested as a possible cause of eutrophication as long ago as 1995 (Natural England (1969-2000)). Eutrophication resulting from agricultural sources therefore remains a threat to the Canal’s nature conservation interests.

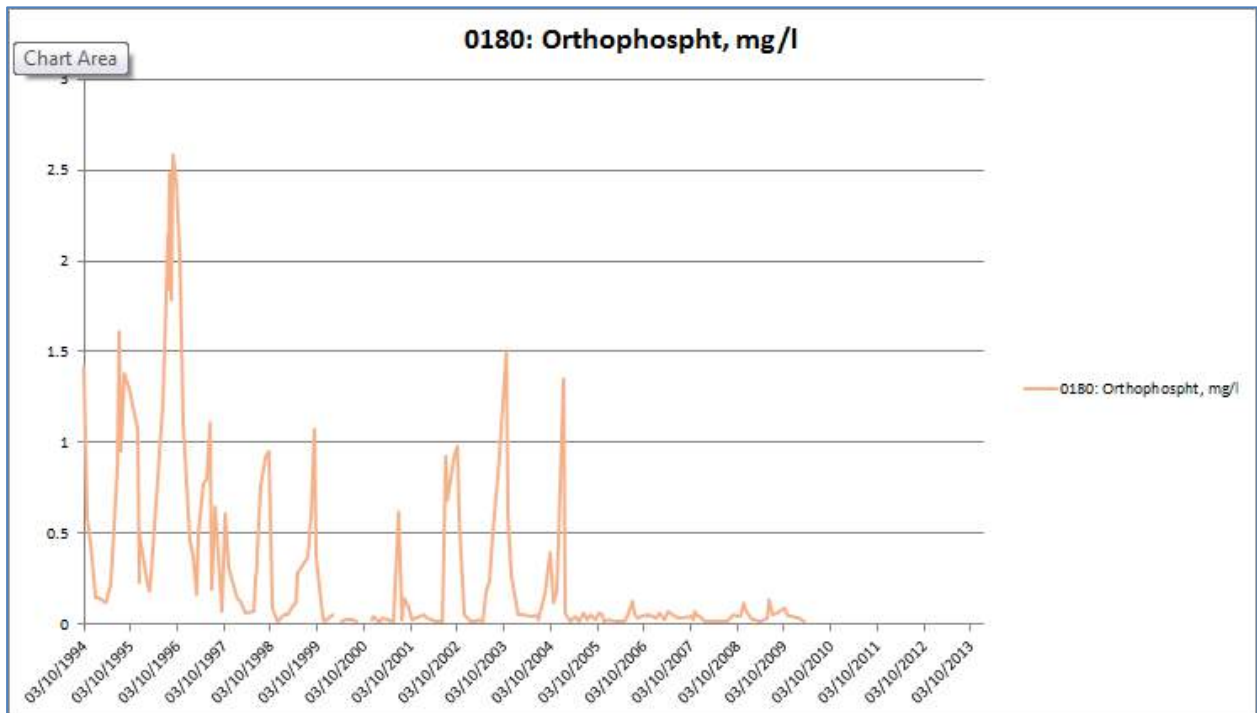


Plate 65: Environment Agency water quality monitoring data from Hagg Bridge

4.2.28 The Thornton Lock feeder receives water from the Pocklington/Bielby Beck. The Pocklington Sewage Treatment works discharges into the Pocklington/Bielby Beck and although downstream of the Canal Head feeder, this discharge historically resulted in elevated levels of phosphates entering the Canal at Thornton. The introduction of Phosphate stripping through a tertiary treatment process at the Works in 2005 however resulted in a significant reduction in phosphates entering the Canal. This is clearly demonstrated by Environment Agency water quality monitoring data from Hagg Bridge (**Plate 65**).

4.2.29 Despite these improvements in phosphate levels, the Pocklington/Bielby Beck is still classified as a deteriorating water body by the Environment Agency under the terms of the Water Framework Directive. The Sewage Treatment Works at Pocklington remain a concern and despite the 2005 improvements there remains a storm discharge. Poor phyto-benthos i.e. microscopic plant growth in the Beck, has also been identified and the Environment Agency have also attributed this to agricultural runoff (D. Fyfe per comm. 2015). The spot samples taking in 2015 by Ecus also indicated high Phosphate levels in the Canal, particularly at Canal Head. This is of particular concern given that Phosphate levels had been within acceptable parameters in 2010, and may again relate to diffuse pollution in the upper catchment.

- 4.2.30 The identification of water quality of the Bielby Beck as an issue by the Environment Agency under the Water Framework directive does however present an opportunity. The Environment Agency have already identified a project to address failures under WFD looking at habitat restoration and buffer strips to reduce agricultural runoff into the Pocklington/Bielby Beck.
- 4.2.31 It is also likely that phosphates are held within the sediments of the Canal as a result of historic inputs. Atkins (2004) indicated elevated levels of phosphates in the upper levels (upper 25cm) of sediment in several sections of Canal. These phosphates could be remobilised either by disturbance through dredging or boat traffic or by natural release during warmer periods when anoxic conditions are more likely to be prevalent.
- 4.2.32 Given the possibility that phosphates within the sediments can be released under certain conditions, removal of silt through dredging can not only reverse succession but may also improve water quality.
- 4.2.33 Consequently, it is likely that nutrient levels in the water supply and held within the sediments may still be a factor limiting aquatic plant diversity in the navigable section of the Canal.

Invasive species

- 4.2.34 At present many of the invasive non-native species (INNS) often associated with water bodies (such as Floating pennywort *Hydrocotyle ranunculoides* or Japanese knotweed *Fallopia japonica*) are absent from the Canal. Himalayan Balsam (*Impatiens glandulifera*) has however been found at a number of locations along the Canal and is seen to be increasing on an annual basis.
- 4.2.35 Himalayan balsam can rapidly spread along water courses. It is estimated that each plant can produce up to 800 seeds a year which can remain viable for 2 to 3 years. The plant can spread the seeds by scattering them up to 7 m away from the plant when the pods mature.
- 4.2.36 Himalayan balsam can rapidly out-compete native flora due to its ability to rapidly reproduce and it can grow in dense stands. It is also thought that as the balsam produces large amounts of nectar, it can result in reduced pollination of native species by bees, which subsequently leads to a loss in biodiversity. It can also severely damage the native invertebrate fauna by shading, loss of bare ground and suffocation of invertebrate fauna as the plant degrades in the autumn (JNCC 2008). The presence of this species would result in the condition of the SSSIs being unfavourable at certain levels and action should be taken to remove it wherever it occurs.

Risks of boat usage and disturbance

- 4.2.37 It has been suggested that low levels of boat movement and associated management i.e. weed cutting on the Pocklington Canal along the navigable section have been beneficial in keeping the central channel clear of reeds and dense vegetation. Indeed, Goulder (2014) concluded that this has led to the greater diversity of aquatic plant species that is now evident in the navigable section of the Canal.
- 4.2.38 Boating in greater numbers can however have a detrimental effect upon aquatic plants in canals. This is because movement of boats can influence the plants and animals associated with canals by (IWAC, 2008):
- The re-suspension of bottom sediment

- Hydrodynamic impacts, including currents and waves
- Physical contact and entrainment (cutting of plants with propellers)

4.2.39 The cutting of plants with propellers or wave action from boats can physically damage aquatic plants within the Canal channel, as can hydrodynamic factors. The re-suspension of bottom sediment, can cause the water in the Canal to be turbid. This sediment in the water therefore restricts light penetration in the water and can lead to a reduction in plant growth. As stated above it can also lead to a re-suspension of nutrients within the water column. It is therefore important to monitor boat movements on the Pocklington Canal so this can be managed if deemed necessary in the future. IWAC (2008) suggests that up to 500 boat movements a year should not cause an impact to Canal plant communities, although this obviously depends upon boat design, speed and canal profile. At present boat movements are significantly less than this on the Pocklington Canal, 155 movements through Gardham Lock being recorded during 2014 (CRT figures). It is likely that approximately a third of these movements would have been associated with the operation of the PCAS trip boat which recorded the following trips for 2014 (**Table 6**). Each PCAS trip will generally use two lock movements, hence 66 movements in 2014.

Table 6: PCAS trip boat operation 2014

| Destination | Number of trips |
|--|-----------------|
| Short trips (e.g. swing bridge number no 7) | 197 |
| Gardham Lock | 33 |
| Hagg Bridge | 2 |
| East Cottingwith | 4 |
| The Ferry Boat Inn at Thorganby on the River Derwent | 2 |

Animal Erosion/Poaching

- 4.2.52 At a number of points along the Canal there is evidence of erosion caused by dogs entering the water of the Canal. Currently, PCAS undertake repairs to the banks where erosion has advanced. If this was however left unchecked there is potential for small scale bank damage.
- 4.2.53 It is also recognised that livestock access the Canal at the location of Storwood for drinking. At current levels this does not pose a risk to the Canal, and is in fact of benefit to aquatic and emergent vegetation in this location.

4.3 Information, Access and Setting

Information

- 4.3.1 Along the route there are information panels at Canal Head, Coates Bridge, Melbourne Arm, and Hagg Bridge which describe the ecology and history of the Canal. There is a less permanent board explaining the restoration of Sandhill Lock, and a temporary sign at Canal Head explaining the traditional hedge laying that is being undertaken. These are all positive features that greatly enhance the visitor experience. There is potential for enhancing information both on the route and the wider area.
- 4.3.2 Leaflets are produced by the Trust regarding wildlife and the history of the Canal whilst PCAS produce a newsletter ‘the Double Nine’ three times a year. Both the Trust and

PCAS have webpages dedicated to the Canal, its history and its wildlife.

Access

- 4.3.3 Access to the length of the Canal overall is moderate. The gradual incline of the route and the well maintained nature of the towpath mean the route is ideal for walking. Full accessibility for users of limited mobility is at present limited by the presence of traditional gates, styles and uneven surfaces.
- 4.3.4 Cycling on the Canal towpath is permitted between Canal Head and Coates Bridge, but restricted elsewhere. This restriction is not always followed which may relate to the inconspicuous nature of signage relating to cycling.
- 4.3.5 In addition, the Canal towpath forms a bridleway between Canal Head and Coates Bridge.
- 4.3.6 Boaters access the Canal from the River Derwent at East Cottingwith. To access the River Derwent boaters have to go via the River Ouse which is a tidal watercourse, which would present a challenge to novice boaters.
- 4.3.7 Car parking is provided at Canal Head but there are no further car parks situated along the route. This limits accessibility to the southern part of the route and increases congestion at Melbourne.

User Facilities

- 4.3.8 The route has very limited user facilities beyond the public picnic benches at Canal Head and Gardham Lock. Melbourne has private sanitary facilities for users of the marina, however there are currently no similar public facilities along the Canal. At present publically accessible toilets, family or disabled facilities for visitors to the Canal can be found at businesses in the surrounding area, although no information is provided along the Canal as to their location. There is one car park currently available to users of the Canal at Canal Head.

4.4 Conflicts of Interest

Increased Visitor Numbers

- 4.4.1 The proposed improvements to the Canal will likely result in an increase in the number of visitors to the Canal. This change could result in an impact to the sense of tranquillity and isolation which at present is a significant positive contribution to the character of the Canal. The impact from this is most likely to be felt by current users of the Canal, and local residents.
- 4.4.2 In addition, higher foot fall has the potential to increase erosion of towpaths and the potential for damage to occur to canal structures. The higher foot fall could result in disturbance and damage to areas of nature conservation especially those at the western end of the Canal. However this is why zoning of the interpretation plan has taken place, to prioritise areas for promotion of visitors over other areas, to prevent further disturbance in the sensitive areas of the Canal.

Increased Boat Movements

- 4.4.3 Current levels of boating are not in conflict with the conservation of the Canal. Whilst enhancement of the Canal could increase numbers this may be sympathetic to the conservation of the Canal.

Restoration of Navigation Beyond Melbourne

- 4.4.4 The proposed restoration of the Canal beyond Melbourne presents the potential to affect the natural and cultural heritage values of the Canal. It will be necessary to carefully balance the evidential value of unrestored locks, beneficial natural environments of the non-navigable reaches, and public benefit from restoration.

4.5 Opportunities

Volunteers

- 4.5.1 The Canal has an existing volunteer base most significantly in the form of the members of PCAS but also the Trusts own members. Volunteers support is of the upmost good for the canal and the community, and there is an opportunity to continue to build on existing support to develop and realise the other opportunities identified below.

Restoration

- 4.5.2 There is an opportunity for restoration work to remedy previous unsympathetic repairs, such as at Hagg Bridge, and at a number of the swing bridges. It is also considered that there is the potential for further research into the form of the original swing bridges to provide designs for parapet rails which are more in keeping with the historic character of the Canal. Such a project is currently proposed for no. 7 Swing Bridge.
- 4.5.3 PCAS are currently seeking to raise funds to restore the Canal from Melbourne to Bielby to mark the bicentenary of the Canal. This proposed work complements the charitable purposes of the Trust, and there is an excellent opportunity to work closely with PCAS to coordinate the activities and volunteer efforts of the two organisations.

Traditional Skills

- 4.5.4 Restoration and repair work along the Canal offers the opportunity to provide training in traditional construction and nature conservation skills to volunteers. Whilst this would have an initial cost to undertake, there would be a substantial public benefit which would feed back into the management of the Canal through engagement of trained volunteers in working parties.
- 4.5.5 These skills could include masonry repairs, timber repairs, repairing puddling, hedge-laying, coppicing and pollarding, haymaking, ditch and dyke clearance and maintenance.

Research

- 4.5.6 The preparation of this CMP has identified that there is still considerable potential for research into the Canal, in terms of both the development of activities that historically utilised the Canal as well as its nature conservation research.
- 4.5.7 No significant pieces of work have been done into either the local or wider effect of the Canal on trade and industry or the local lives of residents in the area. This means that the true extent of influence that the Canal had on society is not fully understood. Historical research could be undertaken to identify businesses and farmers who were using the Canal, and chart how this relationship changed over the life of the Canal. Of particular interest is the effect of the Canal on the formation and or development of mills at Canal Head, Walbut and Bielby.
- 4.5.8 There is also considered to be potential for further research to be undertaken into the natural environment of the Canal. This includes opportunities for citizen science into

birds, dragonflies, aquatic plant surveys etc.

- 4.5.9 There is therefore considered potential for public engagement in terms of both historical research and nature conservation along the Canal. The information gained from these activities can also be put back into the production of improved interpretation material.

Community Archaeology

- 4.5.10 It is considered that there are two primary areas that represent opportunities for community archaeology projects (. The first is the sites of the former wharf buildings situated at Canal Head which were likely constructed between 1818 and 1840, where excavation would enable the date, form and function of these buildings to be identified, enhancing our knowledge of how trade at Canal Head developed.
- 4.5.11 The second is the site of the former swing bridge at East Cottingwith (HA39) which represents an early abandonment and the highest potential for survival of remains relating to the original swing mechanism, the excavation of which would enhance our understanding of what is a frequent but poorly documented form of structure on the Canal.

Improved Information, Access and Interpretation

- 4.5.12 In parallel to this Plan, the Trust has commissioned a visitor interpretation plan (PLB Projects 2015) which identifies both general and specific objectives for improving information, access and interpretation at the Canal.

5. Vision and Policy



5.1 Introduction

- 5.1.1 A vision for the management has been agreed for the Pocklington Canal. This was developed by The Pocklington Canal Liaison Group (PCLG) which includes representatives from the main interest groups associated with the Canal, including Canal & River Trust, Pocklington Canal Amenity Society, Natural England, Historic England, the East Riding of Yorkshire Council and Environment Agency.
- 5.1.2 The PCLG was set up in 1999 to foster a better understanding of partners' objectives and goals. Between 2010 and 2012 the Group developed a shared vision which is given below. The development of this vision is the driver behind the current desire to promote, preserve and enhance the significance of the Pocklington Canal through long-term sustainable management.

Pocklington Canal is a very special place with a wealth of heritage and wildlife interest. It is highly valued by the public both for this intrinsic interest and as a place for quiet recreation including walking, boating, bird watching and photography. It is recognised that the Canal should be managed in a way that protects the Canals unique historical and wildlife interest whilst allowing the public to continue to enjoy the Canal.

- 5.1.3 The following policies, agreed by PCLG in 2012, underpin the overarching vision statement.

5.2 The Historic Environment

- 5.2.1 The historic importance of the Canal should be maintained with all designated structures (Scheduled Ancient Monuments and Listed Buildings) repaired or conserved in a structurally stable state so that their significance is protected.
- 5.2.2 All historically important non designated structures associated with the Canal, should be maintained so that they are structurally sound and their character conserved.

5.3 The Natural Environment

- 5.3.1 All parts of the Canal notified as Sites of Special Scientific Interest should be in favourable condition, as should the adjacent Special Protection Areas and Special Areas of Conservation.
- 5.3.2 Those sections of the Canal not within SSSIs should be maintained in an equivalent

favourable condition.

5.3.3 The Canal and surrounding areas should retain their rural, tranquil and relatively undeveloped character.

5.4 The Public Enjoyment Of The Canal

5.4.1 The public should be able to continue to enjoy and appreciate the wildlife, historic interest and rural tranquil, undeveloped character of the Canal through activities such as boating, walking, bird watching and fishing.

5.4.2 The Canal should be used as a formal and informal education resource and provide opportunities for volunteering.

5.4.3 The nature of the Canal as a navigable waterway should be preserved.

5.5 Future Management of the Canal and Surrounding Environment.

5.5.1 The Canal and surrounding environment will be managed sustainably so that conditions required to fulfil this visions objectives will be maintained. To this end;

- Access to the towpath for walkers should be maintained, and the currently navigable section of the Canal, below Thornton Lock managed in order to maintain it as a navigable waterway.
- Water supply (quality and quantity) should be maintained for the benefit of navigation and nature conservation
- Canal structures will be maintained in good working order (and restored where necessary).
- A dredging management plan will be prepared and implemented.
- Opportunities for future restoration of non navigable sections will be pursued where they do not adversely impact upon the historic and nature conservation interest or character of the Canal and its surroundings.

6. Management and Maintenance Plan

6.1 Introduction

- 6.1.1 The following aims and objectives are written in response to the observed issues as discussed in the previous chapter and to suggest ways that may be employed for the protection of the Canals significance, its physical protection, its enhancement and to help realise its full potential for public enjoyment access and understanding.
- 6.1.2 These recommendations indicate how an aspirational ideal outcome for the future of the Canal might be achieved, and should in practice be viewed as guidance for detail planning of any future proposed actions.
- 6.1.3 Any proposed works undertaken as a result of the recommendations of this management plan should be in consultation with relevant authorities on the plans, methodology and timetables for works. This will not only involve stakeholders but ensure the necessary consents and assents are obtained so both as to guarantee compliance with legislation.
- 6.1.4 Nature and heritage conservation is an ongoing process that is required to be implemented and reviewed regularly, rather than being a one off event. The process of conservation involves a series of decisions to inform actions that can be required as long term or 'day to day'.
- 6.1.5 Within this Plan, the policies are grouped under various key headings arising out of the issues and opportunities raised. The categories are:
- Management and Condition MC
 - Access and Interpretation AI
 - Conflicts of Interest CI

6.2 Recognition and Protection

Cultural Heritage

- 6.2.1 The Canal itself is not wholly recorded as a heritage asset by the Humberside HER or Historic England. None the less the Canal is considered to be of regional importance. It is considered that advice is sought from planners and advisors from East Riding of Yorkshire County Council with regards to any works affecting the historic fabric of the Canal. Consultation with further relevant stakeholders should be undertaken including Historic England.
- 6.2.2 A total of 13 built structures, associated with the Canal are designated as Listed Buildings and are considered to be of national importance. Listed Buildings fall under the protection of Department of Culture, Media and Sport (DoCMS). If demolition, alteration or extension is to be carried out in such a way that it may affect its character or significance as a Listed Building, Listed Building consent must be applied for, from the Local Planning Authority.

Natural Heritage

- 6.2.3 All of the Pocklington Canal (with the exception of a small stretch near Hagg Bridge) is designated as a SSSI. There are currently three SSSI's that cover the Canal and these

are: the Pocklington Canal SSSI, Melbourne and Thornton Ings SSSI and Derwent Ings SSSI. The Derwent Ings and Melbourne and Thornton Ings SSSIs are part of the internationally important Lower Derwent Valley Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site. Therefore all management recommendations will be subject to an assessment under The Conservation of Habitats and Species Regulations 2010 often referred to as the “Habitat Regulations” in order to ensure they are compatible with safeguarding the integrity of the internationally protected sites.

- 6.2.4 This involves plans or projects not wholly connected with the management of the designated sites being subject to a test of “likely significant effect”. Where such an effect cannot be excluded, a proposal must then be subject to a more detailed “appropriate assessment” in order to determine whether an adverse effect on the integrity of the site can be ruled out. Where such an adverse effect cannot be ruled out, and no alternatives can be identified, then a project can only proceed if there are “imperative reasons of over-riding public interest” and if compensatory measures can be secured.

6.3 Management and Condition (MC) Recommendations

Ownership

- MC1: A partnership agreement should be sought with the owner of Bielby Arm to better manage the cultural and natural heritage of the Canal.
- MC2: The Trust should maintain a good working relationship with adjacent land owners, by formalising agreements for land adjacent to the canal required for access but not owned by the Trust.
- MC3: The existing Heritage Partnership Agreement between the Trust, Historic England and East Riding of Yorkshire Council should be reviewed on a 5 year basis, or as otherwise required.
- MC4: Consultation should be undertaken with the local planning authority as to ascertain how the important natural and built landscape character of the Canal can be best protected from unsympathetic development. This could comprise engagement with the forthcoming planning guidance for the Lower Derwent Valley.

Restoration and Repairs

- MC5: Increasing the length of navigable waterway at the Canal is identified as key charitable aim of the Trust and the management of all elements of the Canal should be undertaken with this aim in mind.
- MC6: Formalise the materials and techniques for repairs and restoration work to ensure a consistent and sympathetic approach. Seek advice on all works to historic structures from a conservation engineer or heritage advisor.
- MC7: Ruined locks should be assessed to determine what work would be required, and projective costs, to reinstate lock gates. This should consider the degree to which the original fabric of the lock survives and how the loss of such fabric can be avoided. The creation of operational gates and bypass system would return these structures to their original appearance and allow a much improved level of water control thereby reducing the risk of future damage. Better

water control would also help safeguard the natural heritage by preventing pounds becoming overly drained during drought periods. In the medium term, it should be assessed whether weirs should be established at the bottom locks rather than the top locks in order to reduce low level deterioration of chamber walls from frost damage.

- MC8: Where damage to the stone/brickwork has already occurred from vegetation, water penetration or subsidence, the stonework should be consolidated to arrest further deterioration (e.g. Sandhill Lock, HA 8, Culvert no.7, HA 12, Culvert no.6, HA 16 and Swing Bridge no.6, HA 25 etc.).
- MC9: Opportunities should be sought to identify areas where cement has been used for repointing of historic structures (e.g. Walbut Bridge, HA 16). Where possible this should be removed and replaced with lime based mortar, however judgement will be necessary to assess whether removal would cause more damage to brickwork than leaving it in situ.
- MC10: Develop a mowing strategy to best manage habitats along the Canal and improve the connectivity between the Canal and towpath (e.g. south of Coates Bridge to Bielby Arm where significant plant growth has become established). Current mowing spec is on **Figure 33**. Actions relating to towpath and annual in-channel maintenance are annotated on vegetation management maps (**Figures 14 to 32**).

Structural Deterioration

- MC11: Continue routine inspections of the Canal. To comprise monthly Length Inspections to identify defects and monitor change; annual basic structural conditions surveys by an engineer suitably qualified in the conservation of historic structures; and thorough surveys every 10 years.
- MC12: Undertake a programme of annual vegetation clearance from structures in line with best habitat management practices and in consultation to the Trust's guidance on *Wall Flora and Management of Historic Structures*. Special care should be taken during the removal of vegetation along the exposed edges of the structures and their elevations in order to not loosen stonework. Substantial growth should be cut back and the stumps treated with an appropriate herbicide to prevent regrowth.
- MC13: Undertake maintenance to address risks and defects identified during routine inspections before they cause structural damage.

Succession of Non-Navigable Lengths

- MC14: Undertake in channel vegetation clearance as proposed in The Dredging Conservation Plan (Hyder 2013 as amended by the Trust/Natural England ecologists).
- MC15: Increase the area of open water, allowing aquatic plants to colonise. This will be carried out by dredging and removing in channel vegetation from areas of the Canal as proposed in the Dredging Conservation Plan (Hyder 2013) and as amended by the Trust/ Natural England Ecologists (**Figures 14-32**). Dredging should be undertaken with The Trusts/Natural England's draft protocol for dredging (**CRT/Natural England 2014**).

- MC16: Ensure vegetation removal is deep enough to remove plant roots from the Canal in order to slow succession trends. Vegetation removal should be undertaken in accordance with best practice as outline in The Trusts/Natural England's draft protocol on dredging.
- MC17: Create a mosaic of habitats (open water, marginal and emergent vegetation) that will encourage a wider diversity of invertebrates and other fauna.
- MC18: Maintain some emergent vegetation as required to maintain any filtering thereby limit sediment dispersal downstream.

Shading

- MC19: Undertake tree removal as proposed in The Dredging Conservation Plan (Hyder 2013) as amended. Trees should follow the specification provided in [Appendix IV](#) unless alternative working methods are agreed between the Trust and Natural England.

Water Quality

- MC20: Harvest biomass (weed cutting) to remove nutrients from phosphorus/nitrogen cycles. This compliments works to reverse successional trends.
- MC21: Undertake dredging to remove nutrients contained within sediment, thus reducing possibility of remobilisation
- MC22: Implement management options to remediate polluted water input at Pocklington/Bielby Beck in collaboration with Environment Agency.
- MC23: Undertake a comprehensive walkover survey, detailing location of any discharges and surrounding land use (to clarify possible hydrological linkages raised in Jacobs, 2008 report). This should also include wet weather sampling of any identified discharge points and catchment as required - subject to funding.
- MC24: Work in partnership with Environment Agency to alleviate any identified concerns relating to Pocklington Sewage Treatment Works or Combined Sewer Overflows (CSOs).
- MC25: Work in partnership with Environment Agency to implement actions identified in the Diffuse Water Pollution Plan for the River Derwent and Pocklington Canal (2013).
- MC26: Encourage farmers and land owners to engage in Countryside Stewardship, adopting measures to reduce possible diffuse pollution including, capital yard improvements, buffer strips, maintenance of ditch/swale systems to reduce sedimentation in canal, sediment traps, winter cover crops or different main crops on field susceptible to sediment erosion.
- MC27: Work in partnership with Environment Agency to secure funding to do some remedial work on the Pocklington Beck under the Water Framework Directive, in order to look at diffuse pollution and habitat works and thus alleviate any nutrient run off into the Beck.

Invasive Species

- MC28: Undertake invasive species removal identified on the maps in **Figures 14-32**.
- MC29: The Trust's inspection team to monitor the Canal on a monthly basis and log new locations or new invasive species.
- MC30: Implement a programme of invasive species control, by volunteers and contractors as required.
- MC31: Non-native invasive species discovered during the course of the Project will be treated immediately in order to stop it becoming established on the Canal.

Risks of Boat Usage and Disturbance

- MC32: Seek to maintain boat movements at less than 500 movements a year.

Animal Erosion/Poaching

- MC33: Identify where animals are gaining access to the Canal and whether the reinstatement or improvement of boundary treatment along the Canal is required to reduce poaching or erosion where it is determined to have a negative effect. There are also benefits to poaching in some areas, as it ensures species richness, and therefore the situation should be monitored.

6.4 Access and Interpretation (AI) Recommendations

- AI1: Form and adopt a visitor strategy to enable an approach to be adopted that encourages and enhances visitor engagement with respect to the special qualities of the canal.

6.5 Conflict of Interests (CI) Recommendations

Increased Visitor Numbers

- CI1: Adopt a 'go slow' approach to promoting the canal, encouraging manageable visitor numbers with enhanced interpretation material that enhances appreciation of the canals special interest and guides them to less sensitive areas.

Restoration of Navigation Beyond Melbourne

- CI2: Undertake environmental impact assessment of proposed restoration of navigation beyond Melbourne to understand the implications of any such proposals to environmental systems and thereby enable the identification of how effects can be avoided or mitigated.

6.6 Management Plan

- 6.6.1 In consideration of the management recommendations identified above, a number of actions have been identified that should be undertaken to ensure the preservation and enhancement of the cultural and natural heritage interest of the Pocklington Canal.
- 6.6.2 These actions are presented in **Table 7** below, and are depicted on **Figures 11-32**. The plan identifies *Actions* to be undertaken, their *Priority* and whose *Responsibility* it is undertake the action.

Table 7: Management Plan

| CMP Policy | Plan Ref. | Action | Priority | | | Responsibility |
|---|-----------|---|--------------------|-----------------------|--------|----------------|
| | | | Short Term (<3yrs) | Longer Term (3-10yrs) | Annual | |
| General Measures | | | | | | |
| Ownership and Management | | | | | | |
| MC1 | n/a | Form partnership agreement with owner of Bielby Arm. | ✓ | | | CRT |
| MC2 | n/a | Re-establish land ownership boundaries where lost | | ✓ | | CRT |
| MC3 | n/a | Maintain Heritage Partnership Agreement with the Local Planning Authority. | | ✓ | | CRT |
| MC4 | n/a | Work with Local Planning Authority to identify a strategy for controlling unsympathetic development within the Canal's setting | ✓ | | | CRT |
| Vegetation and Water Environment | | | | | | |
| MC12 | n/a | Adopt a vegetation clearance strategy to remove potentially damaging growth from structures and banks | ✓ | | | CRT |
| MC10 | n/a | Adopt a mowing strategy to best manage habitats along canal margins | ✓ | | | CRT |
| MC14-MC18 | n/a | Adopt a strategy for harvesting of biomass (weed cutting) to remove nutrients from phosphorus/nitrogen cycles. | ✓ | | | CRT |
| Structures | | | | | | |
| MC5 MC7 CI1-2 | n/a | Conduct assessments and adopt a strategy for restoring the full length of the Canal to navigable status | | ✓ | | CRT |
| MC11 | n/a | Maintain routine structural inspections at monthly, annual and ten year intervals | | | ✓ | CRT |
| MC6 | n/a | Compile and keep up to date a conservation handbook for the Canal identifying sources and types of materials to be used in restoration works. | ✓ | | | CRT |

| CMP Policy | Plan Ref. | Action | Priority | | | Responsibility |
|--|-----------|--|--------------------|-----------------------|--------|----------------|
| | | | Short Term (<3yrs) | Longer Term (3-10yrs) | Annual | |
| Access and Interpretation | | | | | | |
| AI1 | n/a | Adopt a Visitor Interpretation Plan | ✓ | | | CRT |
| <u>Canal Head to Top lock</u> | | | | | | |
| In Channel Works | | | | | | |
| MC14,15,18 & MC21 | 14.1 | Dredge the basin to a profile of approx.10m x 1.5m as per Randalls survey (2015). This should be undertaken approx. every 8 years to prevent siltation of the basin. | ✓ | | | CRT |
| Tree Works | | | | | | |
| MC19 | 14.2 | Remove dead elm trees on the offside above Top Lock | ✓ | | | CRT |
| <u>Top Lock to Silburn Lock</u> | | | | | | |
| In Channel Works | | | | | | |
| MC14,15,16, 17,18,20 & MC21 | 14.3 | Dredge the canal from Top Lock to Silburn Lock Profile 4m by 1.1m as per Hyder report. (Retain reeds on both sides of the canal) | ✓ | | | CRT |
| Tree Works | | | | | | |
| MC19 | 14.4 | Crown thinning and selective tree removal on the offside | ✓ | | | CRT |
| <u>Silburn to Giles Lock</u> | | | | | | |
| Built Heritage Works | | | | | | |
| MC5-9 MC13 | 11.1 | Silburn Lock (HA 5): Undertake vegetation clearance and remedial work to chamber structure | | ✓ | | CRT |
| In Channel Works | | | | | | |
| MC14,15,16,17 | 15.1 | In channel vegetation clearance to clear glyceria from centre of the channel | ✓ | | | CRT |

| CMP Policy | Plan Ref. | Action | Priority | | | Responsibility |
|--|-----------|---|--------------------|-----------------------|--------|----------------|
| | | | Short Term (<3yrs) | Longer Term (3-10yrs) | Annual | |
| | | and open up channel | | | | |
| Tree Works | | | | | | |
| MC19 | 15.2 | Remove overhanging limbs of ash tree on offside to reduce shading | ✓ | | | CRT |
| MC19 | 15.3 | Remove all vegetation overhanging towpath and crown lift trees to 5m | ✓ | | | CRT |
| <u>Giles Lock to Sandhill Lock</u> | | | | | | |
| Built Heritage Works | | | | | | |
| MC5-9 MC13 | 11.2 | Giles Lock (HA 6): Undertake vegetation clearance and remedial work to chamber structure | | ✓ | | CRT |
| In Channel Works | | | | | | |
| MC14,15,16,17 & MC20 | 16.1 | In channel vegetation works over a profile of 4m by 1.1m | | ✓ | | CRT |
| Tree Works | | | | | | |
| MC19 | 16.2 | Continue to manage the overhanging tree line on the offside to reduce shading | | ✓ | | CRT |
| MC19 | 16.3 | 50m above Sandhill Lock on the offside remove trees to allow light to the canal | ✓ | | | CRT |
| <u>Sandhill Lock to Coates Lock</u> | | | | | | |
| Built Heritage Works | | | | | | |
| MC5-9 MC13 | 12.1 | Sandhill Lock (HA 8): Undertake vegetation clearance and remedial work to chamber structure | ✓ | | | CRT |
| In Channel Works | | | | | | |
| MC21 | 17.1 | Dredging of this length to open up a profile of 4m wide by 1m deep as per Hyder plan | | ✓ | | CRT |

| CMP Policy | Plan Ref. | Action | Priority | | | Responsibility |
|---|-----------|---|--------------------|-----------------------|--------|----------------|
| | | | Short Term (<3yrs) | Longer Term (3-10yrs) | Annual | |
| MC14,15,16,17 & MC20 | 17.2 | Annually manage the phragmites growth in the centre of the channel | | | ✓ | CRT |
| Tree Works | | | | | | |
| MC19 | 17.3-7 | Remove willow, hawthorn and other scrub from offside of canal | ✓ | | | CRT |
| MC19 | 17.8 | Remove overhanging tree from towpath side | ✓ | | | CRT |
| <u>Coates Lock to Bielby Arm</u> | | | | | | |
| Built Heritage Works | | | | | | |
| MC8-9 MC13 | 12.2 | Coates Lock (HA 10): Undertake vegetation clearance | ✓ | | | CRT |
| In Channel Works | | | | | | |
| MC21 | 19.1 | Dredge this section of canal to a profile of 4m by 1.1m as per Hyder report (Fig 17-19) | ✓ | | | CRT |
| MC14,15,16,17 & MC20 | 19.2 | Dense Phragmites needs centre of channel maintaining once dredging completed to maintain open channel | | | ✓ | CRT |
| Tree Works | | | | | | |
| MC19 | 18.1 | Remove all hawthorns along the section between the towpath and the canal | ✓ | | | CRT |
| MC19 | 18.2-3 | Remove willows in the channel and those overhanging the canal in this section | ✓ | | | CRT |
| <u>Bielby Arm to Swing Bridge No.8</u> | | | | | | |
| Built Heritage Works | | | | | | |
| MC6 MC8 MC13 | 12.3 | Culvert no.7 (HA 12): Undertake remedial work to wing walls | ✓ | | | CRT |

| CMP Policy | Plan Ref. | Action | Priority | | | Responsibility |
|---|------------------|--|--------------------|-----------------------|--------|----------------|
| | | | Short Term (<3yrs) | Longer Term (3-10yrs) | Annual | |
| MC1 | 12.4 | Bielby Arm Basin (HA 13): Establish management agreement with owner | ✓ | | | CRT |
| Tree Works | | | | | | |
| MC19 | 19.3 | Remove trees overhanging the canal on the offside | ✓ | | | CRT |
| MC19 | 19.4-7 | Selectively thin and remove trees on towpath side to allow light to canal | ✓ | | | CRT |
| <u>Swing Bridge No.8 Walbut Lock</u> | | | | | | |
| Tree Works | | | | | | |
| MC19 | 19.8 | Selectively thin trees on towpath side near to bridge to allow light to canal | ✓ | | | CRT |
| MC19 | 19.9-10 & 20.1-2 | Continue to manage tree line on offside of the canal. Remove from bankside and that overhanging the canal, but maintain woodland for badgers | | ✓ | | CRT |
| MC19 | 20.3 | Maintain the centre of the channel clear of vegetation to ensure an open channel | ✓ | | | CRT |
| <u>Walbut Lock to Thornton Lock</u> | | | | | | |
| Built Heritage Works | | | | | | |
| MC6 MC8 MC13 | 12.5 | Walbut Lock (HA 15): Investigate potential blockage/collapse of bywash | ✓ | | | CRT |
| MC6 MC13 | 12.5 | Walbut Lock (HA 15): Repair failed balance beam | | ✓ | | CRT |
| MC6 MC9 MC13 | 12.6 | Walbut Bridge (HA 16): Pick out and replace damaged bricks, remove concrete mortar (where appropriate) and repoint | | ✓ | | CRT |
| MC6 MC8 MC13 | 12.7 | Culvert no. 6 (HA 18): Undertake remedial work to wing walls | ✓ | | | CRT |

| CMP Policy | Plan Ref. | Action | Priority | | | Responsibility |
|---|---------------|--|--------------------|-----------------------|--------|----------------|
| | | | Short Term (<3yrs) | Longer Term (3-10yrs) | Annual | |
| In Channel Works | | | | | | |
| MC21 | 21.1 | Dredging of this section with a 1.1m by 4m profile of the channel as per Hyder report | ✓ | | | CRT |
| MC14,15,16,17 & MC20 | 21.2 | The plants in the channel will be removed when the dredging of this section takes place as well. This will require regular maintenance afterwards. | | | ✓ | CRT |
| Tree Works | | | | | | |
| MC19 | 21.3-4 | Remove hawthorn and willows from the offside to allow light to channel | ✓ | | | CRT |
| MC19 | 21.5 | Remove elders x 4 from towpath side | ✓ | | | CRT |
| <u>Thornton Lock to Church Bridge</u> | | | | | | |
| Built Heritage Works | | | | | | |
| MC6 MC8 MC13 | 12.8 | Thornton Lock (HA 19): Investigate potential blockage/collapse of bywash | ✓ | | | CRT |
| In Channel Works | | | | | | |
| MC14,15,16,17 & MC20 | 22.1 | Removal of channel vegetation along 250m section between Thornton Lock and Church Bridge | ✓ | | | CRT |
| <u>Church Bridge to Swing Bridge 6</u> | | | | | | |
| Built Heritage Works | | | | | | |
| MC6 MC9 MC13 | 12.9 | Church Bridge (HA 22): Pick out and replace damaged bricks, remove concrete mortar (where appropriate) and repoint | ✓ | | | CRT |
| Tree Works | | | | | | |
| MC19 | 22.2-3 & 23.1 | Manage scrub and trees on the offside of the canal | | ✓ | | CRT |

| CMP Policy | Plan Ref. | Action | Priority | | | Responsibility |
|------------|-----------|---|--------------------|-----------------------|--------|----------------|
| | | | Short Term (<3yrs) | Longer Term (3-10yrs) | Annual | |
| MC19 | 23.2 | Remove alder trees on offside just after Swing Bridge 7 on the offside. Remove 50% cover | | ✓ | | CRT |

| Swing Bridge 6 to Swing Bridge 5 | | | | | | |
|---|--------|---|--|---|--|-----|
| Built Heritage Works | | | | | | |
| MC6 MC8 MC13 | 12.10 | Swing Bridge 6 (HA 25): Undertake remedial work to repair crack in abutment | | ✓ | | CRT |
| Tree Works | | | | | | |
| MC19 | 23.3 | Thin out band of alders on the offside | | ✓ | | CRT |
| MC19 | 24.1-2 | Cut back small willows to allow light to offside of canal | | ✓ | | CRT |
| MC19 | 24.5-6 | Remove small trees next to towpath to open up views of ings. Also crown lift ash trees to open up towpath | | ✓ | | CRT |
| MC19 | 24.7 | Remove 1 ash tree and 1 alder to open up area for adjacent Ings birds | | ✓ | | CRT |

| Swing Bridge 5 to Swing Bridge 3 (Gardham Lock) | | | | | | |
|--|------|---|---|---|--|-----|
| Built Heritage Works | | | | | | |
| MC6 MC8 MC13 | 13.1 | Swing Bridge 5 (HA 26): Undertake remedial work to repair abutment | | ✓ | | CRT |
| MC6 MC8 MC13 | 13.2 | No.5 Culvert (HA 27): Undertake remedial work to wing walls | | ✓ | | CRT |
| Tree Works | | | | | | |
| MC19 | 24.8 | Remove multi stemmed ash and 2 alders from next to bridge on towpath side to open up area for adjacent Ings birds | | ✓ | | CRT |
| MC19 | 24.4 | Thin and lift offside trees, remove back half a metre from the canal | | ✓ | | CRT |
| MC19 | 25.1 | Remove smaller willows to allow light to canal | ✓ | | | CRT |

| CMP Policy | Plan Ref. | Action | Priority | | | Responsibility |
|--|-----------|---|--------------------|-----------------------|--------|----------------|
| | | | Short Term (<3yrs) | Longer Term (3-10yrs) | Annual | |
| MC19 | 25.2 | Coppice back goat willows on towpath side | | ✓ | | CRT |
| MC19 | 25.3-6 | Remove select trees and coppice others on towpath side | | ✓ | | CRT |
| MC19 | 25.7 | Adjacent swing bridge no.4 crown lift trees on offside to allow light to canal. Undertake works to take trees back to the waters edge | | ✓ | | CRT |
| MC19 | 25.8 | Remove scrub on offside upstream | | ✓ | | CRT |
| MC19 | 26.1 | Remove horse chestnuts to allow light into the channel | | ✓ | | CRT |
| <u>Gardham Lock to Cottingwith Lock</u> | | | | | | |
| Built Heritage Works | | | | | | |
| MC6 MC8-9 MC13 | 13.3 | Gardham Lock (HA 30): Pick out and replace damaged bricks and repoint | | ✓ | | CRT |
| MC6 MC9 MC13 | 13.4 | Hagg Bridge (HA 33): Pick out and replace damaged bricks, remove concrete mortar (where appropriate) and repoint | ✓ | | | CRT |
| MC6 MC9 MC13 | 13.4 | Hagg Bridge (HA 33): Repair coping | ✓ | | | CRT |
| MC13 | 13.4 | Hagg Bridge (HA 33): Seek relocation of pipe from west elevation | | ✓ | | CRT |
| MC6 MC8-9 MC13 | 13.5 | Culvert no.3 (HA 34): Undertake remedial work to wing walls | ✓ | | | CRT |
| MC6 MC8-9 MC13 | 13.6 | Culvert no.1 (HA 38): Undertake remedial work to wing walls | ✓ | | | CRT |
| MC13 | 13.7 | Swing Bridge (HA 39): Consolidate remains | ✓ | | | CRT |
| In Channel Works | | | | | | |
| MC14,15,16,17 & MC20 | 26.2 | Weed clearance required in centre of channel annually to retain an open channel | | | ✓ | CRT |

| CMP Policy | Plan Ref. | Action | Priority | | | Responsibility |
|-------------------|-----------|---|--------------------|-----------------------|--------|----------------|
| | | | Short Term (<3yrs) | Longer Term (3-10yrs) | Annual | |
| Tree Works | | | | | | |
| MC19 | 26.3-5 | Willows and on the offside to be pollarded, thinned and removed where required to reduce shading onto the canal | | ✓ | | CRT |
| MC19 | 27.1 | Remove overhanging willow branches from the channel | ✓ | | | CRT |
| MC19 | 27.2 | Pollard willow over towpath | | ✓ | | CRT |
| MC19 | 27.3 | Remove small horse chestnut to open up the canal and reduce shading | | ✓ | | CRT |
| MC19 | 29.1 | Remove willow over towpath | | ✓ | | CRT |
| MC19 | 32.1 | Pollard willows to reduce encroachment on towpath | | ✓ | | CRT |

7. Adoption and Review

7.1 Implementation

- 7.1.1 The actions detailed in Section 6.4 should be viewed as aspirational, and representative of a strategy to secure the long term preservation and enhancement of the natural and historic values inherent within the Pocklington Canal. There are, however, considered to be actions that are of a greater priority to others and these are identified as short term aims.
- 7.1.2 It is considered that funding should be sought to undertake the actions identified as 'short term' as a priority and that longer term actions should be built into future financial planning strategies.

Short Term Works

- 7.1.3 The following short term works have been identified as part of the Management Plan. It is recommended that these be conducted over the three years following the adoption of this plan.
- Built Heritage Works
 - Establish management agreement with owner of Bielby Arm.
 - Investigate potential blockage/collapse of bywashes of Walbut Lock (HA 15) and Thornton Lock (HA 19).
 - Undertake remedial work to wing wall structures of culverts 1, 3, 6 and 7 (HA 38, 34, 18, and 12).
 - Clear vegetation from Coates Lock (HA 10).
 - Clear vegetation and undertake remedial work to lock chamber of Sandhill Lock (HA 8).
 - Undertake remedial work to Church Bridge (HA 22) and Hagg Bridge (HA 33).
 - Consolidate remains of the former Swing Bridge at Cottingwith (HA 39).
 - In Channel Works
 - Dredging from Canal Head (including basin) to Silburn lock
 - In-channel vegetation removal from Silburn to Giles Lock.
 - Dredging between Coates Lock to Bielby Arm.
 - In-channel vegetation, vegetation clearance between Bielby Arm and Walbut Lock.
 - Dredging Walbut Lock to Thornton Lock.
 - Thornton Lock to Church Bridge in channel vegetation clearance.

- Gardham Lock to Cottingwith Lock; continuation of channel maintenance using weed cutting boat on an annual basis
- Tree Works
 - Tree removal, thinning and crown lifting from Top Lock to Silburn Lock,
 - Tree works on towpath side, and tree removal, thinning and crown lifting on offside between Silburn and Giles Lock
 - Removal of trees from the offside (50m upstream of Sandhill Lock)
 - Removal of willows and other scrub from the offside of Canal between Sandhill Lock and Coates Lock. Remove overhanging trees from towpath side.
 - Removal of Hawthorns from towpath bank and overhanging willows between Coates Lock and Bielby Arm
 - Crown lifting and tree works near No. 8 Swing Bridge.
 - Walbut Lock scrub and tree removal on offside of the canal.
 - Removal of smaller willows between Swing Bridge No 5. and Gardham Lock.
 - Removal of overhanging willows between Gardham Lock and East Cottingwith Lock

7.2 Monitoring

7.2.1 In order to allow maintenance to be tracked an ongoing record should be maintained.

7.3 Review

7.3.1 This CMP is designed to work as a reference text, to support a maintenance/management plan for the site and its heritage assets. It is perceived that the CMP may remain relevant for approximately ten years; although it is suggested that a five year review point is incorporated into the review process along with an annual check to advise and assist on the work programme where necessary.

8. References

8.1 Acknowledgements

- 8.1.1 This project was commissioned by the Canal & River Trust, and Ecus are grateful to Jane Thomson in regard to this.
- 8.1.2 The authors are also especially grateful to PCAS for their support and assistance during this project. The authors would like to recognise the staff of Canal & River Trust archive, Humberside HER, Beverley Archives, and the Waterways Museum for their help in researching the Canal. Special thanks also go to John Nottingham of the Pocklington Local History Group for sharing his research.

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Appendix I: Hierarchy of Heritage Assets

| | | | | | | | | | | | |
|-------------------|--|------|-------------|------|--------------------|------|-------------------------------|------|-----------|-----|-------|
| Pocklington Canal | | | | | | | | | | | |
| 1 | Pocklington Beck Feeder Culvert | | | | | | | | | | |
| 2 | Canal Head | | | | | | | | | | |
| | <table border="1"> <tr> <td>1.1</td> <td>Ring Cleats</td> </tr> <tr> <td>1.2</td> <td>Information Centre</td> </tr> <tr> <td>1.3</td> <td>Site of former wharf building</td> </tr> <tr> <td>1.4</td> <td>Warehouse</td> </tr> </table> | 1.1 | Ring Cleats | 1.2 | Information Centre | 1.3 | Site of former wharf building | 1.4 | Warehouse | | |
| 1.1 | Ring Cleats | | | | | | | | | | |
| 1.2 | Information Centre | | | | | | | | | | |
| 1.3 | Site of former wharf building | | | | | | | | | | |
| 1.4 | Warehouse | | | | | | | | | | |
| 3 | Lock Keeper's Cottage | | | | | | | | | | |
| 4 | Top Lock no.9 | | | | | | | | | | |
| | <table border="1"> <tr> <td>4.1</td> <td>Top Lock</td> </tr> <tr> <td>4.2</td> <td>Chamber</td> </tr> <tr> <td>4.3</td> <td>Bottom Lock</td> </tr> <tr> <td>4.4</td> <td>Bywash</td> </tr> <tr> <td>4.5</td> <td>Bench</td> </tr> </table> | 4.1 | Top Lock | 4.2 | Chamber | 4.3 | Bottom Lock | 4.4 | Bywash | 4.5 | Bench |
| 4.1 | Top Lock | | | | | | | | | | |
| 4.2 | Chamber | | | | | | | | | | |
| 4.3 | Bottom Lock | | | | | | | | | | |
| 4.4 | Bywash | | | | | | | | | | |
| 4.5 | Bench | | | | | | | | | | |
| 5 | Silburn Lock no.8 | | | | | | | | | | |
| | <table border="1"> <tr> <td>5.1</td> <td>Top Lock</td> </tr> <tr> <td>5.2</td> <td>Chamber</td> </tr> <tr> <td>5.3</td> <td>Bottom Lock</td> </tr> <tr> <td>5.4</td> <td>Bywash</td> </tr> </table> | 5.1 | Top Lock | 5.2 | Chamber | 5.3 | Bottom Lock | 5.4 | Bywash | | |
| 5.1 | Top Lock | | | | | | | | | | |
| 5.2 | Chamber | | | | | | | | | | |
| 5.3 | Bottom Lock | | | | | | | | | | |
| 5.4 | Bywash | | | | | | | | | | |
| 6 | Giles Lock no.7 | | | | | | | | | | |
| | <table border="1"> <tr> <td>6.1</td> <td>Top Lock</td> </tr> <tr> <td>6.2</td> <td>Chamber</td> </tr> <tr> <td>6.3</td> <td>Bottom Lock</td> </tr> <tr> <td>6.4</td> <td>Bywash</td> </tr> </table> | 6.1 | Top Lock | 6.2 | Chamber | 6.3 | Bottom Lock | 6.4 | Bywash | | |
| 6.1 | Top Lock | | | | | | | | | | |
| 6.2 | Chamber | | | | | | | | | | |
| 6.3 | Bottom Lock | | | | | | | | | | |
| 6.4 | Bywash | | | | | | | | | | |
| 7 | Culvert no. 9 (The Beck) | | | | | | | | | | |
| 8 | Sandhill Lock no.6 | | | | | | | | | | |
| | <table border="1"> <tr> <td>8.1</td> <td>Top Lock</td> </tr> <tr> <td>8.2</td> <td>Chamber</td> </tr> <tr> <td>8.3</td> <td>Bottom Lock</td> </tr> <tr> <td>8.4</td> <td>Bywash</td> </tr> </table> | 8.1 | Top Lock | 8.2 | Chamber | 8.3 | Bottom Lock | 8.4 | Bywash | | |
| 8.1 | Top Lock | | | | | | | | | | |
| 8.2 | Chamber | | | | | | | | | | |
| 8.3 | Bottom Lock | | | | | | | | | | |
| 8.4 | Bywash | | | | | | | | | | |
| 9 | Culvert no. 8 | | | | | | | | | | |
| 10 | Coates Lock no.5 | | | | | | | | | | |
| | <table border="1"> <tr> <td>10.1</td> <td>Top Lock</td> </tr> <tr> <td>10.2</td> <td>Chamber</td> </tr> <tr> <td>10.3</td> <td>Bottom Lock</td> </tr> <tr> <td>10.4</td> <td>Bywash</td> </tr> </table> | 10.1 | Top Lock | 10.2 | Chamber | 10.3 | Bottom Lock | 10.4 | Bywash | | |
| 10.1 | Top Lock | | | | | | | | | | |
| 10.2 | Chamber | | | | | | | | | | |
| 10.3 | Bottom Lock | | | | | | | | | | |
| 10.4 | Bywash | | | | | | | | | | |
| 11 | Coates Bridge | | | | | | | | | | |

| | | |
|----|---|------------------------|
| 12 | Culvert no.7 (The Beck) | |
| 13 | Bielby Arm | |
| 14 | Bielby Bridge (Swing Bridge no.8) | |
| 15 | Walbut Lock no.4 | 15.1 Top Lock |
| | | 15.2 Chamber |
| | | 15.3 Bottom Lock |
| | | 15.4 Bywash |
| 16 | Walbut Bridge | |
| 17 | Walbut Mill Wharf | |
| 18 | Culvert no.6 (The Beck) | |
| 19 | Thornton Lock no. 3 | 19.1 Top Lock |
| | | 19.2 Chamber |
| | | 19.3 Bottom Lock |
| | | 19.4 Bywash |
| 20 | Thornton Feeder Sluice | |
| 21 | Private Wharf | |
| 22 | Church Bridge | |
| 23 | Melbourne Arm | |
| 24 | Dales Bridge (Swing Bridge no.5) | |
| 25 | Kidds Lane (Swing Bridge no. 6) | |
| 26 | Baldwin's Bridge (Swing Bridge no.5) | |
| 27 | Culvert no.5 (Black Drain) | |
| 28 | Peacock Bridge (Swing Bridge no.4) | |
| 29 | Bywash | |
| 30 | Gardham Lock no.2 | 30.1 Top Lock |
| | | 30.2 Chamber |
| | | 30.3 Bottom Lock |
| | | 30.4 Swing Bridge no.3 |
| 31 | Gardham Wharf | |
| 32 | Culvert no. 4 | |
| 33 | Hagg Bridge | |
| 34 | Culvert no.3 (The Flags) | |
| 35 | Storthwait Top Bridge (Swing Bridge no.2) | |
| 36 | Storwood Low Bridge (Swing Bridge no.1) | |
| 37 | Culvert no.2 | |
| 38 | Culvert no.1 (Hacking Drain) | |

| | | |
|----|-----------------------|------------------|
| 39 | Swing Bridge | |
| 40 | Cottingwith Lock no.1 | |
| | | 40.1 Top Lock |
| | | 40.2 Chamber |
| | | 40.3 Bottom Lock |
| | | 40.4 Bywash |
| | | 38.5 Counter |
| 41 | Cottingwith Arm | |
| 42 | Cottingwith Wharf | |

Appendix II: Tables

Table 8: List of Canal SSSIs in England and Wales

| | |
|--|---|
| Exeter Canal | Exe Estuary |
| Ashby Canal | Ashby Canal |
| Chesterfield Canal | Chesterfield Canal |
| Grantham Canal | Grantham Canal |
| Grand Union Canal | Kilby-Foxton Canal |
| Grantham Canal | Kinoulton Marsh & Canal |
| Basingstoke Canal | Basingstoke Canal |
| Leeds-Liverpool Canal | Leeds-Liverpool Canal |
| Royal Military Canal | Dungeness, Romney Marsh And Rye Bay |
| Pocklington Canal | Derwent Ings |
| Leven Canal | Leven Canal |
| Pocklington Canal | Melbourne & Thornton Ings |
| Pocklington Canal | Pocklington Canal |
| Ashton Canal | Hollinwood Branch Canal |
| Huddersfield Narrow Canal | Huddersfield Narrow Canal |
| Rochdale Canal | Rochdale Canal |
| Cromford Canal | Cromford Canal |
| Coombe Hill Canal | Coombe Hill Canal |
| Wyrley & Essington Canal (Cannock Extension Branch | Cannock Extension Canal |
| Montgomery Canal | Montgomery Canal (Aston Locks- Keeper's Bridge) |
| Newport Canal | Newport Canal |
| Llangollen Canal | Prees Branch Canal |

Table 9: Condition Survey Results for all identified Heritage Assets

| Area | Survival | Condition | Heritage at Risk Code* | Trend |
|------------------------------------|----------|-----------|------------------------|-----------|
| 1. Pocklington Beck Feeder Culvert | Unknown | Uncertain | 5 | Unknown |
| 2. Canal Head | Good | Good | 4 | Stable |
| 3. Lock Keeper's Cottage | Good | Good | 4 | Stable |
| 4. Top Lock no.9 | Fair | Fair | 3 | Declining |
| 5. Silburn Lock no.8 | Poor | Very bad | 2 | Declining |

| Area | Survival | Condition | Heritage at Risk Code* | Trend |
|--|----------|-----------|------------------------|-----------|
| 6. Giles Lock no.7 | Poor | Very Bad | 2 | Declining |
| 7. Culvert no.9 | Unknown | Uncertain | 5 | Unknown |
| 8. Sandhill Lock no.6 | Poor | Very bad | 1 | Declining |
| 9. Culvert no.8 | Unknown | Uncertain | 5 | Unknown |
| 10. Coates Lock no.5 | Poor | Poor | 3 | Declining |
| 11. Coates Bridge | Fair | Fair | 3 | Stable |
| 12. Culvert no.7 | Fair | Good | 3 | Declining |
| 13. Bielby Arm | Good | Good | 3 | Stable |
| 14. Bielby Bridge (swing Bridge no. 8) | Poor | Good | 4 | Stable |
| 15. Walbut Lock no.4 | Fair | Poor | 2 | Declining |
| 16. Walbut Bridge | Fair | Good | 3 | Stable |
| 17. Walbut Mill Wharf | Fair | Fair | 3 | Stable |
| 18. Culvert no.6 | Fair | Fair | 3 | Stable |
| 19. Thornton Lock no.3 | Fair | Fair | 3 | Stable |
| 20. Thornton Feeder Sluice | Poor | Good | 4 | Stable |
| 21. Private Wharf | Fair | Fair | 3 | Stable |
| 22. Church Bridge | Good | Fair | 3 | Declining |
| 23. Melbourne Arm | Good | Good | 4 | Stable |
| 24. Dales Bridge (Swing Bridge no.5) | Poor | Good | 4 | Stable |
| 25. Kidds Lane (Swing Bridge no.6) | Poor | Good | 3 | Stable |
| 26. Clarks Bridge (Swing Bridge no.5) | Fair | Very bad | 1 | Declining |
| 27. Culvert no.5 | Fair | Poor | 3 | Declining |
| 28. Peacock Bridge (Swing Bridge no.4) | Poor | Good | 3 | Stable |
| 29. Bywash | Good | Fair | 3 | Stable |
| 30. Gardham Lock no.2 | Fair | Fair | 3 | Declining |
| 31. Gardham Wharf | Fair | Fair | 4 | Stable |

| Area | Survival | Condition | Heritage at Risk Code* | Trend |
|---|----------|-----------|------------------------|-----------|
| 32. Culvert no.4 | Unknown | Uncertain | 5 | Unknown |
| 33. Hagg Bridge | Fair | Poor | 2 | Declining |
| 34. Culvert no.3 | Good | Very bad | 2 | Declining |
| 35. Storthwait Top Bridge (Swing Bridge no.2) | Poor | Good | 4 | Stable |
| 36. Storwood Low Bridge (Swing Bridge no.1) | Fair | Fair | 4 | Stable |
| 37. Culvert no.2 | Unknown | Uncertain | 5 | Unknown |
| 38. Culvert no.1 | Good | Good | 3 | Declining |
| 39. Swing Bridge | Poor | Very bad | 2 | Stable |
| 40. Cottingwith Lock no.1 | Fair | Good | 3 | Stable |
| 41. Cottingwith Arm | Very bad | Poor | 2 | Declining |
| 42. Cottingwith Wharf | Fair | Fair | 3 | Declining |

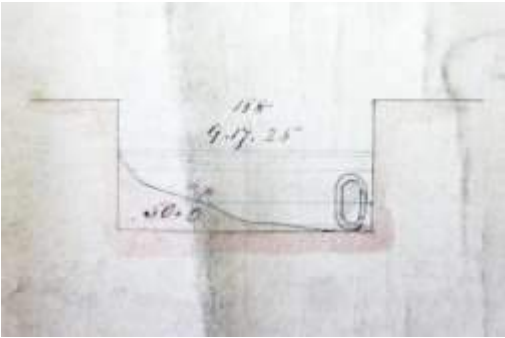
Table 10: Condition of SSSIs in England 2014 with suggested reason for unfavourable condition where appropriate. (Source Natural England)


| Canal | Component SSSI | Condition | | Feature | Adverse reasons |
|--------------------|-------------------------|-------------------------|----|--------------------------------|--|
| Ashby Canal | Ashby Canal | Unfavourable Change | No | Standing open water and canals | possibly boat traffic & siltation |
| Ashton Canal | Hollinwood Branch Canal | Unfavourable declining | | Standing open water and canals | water quality, siltation, water availability & Non Native Species (floating pennywort) |
| Basingstoke Canal | Basingstoke Canal | Unfavourable declining | | Standing open water and canals | Invasive Freshwater Species, Siltation, Fish Stocking, boat traffic |
| Chesterfield Canal | Chesterfield Canal | Unfavourable Change | No | Standing open water and canals | Water pollution, possible boat traffic and siltation |
| Coombe Hill Canal | Coombe Hill Canal | Unfavourable Change | No | Standing open water and canals | inappropriate vegetation management, water pollution |
| Cromford Canal | Cromford Canal | Unfavourable Recovering | | Standing open water and canals | |

| | | | | | |
|---------------------------|---|-------------------------|----|---------------------------------|---|
| Exeter Canal | Exe Estuary | Favourable | | littoral sediment | |
| Grand Union Canal | Kilby-Foxton Canal | Unfavourable Change | No | Standing open water and canals. | possibly boat traffic, water quality & siltation |
| Grantham Canal | Grantham Canal | Unfavourable declining | | Standing open water and canals | Water pollution, siltation, succession & inappropriate cutting/mowing |
| Grantham Canal | Kinoulton Marsh & Canal | Unfavourable Change | No | Standing open water and canals | Non-native invasive species (Azolla) |
| Huddersfield Narrow Canal | Huddersfield Narrow Canal | Unfavourable change | no | Standing open water and canals | recovery from dredging following reopening of canal |
| Leeds-Liverpool Canal | Leeds-Liverpool Canal | Unfavourable Recovering | | Standing open water and canals | |
| Leven Canal | Leven Canal | Unfavourable recovering | | Standing open water and canals | water quality, vegetation management |
| Llangollen Canal | Prees Branch Canal | Unfavourable recovering | | Standing open water and canals | shading and siltation |
| Montgomery Canal | Montgomery Canal (Aston Locks- Keeper's Bridge) | Unfavourable change | no | Standing open water and canals | plants not yet established following canal reopening |
| Newport Canal | Newport Canal | Unfavourable declining | | Standing open water and canals | water quality? |
| Pocklington Canal | Derwent Ings | Favourable | | Standing open water and canals | |
| Pocklington Canal | Melbourne & Thornton Ings | Favourable | | Standing open water and canals | water quality, shading, |
| Pocklington Canal | Pocklington Canal | Unfavourable declining | | Standing open water and canals | water quality, shading & siltation and succession. |
| Rochdale Canal | Rochdale Canal | Unfavourable Recovering | | Standing open water and canals | recovery from dredging following reopening of canal |


| | | | | |
|---|-------------------------------------|---|--------------------------------|-----------|
| Royal Military Canal | Dungeness, Romney Marsh And Rye Bay | 1 Favourable, 2 unfavourable recovering | Standing open water and canals | |
| Wyrley & Essington Canal (Cannock Extension Branch) | Cannock Extension Canal | Unfavourable recovering and favourable | Standing open water and canals | siltation |


Appendix III: Cultural Heritage Gazetteer

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| Pocklington Canal: Pocklington Beck Feeder Culvert | | Heritage Asset | 1 |
|  | Statutory Designations: | Grade II Listed Building (part) | |
| | Monument Type: | Culvert | |
| | NGR: | 480025 447359 | |
| | Location: | Canal Head, near Pocklington | |
| Description: | <p>A culvert which feeds the Canal from Pocklington Beck. The culvert is documented in 1859 (see picture) as comprising an elliptical, likely brick built, structure. The route of the culvert historically led off of the tail race of the water management system associated with a former bone mill situated to the north of the York to Hull road.</p> <p>The culvert forms joins the Grade II Listed Building of Pocklington Canal Top Lock and Canal Head.</p> | | |
| Heritage Value: | The culvert has local to regional evidential and historic value. | | |
| Survival: | Unknown | | |
| Condition: | Unknown | | |
| Vulnerability: | Deterioration, water damage, vegetation, blockage. | | |
| Trend: | Unknown | | |


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| Pocklington Canal: Canal Head | | Heritage Asset | 2 |
|  | Statutory Designations: | Grade II Listed Building | |
| | Monument Type: | Canal Head | |
| | NGR: | 479971 447294 | |
| | Location: | South of Canal Head, near Pocklington. | |
| Description: | <p>The head of Pocklington Canal, constructed in red brick with ashlar coping stones and slots for vertically set timber bumping pieces. The structure of the Canal head comprises recessed bays on the eastern and western side and a narrowed bay at the northern terminus which likely functioned as winding hole. The wharf to the west was likely let for use by private companies, whilst that to the east was a public wharf operated initially by the wharfinger Thomas Johnson.</p> <p>The culvert joins the Grade II Listed Building of Pocklington Canal Top Lock and Canal Head.</p> <p><i>Element 1.1</i> Cast iron ring cleats (three in total) are located along the northern side of the Canal basin.</p> <p><i>Element 1.2</i> The PCAS Information Centre comprises a small red brick built structure with pitched tiled roof. The building has a door and shuttered window situated in its southern elevation. The building appears to be of nineteenth century origin, but is not depicted on historic Ordnance Survey maps. It is, however, situated in the vicinity of Denison’s warehouse and granary and may represent a surviving fragment of this complex.</p> <p>Further archaeological remains associated with the early wharf buildings may survive to its southwest.</p> <p><i>Element 1.3</i> The site of a former wharf warehouse built for Robert Dennison in 1834 lies within the vicinity of the current picnic area. Slight undulations in ground levels in this area indicate that there may be archaeological remains relating to this structure.</p> <p><i>Element 1.4</i> To the east of the Canal is a three storey brick built warehouse with pitched pantiled roof. The building has been renovated as a dwelling and is believed to comprise the first warehouse constructed in 1818 by Thomas Johnson. There are numerous irregularly spaced windows across the west elevation including one larger opening which may represent an original loading door.</p> | | |
| Heritage Value: | The Canal head has regional aesthetic and historic value. In addition there is potential for remains relating to former | | |

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| Pocklington Canal: Canal Head | | Heritage Asset | 2 |
| | wharf buildings which would be of local archaeological value. | | |
| Survival: | Good. | | |
| Condition: | Good. | | |
| Vulnerability: | Deterioration, plant growth and water damage. | | |
| Trend: | Stable. | | |


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| Pocklington Canal: Lock Keeper's Cottage | | Heritage Asset | 3 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Building | |
| | NGR: | 479849 447199 | |
| | Location: | Canal Head. | |
| Description: | Brick built, two-storey cottage, rendered and painted. The building has a hipped red clay, pantile roof and small paned sash windows. The building is situated in a small garden the gate post to which is possibly made from a reused lock balance beam or paddle gear stanchion. A canted bay window overlooks the Canal. The Lock House is currently in private ownership. | | |
| Heritage Value: | The building is of local-regional aesthetic and historic value. | | |
| Survival: | Good. | | |
| Condition: | Good. | | |
| Vulnerability: | Removal of historic material, plant growth. | | |
| Trend: | Stable | | |

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| Pocklington Canal: Top Lock No.9 | | Heritage Asset | 4 |
|  | Statutory Designations: | Grade II Listed Building. | |
| | Monument Type: | Lock | |
| | NGR: | 479856 447183 | |
| | Location: | South of Lock House. | |
| Description: | | <p>Constructed in 1817-1818, and refurbished by PCAS post 1970. The culvert forms joins the Grade II Listed Building of Pocklington Canal Top Lock and Canal Head.</p> <p><i>Element 4.1</i> The top lock is a modern replacement, with square section balance beams. The lock was refurbished in 2002 and a commemorative plaque marks this date. The lock has ground paddle gears comprising cast iron stanchions with rack and pinion gearing. The cast iron anchor collars are a later replacement. The cill was not inspected. The ashlar surrounding the top lock is loose and reeds are growing between joins.</p> <p><i>Element 4.2</i> The Canal chamber is constructed in red brick with ashlar coping stones. The chamber has been partially rebuilt and the coping stones although original have been moved and repositioned. The bricks at water level have suffered some damage. There are full height beam slots built in along the Canal chambers length which would historically have help bumping pieces and a steel ladder set into the Canal chamber wall. The chamber base and wall foundations were not inspected.</p> <p><i>Element 4.3</i> The bottom lock is a later replacement, with square section balance beams, new anchor collars and gate paddle gears. There are two plaques dating to the refurbishment of the lock one dating to 2001 and the second to 2002.</p> <p><i>Element 4.4</i> The entrance to the bywash is located in the ashlar stone coping north of the top lock. It appears to be in working order.</p> <p><i>Element 4.5</i> A bench is situated to the side of the lock which was constructed from old railway tracks which had been used as balance beams on Cottingwith Lock.</p> | |
| Heritage Value: | | The lock is of national architectural and historic value. | |
| Survival: | | Moderate. | |
| Condition: | | Poor – There is vegetation growing between the joins of the ashlar surrounding the top lock and the damage to the brick at water level in the canal chamber. The lock is also | |

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| Pocklington Canal: Top Lock No.9 | | Heritage Asset | 4 |
| | | considered to be in a state of decline caused by exposure to the elements. Lock gates need constant refurbishment and replacement | |
| Vulnerability: | Deterioration, plant growth, water damage. | | |
| Trend: | Slow decline. | | |


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| Pocklington Canal: Silburn Lock No.8 | | Heritage Asset | 5 |
|  | Statutory Designations: | Grade II Listed Building. | |
| | Monument Type: | Lock | |
| | NGR: | 479733 446815 | |
| | Location: | South of Top Lock (HA 38). | |
| Description: | <p>Constructed in 1817-1818. In very bad condition. The lock gates have been removed and there is significant damage to the brick and stone work. There is general erosion of the stonework and ashlar is missing from the side walls. There are no lock gates or other operational features left in-situ.</p> <p><i>Element 5.1</i> The top lock no longer has its lock gates. Reeds and vegetation has become established and this is loosening the stone work. The anchor collar and wrought iron brace from the former ground paddle gear survive on the south side.</p> <p><i>Element 5.2</i> There lock chamber and splayed wing walls are constructed of red brick with ashlar stone coping stepped where the lower wing walls slope down. The brick work is suffering from substantial water damage. Ivy growth is causing damage to the top edge of the chamber.</p> <p><i>Element 5.3</i> The lock gates and associated infrastructure of the bottom lock has been removed. Vegetation has become established.</p> <p><i>Element 5.4</i> The bywash remains, however the condition is unknown but water no longer flows through it due to the absence of the lock gates. The upper weir comprises low rectangular openings, whilst the lower outfall is from a brick arched opening.</p> | | |
| Heritage Value: | The lock is of high aesthetic and historic value | | |
| Survival: | Poor. | | |

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| Pocklington Canal: Silburn Lock No.8 | | Heritage Asset | 5 |
| Condition: | Poor – There is vegetation becoming established in the cill, elevations of the canal chamber and wing walls of the lock. This vegetation is loosening the stone and brick work which will eventually result in structural damage. Due to the retention of the lock chamber out of water, damage from freezing and general water penetration is occurring at a low level within the chamber leading to significant risks of collapse of the above structure. | | |
| Vulnerability: | Deterioration, plant growth, water damage, erosion | | |
| Trend: | Decline. | | |

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| Pocklington Canal: Giles Lock No.7 | | Heritage Asset | 6 |
|  | Statutory Designations: | Grade II Listed Building. | |
| | Monument Type: | Lock | |
| | NGR: | 479515 446348 | |
| | Location: | North of Toft Farmhouse. | |
| Description: | A brick and ashlar constructed lock. The lock chamber has been previously partially rebuilt and the majority of operational workings have been removed. | | |
| <i>Element 6.1</i> | The top lock no longer has its lock gates. Reeds and vegetation has become established and this is loosening the stone work. The anchor collar and rising lever from the ground paddle survive to the south. | | |
| <i>Element 6.2</i> | There lock chamber and splayed wing walls are constructed of red brick with ashlar stone coping stepped where the lower wing walls slope down. A number of the ashlar coping stones are missing. The interior of the chamber has largely been altered. In some locations leaded staples hold the ashlar stone coping together. There are partially blocked full height slots built into the chamber wall which would have held bumping pieces. The brick work is in very poor condition, suffering from substantial water damage, is missing in a number of locations and vegetation has become well established. | | |
| <i>Element 6.3</i> | The lock gates and associated infrastructure of the bottom lock has been removed. Vegetation has become established. | | |


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| Pocklington Canal: Giles Lock No.7 | | Heritage Asset | 6 |
| <i>Element 6.4</i> | The bywash remains, however the condition is unknown but water no longer flows through it due to the absence of the lock gates. The upper weir comprises low rectangular openings, whilst the lower outfall is from a brick arched opening. | | |
| Heritage Value: | The lock is of national aesthetic and historic value. | | |
| Survival: | Poor. | | |
| Condition: | Poor –Vegetation growth is loosening stone and brick work. The brick work of the canal chamber is in very poor condition and suffering from water damage similar to at Silburn Lock. This and the damage caused to the structural integrity by the loss of masonry and brick has resulted in some structural instability. | | |
| Vulnerability: | Deterioration, plant growth, water damage, erosion, collapse | | |
| Trend: | Decline. | | |


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| Pocklington Canal: Culvert No.9 (The Beck) | | Heritage Asset | 7 |
| | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Culvert | |
| | NGR: | 478939 445860 | |
| | Location: | North of Marketbridge Farm | |
| Description: | This culvert likely dates to 1817-18. The entrance and exit of the culvert are set back from the edge of the Canal, and were not accessible for survey. | | |
| Heritage Value: | Potential local historical and evidential value. | | |
| Survival: | Unknown | | |
| Condition: | Unknown | | |
| Vulnerability: | Unknown | | |
| Trend: | Unknown | | |


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| Pocklington Canal: Sandhill Lock No.6 | | Heritage Asset | 8 |
|  | Statutory Designations: | Grade II Listed Building. | |
| | Monument Type: | Lock | |
| | NGR: | 478777 445689 | |
| | Location: | North of Marketbridge Farm. | |
| Description: | <p>Constructed 1817-1818. A brick and ashlar constructed lock. The majority of operational workings have been removed. The lock chamber walls are currently braced with a series of timber frames. Much of the ashlar coping is loose and the walls where the bottom lock originally sat are beginning to collapse. There are partial remains of the paddle gears situated at the former location of the top lock refaced.</p> <p><i>Element 8.1</i> The top lock no longer retains its lock gates and is in poor condition. Timber posts and rack and pinion mechanism of the ground paddle gear survive, as do the original anchor collars. Vegetation is causing the stonework of the cill to loosen and some of the stones are missing.</p> <p><i>Element 8.2</i> There lock chamber and splayed wing walls are constructed of red brick with ashlar stone coping stepped where the lower wing walls slope down. The interior of the chamber has largely been rebuilt or refaced. In some locations leaded staples hold the ashlar stone coping together. There are blocked full height slots built into the chamber wall which would have held bumping pieces. The Canal chamber is currently braced with timber supports and is at risk of collapse. Vegetation and water damage means a number of the brick faces are blown.</p> <p><i>Element 8.3</i> The bottom lock gates have also been removed. The brickwork and ashlar is unstable and at significant risk of complete collapse.</p> <p><i>Element 8.4</i> The bywash is also in poor condition and is missing brick, mortar and stonework at both the entrance and exit points. Water no longer runs through the bywash due to the removal of the lock gates from the lock. The upper weir comprises low rectangular openings, whilst the lower outfall is from a brick arched opening.</p> | | |
| Heritage Value: | The lock is of high architectural and historic value. | | |
| Survival: | Poor. | | |


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| Pocklington Canal: Sandhill Lock No.6 | | Heritage Asset | 8 |
| Condition: | Very bad - The lock is suffering significant structural problems with the canal chamber currently braced with timber supports and the wing walls being at significant risk of collapse. Vegetation growth is further exasperating the problems and a number of stones are now missing from the cill. | | |
| Vulnerability: | Deterioration, plant growth, water damage, erosion, collapse | | |
| Trend: | Decline. | | |

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| Pocklington Canal: Culvert No.8 | | Heritage Asset | 9 |
| | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Culvert | |
| | NGR: | 478537 445317 | |
| | Location: | North of Coates Lock | |
| Description: | This culvert likely dates to 1817-18. The entrance and exit of the culvert are set back from the edge of the Canal, and were not accessible for survey. | | |
| Heritage Value: | Potential local historical and evidential value. | | |
| Survival: | Poor | | |
| Condition: | Good | | |
| Vulnerability: | Vegetation growth, blockage. | | |
| Trend: | Stable. | | |


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| Pocklington Canal: Coates Lock No.5 | | Heritage Asset | 10 |
|  | Statutory Designations: | Grade II Listed Building. | |
| | Monument Type: | Lock | |
| | NGR: | 478541 445235 | |
| | Location: | North of Coates Bridge. | |
| Description: | Constructed in 1817-18 now restored and partially rebuilt. | | |
| <i>Element 10.1</i> | The top lock is fitted with a lock gate inserted in 2000. The lock gate has iron stanchion mounted rack and pinion ground paddle gear. Vegetation has become established within the gate woodwork | | |
| <i>Element 10.2</i> | There lock chamber and splayed wing walls are constructed of red brick with ashlar stone coping stepped where the lower wing walls slope down. The interior of the chamber has largely been rebuilt or refaced and incorporates sections of ashlar. There are full height slots built into the chamber wall before each gate to facilitate the temporary damming of the lock for maintenance. A modern steel ladder is set into the Canal chamber wall. | | |
| <i>Element 10.3</i> | The bottom lock is also a later replacement with square section balance beams and six-spoke wheel turned rack and pinion gate paddle gear. Vegetation has become established in the woodwork of the north facing side of the gate. | | |
| <i>Element 10.4</i> | The bywash appears to be in good condition but has been bypassed by a modern ribbed plastic pipe. The upper weir comprises low rectangular openings, whilst the lower outfall is from a brick arched opening. | | |
| Heritage Value: | The lock is considered to be of national historic and architectural value. | | |
| Survival: | Poor. Much of the lock has been replaced or reconstructed. | | |
| Condition: | Fair - The lock was restored and fitted with new gates in 2000. Vegetation has become established in the woodwork of these gates and will require removing before causing further damage. | | |
| Vulnerability: | Vegetation and plant growth, water damage. | | |
| Trend: | Declining. | | |


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| Pocklington Canal: Coates Bridge | | Heritage Asset | 11 |
|  | Statutory Designations: | Grade II Listed Building. | |
| | Monument Type: | Bridge | |
| | NGR: | 478540 445204 | |
| | Location: | Near Marketbridge Lane. | |
| Description: | <p>Bridge designed by George Leather and Constructed in 1817-1818.</p> <p>Built of brick with broad ashlar basket skewed arch, rounded ashlar coping and plain ashlar string course at parapet level. Brickwork is of handmade red bricks laid in English Wall bond (alternating rows of headers and stretchers) with lime mortar bed. In addition to these architectural features the bridges also feature segmental brick buttresses with rounded stone caps either side of the arch, and square newel posts at the end of each parapet. Shows some evidence of having been rebuilt in part. The north east buttress has some damaged bricks which have been patched.. The stone coping has been removed from the tow path. There is some minor vegetation growth.</p> | | |
| Heritage Value: | The bridge is of national aesthetic and historic value. | | |
| Survival: | Moderate. | | |
| Condition: | Good - Some vegetation is beginning to become established within the bridge elevations. | | |
| Vulnerability: | Deterioration, plant growth, water damage. | | |
| Trend: | Stable | | |

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| Pocklington Canal: Culvert No.7 (Mossick Dike Culvert) | | Heritage Asset | 12 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Culvert | |
| | NGR: | 478480 444381 | |
| | Location: | East of Thornton Wood. | |
| Description: | Built 1817-1818. Three brick ring round-arched culvert within curving wing wall built in brick with stone coping. The culvert comprises two-phases and the upper brickwork has been replaced. | | |
| Heritage Value: | The culvert is of local historic and evidential value. | | |
| Survival: | Moderate. | | |
| Condition: | Good - Some of the brick work and masonry is falling loose due to plants establishing themselves between courses. | | |
| Vulnerability: | Deterioration, plant growth, water damage. | | |
| Trend: | Decline. | | |


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| Pocklington Canal: Bielby Arm | | Heritage Asset | 13 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Canal Branch | |
| | NGR: | 478605 444040 | |
| | Location: | Northwest of Bielby. | |
| Description: | Extension of the Canal towards Bielby originally named Bielby Creek on historic maps. The arm does not retain any evidence of timber wharfs, masonry walls or associated structures. In plan the arm widens to the south to incorporate a winding hole. | | |
| Heritage Value: | The Bielby Arm is of regional historic value. | | |
| Survival: | Good | | |


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| Pocklington Canal: Bielby Arm | | Heritage Asset | 13 |
| Condition: | Good - Tree growth on the edge of the canal is likely loosening the bank and may be damaging the puddling, otherwise the arm appears to be in a good and stable condition. | | |
| Vulnerability: | Deterioration, erosion. | | |
| Trend: | Stable. | | |

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| Pocklington Canal: Bielby Bridge (Swing Bridge No.8) | | Heritage Asset | 14 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Bridge | |
| | NGR: | 478165 444006 | |
| | Location: | West of Bielby. | |
| Description: | <p>Originally constructed in 1815, likely replaced in the 1930s with a new swing bridge, and replaced with a fixed bridge in the 1960s. The present bridge was installed post-1970. Formerly named Chaplin Bridge (ERYA ref: DDGD/39).</p> <p>The present bridge is of steel construction and sits on top of curved brick built abutment wall which appears to predate the current bridge structure and has original ashlar coping stones. Concrete and modern brickwork is used extensively to form the foundations and superstructure.</p> <p>There are some substantial cracks in the brickwork of the supporting piers.</p> | | |
| Heritage Value: | The bridge is of high historic value. | | |
| Survival: | Moderate | | |
| Condition: | Good | | |
| Vulnerability: | Deterioration, water damage, plant growth | | |
| Trend: | Stable. | | |

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|---|--|----------------------------|----|
| Pocklington Canal: Walbut Lock No.4 | | Heritage Asset | 15 |
|  | Statutory Designations: | Grade II Listed Building. | |
| | Monument Type: | Lock | |
| | NGR: | 477159 444173 | |
| | Location: | North of Walbut Mill Farm. | |
| Description: | <p>Constructed in 1816-1817, and refurbished post-1970 by PCAS. The lock chamber has some minor areas of mortar loss. The lock was over flowing at time of survey and the bywash did not appear to be functioning.</p> <p><i>Element 15.1</i> The top lock gate is a later replacement with square section balance beams and iron stanchion mounted rack and pinion ground paddle gears and replacement anchor collars. Due to the bywash not functioning this lock gate is currently overflowing.</p> <p><i>Element 15.2</i> The lock chamber and splayed wing walls are constructed of red brick with ashlar stone coping stepped where the lower wing walls slope down. The interior of the chamber was not inspected due to the high water level. In some locations leaded staples hold the ashlar stone coping together. There are full height slots built into the chamber wall before each gate to facilitate the temporary damming of the lock for maintenance. A modern steel ladder is set into the Canal chamber wall.</p> <p><i>Element 15.3</i> The bottom lock is also a later replacement with square section balance beams, six spoke wheel turned gate paddle gear and replaced anchor collars. The gate is currently being overflowed which is resulting in vegetation and debris collecting around the gate.</p> <p><i>Element 15.4</i> The bywash appears in fair condition but is currently not function suggesting it has become blocked. This has resulted in the high water level of the lock chamber and the overflow of the lock gates. Both the upper weir and lower outfall comprise low rectangular openings.</p> | | |
| Heritage Value: | The lock has national architectural and historic value. | | |
| Survival: | Moderate | | |
| Condition: | <p>Poor - The bywash currently appears to be blocked, as a result water is overflowing the lock gates and debris is collecting on the eastern side of either gate. This will be causing excessive wear and tear of the lock gates and increased potential for water damage. The balance beam</p> | | |


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| Pocklington Canal: Walbut Lock No.4 | | Heritage Asset | 15 |
| | of the northern gate of the bottom lock has failed and needs replacing. | | |
| Vulnerability: | Deterioration, plant growth, water damage. | | |
| Trend: | Decline. | | |

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| Pocklington Canal: Walbut Bridge | | Heritage Asset | 16 |
|  | Statutory Designations: | Grade II Listed Building. | |
| | Monument Type: | Bridge | |
| | NGR: | 477114 444192 | |
| | Location: | Northwest of Walbut Mill Farm. | |
| Description: | <p>Bridge designed by George Leather and constructed in 1815-1816.</p> <p>Built of brick with broad ashlar basket skewed arch, rounded ashlar coping and plain ashlar string course at parapet level. Brickwork is of handmade red bricks laid in English Wall bond (alternating rows of headers and stretchers) with lime mortar bed. In addition to these architectural features the bridges also feature segmental brick buttresses with rounded stone caps either side of the arch, and square newel posts at the end of each parapet. Shows some evidence of having been rebuilt in part. The north east buttress has some damaged bricks which have been patched.</p> | | |
| Heritage Value: | The bridge is of national architectural and historic value. | | |
| Survival: | Moderate. | | |
| Condition: | Good - Patching and partial repointing of the bridge in cement has caused some damage to the brick work and replacement with appropriate materials such as a lime mortar should be considered. | | |
| Vulnerability: | Deterioration, plant growth and water damage. | | |
| Trend: | Stable. | | |


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| Pocklington Canal: Walbut Mill Wharf | | Heritage Asset | 17 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Wharf | |
| | NGR: | 477085 444180 | |
| | Location: | West of Walbut Mill Farm. | |
| Description: | A wharf visible as an area of flat grassland. The location of this wharf appears on historic mapping dated 1815-1847 (CRT archive ref 55530). The wharf was likely associated with Walbut Mill which lay to the southwest of the wharf. The wharf itself is not known to have had any structures. | | |
| Heritage Value: | The wharf has local historic value. | | |
| Survival: | Moderate | | |
| Condition: | Fair. | | |
| Vulnerability: | Ploughing, vegetation, flooding. | | |
| Trend: | Stable. | | |


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| Pocklington Canal: Culvert No.6 (The Beck or Nelly Hole Culvert) | | Heritage Asset | 18 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Culvert | |
| | NGR: | 476570 444397 | |
| | Location: | South of Mill House. | |
| Description: | Culvert built in 1815-17 to carry the Canal over The Beck. A basket arched culvert with ashlar voussoirs and skewed brick soffit contained within substantial sweeping brick built wing walls with ashlar coping. There are several phases of brick work with the upper levels of the culvert having been rebuilt. | | |
| Heritage Value: | The culvert is of moderate architectural and historic value. | | |

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| Pocklington Canal: Culvert No.6 (The Beck or Nelly Hole Culvert) | | Heritage Asset | 18 |
| Survival: | Moderate | | |
| Condition: | Fair. - The upper levels of the culvert have been previously rebuilt however the brickwork at the current water level has been partially eroded. | | |
| Vulnerability: | Deterioration, plant growth, water damage. | | |
| Trend: | Stable. | | |


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| Pocklington Canal: Thornton Lock No.3 | | Heritage Asset | 19 |
|  | Statutory Designations: | Grade II Listed Building. | |
| | Monument Type: | Lock | |
| | NGR: | 476095 444396 | |
| | Location: | North of bridge farm. | |
| Description: | <p>Constructed in 1815-17, and refurbished post-1970 by PCAS. Lock partially rebuilt. The wing wall is missing some bricks.</p> <p><i>Element 19.1</i> The top lock gate is a later replacement with railway lines used for balance beams. The lock gate has hydraulic paddle gear and re-uses the original anchor collars.</p> <p><i>Element 19.2</i> There lock chamber and splayed wing walls are constructed of red brick with ashlar stone coping. In some locations there is evidence of leaded staples that would have held the ashlar stone coping together. There are slots containing timber bumper pieces within the chamber, and a steel access ladder.</p> <p><i>Element 19.3</i> The bottom lock matches the top lock. Some vegetation and debris has built up on the gate.</p> <p><i>Element 19.4</i> The bywash appears to function although the brick and stone work at both the entrance and exit points is coming loose and is in poor condition. Both the upper weir and lower outfall comprise low rectangular openings.</p> | | |
| Heritage Value: | The lock is of national aesthetic and historic value. | | |
| Survival: | Moderate | | |
| Condition: | Fair - Some vegetation and debris has built up on the bottom lock gate and the stone and brickwork at both the entrance and exit point to the bywash has been loosened and is in poor condition. The use of railway tracks as | | |

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| | balance beams here is of historical significance but is unsatisfactory for its operation. |
| Vulnerability: | Deterioration, plant growth, water damage. |
| Trend: | Stable. |


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| Pocklington Canal: Thornton Lock Feeder Sluice | | Heritage Asset | 20 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Sluice | |
| | NGR: | 476570 444397 | |
| | Location: | South of Mill House | |
| Description: | A modern red brick sluice with steel sluice gate that allows water into the Canal from The Beck. This sluice possibly replaced an earlier system that originally joined the Canal at the edge of Thornton Lock's northwest wing wall (based on observation of historic OS maps). | | |
| Heritage Value: | The sluice is of local historic value. | | |
| Survival: | Poor | | |
| Condition: | Good | | |
| Vulnerability: | Vegetation, water damage | | |
| Trend: | Stable | | |

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| Pocklington Canal: Private Wharf | | Heritage Asset | 21 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Wharf | |
| | NGR: | 475929 444445 | |
| | Location: | North east of Church Bridge, west of Thornton Lock. | |
| Description: | A former wharf, visible as an area of flat, grassed land. The location of this wharf appears on historic mapping dated 1815-1847 (CRT archive ref 55530). The wharf is not | | |


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| Pocklington Canal: Private Wharf | | Heritage Asset | 21 |
| | known to have been associated with any structures. | | |
| Heritage Value: | The wharf has local historic value. | | |
| Survival: | Moderate | | |
| Condition: | Fair. | | |
| Vulnerability: | Ploughing, vegetation growth. | | |
| Trend: | Stable. | | |


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| Pocklington Canal: Church Bridge | | Heritage Asset | 22 |
|  | Statutory Designations: | Grade II Listed Building. | |
| | Monument Type: | Bridge | |
| | NGR: | 475855 444410 | |
| | Location: | North of Bridge Farm, south of Thornton. | |
| Description: | <p>Bridge designed by George Leather and Constructed in 1815-1816.</p> <p>Built of brick with broad ashlar basket arch, rounded ashlar coping and plain ashlar string course at parapet level. Brickwork is of handmade red bricks laid in English Wall bond (alternating rows of headers and stretchers) with lime mortar bed. In addition to these architectural features the bridges also feature segmental brick buttresses with rounded stone caps either side of the arch, and circular newel posts at the end of each parapet.</p> <p>Service pipes are located along the western face of the bridge. There is some minor vegetation growth and some damage to the brick and stone work.</p> | | |
| Heritage Value: | The bridge is of national aesthetic and historic value. | | |
| Survival: | Good. | | |
| Condition: | Fair - The bridge has been repointed with concrete which will damage the brickwork. Brick work has also been damaged by vegetation growth and vehicular strikes. | | |
| Vulnerability: | Deterioration, plant growth, water damage. | | |
| Trend: | Declining. | | |

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| Pocklington Canal: Melbourne Arm | | Heritage Asset | 23 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Canal Branch | |
| | NGR: | 475325 444296 | |
| | Location: | North of Melbourne. | |
| Description: | <p>Branch of the Canal containing a marina. Serves the town of Melbourne.</p> <p>The arm was altered in 1987 to make space for six pontoons for permanent moorings</p> <p>In 2013 a new 30m mooring was installed, replacing a timber wharf stage on the western side of the arm.</p> | | |
| Heritage Value: | The Melbourne Arm has regional historic value. | | |
| Survival: | Good | | |
| Condition: | Good | | |
| Vulnerability: | Vegetation growth. | | |
| Trend: | Stable. | | |

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| Pocklington Canal: Dales Bridge (Swing Bridge No.7) | | Heritage Asset | 24 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Bridge | |
| | NGR: | 475310 444414 | |
| | Location: | North of Melbourne Arm. | |
| Description: | <p>Originally constructed in 1815, likely replaced in the 1930s with a new swing bridge, and replaced with a fixed bridge in the 1960s. The present bridge was installed post-1970.</p> <p>The present bridge is of steel construction with timber deck. The bridge sits on top of curved brick built abutment wall which reuses original ashlar coping and incorporates some brickwork in the northern abutment that appears to</p> | | |


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| Pocklington Canal: Dales Bridge (Swing Bridge No.7) | | Heritage Asset | 24 |
| | predate the current bridge structure. Concrete and modern brickwork is used extensively to form the foundations and superstructure. The bridge has brick kickers set into concrete. | | |
| Heritage Value: | The swing bridge is of local aesthetic and historic value | | |
| Survival: | Poor | | |
| Condition: | Good | | |
| Vulnerability: | Deterioration, plant growth, water damage. | | |
| Trend: | Stable | | |


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| Pocklington Canal: Kidds Lane (Swing Bridge No. 6.) | | Heritage Asset | 25 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Bridge | |
| | NGR: | 474749 444530 | |
| | Location: | North of Deanery Farm, Melbourne. | |
| Description: | <p>Originally constructed in 1815, likely replaced in the 1930s with a new swing bridge, and replaced with a fixed bridge in the 1960s. The present bridge was installed post-1970.</p> <p>The present bridge is of steel construction and sits on top of curved brick built abutment wall which appears to predate the current bridge structure and has original ashlar coping stones. Concrete and modern brickwork is used extensively to form the foundations and superstructure. The bridge has cobble kickers set into concrete.</p> <p>There are some substantial cracks in the brickwork of the supporting piers.</p> | | |
| Heritage Value: | The swing bridge is of high historic value | | |
| Survival: | Poor | | |
| Condition: | Fair - There is a substantial crack between the brick and the concrete of the supporting piers. This does not appear to have caused any structural instability however it may enable vegetation growth which will further affect the stability of the structure. | | |
| Vulnerability: | Deterioration, plant growth, water damage. | | |
| Trend: | Stable | | |

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| Pocklington Canal: Baldwin's Bridge (Swing Bridge No.5) | | Heritage Asset | 26 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Bridge | |
| | NGR: | 473965 444941 | |
| | Location: | South of Melbourne Ings. | |
| Description: | <p>Swing bridge originally dating to 1815, likely rebuilt in the 1930s then replaced with a level bridge in the 1960s. The bridge was raised by PCAS in the 1970s in order to allow boat passage. The deck was replaced in the 1990s. This bridge was historically also known as Clarks Bridge.</p> <p>The bridge comprises two curving abutments that project into the Canal with fixed timber frame bridge with spayed post and rail fenced parapet. The lower part of the abutments is formed from handmade bricks with ashlar band comprising the coping of the original bridge structure. Above this level the abutments have been raised with later machine made bricks from the Normanton Brick Company. Behind the walls the land has been embanked. The bridge abutments are suffering from collapse.</p> | | |
| Heritage Value: | The bridge is of high architectural and historic value. | | |
| Survival: | Moderate | | |
| Condition: | Very bad - The lower part of the bridge is constructed in low quality brick. The bridge has become structurally unstable and is at risk of collapse. As such the bridge is considered to be in declining condition. | | |
| Vulnerability: | Deterioration, collapse, plant growth, water damage. | | |
| Trend: | Decline. | | |

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| Pocklington Canal: Culvert No.5 (Black Drain) | | Heritage Asset | 27 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Culvert | |
| | NGR: | 473827 445048 | |
| | Location: | North of Westfield Farm. | |
| Description: | Dates to 1815. Circular culvert with a curved wing walls built in brick with ashlar coping stones. The culvert is in good general condition. The wing wall has been partially rebuilt but is suffering from some collapse and has a number of loose coping stones. | | |
| Heritage Value: | The culvert has local evidential and historic value. | | |
| Survival: | Moderate | | |
| Condition: | Poor - The wing wall of the culvert has been rebuilt but is collapsing. The culvert has a number of loose coping stones. | | |
| Vulnerability: | Deterioration, collapse, plant growth, water damage. | | |
| Trend: | Decline | | |

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| Pocklington Canal: Peacock Bridge (Swing Bridge No.4) | | Heritage Asset | 28 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Bridge | |
| | NGR: | 473013 445283 | |
| | Location: | North of The Grange. | |
| Description: | <p>Originally constructed in 1815, replaced in the 1930s with a new swing bridge, replaced with a fixed bridge in the 1960s, with the present bridge post-1970.</p> <p>The present bridge is of steel construction and sits on top of curved brick abutment walls with ashlar coping stones. Makers mark on the steel joists indicates they were produced by British Steel in Shelton. Concrete is used extensively to form the foundations and superstructure. The bridge has brick kickers set into concrete.</p> | | |
| Heritage Value: | The bridge has local historic value. | | |
| Survival: | Poor | | |
| Condition: | Good | | |
| Vulnerability: | Deterioration, plant growth, water damage | | |
| Trend: | Stable. | | |

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| Pocklington Canal: Bywash | | Heritage Asset | 29 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Bywash | |
| | NGR: | 473442 445138 | |
| | Location: | East of Gardham Lock. | |
| Description: | Bywash for Gardham Lock. Comprises a weir situated above the lock, with modern brick abutment walls and timber foot bridge (pictured). Water taken from the weir joins a drain that runs to the south of the Canal and feeds back into the Canal below Gardham Lock within an earth banked channel. The structure appears modern but likely dates originally to 1815. | | |
| Heritage Value: | The bywash is of local evidential and historic value. | | |
| Survival: | Good | | |
| Condition: | Fair | | |
| Vulnerability: | Deterioration, debris, plant growth, water damage. | | |
| Trend: | Stable. | | |

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| Pocklington Canal: Gardham Lock No.2 & No. 3 Swing Bridge | | Heritage Asset | 30 |
|  | Statutory Designations: | Grade II Listed Building. | |
| | Monument Type: | Lock & Bridge | |
| | NGR: | 472944 445322 | |
| | Location: | Northeast of Rossmoor Grange. | |
| Description: | <p>Constructed in 1815, and refurbished post-1970 by PCAS. Refurbishment in 1994 commemorated on a small plaque located on the bottom lock.</p> <p>Historically this lock has been known by a number of names, including Nottingham Lock, Bramleys Lock (Nottingham 2015) and Thompsons in 1859 (CRT archive ref 7453). These names possible derive from local</p> | | |

| Pocklington Canal: Gardham Lock No.2 & No. 3 Swing Bridge | | Heritage Asset | 30 |
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| <i>Element 30.1</i> | landowners, arriving at its current name in the 1860s (Nottingham 2015). Brick work behind top and bottom lock gates in very poor condition. The top lock is a later replacement with square section balance beams and boxed rack and pinion paddle gear, and cast iron anchor collars with square bolts. The position of the cill is marked on top of the Canal chamber sides but was not examined. | | |
| <i>Element 30.2</i> | There lock chamber and splayed wing walls are constructed of red brick with ashlar stone coping stepped where the lower wing walls slope down. The interior of the chamber has been rebuilt or refaced. There are full height slots built into the chamber wall before each gate to facilitate the temporary damming of the lock for maintenance. A modern steel ladder is set into the Canal chamber wall. | | |
| <i>Element 30.3</i> | The bottom lock is also a later replacement with six spoke wheel turned paddle gear (replicas). The top lock also has square section balance beams and one plaque commemorates the refurbishment in 1994. | | |
| <i>Element 30.4</i> | A swing bridge crosses the centre of the Canal chamber. It is of steel construction and sits on top of concrete foundations. The steel is from British Steel in Scunthorpe. The bridge has brick kickers set into concrete. | | |
| Heritage Value: | The lock and swing bridge have national aesthetic and historic value. | | |
| Survival: | Moderate. | | |
| Condition: | Fair - The brickwork behind both the top and bottom lock gates is in very poor condition. | | |
| Vulnerability: | Deterioration, plant growth, water damage. | | |
| Trend: | Decline | | |


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| Pocklington Canal: Gardham Wharf | | Heritage Asset | 31 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Wharf | |
| | NGR: | 472512 445566 | |
| | Location: | South of Four Beck Ends. | |
| Description: | An area of flat land previously used as a wharf. The location of this wharf is recorded on historic OS maps. The wharf was likely in use as a coal wharf for an Engine House (presumably a pumping station) situated at Four Beck Ends which was shown on the 1890 Ordnance Survey map but had been cleared by the 1910 map. The wharf is not known to have been associated with any structures. | | |
| Heritage Value: | The wharf has local historic value and unknown evidential value. | | |
| Survival: | Moderate. | | |
| Condition: | Fair. | | |
| Vulnerability: | Ploughing, vegetation growth. | | |
| Trend: | Stable. | | |

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| Pocklington Canal: Culvert No.4 | | Heritage Asset | 32 |
| | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Culvert | |
| | NGR: | 472453 445530 | |
| | Location: | Northeast of Hagg Bridge | |
| Description: | This culvert likely dates to 1815. The entrance and exit of the culvert are set back from the edge of the Canal, and were not accessible for survey. | | |
| Heritage Value: | Potential local historical and evidential value. | | |
| Survival: | Unknown | | |
| Condition: | Unknown | | |
| Vulnerability: | Vegetation, overgrowth, water damage, deterioration. | | |

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| Pocklington Canal: Culvert No.4 | | Heritage Asset | 32 |
| Trend: | Unknown | | |


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| Pocklington Canal: Hagg Bridge | | Heritage Asset | 33 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Bridge | |
| | NGR: | 471703 445139 | |
| | Location: | West of Hagg Bridge Farm. | |
| Description: | <p>Designed by George Leather and constructed in 1815 by William Marley, James Newton, James Nelson and John Glover. It is possible the bridge incorporates or encases an earlier bridge over The Beck that predated the construction of the Canal.</p> <p>Hagg Bridge is a two span red brick bridge of narrow-waisted, humped-back design featuring a gently curve to wing walls in both elevation and plan. The span over the Canal comprises a basket arch with stone voussoirs. The span over The Beck is principally ashlar built with a semi-circular arch and modern brick parapet supported above on a modern RSJ. The bridge has thin flat stone coping with post and rail fence. Square brick buttresses are situated either side of the Canal arch.</p> <p>The west wall has two phases of brick work with some patching. The west wall is cracked and is also suffering from some bulging. The southwest buttress is also cracked and bulging as is the northeast. The east face has also been rebuilt in two phases. Much of the brick work is blown and the parapet is lifting. The bridge has been repointed in parts in concrete and some of the coping stones have also been replaced in concrete.</p> <p>Services are attached to the west face of the bridge and a free standing gas pipe lies in proximity to the east face.</p> | | |
| Heritage Value: | The bridge has national aesthetic and historic value. | | |
| Survival: | Moderate. | | |
| Condition: | Poor - The bridge is suffering from some bulging and cracks within the brick work. Much of the brick work is blown and the parapet is lifting. The bridge has been partially repointed in concrete which will damage the surrounding brick and stone work and a number of the | | |

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| | coping stone have also been replaced in concrete. | | |
| Vulnerability: | Deterioration, plant growth, weathering, water damage. Surface damage to bricks from concrete. | | |
| Trend: | Decline. | | |
| Pocklington Canal: Culvert No.3 (The Flags) | | | Heritage Asset 34 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Culvert | |
| | NGR: | 470992 444546 | |
| | Location: | The culvert is located north of Storwood. | |
| Description: | A culvert with a curved brick wing wall with two header brick ring round arched soffit. The culvert is in disrepair with loose brick work threatening its stability. | | |
| Heritage Value: | The culvert has local evidential and historic value. | | |
| Survival: | Good | | |
| Condition: | Very bad - Culvert no.3 is considered to be in generally satisfactory condition with significant localised problems. The culvert is considered to be in declining condition with loose brickwork threatening its overall stability. | | |
| Vulnerability: | Deterioration, plant growth, water damage | | |
| Trend: | Decline | | |

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| Pocklington Canal: Storhwait Top Bridge (Swing Bridge No.2) | | | Heritage Asset 35 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Bridge | |
| | NGR: | 471024 444388 | |
| | Location: | Northwest of Storwood. | |
| Description: | Originally constructed in 1815, replaced in the 1930s with a new swing bridge, replaced with a fixed bridge in the 1960s, with the present bridge post-1970. The present bridge is of steel construction and sits on top | | |


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| Pocklington Canal: Storthwait Top Bridge (Swing Bridge No.2) | | Heritage Asset | 35 |
| | of curved concrete and steel piled abutment walls which re-use original ashlar coping stones. Concrete is used extensively to form the foundations and superstructure. The bridge has brick kickers set into concrete. | | |
| Heritage Value: | The bridge has local historic value. | | |
| Survival: | Poor | | |
| Condition: | Good | | |
| Vulnerability: | Deterioration, plant growth, water damage | | |
| Trend: | Stable | | |


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| Pocklington Canal: Storwood Low Bridge (Swing Bridge No.1) | | Heritage Asset | 36 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Bridge | |
| | NGR: | 471068 443979 | |
| | Location: | Southwest of Storwood. | |
| Description: | <p>Originally constructed in 1815, replaced in the 1930s with a new swing bridge, replaced with a fixed bridge in the 1960s, with the present bridge post-1970.</p> <p>The present bridge is of steel construction and sits on top of rebuilt curved brick abutment walls which re-use original ashlar coping stones. Concrete is used extensively to form the foundations and superstructure. The bridge has brick kickers set into concrete.</p> | | |
| Heritage Value: | The bridge has local historic value. | | |
| Survival: | Low survival of historic fabric. | | |
| Condition: | Fair | | |
| Vulnerability: | Deterioration, plant growth, water damage. | | |
| Trend: | Stable | | |

| Pocklington Canal: Culvert No. 2 | | Heritage Asset | 37 |
|---|---|--|----|
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Culvert | |
| | NGR: | 470947 443458 | |
| | Location: | The culvert is located east of Wheldrake Ings. | |
| Description: | Constructed in 1815. Carries water out of the Ings into the Beck. The culvert is evident as a fenced off area either side of the Canal. Whilst no built structure is visible a similar brick built structure to other culverts along the line is anticipated. | | |
| Heritage Value: | Potential local historical and evidential value. | | |
| Survival: | Unknown | | |
| Condition: | Unknown | | |
| Vulnerability: | Deterioration, plant growth, water damage | | |
| Trend: | Unknown | | |


| Pocklington Canal: Culvert No. 1 (Hacking Drain) | | Heritage Asset | 38 |
|---|---|--|----|
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Culvert | |
| | NGR: | 470962 443194 | |
| | Location: | Situated north of East Cottingwith at the end of Canal Road. Near HA4. | |
| Description: | Constructed in 1815. Carries soak drain water into The Beck. Curved brick wing wall with round headed arched culverts with two ring brick soffit and ashlar coping. | | |
| Heritage Value: | The culvert has local evidential and historic value | | |
| Survival: | Good | | |
| Condition: | Good - Vegetation loosening the brickwork of the elevation. | | |
| Vulnerability: | Deterioration, plant growth, water damage | | |


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| Pocklington Canal: Culvert No. 1 (Hacking Drain) | | Heritage Asset | 38 |
| Trend: | Decline | | |

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| Pocklington Canal: Swing Bridge | | Heritage Asset | 39 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Bridge | |
| | NGR: | 470409 442757 | |
| | Location: | Situated north of East Cottingwith at the end of Canal Road. | |
| Description: | <p>Footings for swing bridge dating to 1815, situated at the end of North Hills Lane from Cottingwith. The bridge was labelled on the 1854 OS map, but was no longer shown by the production of the 1896 OS map. Interestingly the bridge numbering system does not include this bridge indicating it post-dates this bridge falling into disuse.</p> <p>The remaining structure comprises two projecting abutments with curving profile in plan. Constructed in brick with an ashlar foundation and coping stones. These stones have a chiselled edge and pecked finish. The bridge no longer survives.</p> <p>Due to the early removal of this bridge and the lack of any subsequent replacement there is considered to be potential for archaeological remains relating to the original swing mechanism to survive below ground level.</p> | | |
| Heritage Value: | The former bridge has local aesthetic and historic value and possible regional evidential value in the potential for the remains to increase knowledge of the form and operation of the original accommodation bridges along the Canal. | | |
| Survival: | Poor (unknown potential for archaeological remains) | | |
| Condition: | Very bad - The remains of the bridge are at risk of being struck by passing boats and the coping stones are becoming loose through erosion of mortar. | | |
| Vulnerability: | Deterioration, plant growth, water damage | | |
| Trend: | Stable. | | |

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| Pocklington Canal: Cottingwith Lock No.1 | | Heritage Asset | 40 |
|  | Statutory Designations: | Grade II Listed. | |
| | Monument Type: | Lock | |
| | NGR: | 470078 442701 | |
| | Location: | Northwest of East Cottingwith. | |
| <p>Description:</p> <p>Constructed in 1815, and refurbished post-1970 by PCAS. Refurbishment in 2008 commemorated on a small plaque located on the bottom lock. The lock comprises the following elements.</p> <p><i>Element 40.1</i> The top lock is also a later replacement with six spoke wheel turned paddle gear. The position of the cill is marked on top of the Canal chamber sides but was not examined. The top lock also has square section balance beams and two plaques one to commemorate the refurbishment in 2008 and one to commemorate George Parkes.</p> <p><i>Element 40.2</i> There lock chamber and splayed wing walls are constructed of red brick with ashlar stone coping stepped where the lower wing walls slope down. The interior of the chamber has largely been rebuilt or refaced. In some locations leaded staples hold the ashlar stone coping together. There are full height slots built into the chamber wall before each gate to facilitate the temporary damming of the lock for maintenance. A modern steel ladder is set into the Canal chamber wall.</p> <p><i>Element 40.3</i> The bottom lock comprises two gates with square section timber balance beams, hydraulic gate paddle gear, and cast iron anchor collars with square bolts.</p> <p><i>Element 40.4</i> The entrance to the bywash is a low rectangular opening built into the Canal chamber walls before the top lock. The outfall from the bywash was not observed and may exit into The Beck.</p> <p><i>Element 40.5</i> A counter is situated on the south side of the Canal. The counting mechanism could not be observed.</p> | | | |
| Heritage Value: | | The site is considered to have national historic and aesthetic value, and local-regional evidential value. | |
| Survival: | | Moderate. Extensive repairs to exposed structure. | |
| Condition: | | Good. | |
| Vulnerability: | | Deterioration, plant growth, water damage (especially during flood episodes). | |

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| Pocklington Canal: Cottingwith Lock No.1 | | Heritage Asset | 40 |
| Trend: | Stable | | |

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| Pocklington Canal: East Cottingwith Arm | | Heritage Asset | 41 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Canal Branch | |
| | NGR: | 470097 442668 | |
| | Location: | Northwest of East Cottingwith on the south bank of the Canal. | |
| Description: | <p>Canal arm serving East Cottingwith, and named on historical maps as 'The Cut'. This canal arm pre-dated the construction of Pocklington Canal and was likely formed in relation to the Derwent Navigation c.1702</p> <p>The arm was infilled in the 1960s although its course is still marked by a pathway down to the Canal.</p> | | |
| Heritage Value: | The site is considered to have local-regional historic and evidential value. | | |
| Survival: | Very bad. The arm has been in-filled. | | |
| Condition: | Poor | | |
| Vulnerability: | Deterioration of the path due to waterlogging, or agricultural activities. | | |
| Trend: | Gradual decline. | | |

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| Pocklington Canal: East Cottingwith Wharf | | Heritage Asset | 42 |
|  | Statutory Designations: | No statutory designations. | |
| | Monument Type: | Wharf | |
| | NGR: | 469929 442667 | |
| | Location: | Northwest of East Cottingwith on the south bank of canal. | |
| Description: | A former wharf, located at the Canal terminus at Cottingwith. The wharf now forms the margin of an agricultural field and has since been raised through the deposition of dredged material in this location. | | |
| Heritage Value: | The site is considered to have local historic and evidential value. | | |
| Survival: | Moderate. The wharf remains identifiable, no associated features, were identified. | | |
| Condition: | Fair - Deposition of dredged material is altering the shape and height of the wharf. | | |
| Vulnerability: | Ploughing, deposition of dredged material. | | |
| Trend: | Decline. | | |

Appendix IV: Supporting Information

Generic specification for tree and scrub works adjacent to the Pocklington Canal

All tree and scrub removal operations are to be implemented outside the bird nesting season, i.e. between March and August inclusive. This is to meet your obligations on the protection of wild birds under the Wildlife and Countryside Act 1981.

All works are subject to you obtaining any necessary consents for the following (but are not limited to):

- tree preservation orders from the local planning authority
- felling licences.
- Environment Agency consent for herbicide use adjacent open water

Consideration is also required with respect to protected species e.g. bats and/or bat roosts and obtaining necessary advice/consents from Natural England.

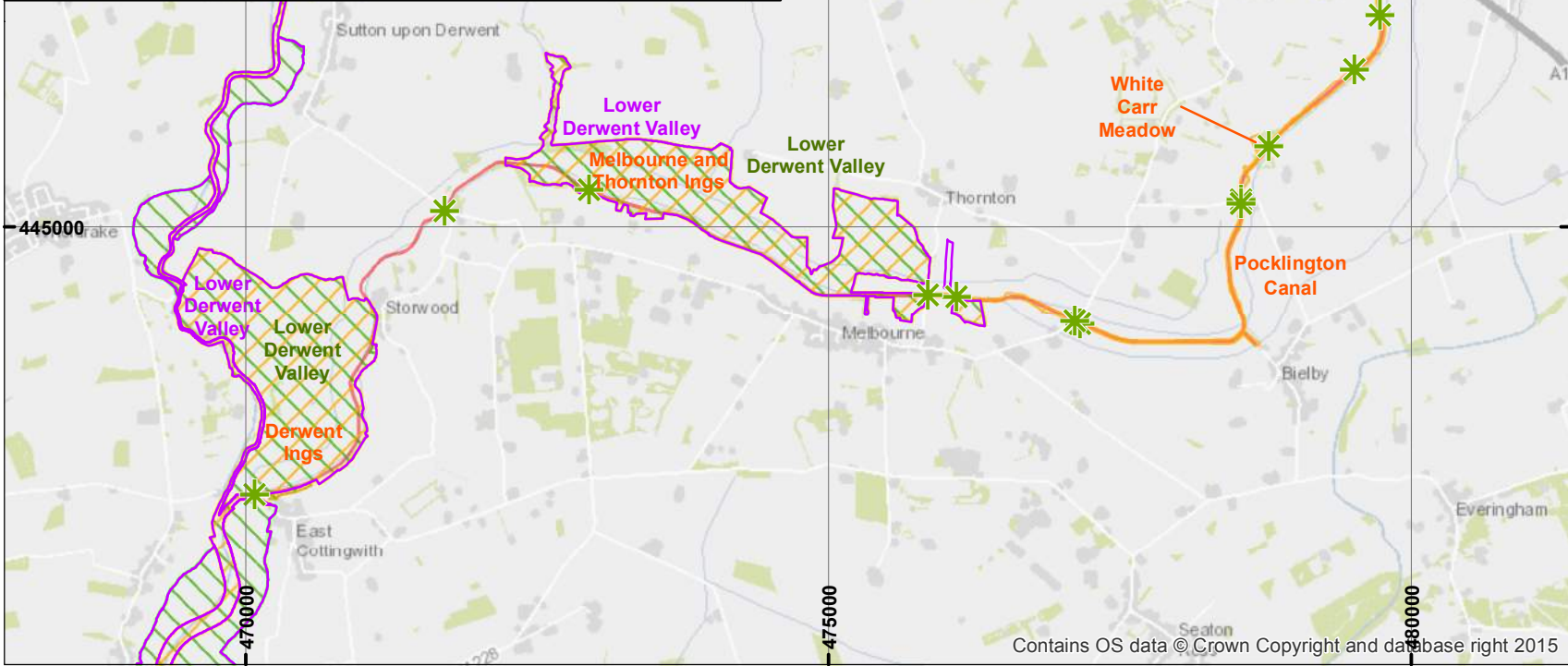
Methodology for tree and scrub cutting:

- The felling of any trees or removal of scrub must be carried out so as to minimise the risk of damage or disturbance to the underlying nature conservation interest of the SSSI.
- All tree and scrub works to be carried out by using hand or mechanical tools but must not include the use of flail mowers or mulchers (except for facing up hedge bordering the tow path).
- Trees must not be removed by pushing over mechanically and stumps must not be pulled out by vehicle.
- Stumps must be reduced to ground level after removal of trees and scrub.
- Stumps and exposed bark must be treated immediately where possible to control re-growth where required using a suitable herbicide for the control of woody weeds, according to label instructions and following manufacturers recommendations. Great care must be taken not to contact surrounding vegetation with herbicide. Given the close proximity of open water Environment Agency consent may be required for use of herbicide. Stumps must not be treated where coppicing is specified.
- Where crown lifting, scrub and suckering growth from base of specified trees are to be cleared and lower branches and limbs be removed as prior agreed with Natural England.
- All cut material must either be chipped and removed off site or removed to an agreed area (which may be onsite) for disposal. Some chippings may be permitted to remain on site and small brush piles may be left in situ as agreed with Natural England. Larger tree trunks may be stacked and may also be used to mark out towpath by pegging down adjacent to path, if agreed beforehand with Natural England. In exceptional circumstance where there is no other method of disposing of brush small fires be used to burn brush. All fire sites must be agreed






with Natural England. Any fire must be tended at all times and dampened down prior to leaving the site at the end of each day's work. There must be no cut material left within the canal channel.

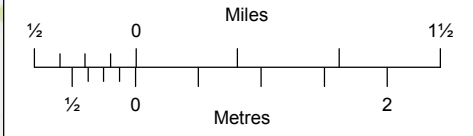
- Care must be taken to ensure there is no spillage of chemicals and other products on the surrounding vegetation when diluting or transferring material to applicators. You must follow the guidance as set out in Environment Agency Pollution Prevention Guidelines or The Trust's environmental appraisal for good practice working next to watercourses.

Figures



Legend

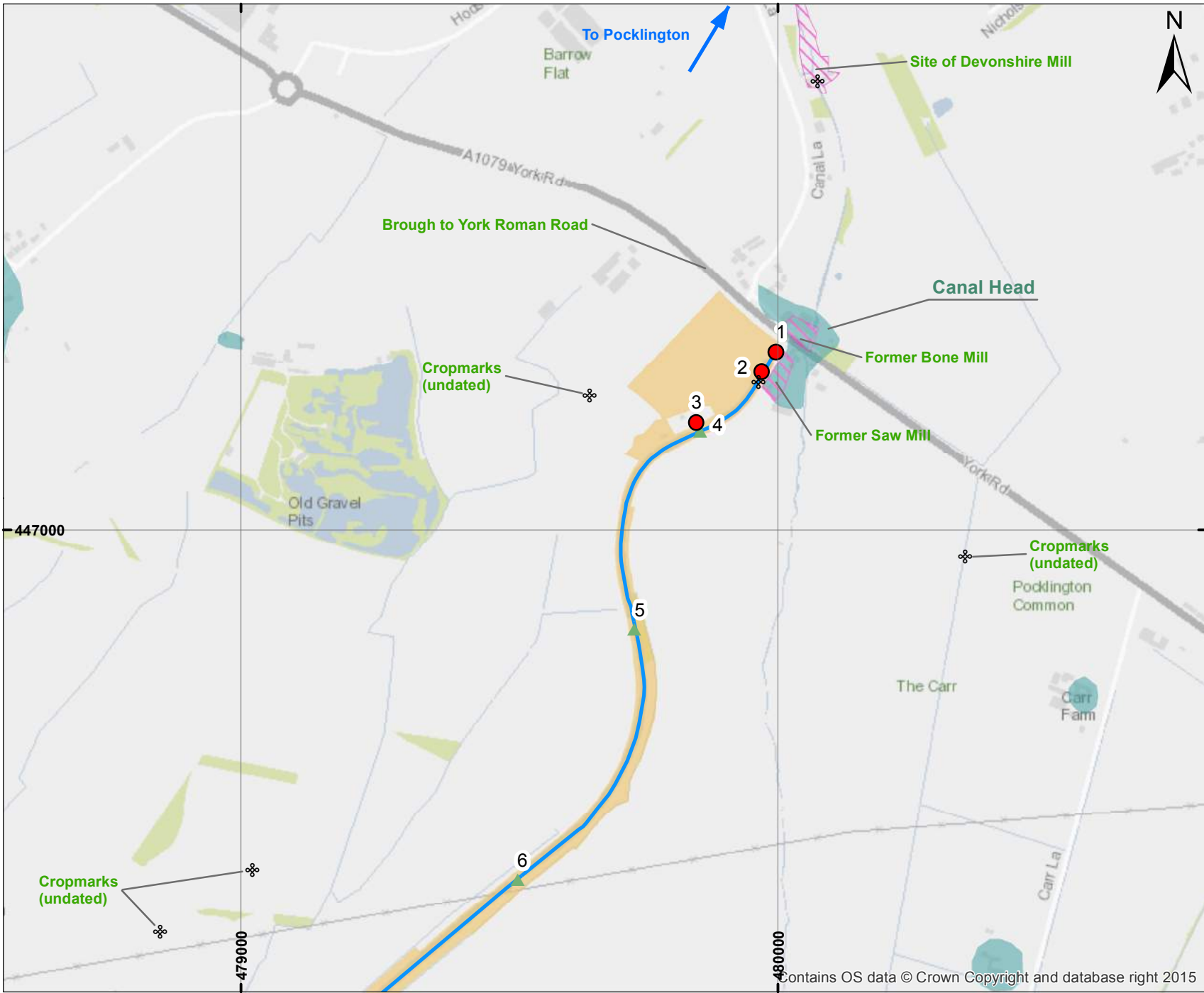
-  Canal Route
-  Grade II Listed Building
-  SAC
-  SSSI
-  SPA



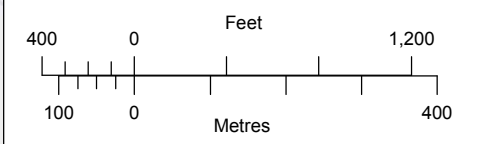
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Pocklington Canal Conservation Management Plan

Figure 1
Location of Canal and Natural and Cultural Heritage Designations

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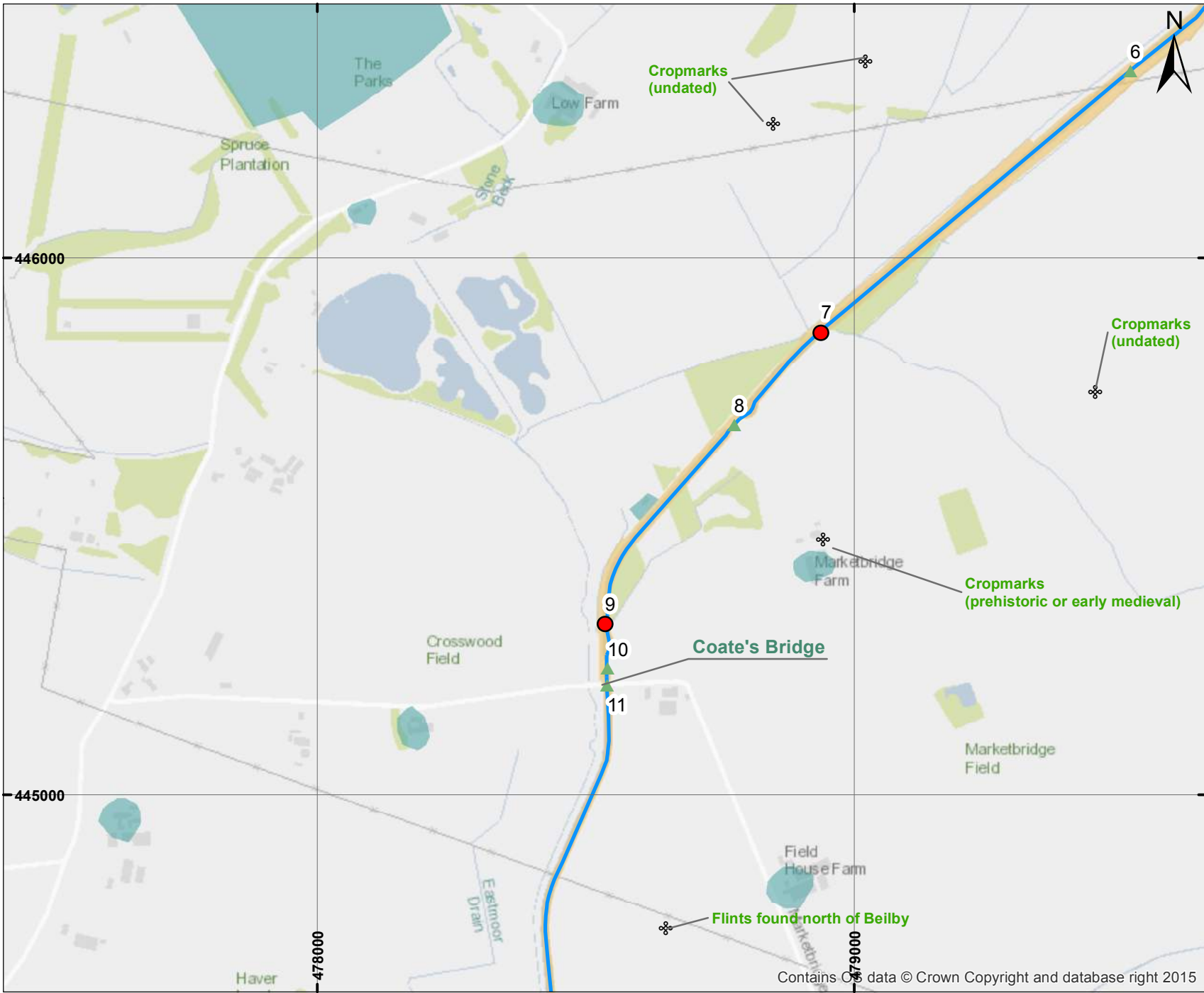
- Legend**
- Canal Route
 - CRT Land Ownership
 - ▲ Grade II Listed Building
 - Non-designated Heritage Asset
 - ⊗ Site of archaeological interest (from Humberside HER)
 - Historical Site
 - Historical Settlement



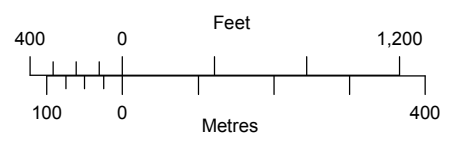
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Pocklington Canal Conservation Management Plan

Figure 2
Canal Head, south of Pocklington

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- Legend**
- Canal Route
 - CRT Land Ownership
 - ▲ Grade II Listed Building
 - Non-designated Heritage Asset
 - ⊗ Site of archaeological interest (from Humberside HER)
 - Historical Site
 - Historical Settlement










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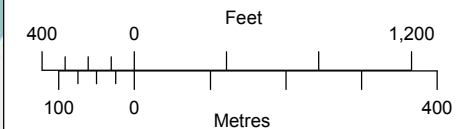
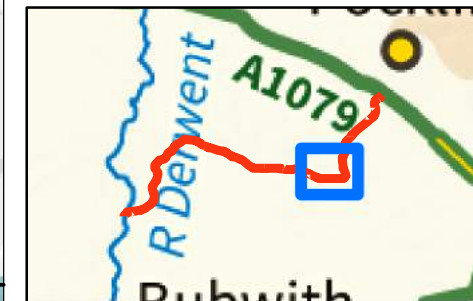
Figure 3
Sandhill Lock

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Legend

-  Canal Route
-  CRT Land Ownership
-  Grade II Listed Building
-  Non-designated Heritage Asset
-  Site of archaeological interest (from Humberside HER)
-  Historical Site
-  Historical Settlement



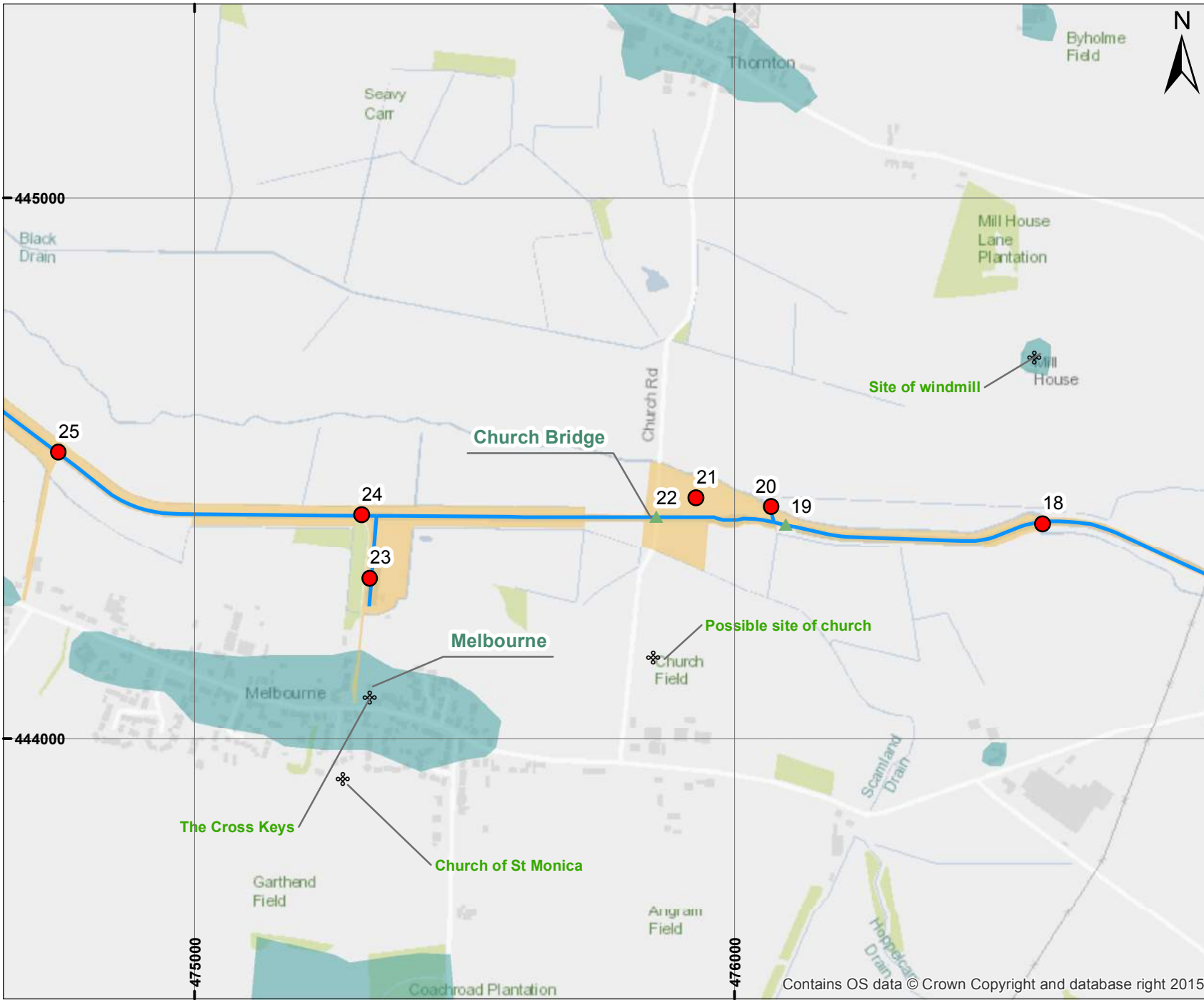
Canal and Rivers Trust
Pocklington Canal Conservation
Management Plan

Figure 4
Beilby

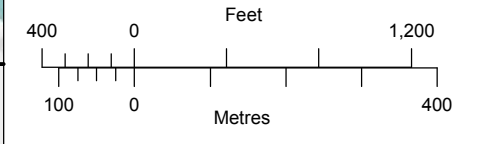
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- Legend**
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 - Non-designated Heritage Asset
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 - Historical Site
 - Historical Settlement



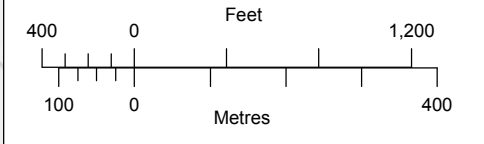
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Figure 5
Melbourne

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- Legend**
- Canal Route
 - CRT Land Ownership
 - ▲ Grade II Listed Building
 - Non-designated Heritage Asset
 - ⊕ Site of archaeological interest (from Humberside HER)
 - Historical Site
 - Historical Settlement



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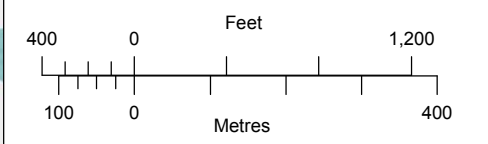
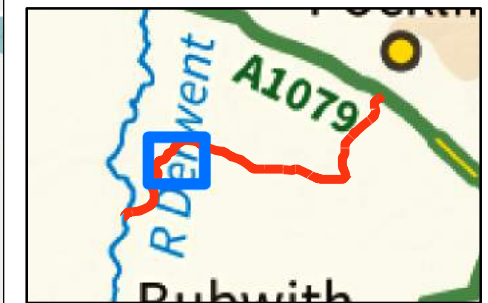
Figure 6
Melbourn to Storwood

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Legend

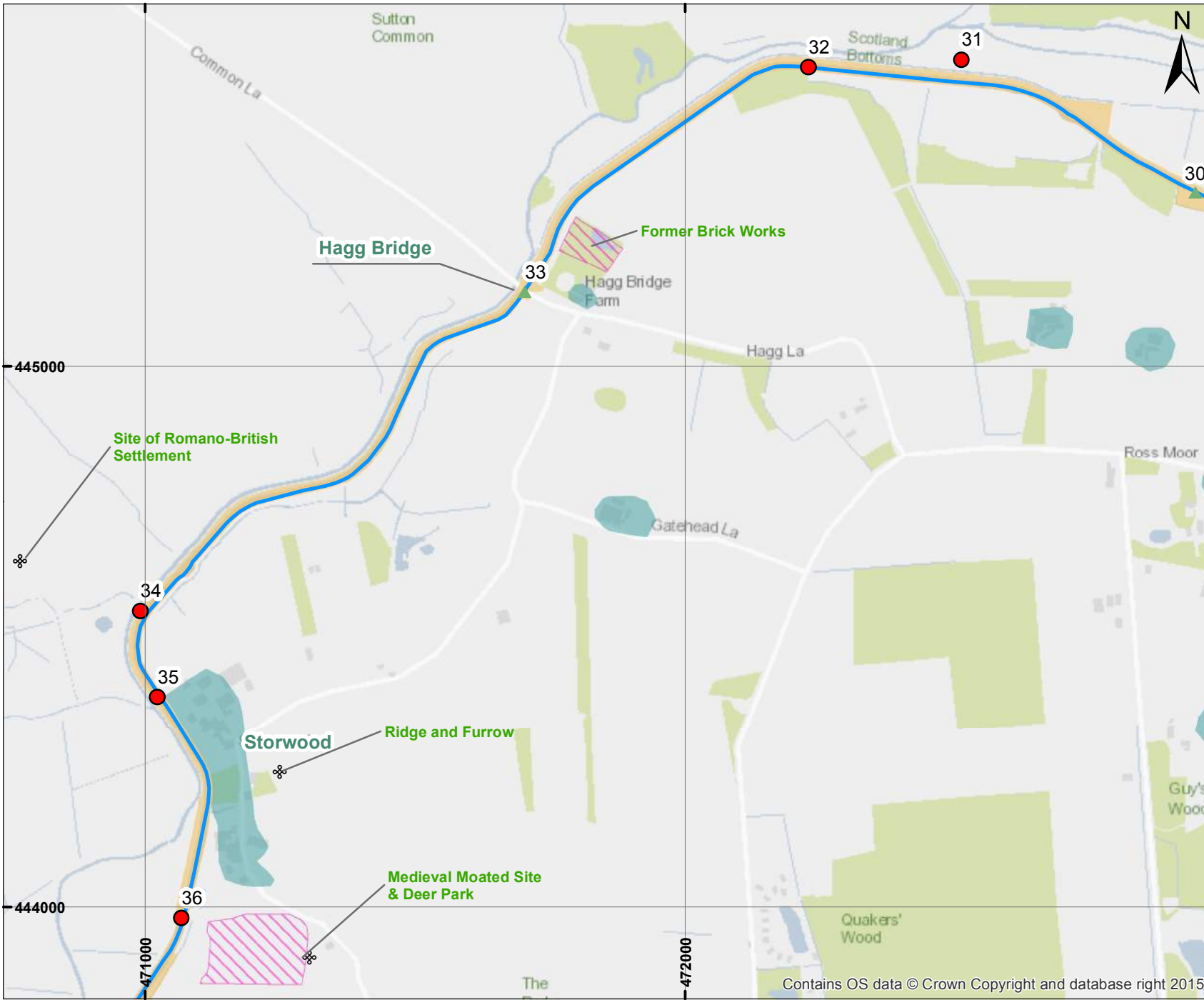
- Canal Route
- CRT Land Ownership
- ▲ Grade II Listed Building
- Non-designated Heritage Asset
- ⊗ Site of archaeological interest (from Humberside HER)
- Historical Site
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Figure 7
Storwood

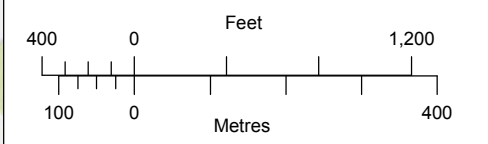
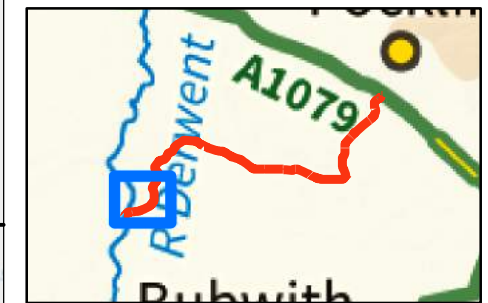
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Legend

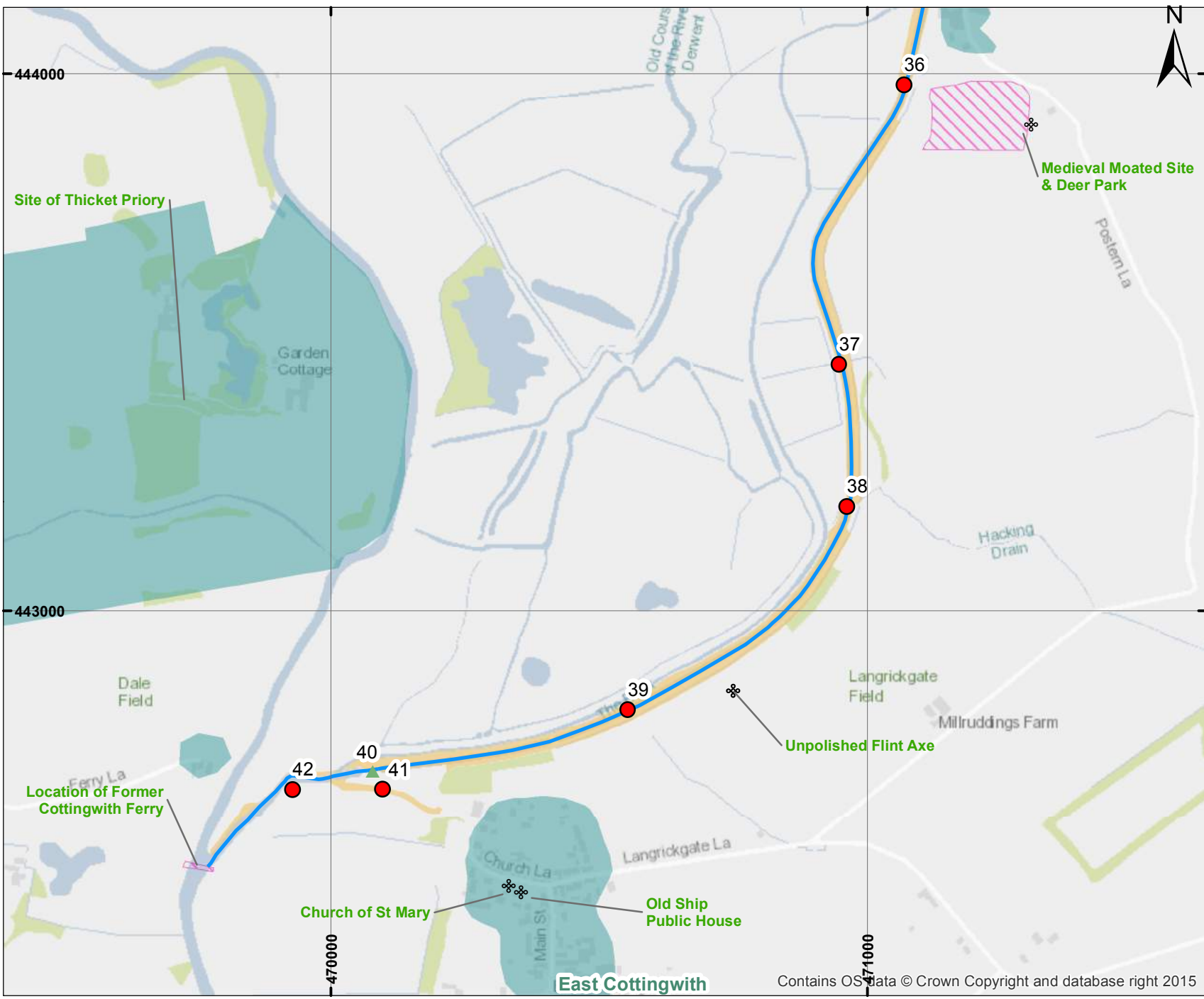
- Canal Route
- CRT Land Ownership
- ▲ Grade II Listed Building
- Non-designated Heritage Asset
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- Historical Site
- Historical Settlement

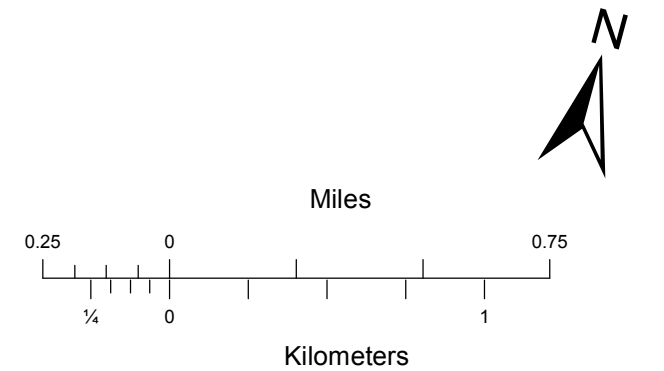
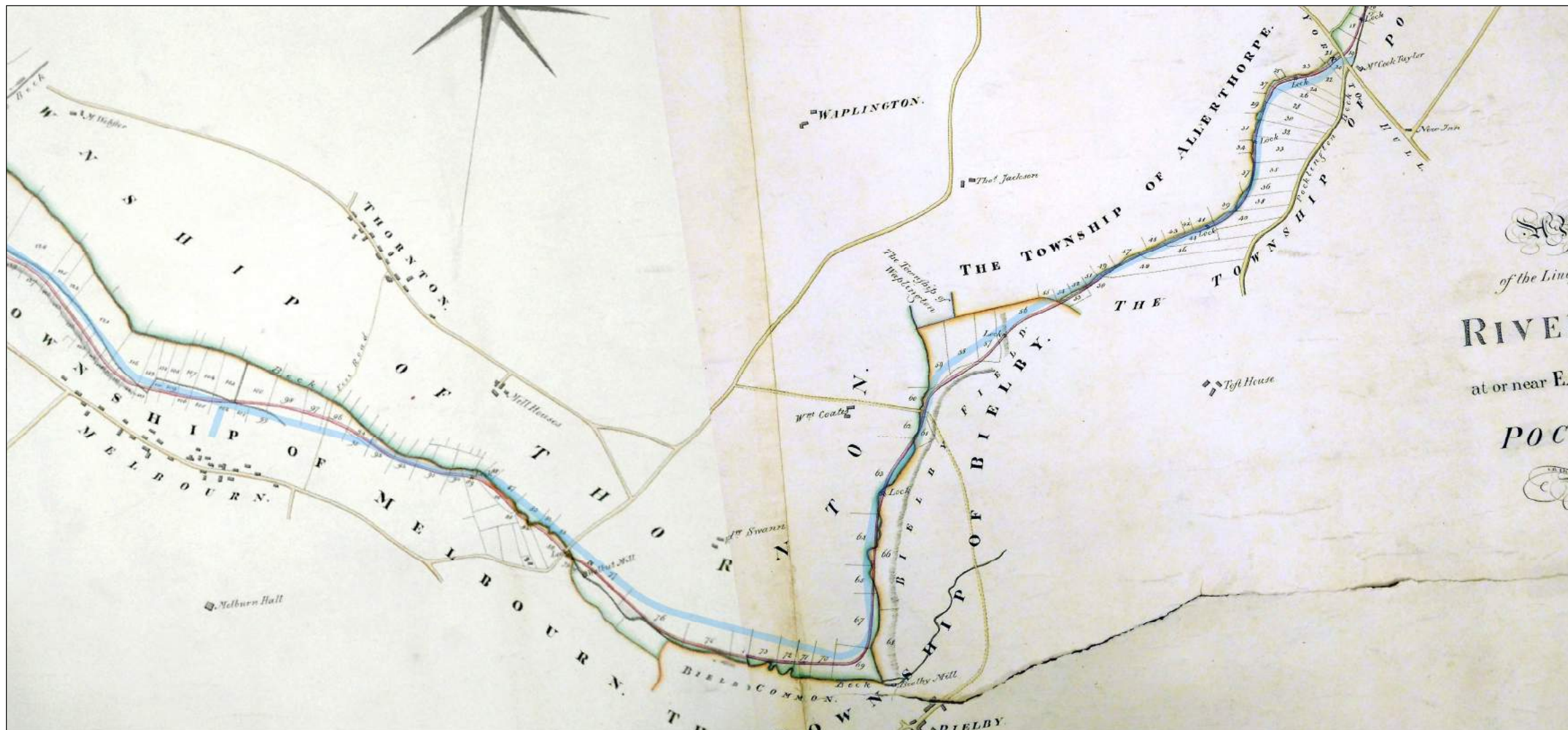


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Figure 8
East Cottingwith

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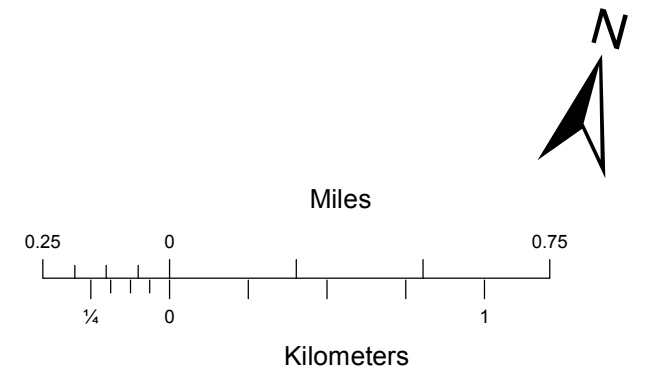
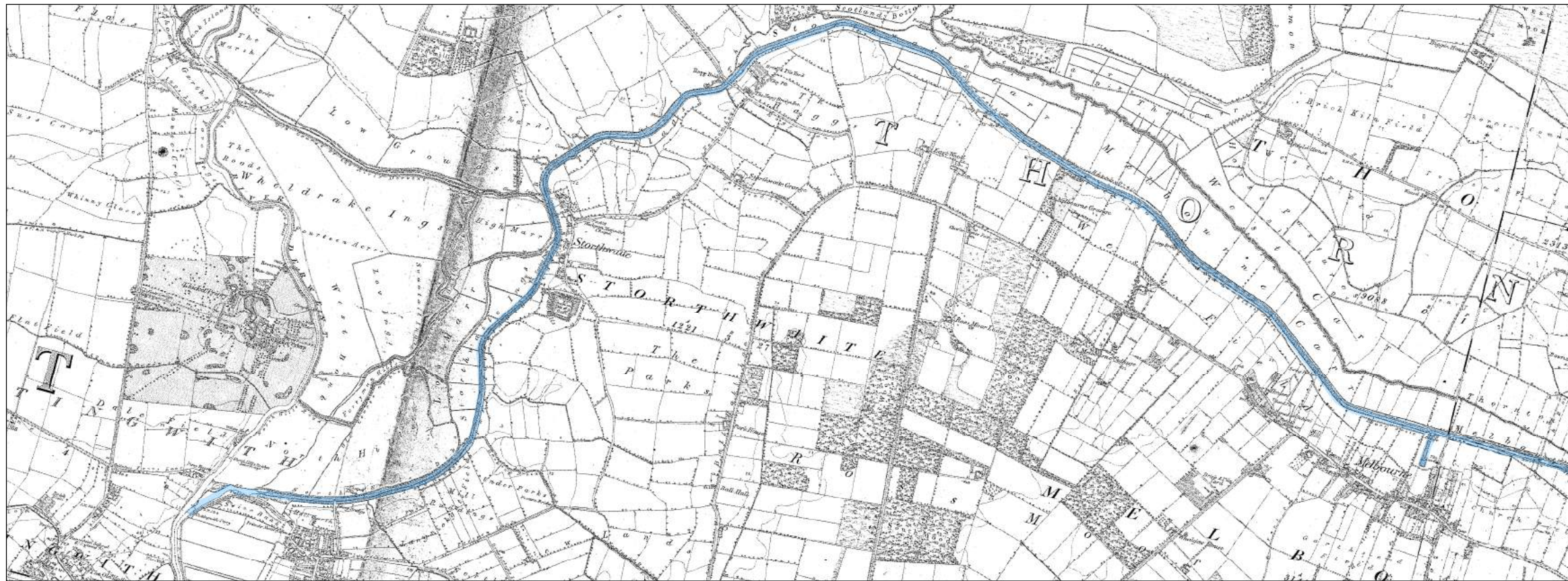




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Figure 9
1815 George Leather survey

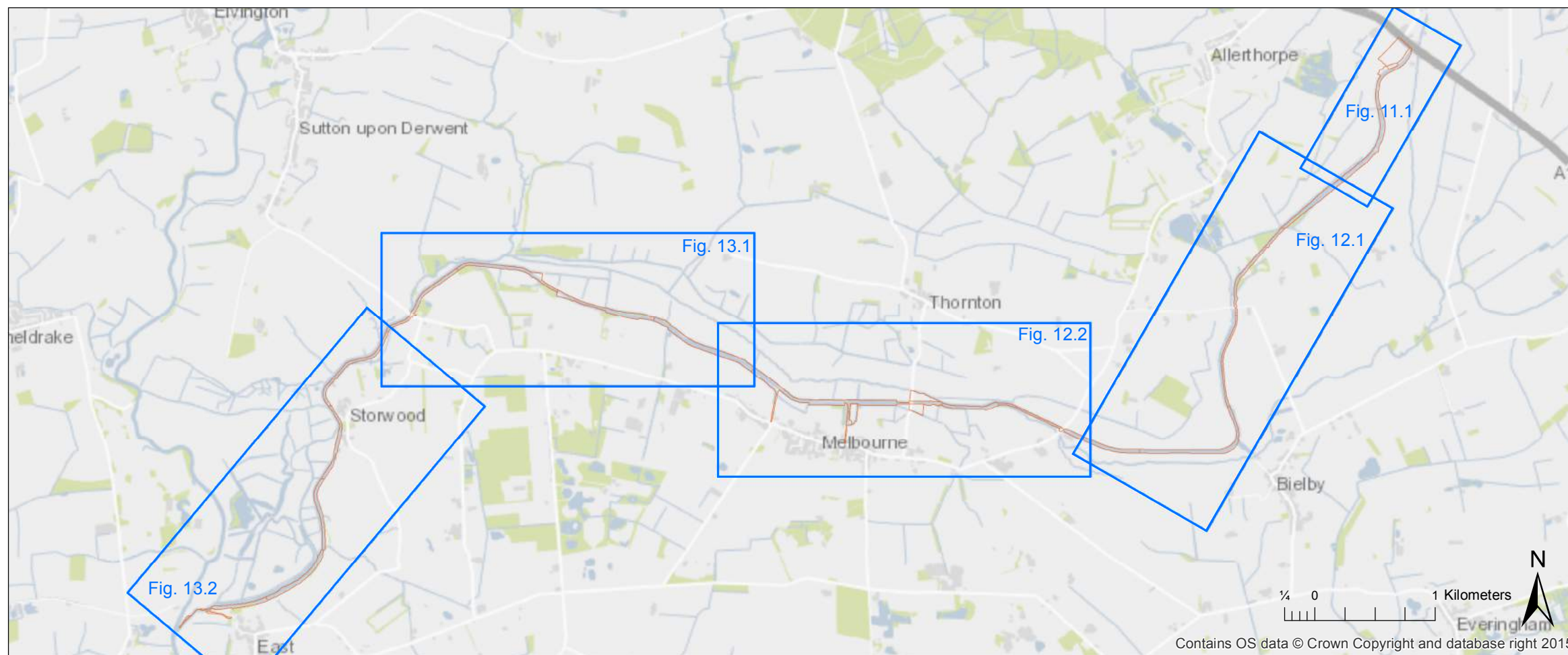
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Figure 10
1854 Ordnance Survey map

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| Id | Name |
|----|--------------------------|
| 1 | Pocklington Beck Culvert |
| 2 | Canal Head |
| 3 | Lock Keepers Cottage |
| 4 | Top Lock |
| 5 | Silburn Lock |
| 6 | Giles Lock |
| 7 | No.9 Culvert |
| 8 | Sandhill Lock |
| 9 | No.8 Culvert |
| 10 | Coat's Lock |
| 11 | Coat's Bridge |
| 12 | No.7 Culvert |
| 13 | Bielby Arm |
| 14 | No.8 Sw ing Bridge |
| 15 | Walbut Lock |
| 16 | Walbut Bridge |
| 17 | Walbut Mill Landing |
| 18 | No.6 Culvert |
| 19 | Thornton Lock |
| 20 | Thornton Feeder Sluice |
| 21 | Private Landing |
| 22 | Church Bridge |
| 23 | Melbourne Arm |
| 24 | No.7 Sw ing Bridge |
| 25 | No.6 Sw ing Bridge |
| 26 | No.5 Sw ing Bridge |
| 27 | No.5 Culvert |
| 28 | No.4 Sw ing Bridge |
| 29 | Byw ash |
| 30 | Gardham Lock |
| 31 | Gardham Landing |
| 32 | No.4 Culvert |
| 33 | Hagg Bridge |
| 34 | No.3 Culvert |
| 35 | No.2 Sw ing Bridge |
| 36 | No.1 Sw ing Bridge |
| 37 | No.2 Culvert |
| 38 | No.1 Culvert |
| 39 | Sw ing Bridge |
| 40 | Cottingw ith Lock |
| 41 | Cottingw ith Arm |
| 42 | Cottingw ith Landing |

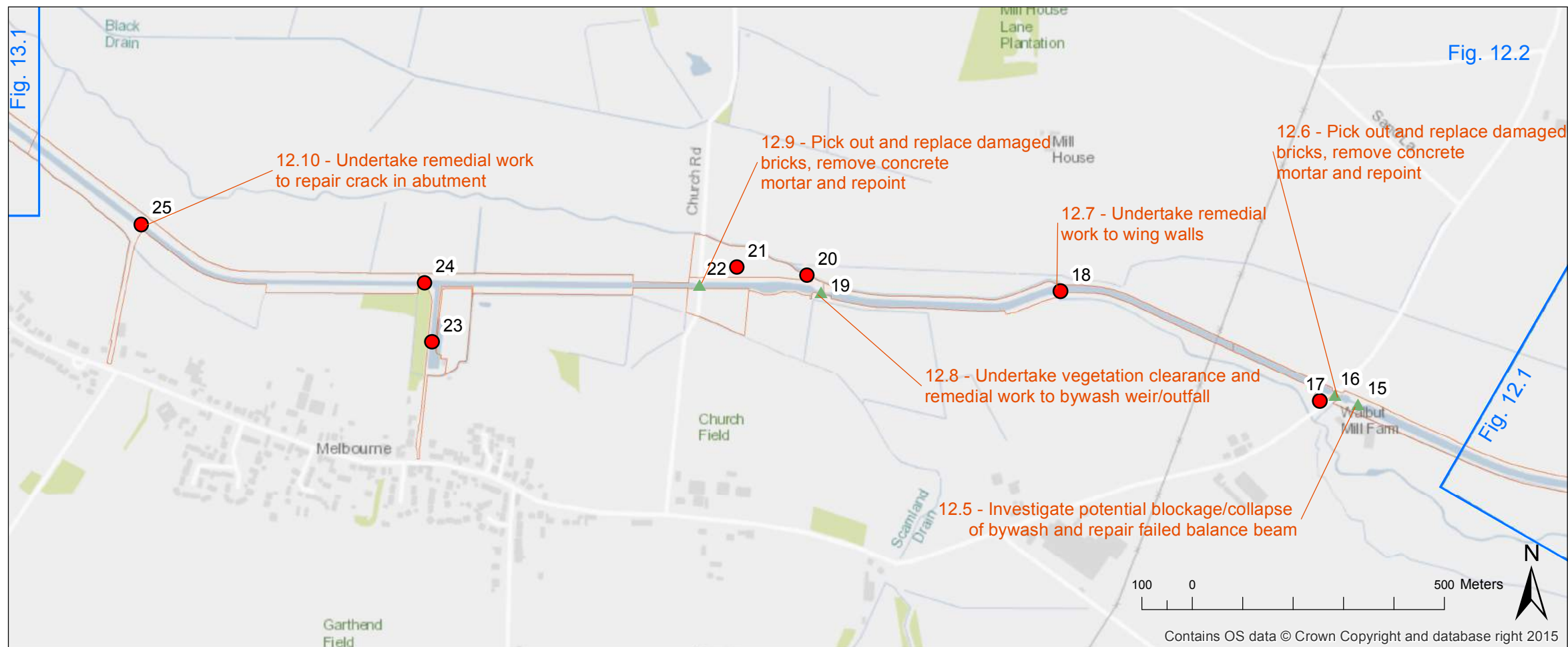
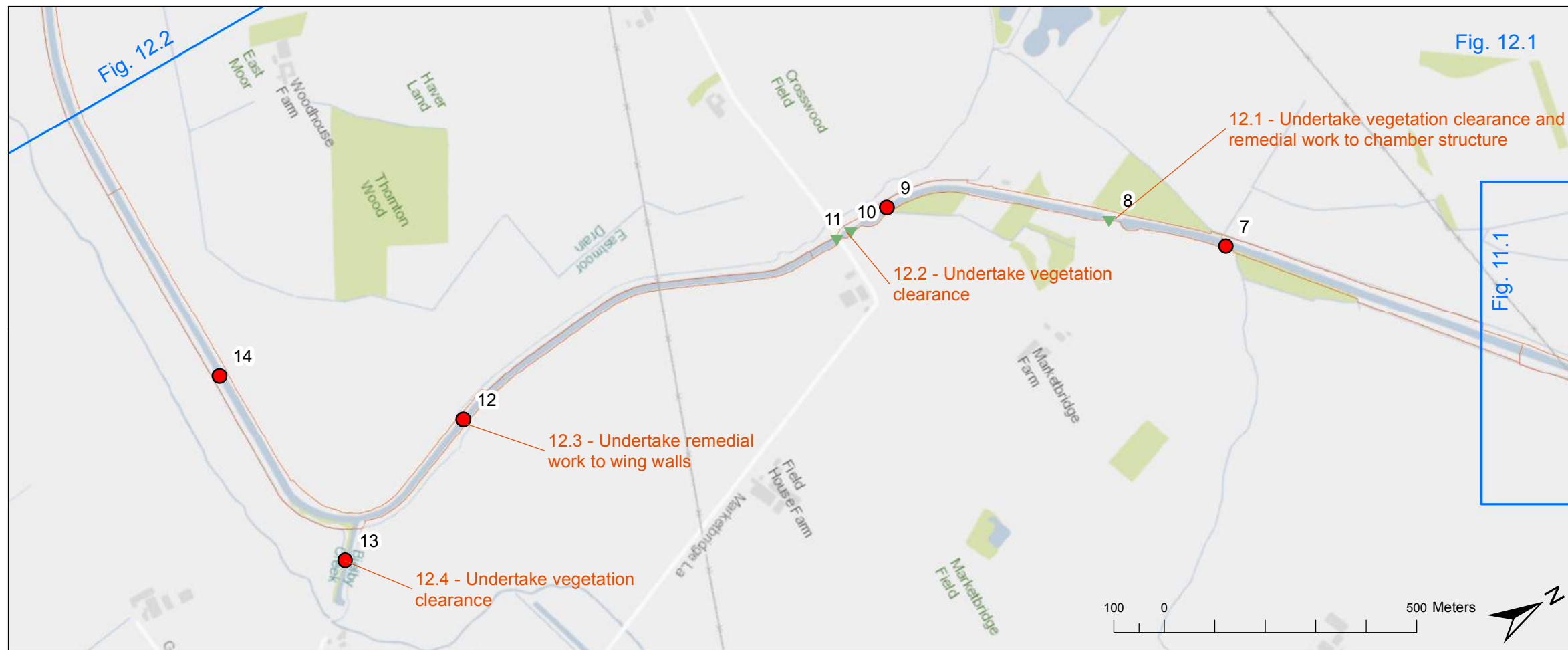


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Management Plan

Figure 11
Cultural Heritage Management Figures

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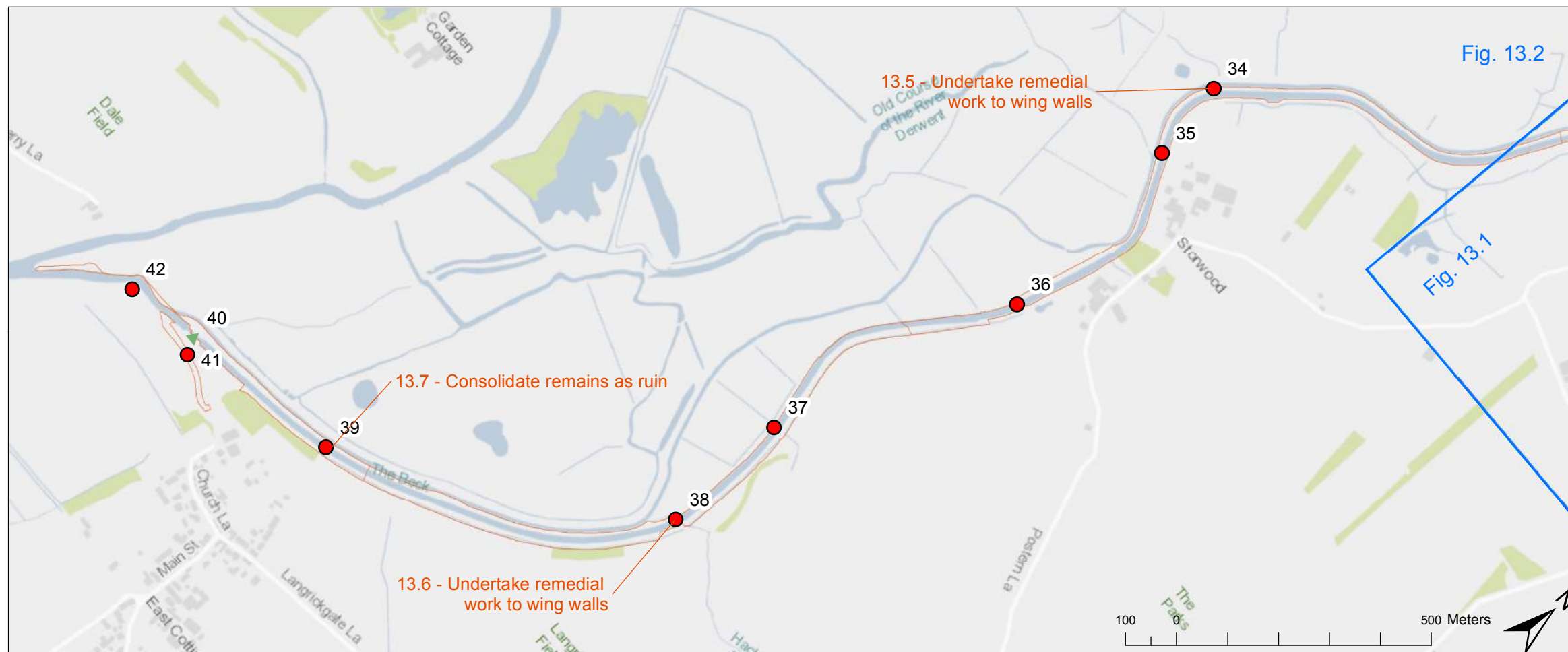
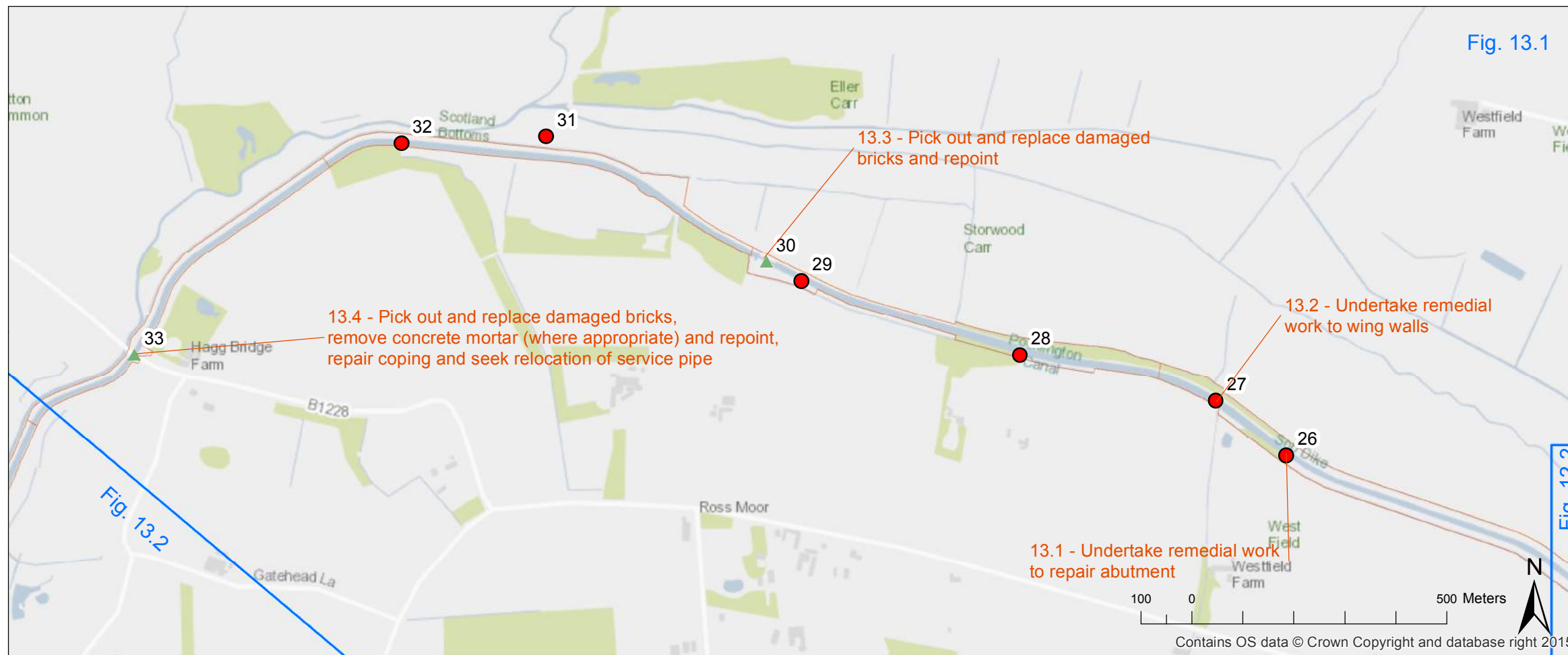
| Id | Name |
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| 15 | Walbut Lock |
| 16 | Walbut Bridge |
| 17 | Walbut Mill Landing |
| 18 | No.6 Culvert |
| 19 | Thornton Lock |
| 20 | Thornton Feeder Sluice |
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| 22 | Church Bridge |
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| 25 | No.6 Sw ing Bridge |
| 26 | No.5 Sw ing Bridge |
| 27 | No.5 Culvert |
| 28 | No.4 Sw ing Bridge |
| 29 | Bywash |
| 30 | Gardham Lock |
| 31 | Gardham Landing |
| 32 | No.4 Culvert |
| 33 | Hagg Bridge |
| 34 | No.3 Culvert |
| 35 | No.2 Sw ing Bridge |
| 36 | No.1 Sw ing Bridge |
| 37 | No.2 Culvert |
| 38 | No.1 Culvert |
| 39 | Sw ing Bridge |
| 40 | Cottingw ith Lock |
| 41 | Cottingw ith Arm |
| 42 | Cottingw ith Landing |

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Figure 12 Cultural Heritage Management Figures

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| Id | Name |
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| 39 | Sw ing Bridge |
| 40 | Cottingwith Lock |
| 41 | Cottingwith Arm |
| 42 | Cottingwith Landing |

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Pocklington Canal Conservation
Management Plan

Figure 13
Cultural Heritage Management Figures

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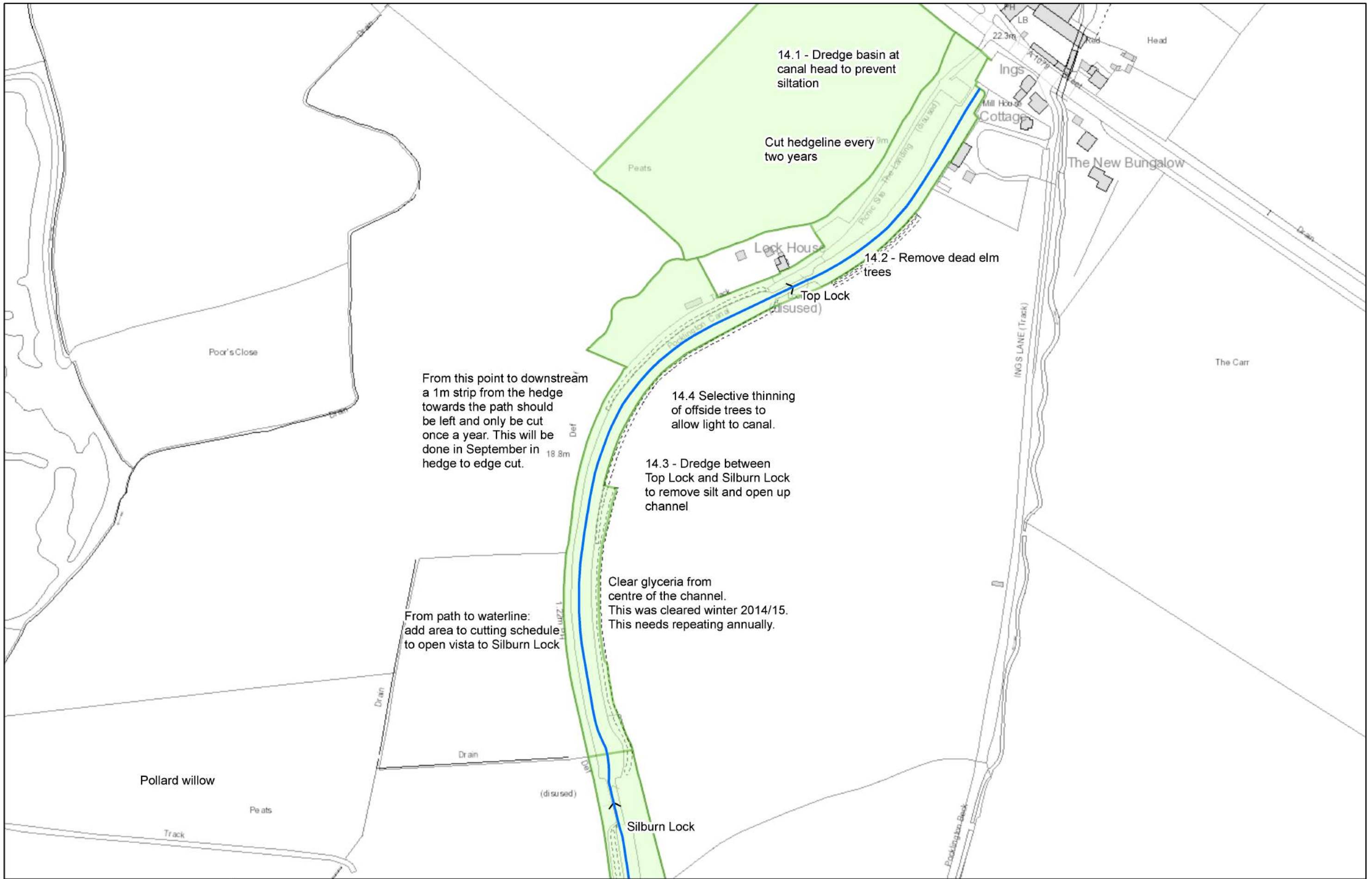
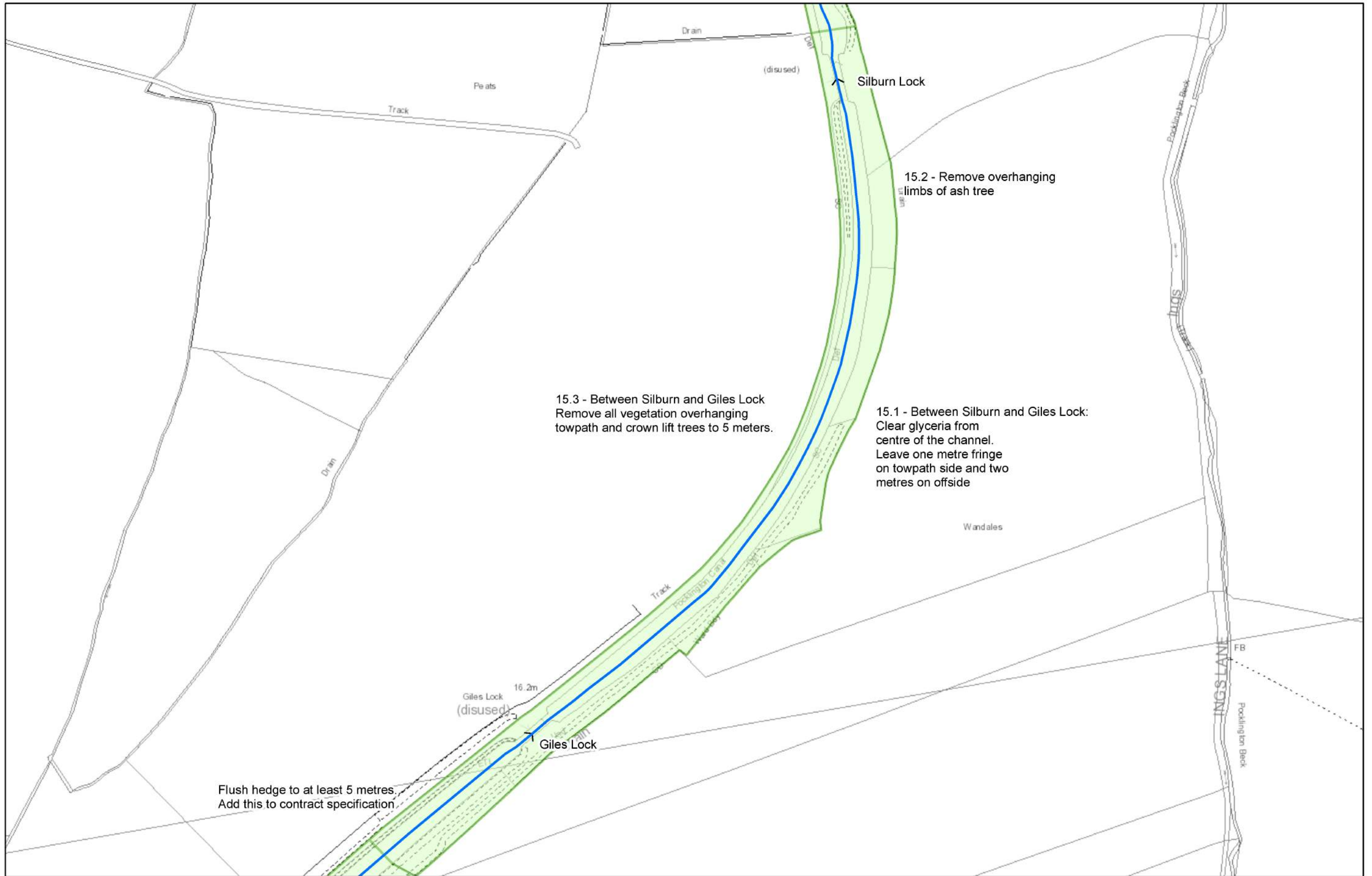
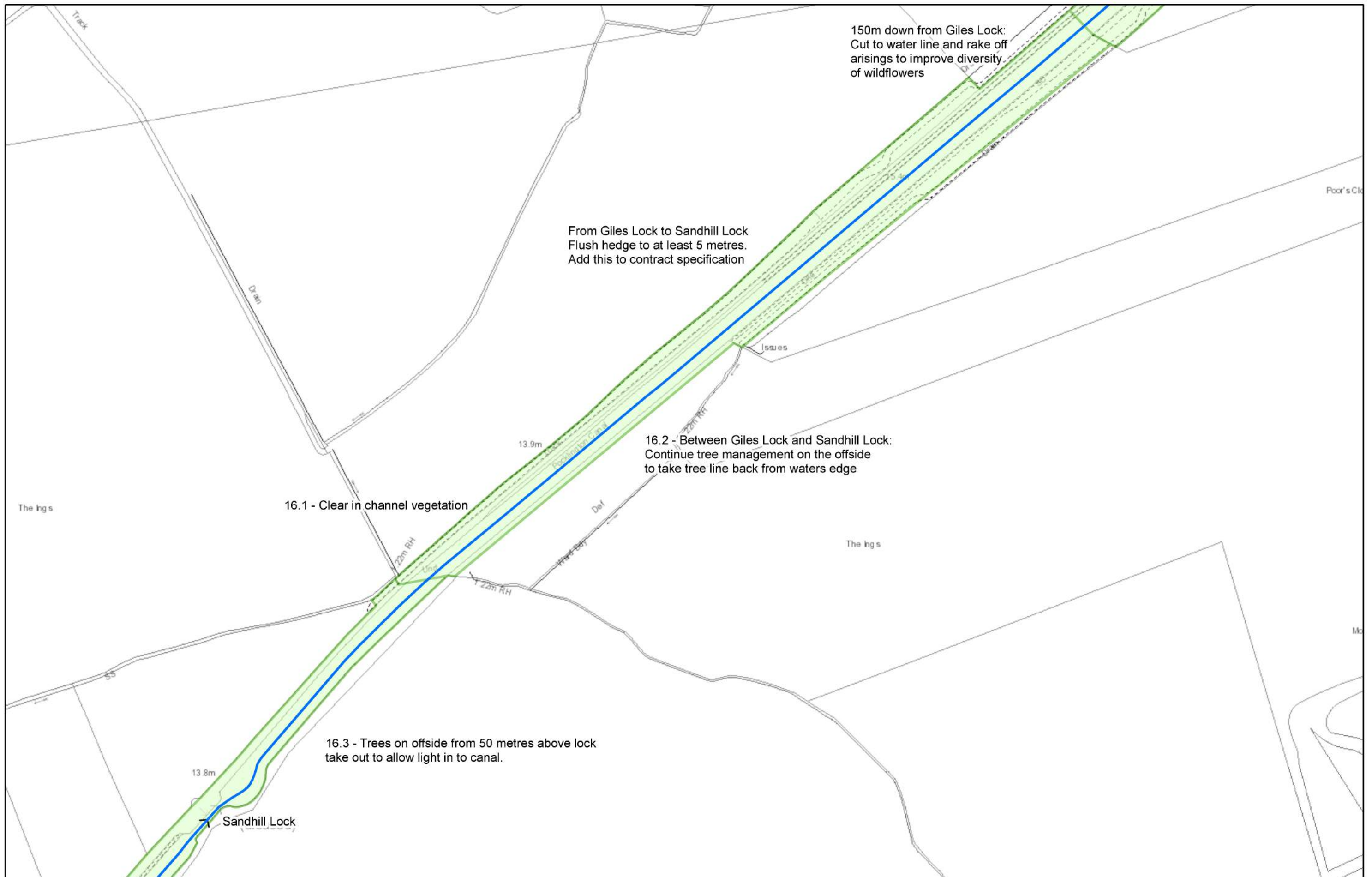


Figure 14







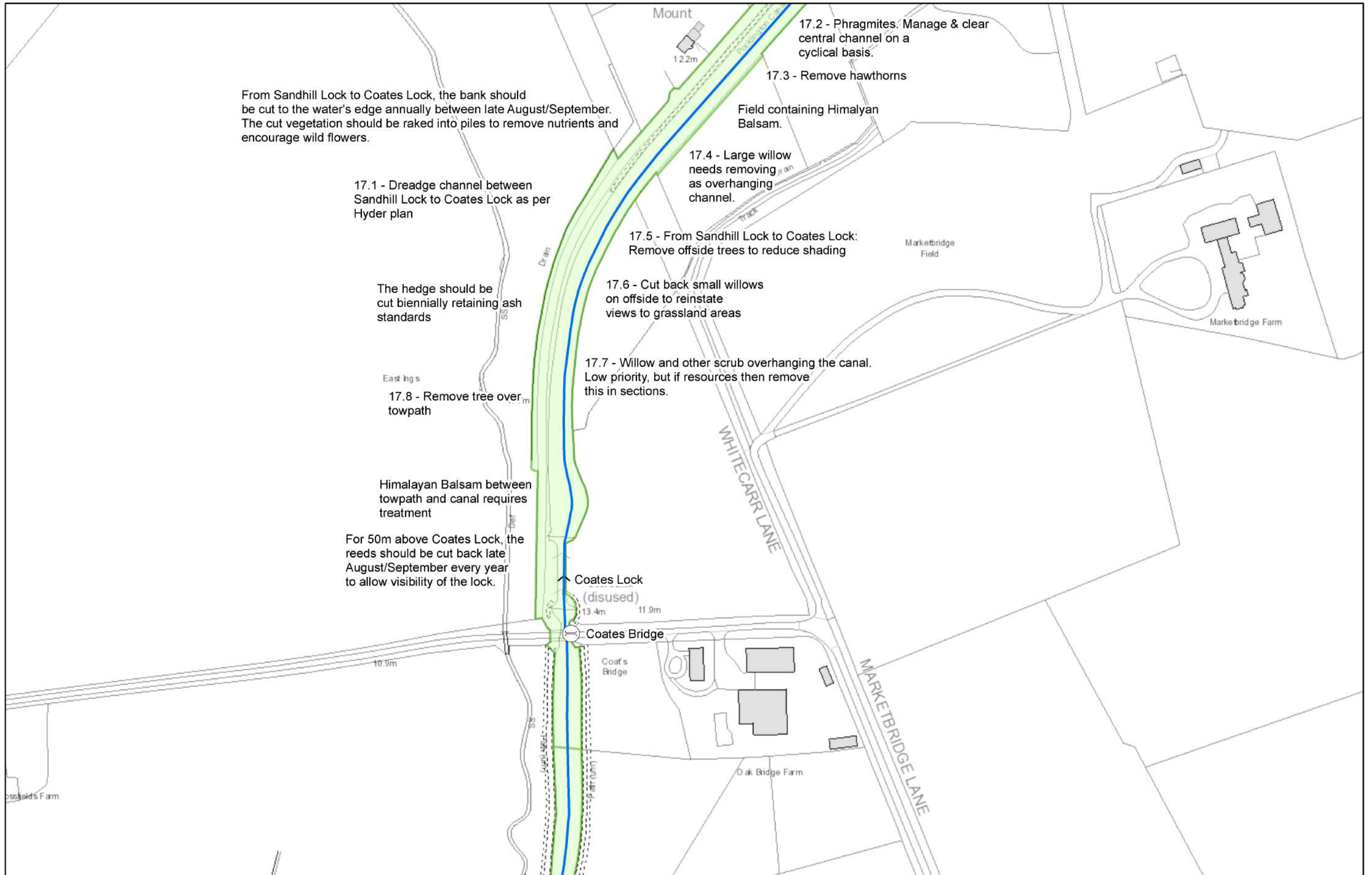
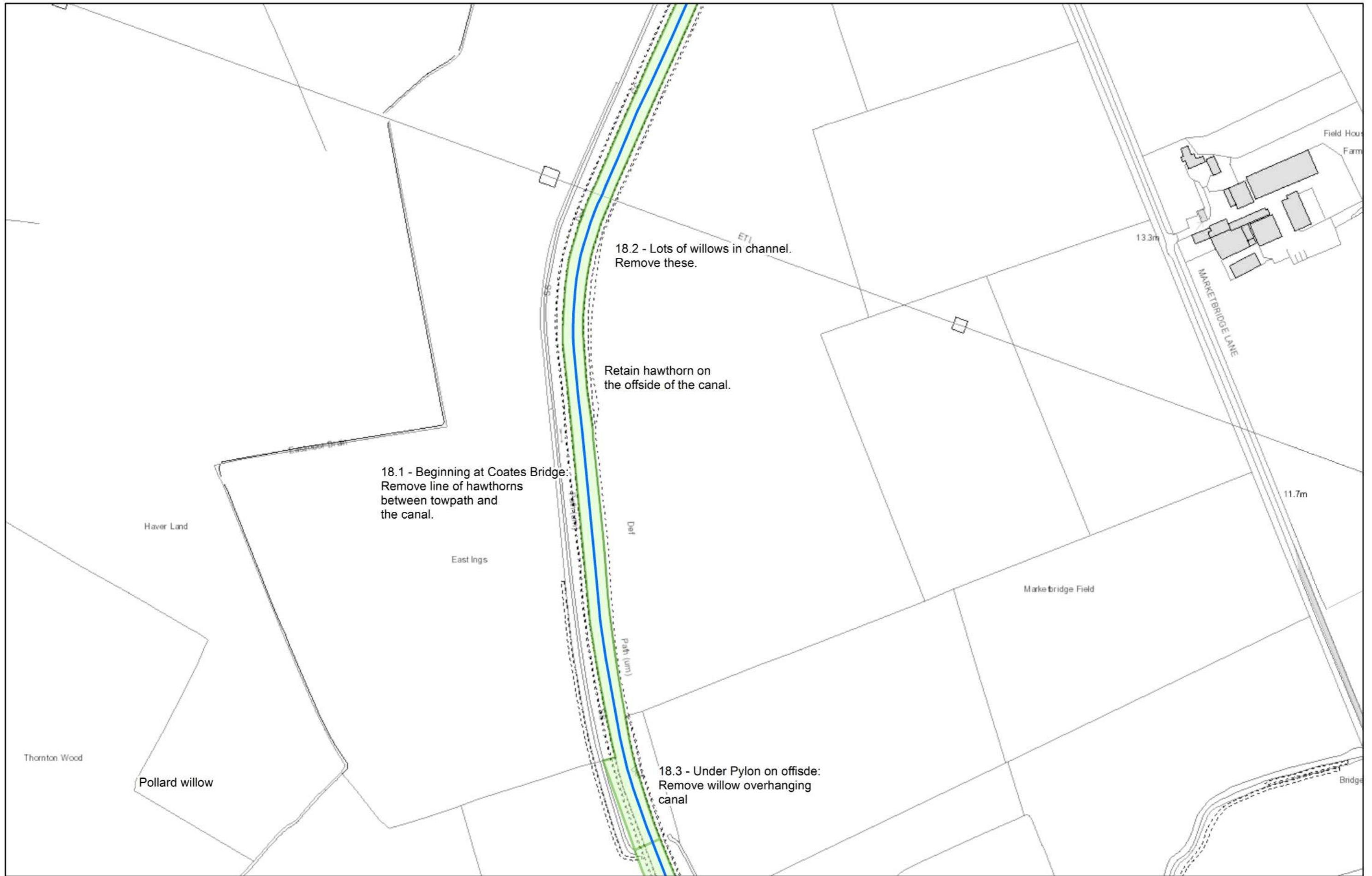


Figure 17



18.1 - Beginning at Coates Bridge:
Remove line of hawthorns
between towpath and
the canal.

18.2 - Lots of willows in channel.
Remove these.

Retain hawthorn on
the offside of the canal.

18.3 - Under Pylon on offside:
Remove willow overhanging
canal

Figure 18



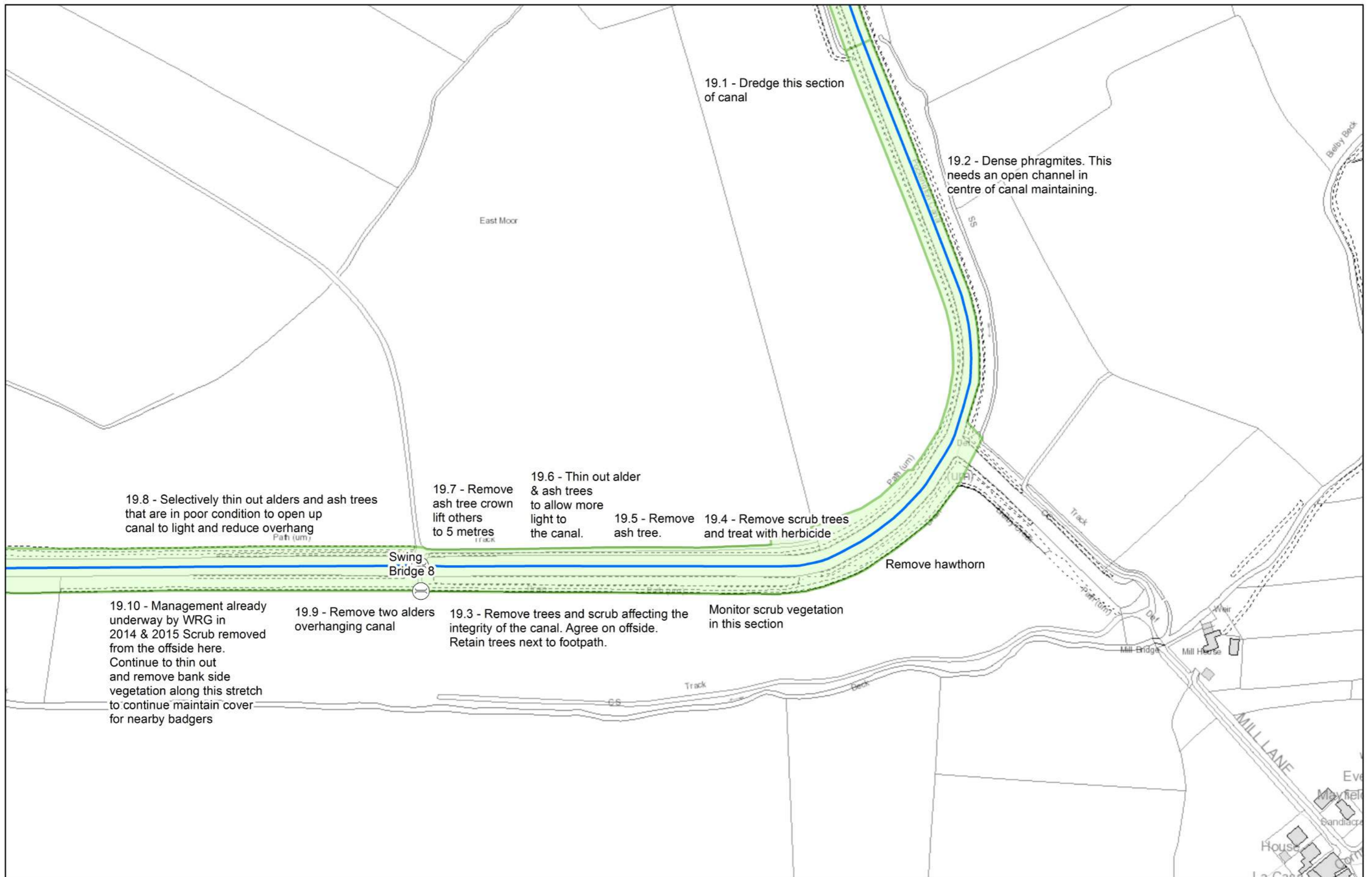
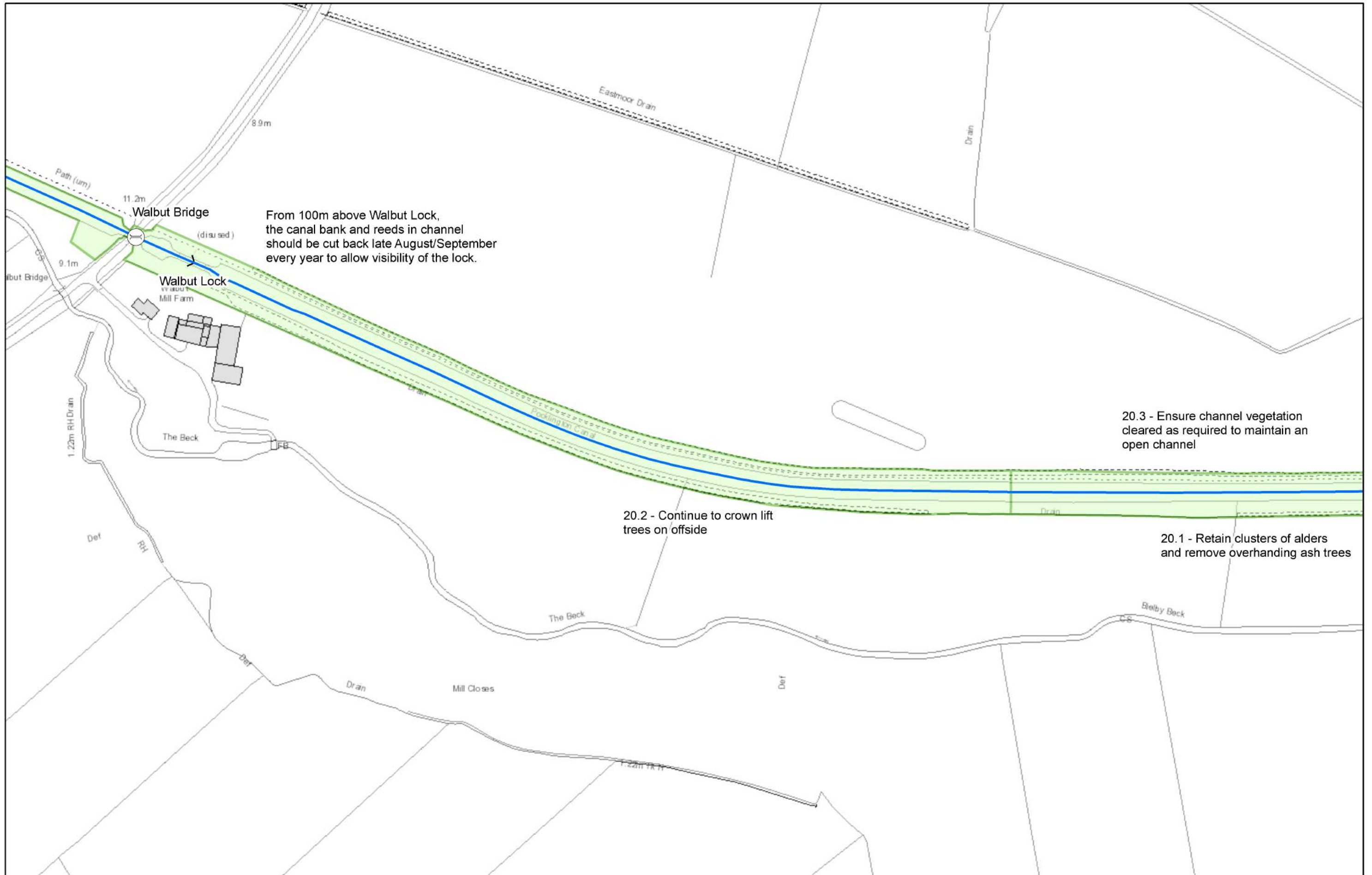


Figure 19



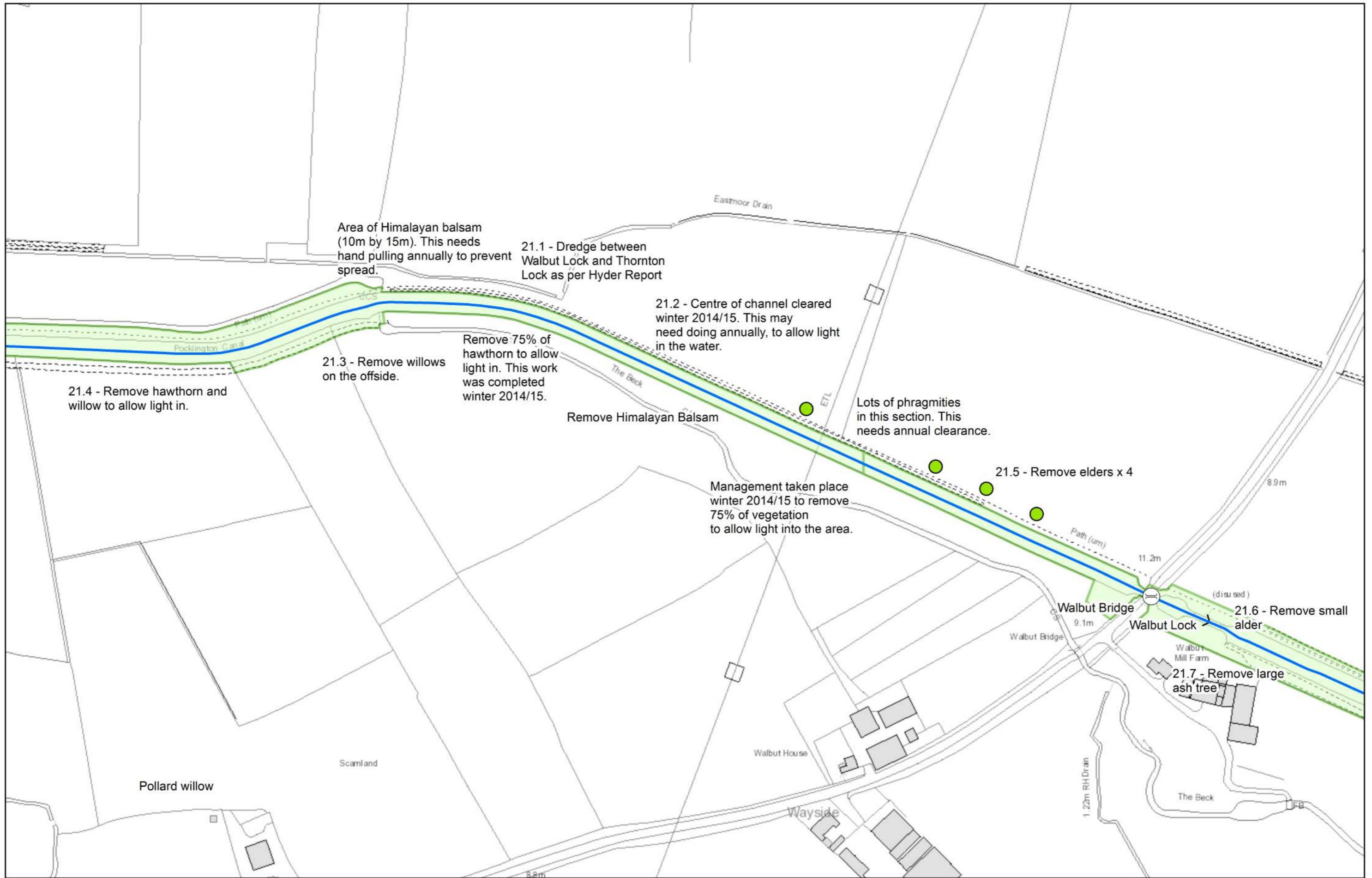


Figure 21

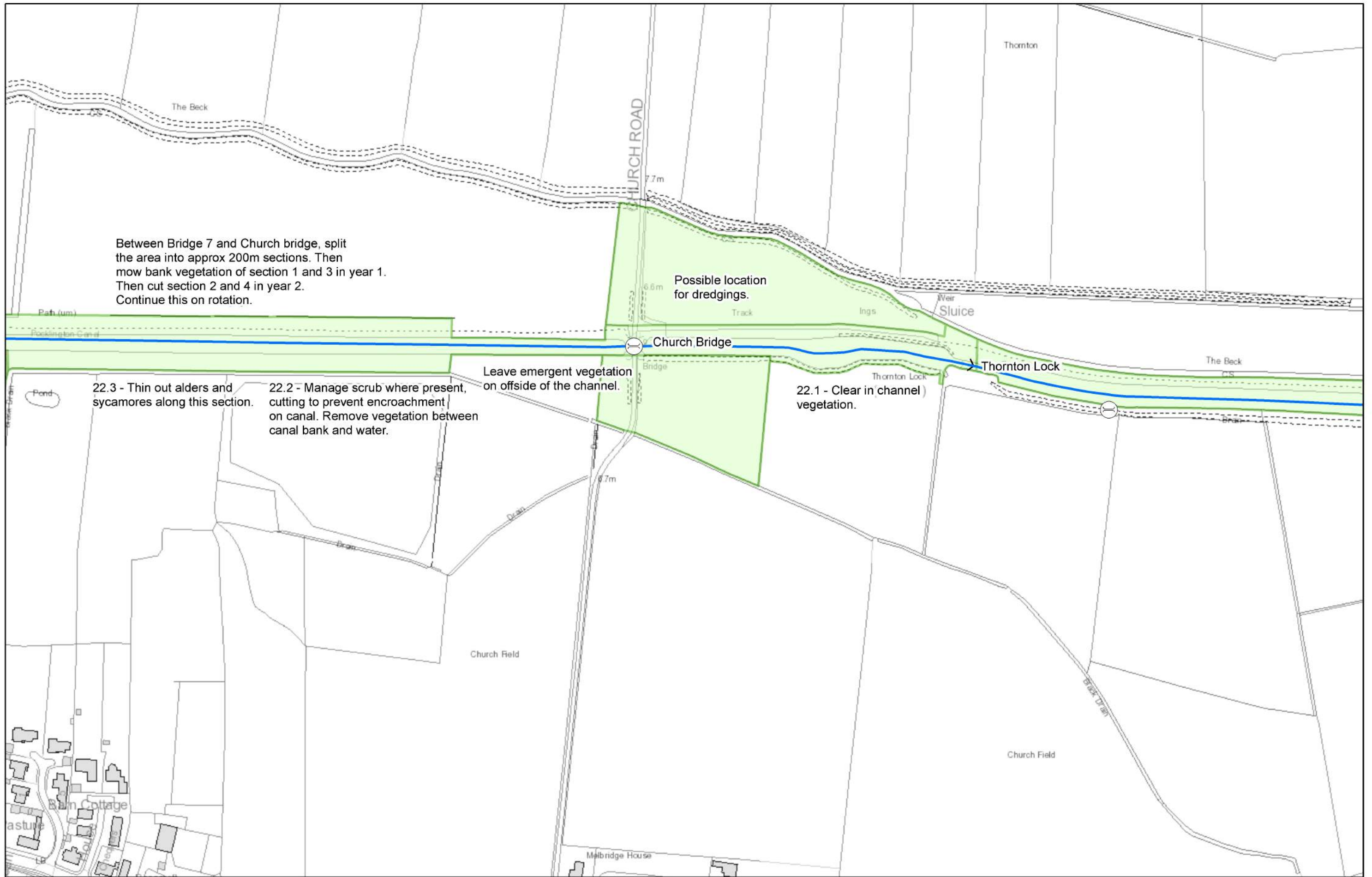


Figure 22

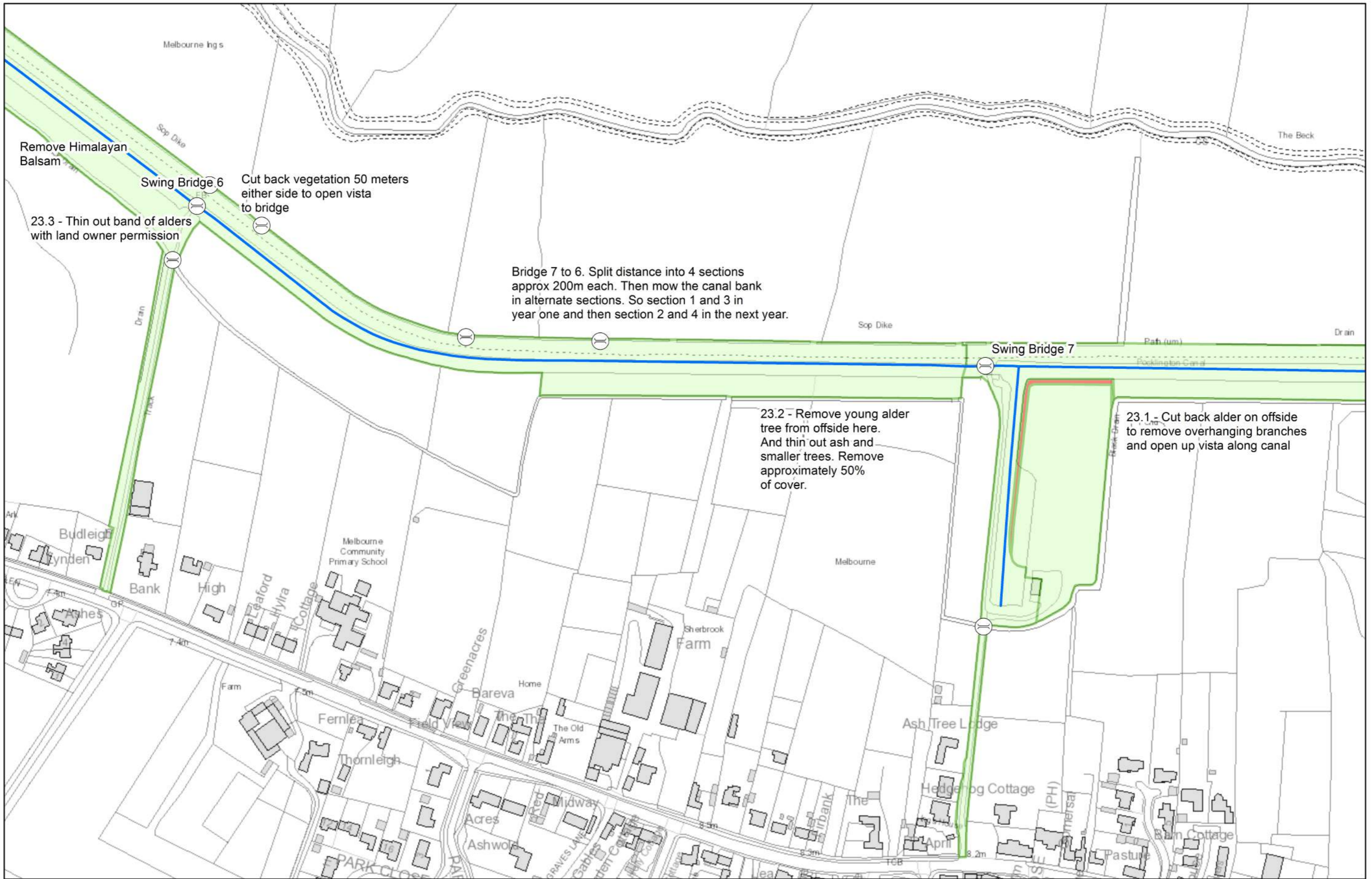


Figure 23

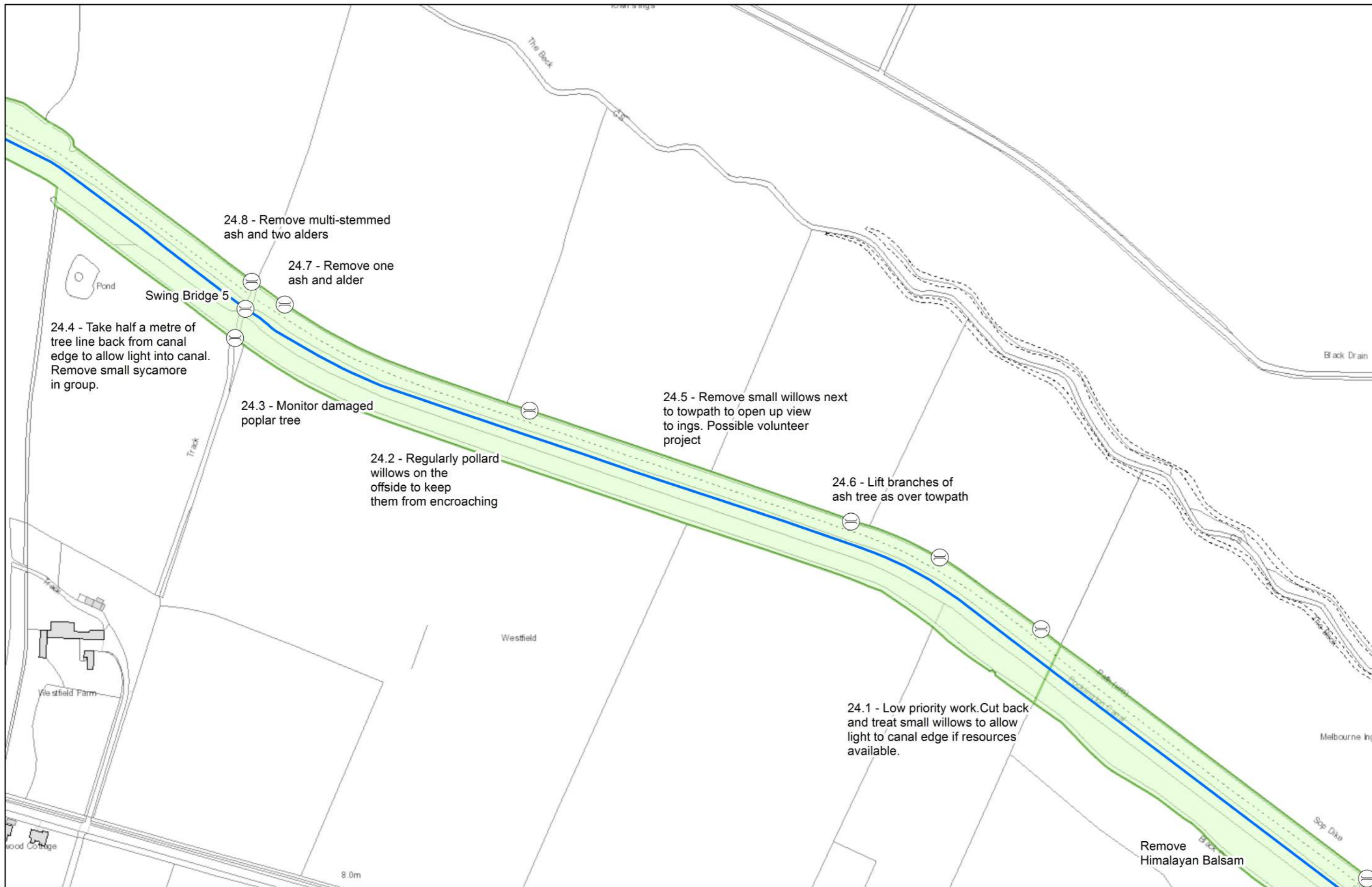


Figure 24

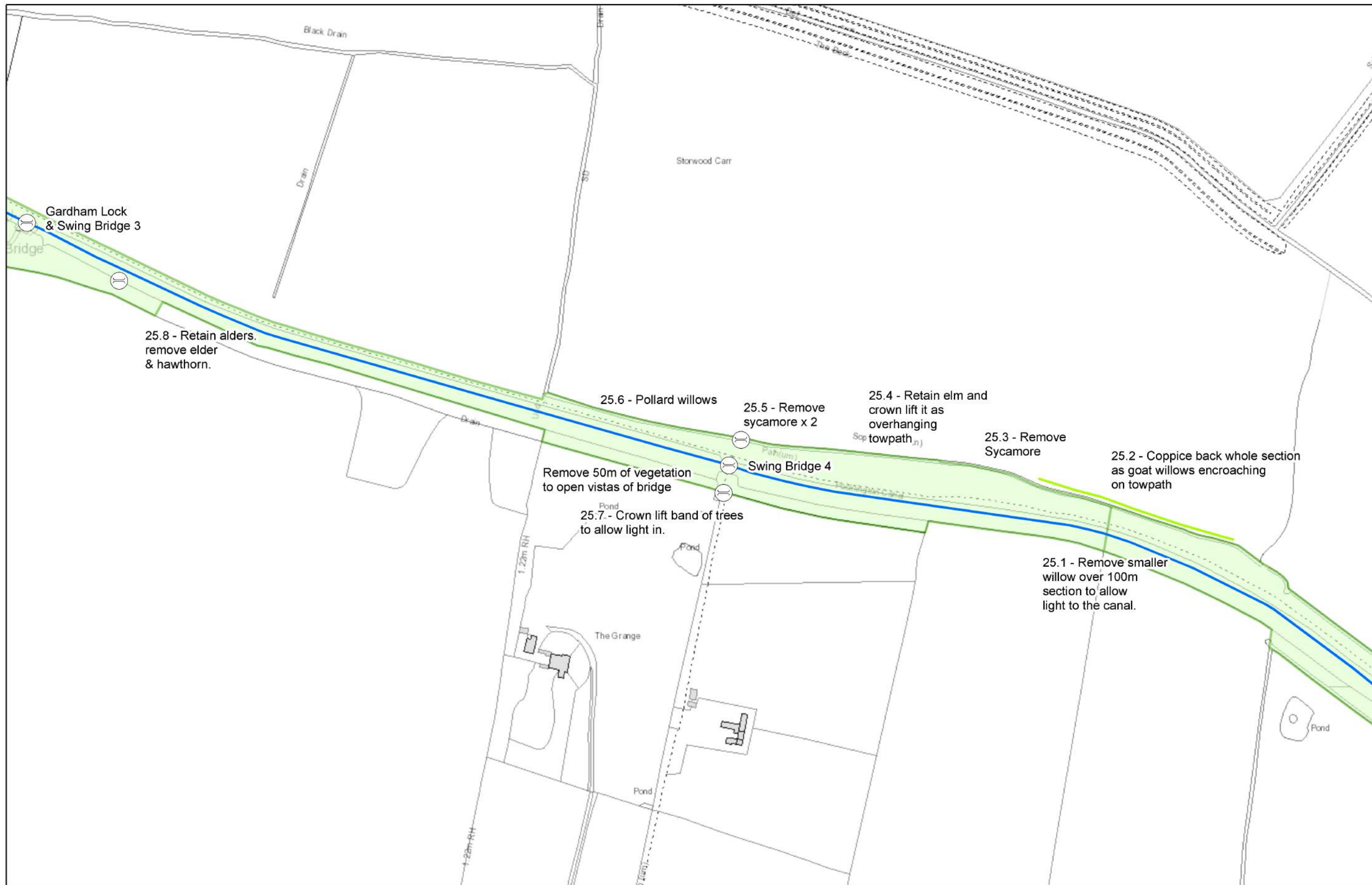


Figure 25

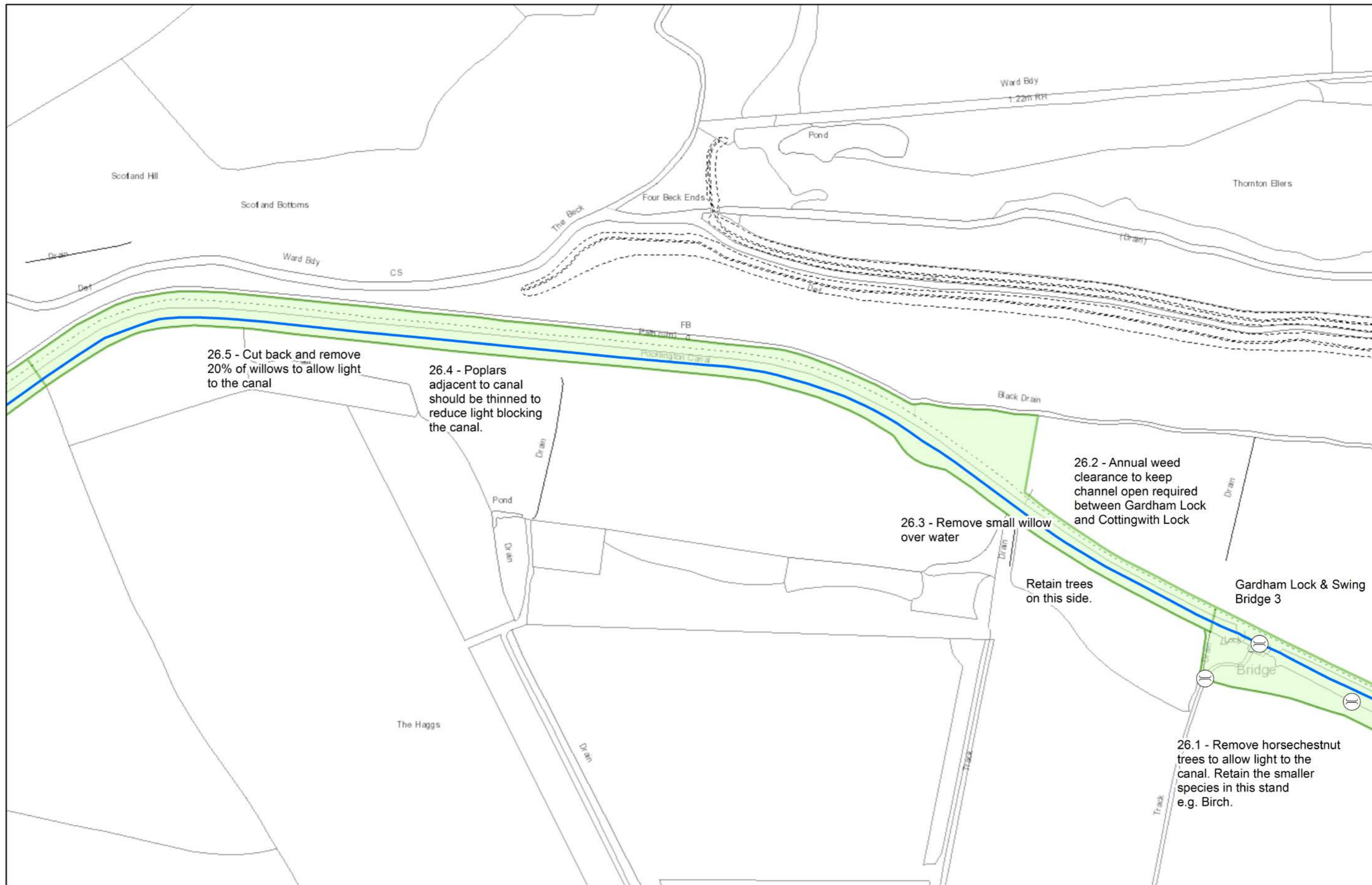


Figure 26

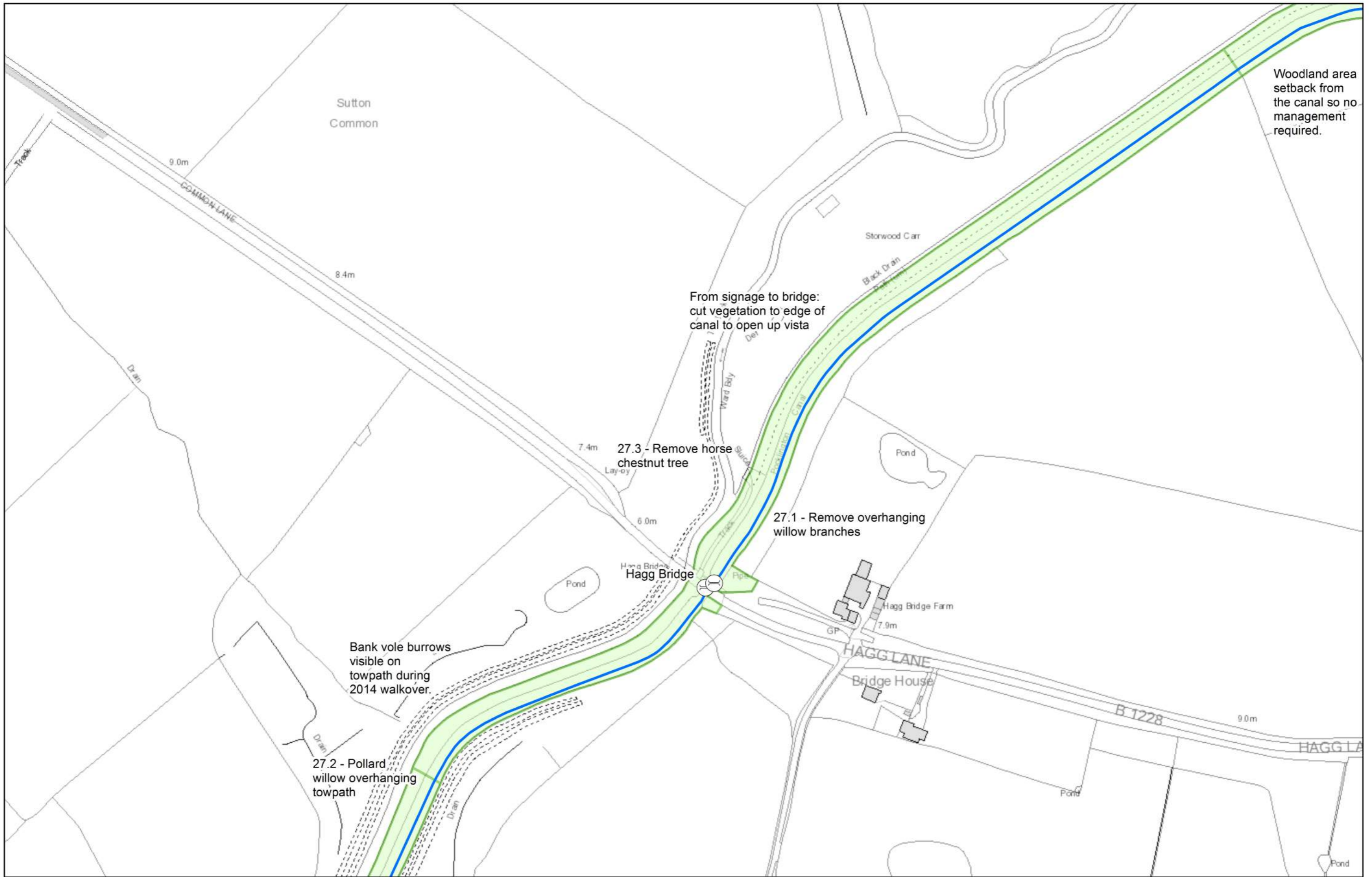


Figure 27

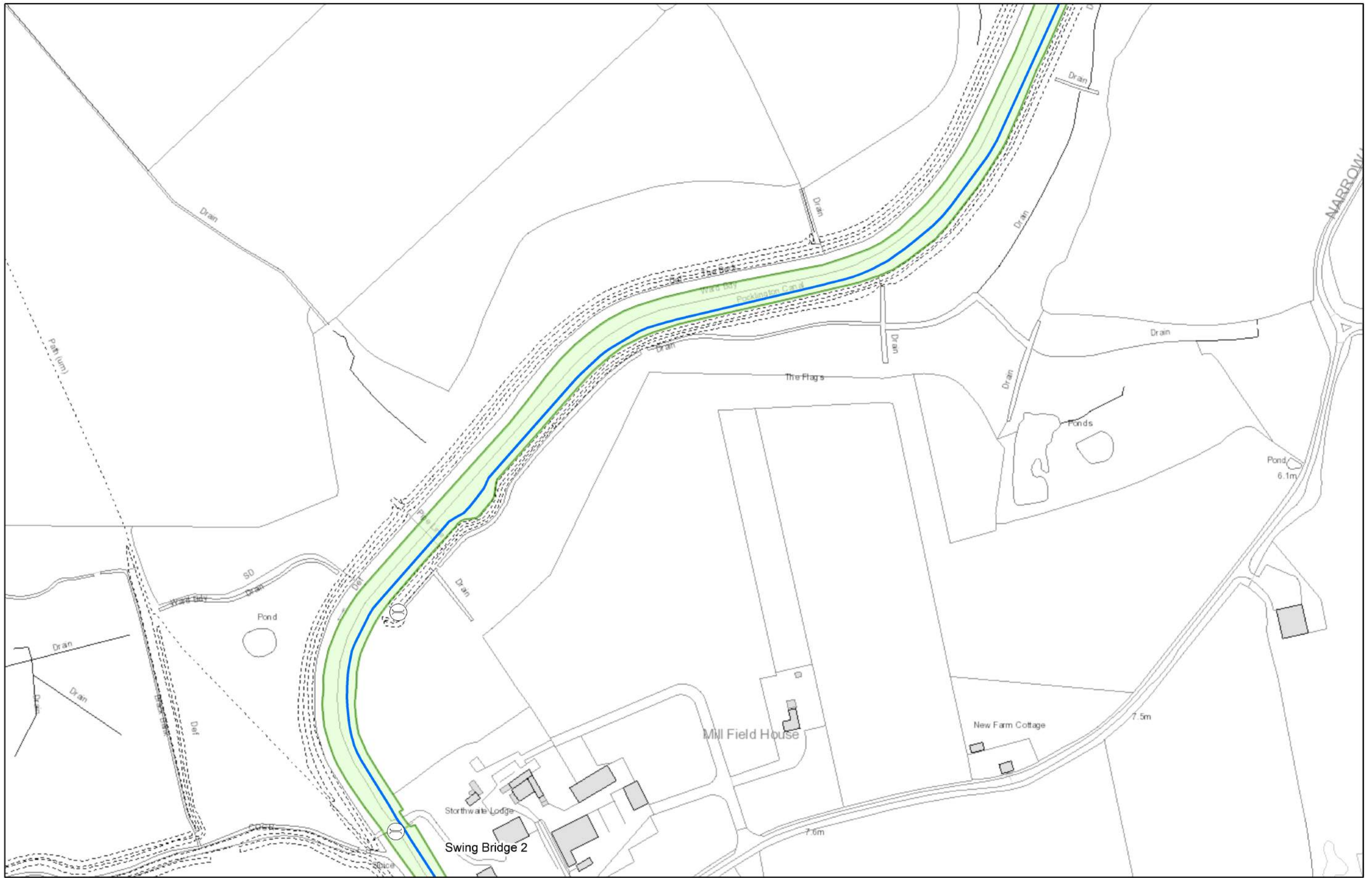


Figure 28

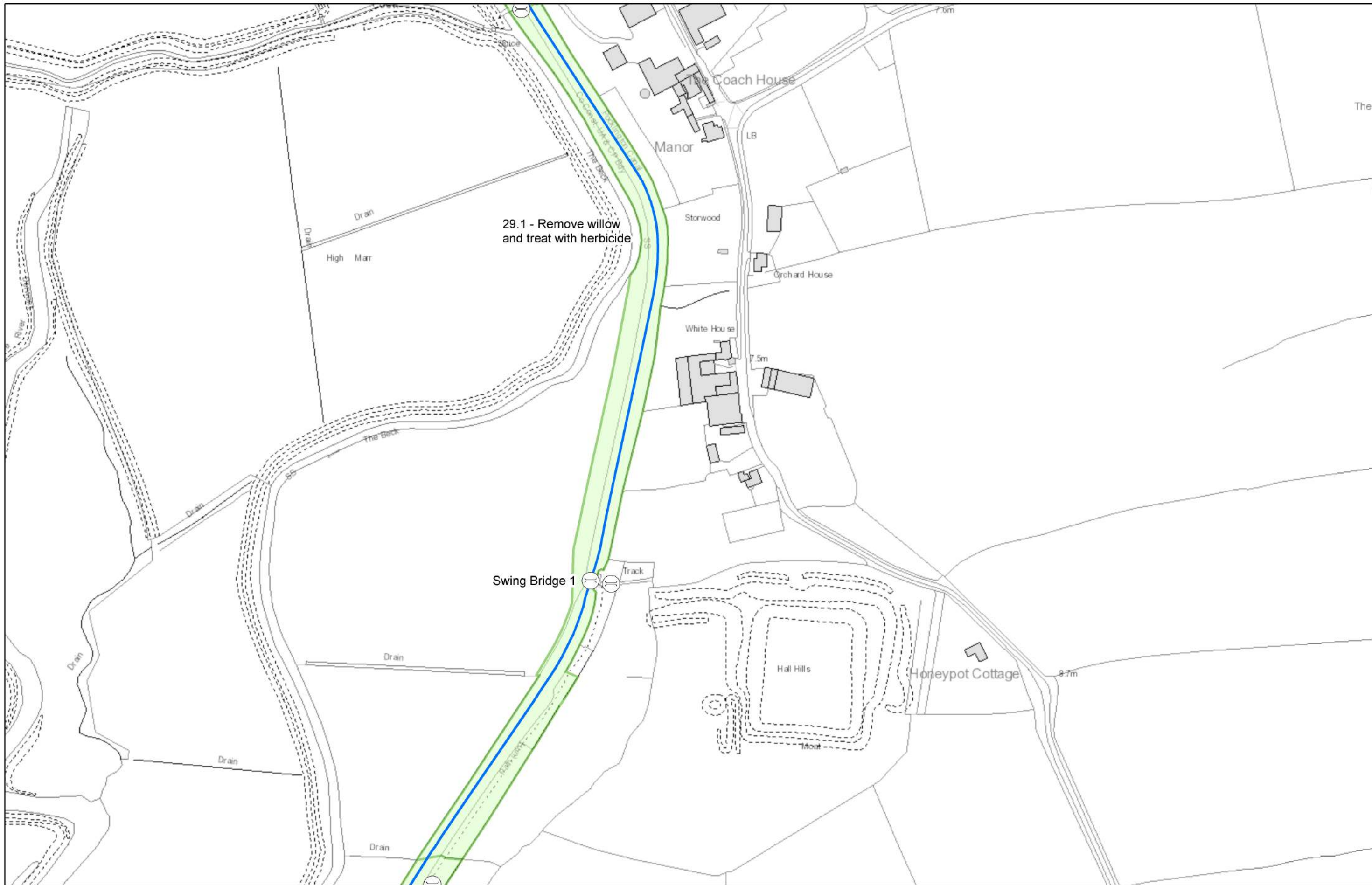
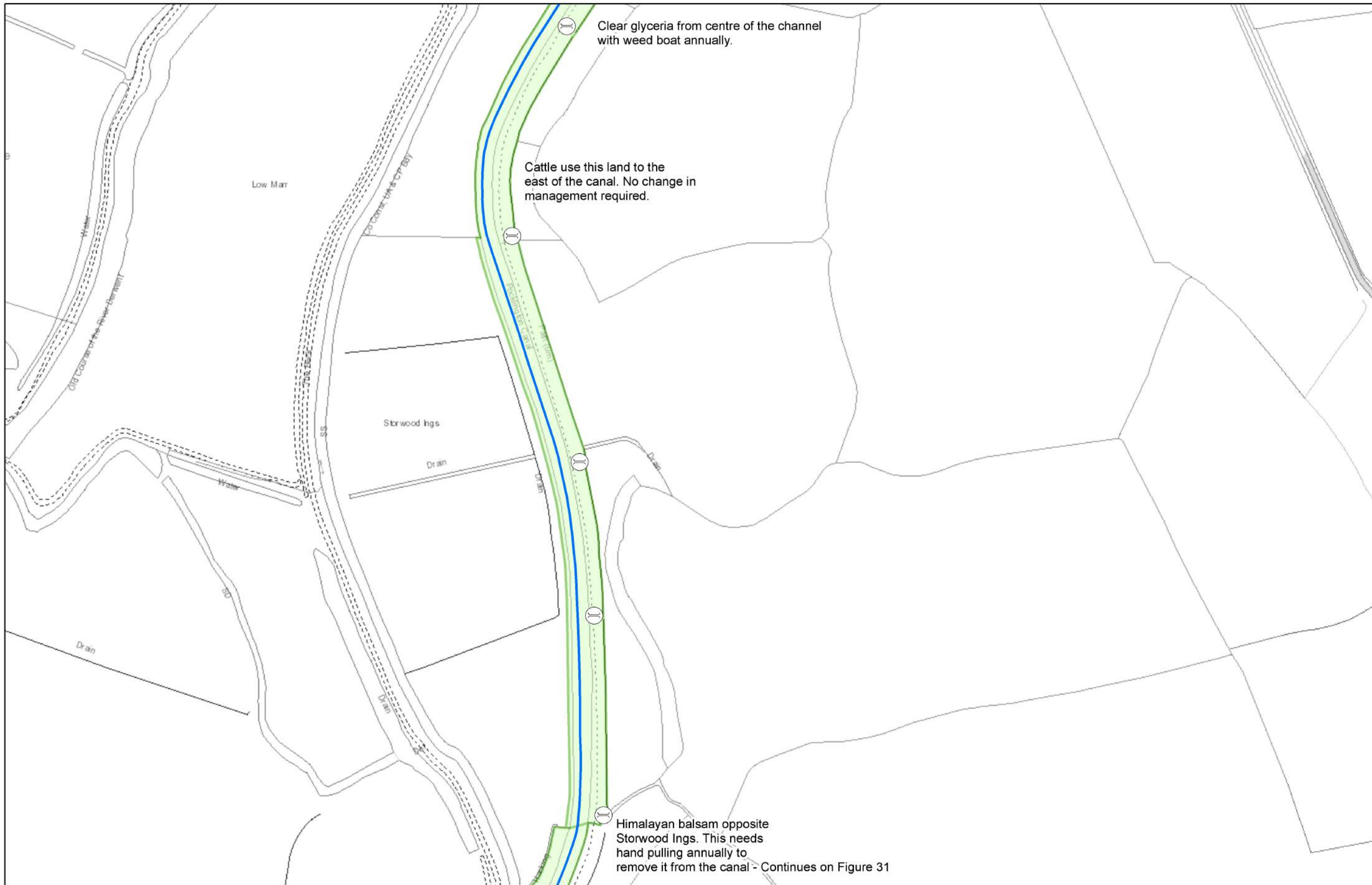
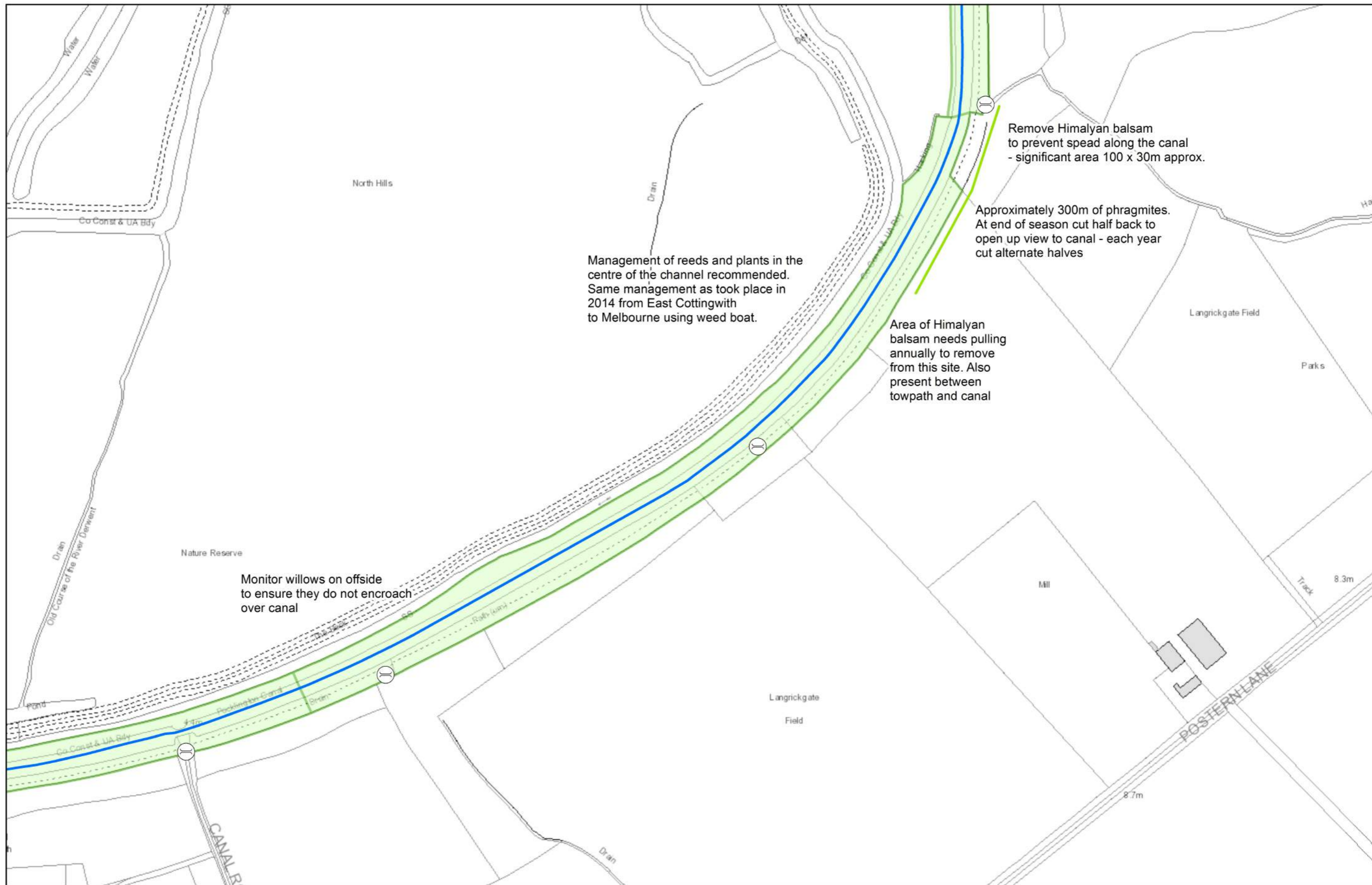
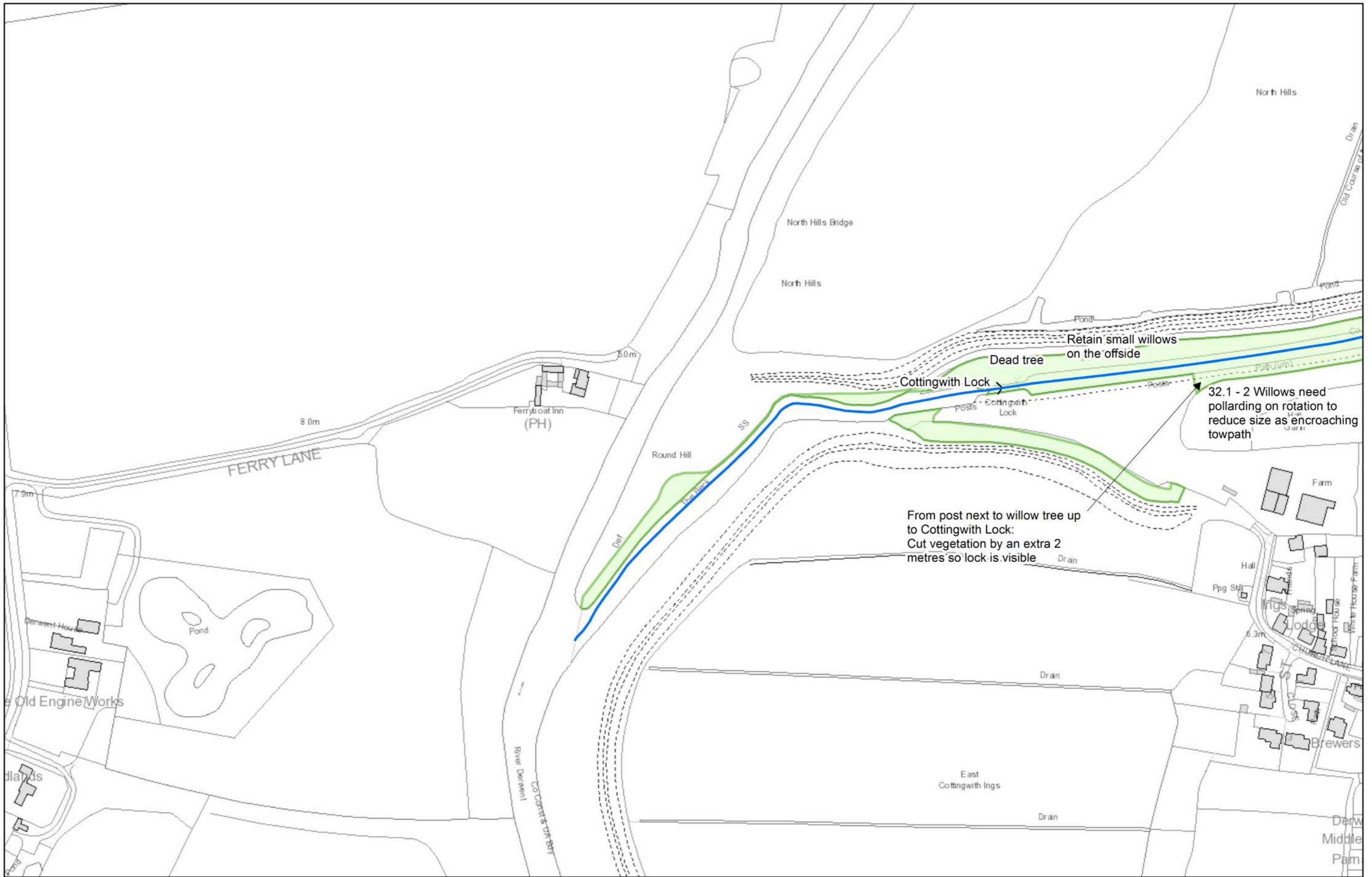


Figure 29



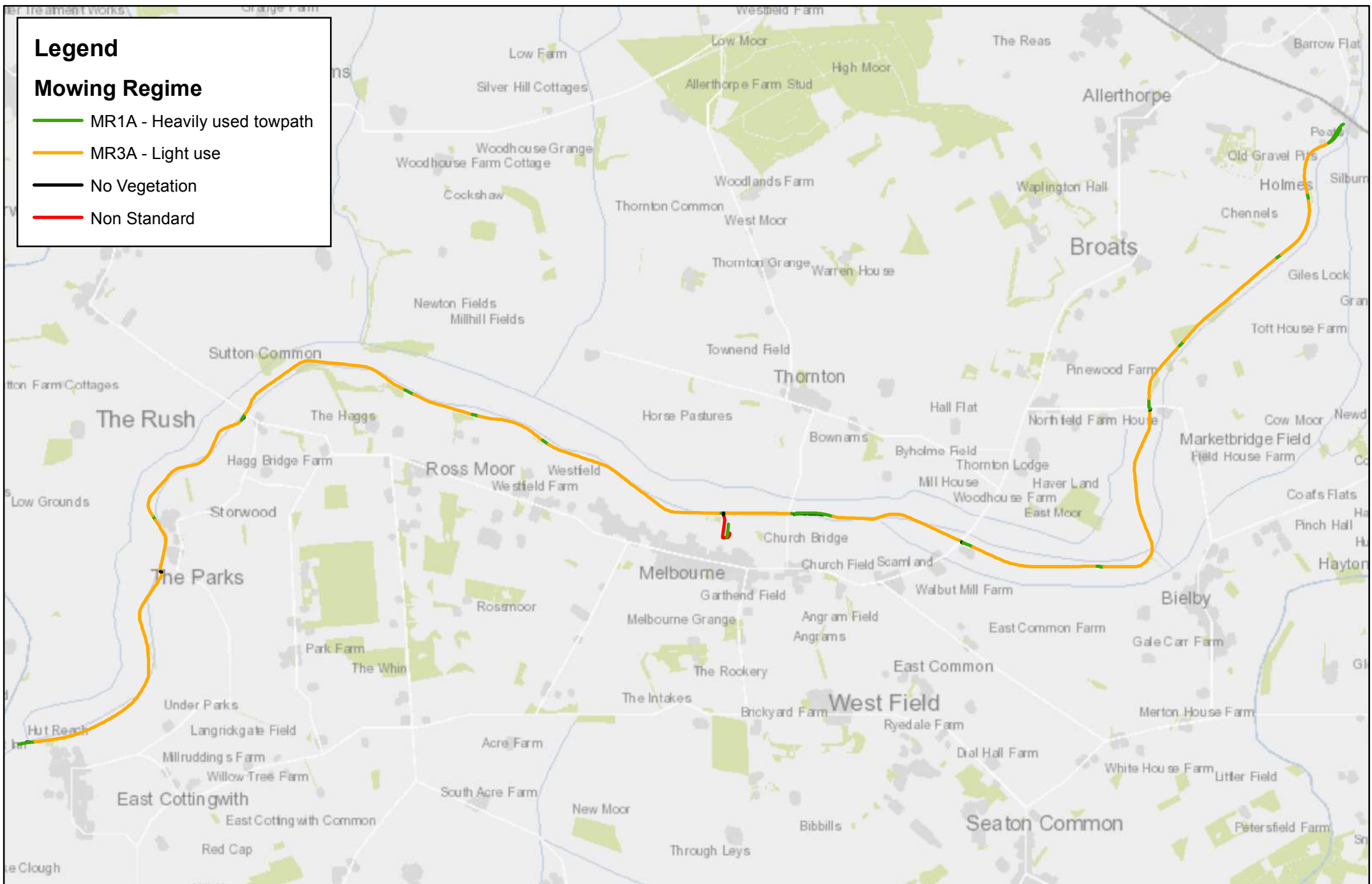




Legend

Mowing Regime

- MR1A - Heavily used towpath
- MR3A - Light use
- No Vegetation
- Non Standard



The mowing regime for Pocklington Canal

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