In Parliament – Session 2021 - 2022

HS2

High Speed Rail (Crewe – Manchester)

Background information and data

Water resources and flood risk

BID WR-002-00001_Part 1

Water Framework Directive compliance assessment baseline data - Part 1 of 2

M303

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Department for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

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1 Introduction

1.1.1 This report presents baseline data relating to the Water Framework Directive (WFD)[1] compliance assessment which has been undertaken for the Proposed Scheme.

1.1.2 The WFD compliance assessment is a route-wide assessment; this document presents the baseline data for the section of the proposed HS2 rail network from Crewe to Manchester, which relates to the following community areas (CAs):

- Hough to Walley's Green (MA01);
- Wimboldsley to Lostock Gralam (MA02);
- Pickmere to Agden and Hulseheath (MA03);
- Broomedge to Glazebrook (MA04);
- Risley to Bamfurlong (MA05);
- Hulseheath to Manchester Airport (MA06);
- Davenport Green to Ardwick (MA07); and
- Manchester Piccadilly Station (MA08).

1.1.3 The Environmental Statement[2] should be referred to for details of:

- the WFD compliance assessment (Volume 5: Appendix WR-001-00000) and the WFD compliance assessment summary (Volume 3, Route-wide effects);
- the Water resources assessments and Flood risk assessments, which are reported per community area, (Volume 5: Appendices WR-003 and WR-005);
- the Hydraulic modelling reports which support the Flood risk assessments (Volume 5: WR-006); and
- a draft water resources and flood risk operation and maintenance plan (Volume 5: Appendix WR-007-00000).

1.1.4 The WFD assessment for off-route works at Annandale depot can be found in Volume 5: Appendix WR-001-OR003. WFD baseline data is set out in BID WR-002-OR003.

1.1.5 Additional information is also included in Water resources assessment baseline data, which is reported per community area (BID WR-004).

[1] The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (SI 2017 No. 407). Available online at: https://www.legislation.gov.uk/uksi/2017/407/contents/made.

[2] High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement*. Available online at: https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-environmental-statement.

1.1.6 Route-wide WFD maps are set out in the Volume 5, Water resources and flood risk Map Books: Map Series WR-03[3].

1.1.7 The current River Basin Management Plan (RBMP)[4] Cycle 2 forms the legal baseline for WFD and was published in 2015. While 2019 WFD status data is available, the issue of RBMP Cycle 3 is not expected until 2022. This report provides the current 2015 Cycle 2 data alongside updated 2019 status information.

[3] High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement, Volume 5 Water resources and flood risk Map Book*. Available online at: https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-environmental-statement.

[4] Under the WFD, 'water bodies' are the basic management units and are defined as all or part of a river system or aquifer. These water bodies form part of a larger 'river basin district' (RBD), for which 'river basin management plans' (RBMP) are developed, and environmental objectives are set for all water bodies. These RBMP are produced every six years by the Environment Agency in England and by the Scottish Environment Protection Agency in Scotland, in accordance with the river basin management planning cycle.

2 Surface water baseline

2.1 WFD surface water bodies

2.1.1 Table 1 presents the baseline information for all WFD surface water bodies in the study area and indicates whether they have been screened in for WFD preliminary assessment based on their potential to be affected by the Proposed Scheme. WFD surface water bodies are given a water body ID by the Environment Agency (in the format GB1234567890) and these are presented in Table 1.

2.1.2 Locations of the relevant WFD surface water bodies are shown in Figure 1 to Figure 4.

2.1.3 The 2015 status and status objectives information along with the 2019 status for each WFD surface water body are then provided in the below sections.

Table 1: Summary of all WFD surface water bodies within the study area and their 2015 Cycle 2 and 2019 status classifications

WFD water body name and ID	River Basin District / management plan	Environment Agency management catchment	Water body type (hydro - morphological designation)	2015			2019			Screened in for WFD preliminary assessment
				Overall status	Ecological status/ potential	Chemical status	Overall status	Ecological status/ potential	Chemical status[5]	
Wistaston Brook GB112068055280	North West	Weaver Gowy	River (not Artificial (A) / Heavily Modified Water Body (HMWB))	Bad	Bad	Good	Bad	Bad	Fail	Yes
Valley Brook (Englesea Brook to Weaver) GB112068055310	North West	Weaver Gowy	River (HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes
Fowle Brook GB112068055400	North West	Weaver Gowy	River (not A/HMWB)	Poor	Poor	Good	Poor	Poor	Fail	No
Weaver (Marbury Brook to Dane) GB112068060460	North West	Weaver Gowy	River (not A/HMWB)	Poor	Poor	Good	Poor	Poor	Fail	Yes
Shropshire Union Canal, Market Drayton to Ellesmere Port GB71210133	North West	North West AWB	Canal (Artificial Water Body (AWB))	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes
Wheelock (Fowle Brook to Dane) GB112068055380	North West	Weaver Gowy	River (not A/HMWB)	Poor	Poor	Good	Bad	Bad	Fail	No

[5] The chemical status assessment for RBMP Cycle 3 (2019) has changed since Cycle 2 (2015), as it now includes assessment of uPBT substances (ubiquitous, persistent, bioaccumulative, toxic) and a new priority substance: Cypermethrin (previously only assessed as part of the ecological classification). This has meant that surface water bodies in England now fail chemical status classifications.

WFD water body name and ID	River Basin District / management plan	Environment Agency management catchment	Water body type (hydro - morphological designation)	2015			2019			Screened in for WFD preliminary assessment
				Overall status	Ecological status/ potential	Chemical status	Overall status	Ecological status/ potential	Chemical status[5]	
Dane (Wheelock to Weaver) GB112068060470	North West	Weaver Gowy	River (not A/HMWB)	Bad	Bad	Good	Moderate	Moderate	Fail	Yes
Trent and Mersey Canal, summit to Preston Brook Tunnel GB71210247	North West	North West AWB	Canal (AWB)	Moderate	Moderate	Fail	Moderate	Moderate	Fail	Yes
Puddinglake Brook GB112068060220	North West	Weaver Gowy	River (not A/HMWB)	Poor	Poor	Good	Poor	Poor	Fail	Yes
Wade Brook GB112068060370	North West	Weaver Gowy	River (not A/HMWB)	Poor	Poor	Fail	Poor	Poor	Fail	Yes
Peover Eye GB112068060390	North West	Weaver Gowy	River (not A/HMWB)	Poor	Poor	Good	Bad	Bad	Fail	Yes
Smoker Brook (Gale Brook to Wincham Brook) GB112068060410	North West	Weaver Gowy	River (not A/HMWB)	Poor	Poor	Good	Bad	Bad	Fail	Yes
Bollin (Ashley Mill to Manchester Ship Canal) GB112069061382	North West	Mersey Upper	River (HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes
Bridgewater Canal GB71210001	North West	North West AWB	Canal (AWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes

WFD water body name and ID	River Basin District / management plan	Environment Agency management catchment	Water body type (hydro - morphological designation)	2015			2019			Screened in for WFD preliminary assessment
				Overall status	Ecological status/ potential	Chemical status	Overall status	Ecological status/ potential	Chemical status[5]	
Mersey/ Manchester Ship Canal (Irwell/ Manchester Ship Canal to Bollin) GB112069061011	North West	Mersey Upper	River (HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes
Sinderland Brook GB112069060980	North West	Mersey Upper	River (not A/HMWB)	Poor	Poor	Good	Poor	Poor	Fail	Yes
Glaze GB112069061420	North West	Mersey Lower	River (not A/HMWB)	Poor	Poor	Good	Bad	Bad	Fail	Yes
Spittle Brook GB112069061020	North West	Mersey Lower	River (HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes
Hey/Borsdane Brook GB112069064520	North West	Mersey Lower	River (HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes
Birkin Brook - Mobberley Brook to River Bollin (including Rostherne Brook) GB112069061370	North West	Mersey Upper	River (not A/HMWB)	Bad	Bad	Good	Bad	Bad	Fail	Yes
Sugar Brook GB112069061350	North West	Mersey Upper	River (not A/HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes
Bollin (River Dean to Ashley Mill) GB112069061381	North West	Mersey Upper	River (not A/HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes

WFD water body name and ID	River Basin District / management plan	Environment Agency management catchment	Water body type (hydro - morphological designation)	2015			2019			Screened in for WFD preliminary assessment
				Overall status	Ecological status/ potential	Chemical status	Overall status	Ecological status/ potential	Chemical status[5]	
Timperley Brook GB112069061260	North West	Mersey Upper	River (HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes
Sinderland Brook (Fairywell Bk and Baguley Bk) GB112069061270	North West	Mersey Upper	River (HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes
Mersey (upstream of Manchester Ship Canal) GB112069061030	North West	Mersey Upper	River (HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes
Chorlton Brook (Princess Parkway to Mersey) GB112069061040	North West	Mersey Upper	River (HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	No
Fallowfield Brook GB112069061410	North West	Mersey Upper	River (HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes
Platt Brook (Source to Fallowfield Bk) GB112069061060	North West	Mersey Upper	River (HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes
Irwell / Manchester Ship Canal (Irk to confluence with Upper Mersey)	North West	Irwell	River (HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	No

WFD water body name and ID	River Basin District / management plan	Environment Agency management catchment	Water body type (hydro - morphological designation)	2015			2019			Screened in for WFD preliminary assessment
				Overall status	Ecological status/ potential	Chemical status	Overall status	Ecological status/ potential	Chemical status[5]	
GB112069061452										
Medlock (Lumb Brook to Irwell) GB112069061152	North West	Irwell	River (HMWB)	Moderate	Moderate	Good	Moderate	Moderate	Fail	Yes
Rostherne Mere GB31232650	North West	Mersey Upper	Lake (not A/HMWB)	Bad	Bad	Good	Bad	Bad	Fail	Yes

Figure 1: WFD surface water bodies within the study area (Part 1)

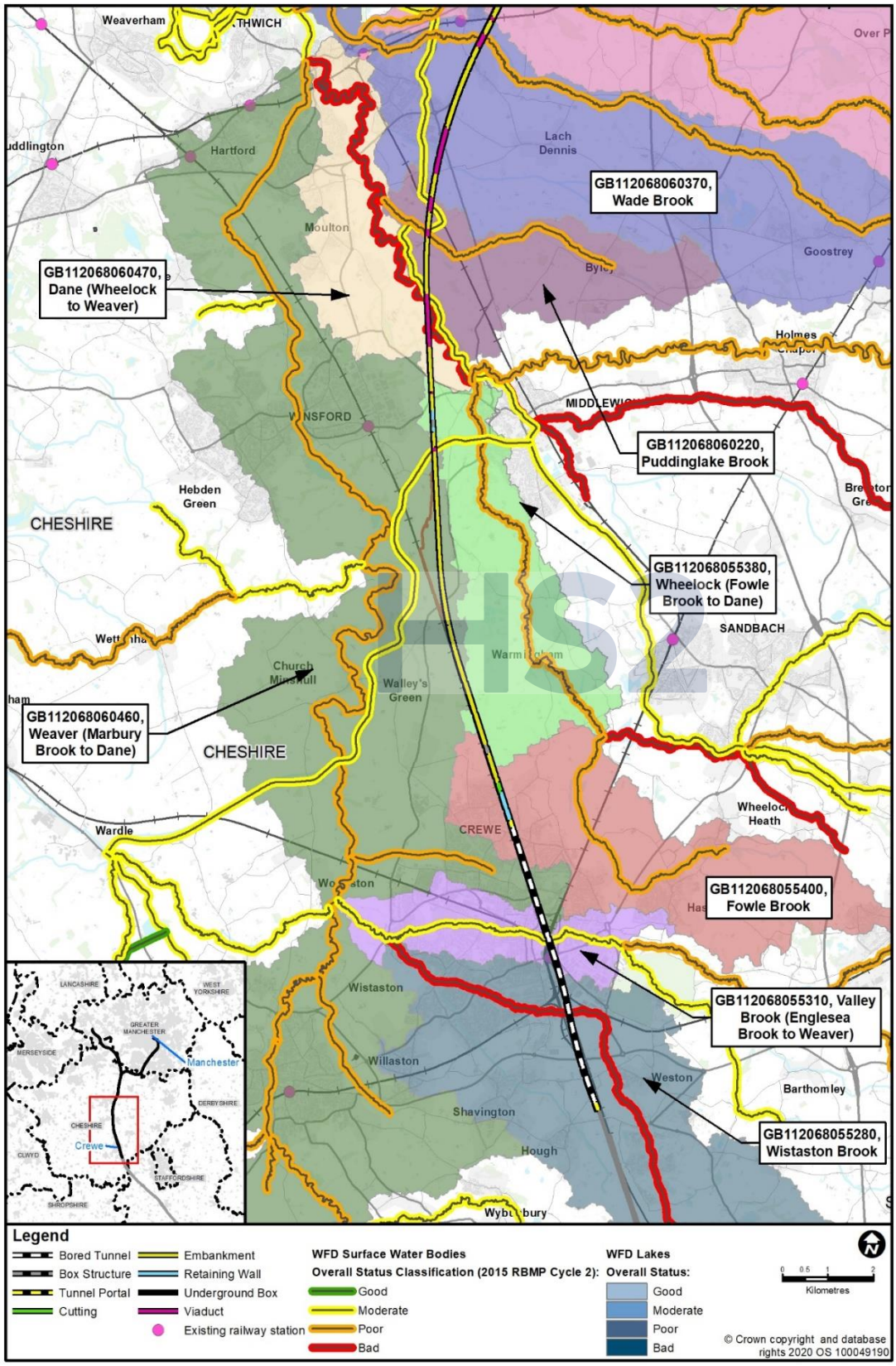


Figure 2: WFD surface water bodies within the study area (Part 2)

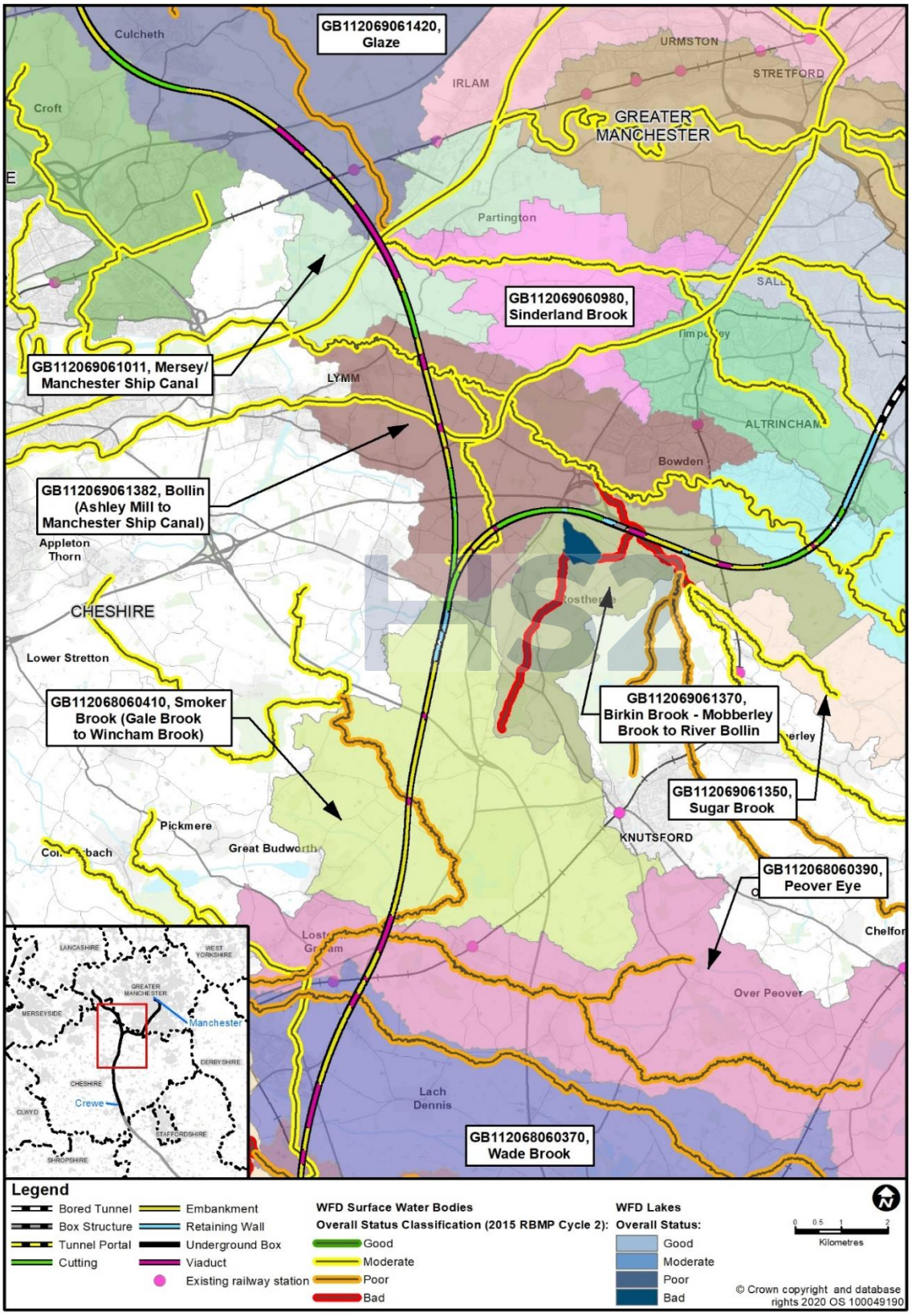


Figure 3: WFD surface water bodies within the study area (Part 3)

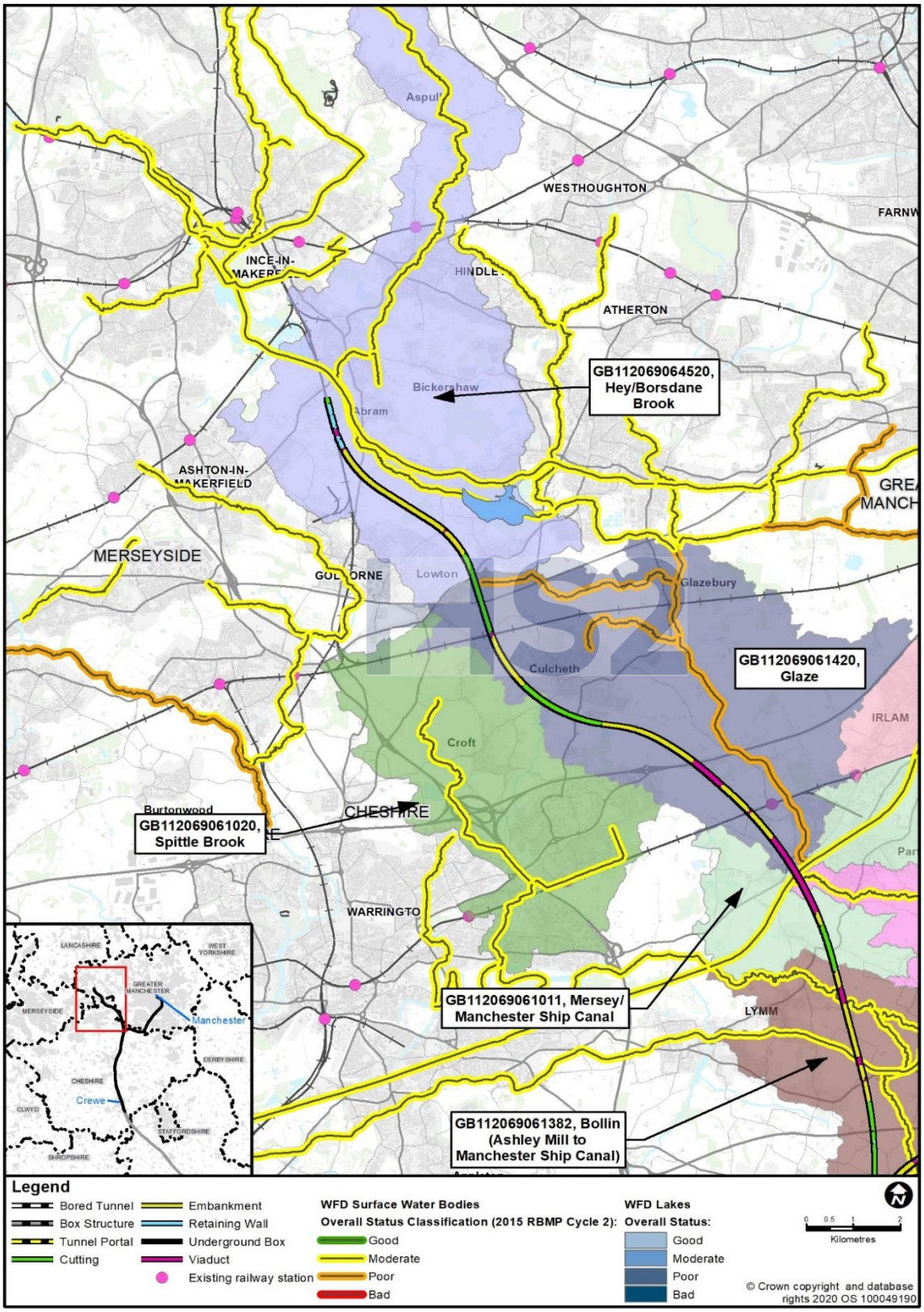
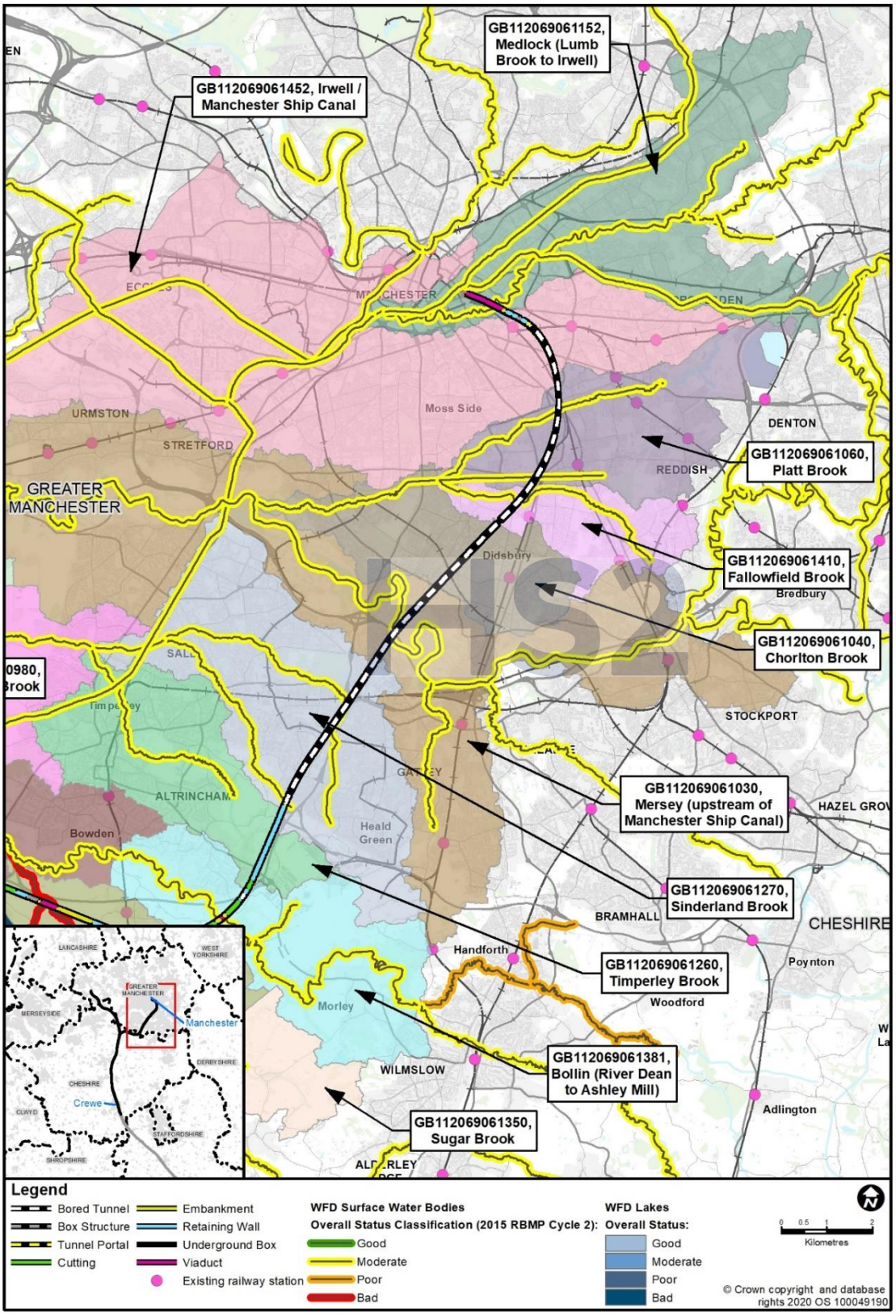


Figure 4: WFD surface water bodies within the study area (Part 4)



Wistaston Brook (GB112068055280)

2.1.4 The Wistaston Brook (GB112068055280) water body is assessed in 2015 as having bad overall status, bad ecological status, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.5 The 2015 Cycle 2 status classification and objectives data and 2019 status data for the water body are shown in Table 2, which shows those status elements that are currently failing to achieve good status.

Table 2: Wistaston Brook – 2015 Cycle 2 status classification, status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Bad	Good by 2027	Bad
Ecological status	Bad	Good by 2027	Bad
Biological status	Bad	Good by 2027	Bad
Fish	Bad	Good by 2027	Bad
Invertebrates	Good	Good by 2015	Good
Macrophytes and phytobenthos	Poor	Good by 2027	Moderate
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	High
Morphology	Supports good	-	Supports good
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	High	Good by 2015	High
Dissolved oxygen	Moderate	Good by 2015	Moderate
pH	High	-	High
Phosphate	Poor	Good by 2027	Poor
Temperature	High	Good by 2015	High
Specific pollutants status	-	Not assessed	-
Chemical status	Good	Good by 2015	Fail

Valley Brook (Englesea Brook to Weaver) (GB112068055310)

2.1.6 The Valley Brook (Englesea Brook to Weaver) (GB112068055310) water body is a Heavily Modified Water Body (HMWB) and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.7 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 3, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 3: Valley Brook (Englesea Brook to Weaver) – 2015 Cycle 2 status classification, status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Good by 2027	Moderate
Ecological potential	Moderate	Good by 2027	Moderate
Biological status	Bad	Good by 2027	Bad
Fish	Bad	Good by 2027	Bad
Invertebrates	Bad	Good by 2027	Bad
Macrophytes and phytobenthos	-	-	-
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	-	-	-
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	Good	Good by 2015	Good
Dissolved oxygen	High	Good by 2015	High
pH	High	Good by 2015	High
Phosphate	Poor	Good by 2027	Poor
Temperature	High	Good by 2015	High
Specific pollutants status	-	-	-
Chemical status	Good	Good by 2015	Fail

Fowle Brook (GB112068055400)

2.1.8 The Fowle Brook (GB112068055400) water body is currently assessed in 2015 as having poor overall status, poor ecological status, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.9 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 4, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 4: Fowle Brook – 2015 Cycle 2 status classification, status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Poor	Good by 2027	Poor
Ecological status	Poor	Good by 2027	Poor
Biological status	Poor	Good by 2027	Poor

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Fish	-	-	-
Invertebrates	Poor	Good by 2027	Poor
Macrophytes and phytobenthos	Poor	Good by 2027	Moderate
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	High	Supports good by 2015	High
Morphology	Supports good	-	Supports good
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	Good	Good by 2015	Good
Dissolved oxygen	Bad	Good by 2027	Poor
pH	High	Good by 2015	High
Phosphate	Moderate	Good by 2027	Moderate
Temperature	High	Good by 2015	High
Specific pollutants status	-	Not assessed	-
Chemical status	Good	Good by 2015	Fail

Weaver (Marbury Brook to Dane) (GB112068060460)

2.1.10 The Weaver (Marbury Brook to Dane) (GB112068060460) water body is currently assessed in 2015 as having poor overall status, poor ecological status, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.11 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 5, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 5: Weaver (Marbury Brook to Dane) – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Poor	Good by 2027	Poor
Ecological status	Poor	Good by 2027	Poor
Biological status	Poor	Good by 2027	Poor
Fish	Poor	Good by 2027	Poor
Invertebrates	Poor	Good by 2027	Poor
Macrophytes and phytobenthos	Poor	Good by 2027	Poor
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Morphology	-	-	-
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	Good	Good by 2015	Moderate
Dissolved oxygen	High	Good by 2015	Good
pH	High	Good by 2015	High
Phosphate	Poor	Good by 2027	Poor
Temperature	High	Good by 2015	High
Specific pollutants status	-	Not assessed	-
Chemical status	Good	Good by 2015	Fail

Shropshire Union Canal, Market Drayton to Ellesmere Port (GB71210133)

2.1.12 The Shropshire Union Canal, Market Drayton to Ellesmere Port (GB71210133) water body is an Artificial Water Body (AWB) and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.13 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 6, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 6: Shropshire Union Canal, Market Drayton to Ellesmere Port – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Good by 2021	Moderate
Ecological potential	Moderate	Good by 2021	Moderate
Biological status	-	Not assessed	-
Fish	-	-	-
Invertebrates	-	-	-
Macrophytes and phytobenthos	-	-	-
Hydromorphological status	-	Not assessed	-
Hydrological regime	-	-	-
Morphology	-	-	-
Physicochemical status	High	Good by 2015	High
Ammonia (phys-chem)	High	Good by 2015	High

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Dissolved oxygen	High	Good by 2015	-
pH	High	Good by 2015	High
Phosphate	-	-	-
Temperature	High	Good by 2015	High
Specific pollutants status	-	Not assessed	-
Chemical status	Good	Good by 2021	Fail

Wheelock (Fowle Brook – Dane) (GB112068055380)

2.1.14 The Wheelock (Fowle Brook – Dane) (GB112068055380) water body is currently assessed in 2015 as having poor overall status, poor ecological status, and good chemical status. In the 2019 classification, the overall status, ecological status and biological status all changed to bad, with chemical status changing to fail. The water body is therefore currently failing its good overall status objective under the WFD.

2.1.15 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 7, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 7: Wheelock (Fowle Brook – Dane) – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Poor	Good by 2027	Bad
Ecological status	Poor	Good by 2027	Bad
Biological status	Poor	Good by 2027	Bad
Fish	Moderate	Good by 2027	Moderate
Invertebrates	Moderate	Good by 2027	Bad
Macrophytes and phytobenthos	Poor	Good by 2027	Poor
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	Supports good	-	Supports good
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	Good	Good by 2015	Good
Dissolved oxygen	High	Good by 2015	High
pH	High	Good by 2015	High
Phosphate	Poor	Good by 2027	Poor
Temperature	High	Good by 2015	High

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Specific pollutants status	-	Not assessed	-
Chemical status	Good	Good by 2015	Fail

Dane (Wheelock to Weaver) (GB112068060470)

2.1.16 The Dane (Wheelock to Weaver) (GB112068060470) water body is currently assessed in 2015 as having bad overall status, bad ecological status, and good chemical status. The water body is therefore currently failing its good overall status objective under the WFD. In the 2019 classification, the overall status, ecological status and biological status all increased to moderate, with chemical status changing to fail.

2.1.17 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 8, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 8: Dane (Wheelock to Weaver) – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Bad	Moderate by 2027	Moderate
Ecological status	Bad	Moderate by 2027	Moderate
Biological status	Bad	Moderate by 2027	Moderate
Fish	Good	Good by 2015	Moderate
Invertebrates	Bad	Good by 2027	Good
Macrophytes and phytobenthos	-	-	Moderate
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	Supports good	-	Supports good
Physicochemical status	Moderate	Moderate by 2015	Moderate
Ammonia (phys-chem)	High	Good by 2015	High
Dissolved oxygen	High	-	High
pH	High	Good by 2015	High
Phosphate	Poor	Poor by 2015	Poor
Temperature	High	Good by 2015	High
Specific pollutants status	High	High by 2015	High
Chemical status	Good	Good by 2015	Fail

Trent and Mersey Canal, summit to Preston Brook Tunnel (GB71210247)

2.1.18 The Trent and Mersey Canal, summit to Preston Brook Tunnel (GB71210247) water body is an AWB and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, and a failing chemical status. The 2019 classifications remained unchanged. The water body met its moderate by 2015 overall status objective under the WFD but fails to meet the 2027 objective.

2.1.19 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 9, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 9: Trent and Mersey Canal, summit to Preston Brook Tunnel – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Moderate by 2015	Moderate
Ecological potential	Moderate	Good by 2027	Moderate
Biological status	-	Not assessed	-
Fish	-	-	-
Invertebrates	-	-	-
Macrophytes and phytobenthos	-	-	-
Hydromorphological status	-	Not assessed	-
Hydrological regime	-	-	-
Morphology	-	-	-
Physicochemical status	High	Good by 2015	High
Ammonia (phys-chem)	-	-	-
Dissolved oxygen	-	-	-
pH	High	Good by 2015	High
Phosphate	-	-	-
Temperature	-	-	-
Specific pollutants status	-	Not assessed	-
Chemical status	Fail	Fail by 2015	Fail

Puddinglake Brook (GB112068060220)

2.1.20 The Puddinglake Brook (GB112068060220) water body is currently assessed in 2015 as having poor overall status, poor ecological status, and good chemical status (changing to fail

in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.21 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 10, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 10: Puddinglake Brook – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Poor	Good by 2027	Poor
Ecological status	Poor	Good by 2027	Poor
Biological status	Poor	Good by 2027	Poor
Fish	-	-	-
Invertebrates	Moderate	Good by 2027	Moderate
Macrophytes and phytobenthos	Poor	Good by 2027	Poor
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	High	Supports good by 2015	Supports good
Morphology	Supports good	-	Supports good
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	Moderate	Good by 2021	Poor
Dissolved oxygen	High	Good by 2015	Poor
pH	High	Good by 2015	High
Phosphate	Poor	Good by 2027	Poor
Temperature	High	Good by 2015	High
Specific pollutants status	-	Not assessed	-
Chemical status	Good	Good by 2015	Fail

Wade Brook (GB112068060370)

2.1.22 The Wade Brook (GB112068060370) water body is currently assessed in 2015 as having poor overall status, poor ecological status, and a failing chemical status (remaining the same in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.23 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 11, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 11: Wade Brook – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Poor	Good by 2027	Poor
Ecological status	Poor	Good by 2027	Poor
Biological status	Poor	Good by 2027	Poor
Fish	-	-	-
Invertebrates	Poor	Good by 2027	Moderate
Macrophytes and phytobenthos	Poor	Good by 2027	Poor
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	Supports good	Supports good by 2015	Supports good
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	Moderate	Good by 2027	Bad
Dissolved oxygen	High	Good by 2015	High
pH	High	Good by 2015	High
Phosphate	Moderate	Good by 2027	Moderate
Temperature	High	Good by 2015	Good
Specific pollutants status	Moderate	High by 2027	Moderate
Chemical status	Fail	Good by 2027	Fail

Peover Eye (GB112068060390)

2.1.24 The Peover Eye (GB112068060390) water body is currently assessed in 2015 as having poor overall status, poor ecological status, and good chemical status. In the 2019 classification, the overall status, ecological status and biological status all changed to bad, with chemical status changing to fail. The water body is therefore currently failing its good overall status objective under the WFD.

2.1.25 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 12, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 12: Peover Eye – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Poor	Good by 2027	Bad
Ecological status	Poor	Good by 2027	Bad
Biological status	Poor	Good by 2027	Bad
Fish	Poor	Good by 2027	Bad
Invertebrates	High	Good by 2015	Good

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Macrophytes and phytobenthos	Moderate	Good by 2027	Moderate
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	Supports good	Supports good by 2015	Supports good
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	High	Good by 2015	High
Dissolved oxygen	High	Good by 2015	Good
pH	High	Good by 2015	High
Phosphate	Moderate	Good by 2027	Moderate
Temperature	High	Good by 2015	High
Specific pollutants status	-	Not assessed	-
Chemical status	Good	Good by 2015	Fail

Smoker Brook (Gale Brook to Wincham Brook) (GB112068060410)

2.1.26 The Smoker Brook (Gale Brook to Wincham Brook) (GB112068060410) water body is currently assessed in 2015 as having poor overall status, poor ecological status, and good chemical status. In the 2019 classification, the overall status, ecological status and biological status all changed to bad, with chemical status changing to fail. The water body is therefore currently failing its good overall status objective under the WFD.

2.1.27 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 13, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 13: Smoker Brook (Gale Brook to Wincham Brook) – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Poor	Good by 2027	Bad
Ecological status	Poor	Good by 2027	Bad
Biological status	Poor	Good by 2027	Bad
Fish	Poor	Good by 2027	Bad
Invertebrates	High	Good by 2015	High
Macrophytes and phytobenthos	High	Good by 2015	High
Hydromorphological status	Supports good	Supports good	Supports good
Hydrological regime	High	Supports good by 2015	High
Morphology	Supports good	-	Supports good

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	High	Good by 2015	Good
Dissolved oxygen	High	Good by 2015	High
pH	High	Good by 2015	High
Phosphate	Moderate	Good by 2027	Moderate
Temperature	High	Good by 2027	High
Specific pollutants status	-	-	-
Chemical status	Good	Good by 2015	Fail

Bollin (Ashley Mill to Manchester Ship Canal) (GB112069061382)

2.1.28 The Bollin (Ashley Mill to Manchester Ship Canal) (GB112069061382) water body is a HMWB and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, poor biological status and good chemical status (changing to fail in 2019). The water body met its moderate by 2015 overall status objective under the WFD but fails to meet the 2027 objective.

2.1.29 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 14, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 14: Bollin (Ashley Mill to Manchester Ship Canal) – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Moderate by 2015	Moderate
Ecological potential	Moderate	Moderate by 2015	Moderate
Biological status	Poor	Good by 2027	Poor
Fish	Poor	Good by 2027	Poor
Invertebrates	Moderate		Good
Macrophytes and phytobenthos	-	-	-
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	-	-	-
Physicochemical status	Moderate	Moderate by 2015	Moderate
Ammonia (phys-chem)	Good	Good by 2015	Good
Dissolved oxygen	High	Good by 2015	Good

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
pH	High	Good by 2015	High
Phosphate	Poor	Moderate by 2027	Poor
Temperature	High	Good by 2015	High
Specific pollutants status	-	Not assessed	-
Chemical status	Good	Good by 2015	Fail

Bridgewater Canal (GB71210001)

2.1.30 The Bridgewater Canal (GB71210001) water body is an AWB and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.31 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 15, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 15: Bridgewater Canal – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Good by 2027	Moderate
Ecological potential	Moderate	Good by 2027	Moderate
Biological status	-	-	-
Fish	-	-	-
Invertebrates	-	-	-
Macrophytes and phytobenthos	-	-	-
Hydromorphological status	-	-	-
Hydrological regime	-	-	-
Morphology	-	-	-
Physicochemical status	-	-	-
Ammonia (phys-chem)	-	-	-
Dissolved oxygen	-	-	-
pH	-	-	-
Phosphate	-	-	-
Temperature	-	-	-
Specific pollutants status	-	-	-

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Chemical status	Good	Good by 2015	Fail

Mersey/Manchester Ship Canal (Irwell/Manchester Ship Canal to Bollin) (GB112069061011)

2.1.32 The Mersey/ Manchester Ship Canal (Irwell/Manchester Ship Canal to Bollin) (GB112069061011) water body is a HMWB and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, and good chemical status (changing to fail in 2019). The water body met its moderate by 2015 overall status objective under the WFD.

2.1.33 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 16, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 16: Mersey/Manchester Ship Canal (Irwell/Manchester Ship Canal to Bollin) – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Moderate by 2015	Moderate
Ecological potential	Moderate	Moderate by 2015	Moderate
Biological status	Bad	Bad by 2015	Bad
Fish	-	-	-
Invertebrates	Bad	Bad by 2015	Bad
Macrophytes and phytobenthos	Good	Good by 2015	Good
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	-	-	-
Physicochemical status	Moderate	Moderate by 2015	Moderate
Ammonia (phys-chem)	Moderate	Moderate by 2015	Moderate
Dissolved oxygen	Good	Moderate by 2021	Bad
pH	High	Good by 2015	High
Phosphate	Poor	Poor by 2015	Poor
Temperature	High	Good by 2015	High

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Specific pollutants status	-	Not assessed	High
Chemical status	Good	Good by 2015	Fail

Sinderland Brook (GB112069060980)

2.1.34 The Sinderland Brook (GB112069060980) water body is currently assessed in 2015 as having poor overall status, poor ecological status, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its moderate overall status objective under the WFD.

2.1.35 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 17, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 17: Sinderland Brook – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Poor	Moderate by 2015	Poor
Ecological status	Poor	Moderate by 2015	Poor
Biological status	Poor	Moderate by 2015	Poor
Fish	Moderate	Good by 2027	Moderate
Invertebrates	Moderate	Good by 2027	Poor
Macrophytes and phytobenthos	Poor	Moderate by 2015	Moderate
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	Supports good	Supports good by 2015	Supports good
Physicochemical status	Moderate	Moderate by 2015	Moderate
Ammonia (phys-chem)	Moderate	Good by 2027	Good
Dissolved oxygen	Good	Good by 2015	Moderate
pH	High	Good by 2015	High
Phosphate	Moderate	Moderate by 2015	Poor
Temperature	High	Good by 2015	High
Specific pollutants status	High	High by 2015	High
Chemical status	Good	Good by 2015	Fail

Glaze (GB112069061420)

2.1.36 The Glaze (GB112069061420) water body is currently assessed in 2015 as having poor overall status, poor ecological status, and good chemical status. In the 2019 classification,

the overall status, ecological status and biological status all changed to bad, with chemical status changing to fail. The water body has met its current overall status of poor by 2015 under the WFD.

2.1.37 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 18, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 18: Glaze – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Poor	Poor by 2015	Bad
Ecological status	Poor	Poor by 2015	Bad
Biological status	Poor	Poor by 2015	Bad
Fish	Moderate	Moderate by 2015	Bad
Invertebrates	Poor	Poor by 2015	Poor
Macrophytes and phytobenthos	Moderate	Good by 2015	Poor
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	Supports good	-	Supports good
Physicochemical status	Moderate	Moderate by 2015	Moderate
Ammonia (phys-chem)	Moderate	Good by 2027	Moderate
Dissolved oxygen	Good	Good by 2015	Good
pH	High	Good by 2015	High
Phosphate	Poor	Poor by 2015	Moderate
Temperature	High	Good by 2015	High
Specific pollutants status	High	High by 2015	High
Chemical status	Good	Good by 2015	Fail

Spittle Brook (GB112069061020)

2.1.38 The Spittle Brook (GB112069061020) water body is a HMWB and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.39 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 19, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 19: Spittle Brook – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Good by 2027	Moderate
Ecological potential	Moderate	Good by 2027	Moderate
Biological status	-	Not assessed	-
Fish	-	-	-
Invertebrates	-	-	-
Macrophytes and phytobenthos	-	Not assessed	-
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	-	-	-
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	High	Good by 2015	High
Dissolved oxygen	Poor	Good by 2027	Bad
pH	High	Good by 2015	High
Phosphate	Poor	Good by 2027	Moderate
Temperature	High	Good by 2015	High
Specific pollutants status	High	High by 2015	High
Chemical status	Good	Good by 2015	Fail

Hey/Borsdane Brook (GB112069064520)

2.1.40 The Hey/Borsdane Brook (GB112069064520) water body is a HMWB and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.41 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 20, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 20: Hey/Borsdane Brook – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Good by 2027	Moderate
Ecological potential	Moderate	Good by 2027	Moderate
Biological status	Moderate	Good by 2027	Moderate
Fish	Good	Good by 2015	Good

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Invertebrates	Moderate	Good by 2027	Moderate
Macrophytes and phytobenthos	Moderate	Good by 2027	Moderate
Hydromorphological status	Supports good	Supports good	Supports good
Hydrological regime	Supports good	Supports good	Supports good
Morphology	-	-	-
Physicochemical status	Good	Good by 2015	Moderate
Ammonia (phys-chem)	High	Good by 2015	Good
Dissolved oxygen	High	Good by 2015	Moderate
pH	High	Good by 2015	High
Phosphate	Good	Good by 2015	Good
Temperature	High	Good by 2015	Good
Specific pollutants status	High	High by 2015	High
Chemical status	Good	Good by 2015	Fail

Birkin Brook – Mobberley Brook to River Bollin (including Rostherne Brook) (GB112069061370)

2.1.42 The Birkin Brook – Mobberley Brook to River Bollin (including Rostherne Brook) (GB112069061370) water body is currently assessed in 2015 as having bad overall status, bad ecological status, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its moderate overall status objective under the WFD.

2.1.43 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 21, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 21: Birkin Brook – Mobberley Brook to River Bollin (including Rostherne Brook) – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Bad	Moderate by 2027	Bad
Ecological status	Bad	Moderate by 2027	Bad
Biological status	Bad	Moderate by 2027	Bad
Fish	Bad	Good by 2027	Bad
Invertebrates	High	Good by 2027	High
Macrophytes and phytobenthos	Moderate	Moderate by 2015	Moderate
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	Supports good	-	Supports good

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Physicochemical status	Moderate	Moderate by 2015	Good
Ammonia (phys-chem)	High	Good by 2015	High
Dissolved oxygen	Poor	Good by 2027	High
pH	High	Good by 2015	High
Phosphate	Moderate	Moderate by 2015	Good
Temperature	High	Good by 2015	High
Specific pollutants status	High	High by 2015	High
Chemical status	Good	Good by 2015	Fail

Sugar Brook (GB112069061350)

2.1.44 The Sugar Brook (GB112069061350) water body is currently assessed in 2015 as having moderate overall status, moderate ecological status, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.45 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 22, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 22: Sugar Brook – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Good by 2027	Moderate
Ecological status	Moderate	Good by 2027	Moderate
Biological status	Moderate	Good by 2027	Moderate
Fish	-	-	-
Invertebrates	Good	Good by 2015	High
Macrophytes and phytobenthos	Moderate	Good by 2027	Moderate
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	High	Supports good by 2015	High
Morphology	Supports good	-	Supports good
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	High	Good by 2015	High
Dissolved oxygen	High	Good by 2015	High
pH	High	Good by 2015	High
Phosphate	Moderate	Good by 2027	Moderate
Temperature	High	Good by 2015	High
Specific pollutants status	-	Not assessed	-

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Chemical status	Good	Good by 2015	Fail

Bollin (River Dean to Ashley Mill) (GB112069061381)

2.1.46 The Bollin (River Dean to Ashley Mill) (GB112069061381) water body is currently assessed in 2015 as having moderate overall status, moderate ecological status, and good chemical status (changing to fail in 2019). The water body has met its moderate overall status objective under the WFD.

2.1.47 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 23, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 23: Bollin (River Dean to Ashley Mill) – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Moderate by 2015	Moderate
Ecological status	Moderate	Moderate by 2015	Moderate
Biological status	Moderate	Good by 2027	Moderate
Fish	Moderate	Good by 2027	Moderate
Invertebrates	-	-	Moderate
Macrophytes and phytobenthos	-	-	Good
Hydromorphological status	Supports good	-	Supports good
Hydrological regime	Supports good	-	Supports good
Morphology	Supports good	-	Supports good
Physicochemical status	Moderate	Moderate by 2015	Moderate
Ammonia (phys-chem)	Poor	Good by 2027	Moderate
Dissolved oxygen	High	Good by 2015	High
pH	High	Good by 2015	High
Phosphate	Poor	Moderate by 2027	Poor
Temperature	High	Good by 2015	High
Specific pollutants status	-	Not assessed	-
Chemical status	Good	Good by 2015	Fail

Timperley Brook (GB112069061260)

2.1.48 The Timperley Brook (GB112069061260) water body is a HMWB and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.49 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 24, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 24: Timperley Brook – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Good by 2027	Moderate
Ecological potential	Moderate	Good by 2027	Moderate
Biological status	Moderate	Good by 2027	Moderate
Fish	-	-	-
Invertebrates	Moderate	Good by 2027	Moderate
Macrophytes and phytobenthos	Moderate	Good by 2027	Moderate
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	-	-	-
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	Good	Good by 2015	Moderate
Dissolved oxygen	Good	Good by 2015	Good
pH	High	Good by 2015	High
Phosphate	Moderate	Good by 2027	Moderate
Temperature	High	Good by 2015	High
Specific pollutants status	High	High by 2015	High
Chemical status	Good	Good by 2015	Fail

Sinderland Brook (Fairywell Bk and Baguley Bk) (GB112069061270)

2.1.50 The Sinderland Brook (Fairywell Bk and Baguley Bk) (GB112069061270) water body is a HMWB and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate

ecological potential, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.51 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 25, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 25: Sinderland Brook (Fairywell Bk and Baguley Bk) – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Good by 2027	Moderate
Ecological potential	Moderate	Good by 2027	Moderate
Biological status	-	Not assessed	Poor
Fish	-	-	-
Invertebrates	-	-	Poor
Macrophytes and phytobenthos	-	Not assessed	-
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	-	-	-
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	High	Good by 2015	High
Dissolved oxygen	High	Good by 2015	High
pH	High	Good by 2015	High
Phosphate	Moderate	Good by 2015	Poor
Temperature	High	High by 2015	High
Specific pollutants status	High	High by 2015	High
Chemical status	Good	Good by 2015	Fail

Mersey (upstream of Manchester Ship Canal) (GB112069061030)

2.1.52 The Mersey (upstream of Manchester Ship Canal) (GB112069061030) water body is a HMWB and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, and good chemical status (changing to fail in 2019). The water body has therefore met its moderate overall status objective under the WFD.

2.1.53 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 26, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 26: Mersey (upstream of Manchester Ship Canal) – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Moderate by 2015	Moderate
Ecological potential	Moderate	Moderate by 2015	Moderate
Biological status	-	Not assessed	-
Fish	-	-	-
Invertebrates	-	-	-
Macrophytes and phytobenthos	-	Not assessed	-
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	-	-	-
Physicochemical status	Moderate	Moderate by 2015	Moderate
Ammonia (phys-chem)	Good	Good by 2015	Good
Dissolved oxygen	High	Good by 2015	High
pH	High	Good by 2015	High
Phosphate	Poor	Poor by 2015	Poor
Temperature	High	Good by 2015	High
Specific pollutants status	High	High by 2015	High
Chemical status	Good	Good by 2015	Fail

Chorlton Brook (Princess Parkway to Mersey) (GB112069061040)

2.1.54 The Chorlton Brook (Princess Parkway to Mersey) (GB112069061040) water body is a HMWB and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.55 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 27, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 27: Chorlton Brook (Princess Parkway to Mersey) – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Good by 2027	Moderate
Ecological potential	Moderate	Good by 2027	Moderate
Biological status	Poor	Good by 2027	Poor
Fish	-	-	-
Invertebrates	Poor	Good by 2027	Poor
Macrophytes and phytobenthos	-	Not assessed	-
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	-	-	-
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	Good	Good by 2015	High
Dissolved oxygen	Good	Good by 2015	High
pH	High	Good by 2015	High
Phosphate	Poor	Good by 2027	Moderate
Temperature	High	Good by 2015	High
Specific pollutants status	High	High by 2015	-
Chemical status	Good	Good by 2015	Fail

Fallowfield Brook (GB112069061410)

2.1.56 The Fallowfield Brook (GB112069061410) water body is a HMWB and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.57 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 28, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 28: Fallowfield Brook – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Good by 2027	Moderate
Ecological potential	Moderate	Good by 2027	Moderate
Biological status	-	Not assessed	Moderate
Fish	-	-	-

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Invertebrates	-	-	Moderate
Macrophytes and phytobenthos	-	-	-
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	-	-	-
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	Good	Good by 2015	High
Dissolved oxygen	Good	Good by 2015	High
pH	High	Good by 2015	High
Phosphate	Moderate	Good by 2027	Moderate
Temperature	High	Good by 2015	High
Specific pollutants status	High	High by 2015	High
Chemical status	Good	Good by 2015	Fail

Platt Brook (source to Fallowfield Bk) (GB112069061060)

2.1.58 The Platt Brook (source to Fallowfield Bk) (GB112069061060) water body is a HMWB and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.59 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 29, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 29: Platt Brook (source to Fallowfield Bk) – 2015 Cycle 2 status classification, status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Good by 2027	Moderate
Ecological potential	Moderate	Good by 2027	Moderate
Biological status	Bad	Good by 2027	Bad
Fish	-	-	-
Invertebrates	Bad	Good by 2027	Bad
Macrophytes and phytobenthos	Good	Good by 2015	Good
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Morphology	-	-	-
Physicochemical status	Moderate	Good by 2027	Moderate
Ammonia (phys-chem)	Moderate	Good by 2027	Good
Dissolved oxygen	High	Good by 2015	High
pH	High	Good by 2015	High
Phosphate	Poor	Good by 2027	Poor
Temperature	High	Good by 2015	High
Specific pollutants status	High	High by 2015	High
Chemical status	Good	Good by 2015	Fail

Irwell/Manchester Ship Canal (Irk to confluence with Upper Mersey) (GB112069061452)

2.1.60 The Irwell/Manchester Ship Canal (Irk to confluence with Upper Mersey) (GB112069061452) water body is a HMWB and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.61 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 30, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 30: Irwell/Manchester Ship Canal (Irk to confluence with Upper Mersey) – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Moderate by 2015	Moderate
Ecological potential	Moderate	Moderate by 2015	Moderate
Biological status	-	Not assessed	-
Fish	-	-	-
Invertebrates	-	-	-
Macrophytes and phytobenthos	-	-	-
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	-	-	-
Physicochemical status	Moderate	Moderate by 2015	Moderate
Ammonia (phys-chem)	Poor	Poor by 2021	Moderate
Dissolved oxygen	Poor	Moderate by 2021	Bad

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
pH	High	Good by 2015	High
Phosphate	Poor	Poor by 2015	Poor
Temperature	High	Good by 2027	High
Specific pollutants status	High	High by 2015	High
Chemical status	Good	Good by 2015	Fail

Medlock (Lumb Brook to Irwell) (GB112069061152)

2.1.62 The Medlock (Lumb Brook to Irwell) (GB112069061152) water body is a HMWB and so is assessed according to ecological potential rather than ecological status. The water body is currently assessed in 2015 as having moderate overall status, moderate ecological potential, and good chemical status (changing to fail in 2019). The water body has therefore met its moderate overall status objective under the WFD.

2.1.63 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 31, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 31: Medlock (Lumb Brook to Irwell) – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Moderate	Moderate by 2015	Moderate
Ecological potential	Moderate	Moderate by 2015	Moderate
Biological status	Poor	Moderate by 2027	Poor
Fish	Poor	Moderate by 2027	Poor
Invertebrates	Moderate	Good by 2021	Moderate
Macrophytes and phytobenthos	Moderate	-	Moderate
Hydromorphological status	Supports good	Supports good by 2015	Supports good
Hydrological regime	Supports good	Supports good by 2015	Supports good
Morphology	-	-	-
Physicochemical status	Moderate	Moderate by 2015	Moderate
Ammonia (phys-chem)	Moderate	Good by 2027	High
Dissolved oxygen	High	Good by 2015	High
pH	High	Good by 2015	High
Phosphate	Poor	Poor by 2015	Poor
Temperature	High	Good by 2015	Good

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Specific pollutants status	High	High by 2015	High
Chemical status	Good	Good by 2015	Fail

Rostherne Mere (GB31232650)

2.1.64 The Rostherne Mere (GB31232650) water body is a lake water body and is currently assessed in 2015 as having bad overall status, bad ecological status, and good chemical status (changing to fail in 2019). The water body is therefore currently failing its good overall status objective under the WFD.

2.1.65 The 2015 Cycle 2 status classification data and objectives data for the water body are shown in Table 32, along with the 2019 status data, which shows those status elements that are currently failing to achieve good status.

Table 32: Rostherne Mere – 2015 Cycle 2 status classification and status objectives and 2019 status data

Status element	Status (2015)	RBMP Cycle 2 status objective	Status (2019)
Overall status	Bad	Good by 2027	Bad
Ecological status	Bad	Good by 2027	Bad
Biological status	Bad	Good by 2027	Bad
Macrophytes and phytobenthos	Bad	Good by 2027	Bad
Phytoplankton	Moderate	Good by 2027	Poor
Benthic invertebrates	-	-	-
Fish	-	-	-
Hydromorphological status			
Morphology	High	Supports good by 2015	High
Hydrological regime	Supports good	Supports good by 2015	High
Physicochemical status	Moderate	Good by 2027	Moderate
Transparency	-	-	-
Thermal conditions	-	-	-
Dissolved oxygen	Poor	Good by 2027	Poor
Salinity	High	Good by 2015	High
Acidification status	High	Good by 2015	High
Total phosphorus	Bad	Good by 2027	Bad
Specific pollutants status	High	High by 2015	High
Chemical status	Good	Good by 2015	Fail

2.2 Watercourses

2.2.1 Table 33 presents the baseline information for all the watercourses potentially affected by the Proposed Scheme and indicates whether they have been screened in for WFD preliminary assessment based on their baseline condition.

2.2.2 The locations of the watercourses are shown in Figure 5 to Figure 20.

2.2.3 A summary of the baseline condition of each watercourse is then provided in the sections below. Where a reconnaissance field survey of the watercourse has been undertaken, photographic evidence and a short description are provided in a table for that watercourse. No such table is provided for those watercourses that have only been assessed via desk study at this stage.

Table 33: Summary of all WFD watercourses potentially affected by the Proposed Scheme

WFD water body name and ID	Watercourse name	Watercourse designation	Watercourse upstream / downstream National Grid Reference (NGR)	Approx. watercourse length within water body extent (km)	Estimated catchment area of watercourse (km^2)	Estimated Q95 (m^3/s) at Proposed Scheme location	Watercourse surveyed?	Watercourse receptor value at Proposed Scheme location	Watercourse screened in for WFD preliminary assessment?
Wistaston Brook GB112068055280	Tributary of Swill Brook 1	Ordinary watercourse	SJ7173352578 / SJ6988952507	1.9	0.56	<0.002	No	Moderate	Yes
	Tributary of Gresty Brook 1	Ordinary watercourse	SJ7168752668 / SJ7044352890	1.7	0.77	<0.002	No	Moderate	Yes
	Gresty Brook	Main river	SJ7208653620 / SJ6997353887	2.4	24.7	0.0598	No	High	Yes
	Basford Brook	Main river	SJ7269251728 / SJ7208753619	2.9	19.6	0.052	No	High	Yes
Valley Brook (Englesea Brook to Weaver) GB112068055310	Valley Brook	Main river	SJ7236155084 / SJ6867255508	4.3	48.2	0.0981	Yes	High	Yes
Fowle Brook GB112068055400	Tributary of Fowle Brook 1	Ordinary watercourse	SJ6972158317 / SJ7154258298	3.1	4.4	<0.002	Yes	Low	No
Weaver (Marbury Brook to Dane) GB112068060460	Tributary of River Weaver 2	Ordinary watercourse	SJ6873561830 / SJ6759262677	2.0	1.3	<0.002	Yes	Moderate	Yes
	Tributary of River Weaver 4	Ordinary watercourse	SJ6804764938 / SJ6732565410	1.3	0.33	<0.002	Yes	Low	No
Shropshire Union Canal, Market Drayton to Ellesmere Port GB71210133	Shropshire Union Canal	Canal	SJ6733461270 / SJ6957365786	6.2	N/A	N/A	Yes	Very high	Yes
Wheelock (Fowle Brook to Dane)	Hoggins Brook	Ordinary watercourse	SJ6977560072 / SJ6265070452	4.1	5.6	0.0028	Yes	Low	No

WFD water body name and ID	Watercourse name	Watercourse designation	Watercourse upstream / downstream National Grid Reference (NGR)	Approx. watercourse length within water body extent (km)	Estimated catchment area of watercourse (km^2)	Estimated Q95 (m^3/s) at Proposed Scheme location	Watercourse surveyed?	Watercourse receptor value at Proposed Scheme location	Watercourse screened in for WFD preliminary assessment?
GB112068055380	Tributary of River Wheelock 5	Ordinary watercourse	SJ6871066073 / SJ6952865423	1.2	1.1	<0.002	Yes	Low	No
Dane (Wheelock to Weaver) GB112068060470	River Dane	Main river	SJ6935066991 / SJ6717670159	2.3	395.2	0.839	Yes	Very high	Yes
	Tributary of River Dane 3	Ordinary watercourse	SJ6850567400 / SJ6880667548	0.4	0.2	<0.002	Yes	Low	No
Trent and Mersey Canal, summit to Preston Brook Tunnel GB71210247	Trent and Mersey Canal	Canal	SJ7063565714 / SJ6850574774	11.9	N/A	N/A	Yes	Very high	Yes
Puddinglake Brook GB112068060220	Tributary of Trent and Mersey Canal	Ordinary watercourse	SJ6882468911 / SJ6805269349	1.1	0.3	<0.002	No	Low	No
	Puddinglake Brook	Main river	SJ6994970019 / SJ6740370848	8.3	10.9	0.0084	Yes	High	Yes
Wade Brook GB112068060370	Gad Brook	Ordinary watercourse	SJ6976571265 / SJ6723572515	3.5	9.7	0.00396	Yes	Moderate	Yes
	Tributary of Gad Brook 3	Ordinary watercourse	SJ7004271760 / SJ6861471909	1.9	2.0	<0.002	No	Moderate	Yes
	Broken Cross Drains	Ordinary watercourse	SJ6946172909 / SJ6867774198	3.5	1.0	<0.002	No	Low	No
	Wade Brook	Main river	SJ7035773356 / SJ6780874058	4.1	41.3	0.075	Yes	High	Yes

WFD water body name and ID	Watercourse name	Watercourse designation	Watercourse upstream / downstream National Grid Reference (NGR)	Approx. watercourse length within water body extent (km)	Estimated catchment area of watercourse (km^2)	Estimated Q95 (m^3/s) at Proposed Scheme location	Watercourse surveyed?	Watercourse receptor value at Proposed Scheme location	Watercourse screened in for WFD preliminary assessment?
Peover Eye (Wincham Brook) GB112068060390	Tributary of Peover Eye	Ordinary watercourse	SJ7008574773 / SJ7009675711	2.3	0.9	<0.002	Yes	Moderate	Yes
	Peover Eye	Main river	SJ7142775425 / SJ7006075781	1.9	78.3	0.188	Yes	High	Yes
Smoker Brook (Gale Brook to Wincham Brook) GB112068060410	Smoker Brook	Main river	SJ7105776204 / SJ7006075781	1.5	69.7	0.0685	Yes	High	Yes
	Tributary of Smoker Brook 2	Ordinary watercourse	SJ7087077137 / SJ7106376206	1.6	0.7	<0.002	Yes	Low	No
	Waterless Brook	Main river	SJ6909480314 / SJ7105776204	8.4	62.0	0.0397	Yes	High	Yes
	Tabley Brook	Ordinary watercourse	SJ7183680441 / SJ7081578604	3.7	8.8	0.0126	No	Moderate	Yes
	Tributary of Tabley Brook 2	Ordinary watercourse	SJ7060879793 / SJ7137379138	1.6	4.0	<0.002	No	Moderate	Yes
	Tributary of Tabley Brook 3	Ordinary watercourse	SJ7098279990 / SJ7110979980	0.4	0.3	<0.002	No	Moderate	Yes
	Tributary of Tabley Brook 4	Ordinary watercourse	SJ7100880534 / SJ7110979980	0.9	2.4	<0.002	Yes	Low	No
	Tributary of Tabley Brook 6	Ordinary watercourse	SJ7112780772 / SJ7115780520	0.3	0.1	<0.002	Yes	Low	No
	Tributary of Tabley Brook 7	Ordinary watercourse	SJ7121882949 / SJ7098881459	3.0	1.5	<0.002	Yes	Low	No
	Tributary of Tabley Brook 8	Ordinary watercourse	SJ7138981817 / SJ7107381608	2.2	2.1	<0.002	Yes	Low	No

WFD water body name and ID	Watercourse name	Watercourse designation	Watercourse upstream / downstream National Grid Reference (NGR)	Approx. watercourse length within water body extent (km)	Estimated catchment area of watercourse (km^2)	Estimated Q95 (m^3/s) at Proposed Scheme location	Watercourse surveyed?	Watercourse receptor value at Proposed Scheme location	Watercourse screened in for WFD preliminary assessment?
	Tributary of Tabley Brook 9	Ordinary watercourse	SJ7155682477 / SJ7183780441	6.3	3.2	N/A	Yes	Moderate	Yes
Bollin (Ashley Mill to Manchester Ship Canal) GB112069061382	Tributary of Millington Clough 1	Ordinary watercourse	SJ7143483472 / SJ7229684139	2.1	2.6	<0.002	Yes	Low	No
	Tributary of Millington Clough 2	Ordinary watercourse	SJ7158983894 / SJ7211584234	0.7	1.1	<0.002	Yes	Low	No
	Tributary of Millington Clough 3	Ordinary watercourse	SJ7099784568 / SJ7189283998	1.3	0.4	<0.002	Yes	Low	No
	Millington Clough	Main river	SJ7211584234 / SJ7263084306	0.7	3.4	0.00432	Yes	High	Yes
	Tributary of Millington Clough 4	Ordinary watercourse	SJ7167284667 / SJ7211584234	0.7	0.3	0.00232	Yes	Low	No
	Agden Brook	Main river	SJ7263084306 / SJ7173787920	5.2	7.5	0.01	Yes	Moderate	Yes
	Tributary of River Bollin 10	Ordinary watercourse	SJ7325585387 / SJ7354085599	0.6	0.07	<0.002	No	Moderate	Yes
	Tributary of River Bollin 11	Main river	SJ7380585154 / SJ7344786079	1.2	2.19	0.00285	No	Moderate	Yes
	Agden Lane Road Drain 1	Ordinary watercourse	SJ7148886564 / SJ7146186534	0.1	0.01	<0.002	No	Low	No

WFD water body name and ID	Watercourse name	Watercourse designation	Watercourse upstream / downstream National Grid Reference (NGR)	Approx. watercourse length within water body extent (km)	Estimated catchment area of watercourse (km^2)	Estimated Q95 (m^3/s) at Proposed Scheme location	Watercourse surveyed?	Watercourse receptor value at Proposed Scheme location	Watercourse screened in for WFD preliminary assessment?
	Tributary of Agden Brook 1	Ordinary watercourse	SJ7084086054 / SJ7182287008	1.5	0.7	<0.002	Yes	Low	No
	River Bollin	Main river	SJ7232087656 / SJ6960988559	4.3	268.5	1.219	Yes	Very high	Yes
	Old Bollin	Main river	SJ7221288174 / SJ7024288749	2.6	1.7	0.00249	No	Low	No
	Tributary of Old Bollin	Ordinary watercourse	SJ7091688690 / SJ7057188675	1.2	0.1	<0.002	Yes	Low	No
Bridgewater Canal GB71210001	Bridgewater Canal	Canal	SJ7285787460 / SJ6992387441	3.8	N/A	N/A	Yes	Very high	Yes
Mersey/Manchester Ship Canal (Irwell/Manchester Ship Canal to Bollin) GB112069061011	Tributary of Manchester Ship Canal 2 (also known as Warburton Park Brook)	Main river	SJ7192589141 / SJ6970290401	6.4	1.4	0.00251	Yes	Low	No
	Field Drains A6144	Ordinary watercourse	SJ7085889735 / SJ7092589572	0.2	0.03	<0.002	No	Low	No
	Manchester Ship Canal	Canal[6]	SJ7260093468 / SJ6871589097	6.0	1689.3	N/A	Yes	Very high	Yes
Sinderland Brook GB112069060980	Red Brook	Main river	SJ7153190500 / SJ6996890836	2.2	49.9	0.188	Yes	High	Yes

[6] The Manchester Ship Canal is a canalised section of the River Mersey in the study area. It is referred to as the Manchester Ship Canal throughout this report.

WFD water body name and ID	Watercourse name	Watercourse designation	Watercourse upstream / downstream National Grid Reference (NGR)	Approx. watercourse length within water body extent (km)	Estimated catchment area of watercourse (km^2)	Estimated Q95 (m^3/s) at Proposed Scheme location	Watercourse surveyed?	Watercourse receptor value at Proposed Scheme location	Watercourse screened in for WFD preliminary assessment?
Glaze GB112069061420	Tributary of Glaze Brook 1	Main river	SJ6784292485 / SJ7012691318	4.0	1.4	<0.002	Yes	Low	No
	Dam Head Lane Drains	Ordinary watercourse	SJ6906492659 / SJ6906992387	0.4	0.2	<0.002	No	Low	No
	Tributary of Glaze Brook 2	Ordinary watercourse	SJ6700793060 / SJ6904793487	7.3	1.9	<0.002	Yes	Low	No
	M62 Drainage	Ordinary watercourse	SJ6780093408 / SJ6803393453	0.3	0.01	<0.002	No	Low	No
	Tributary of Holcroft Lane Brook 2	Main river	SJ6691893370 / SJ6676694275	1.0	0.1	<0.002	Yes	Low	No
	Tributary of Holcroft Lane Brook 3	Ordinary watercourse	SJ6684693395 / SJ6678094147	1.3	0.2	<0.002	Yes	Low	No
	Tributary of Holcroft Lane Brook 4	Ordinary watercourse	SJ6653893292 / SJ6658894233	4.8	0.9	<0.002	Yes	Low	No
	Holcroft Lane Brook	Main river	SJ6607394270 / SJ6840394075	2.6	3.4	<0.002	Yes	Moderate	Yes
	Tributary of Glaze Brook 4	Ordinary watercourse	SJ6454295431 / SJ6568896454	2.2	1.3	<0.002	No	Moderate	Yes
	Wigshaw Lane Drains	Ordinary watercourse	SJ6414695026 / SJ6450294922	0.5	N/A	<0.002	No	Low	No
	Jibcroft Brook	Ordinary watercourse	SJ6395695742 / SJ6478096126	1.2	0.6	<0.002	Yes	Moderate	Yes

WFD water body name and ID	Watercourse name	Watercourse designation	Watercourse upstream / downstream National Grid Reference (NGR)	Approx. watercourse length within water body extent (km)	Estimated catchment area of watercourse (km^2)	Estimated Q95 (m^3/s) at Proposed Scheme location	Watercourse surveyed?	Watercourse receptor value at Proposed Scheme location	Watercourse screened in for WFD preliminary assessment?
	Tributary of Carr Brook 1	Ordinary watercourse	SJ6380795983 / SJ6476897209	1.8	0.7	<0.002	Yes	Low	No
	Carr Brook	Ordinary watercourse	SJ6265496570 / SJ6470797326	2.7	1.9	0.00261	Yes	Moderate	Yes
	Tributary of Carr Brook 2	Ordinary watercourse	SJ6408869895 / SJ6470897326	0.7	0.4	<0.002	No	Low	No
Spittle Brook GB112069061020	Tributary of Cross Brook 1	Ordinary watercourse	SJ6438494706 / SJ6407592928	2.4	1.1	<0.002	Yes	Low	No
Hey/Borsdane Brook GB112069064520	Small Brook	Main river	SJ6201196948 / SJ6345598683	3.4	0.8	<0.002	Yes	Low	No
	Slag Lane Drains	Ordinary watercourse	SJ6271898228 / SJ6285298184	0.2	0.04	<0.002	No	Low	No
	Tributary of Hey Brook 1	Ordinary watercourse	SJ6249598369 / SJ6259599366	1.8	0.3	0.003	Yes	Low	No
	Tributary of Hey Brook 2	Ordinary watercourse	SJ6234498752 / SJ6194498652	0.4	0.1	<0.002	No	Low	No
	Tributary of Hey Brook 3	Main river	SJ6144298003 / SJ6187299071	2.3	0.1	<0.002	No	Low	No
	Tributary of Hey Brook 4	Ordinary watercourse	SJ6131798914 / SJ6231999445	1.6	1.3	<0.002	Yes	Moderate	Yes
	Windy Bank Brook	Ordinary watercourse	SJ6008999597 / SJ6130099935	1.6	0.4	<0.002	Yes	Moderate	Yes
	Tributary of Nan Holes Brook 1	Ordinary watercourse	SJ6067099793 / SD6066700088	0.3	0.03	<0.002	Yes	Low	No

WFD water body name and ID	Watercourse name	Watercourse designation	Watercourse upstream / downstream National Grid Reference (NGR)	Approx. watercourse length within water body extent (km)	Estimated catchment area of watercourse (km^2)	Estimated Q95 (m^3/s) at Proposed Scheme location	Watercourse surveyed?	Watercourse receptor value at Proposed Scheme location	Watercourse screened in for WFD preliminary assessment?
	Wigan Road Drain	Ordinary watercourse	SJ6065239977 / SJ6066399952	0.4	0.04	<0.002	No	Low	No
	Tributary of Nan Holes Brook 2	Ordinary watercourse	SD6056300004 / SD6057600070	0.7	0.002	<0.002	No	Low	No
	Nan Holes Brook	Main river	SD6118700084	2.7	2.0	<0.002	Yes	Moderate	Yes
	Tributary of Hey Brook 5	Ordinary watercourse	SD6028200466 / SD6076700369	0.5	0.2	<0.002	Yes	Low	No
	Hey Brook	Main river	SD6061602477 / SJ6296599352	6.7	30.9	0.036	Yes	High	Yes
	Tributary of Coffin Lane Brook 2	Ordinary watercourse	SD5938900487 / SD6011601019	4.0	1.0	<0.002	Yes	Low	No
	Coffin Lane Brook	Main river	SD5884301248 / SD6055700932	4.0	2.7	0.00388	Yes	Moderate	Yes
	Tributary of Coffin Lane Brook 1	Ordinary watercourse	SD6005901424 / SD6038601024	0.7	0.3	<0.002	Yes	Low	No
	Bamfurlong Drain	Ordinary watercourse	SD6016401665 / SD6018201675	0.2	0.1	<0.002	No	Low	No
Birkin Brook - Mobberley Brook to	Blackburn's Brook	Main river	SJ7481283929 / SJ7542084696	1.5	10.7	0.0231	Yes	Moderate	Yes

WFD water body name and ID	Watercourse name	Watercourse designation	Watercourse upstream / downstream National Grid Reference (NGR)	Approx. watercourse length within water body extent (km)	Estimated catchment area of watercourse (km^2)	Estimated Q95 (m^3/s) at Proposed Scheme location	Watercourse surveyed?	Watercourse receptor value at Proposed Scheme location	Watercourse screened in for WFD preliminary assessment?
River Bollin (including Rostherne Brook) GB112069061370	Birkin Brook	Main river	SJ7643583044 / SJ7467286002	3.2	96.1	0.123	Yes	High	Yes
	Tributary of Birkin Brook 4	Ordinary watercourse	SJ7676084040 / SJ7654683890	0.3	0.3	<0.002	Yes	Low	No
	Tributary of Birkin Brook 3	Ordinary watercourse	SJ7800084058 / SJ7752383786	1.2	0.9	<0.002	Yes	Low	No
	Tributary of Birkin Brook 2	Ordinary watercourse	SJ7826383712 / SJ7747283685	0.9	0.2	<0.002	No	Low	No
	Tributary of Birkin Brook 1 (Middle House Brook)	Main river	SJ7985282427 / SJ7686483736	4.5	3.3	<0.002	Yes	Moderate	Yes
Sugar Brook GB112069061350	Tributary of Sugar Brook	Main river	SJ7866282670 / SJ7761082726	1.8	0.8	<0.002	No	Moderate	Yes
Bollin (River Dean to Ashley Mill) GB112069061381	River Bollin	Main river	SJ8024283338 / SJ7480485706	10.3	153.1	0.302	Yes	Very high	Yes
	Tributary of River Bollin 3	Ordinary watercourse	SJ7965484731 / SJ7929084367	0.8	0.3	<0.002	Yes	Moderate	Yes
	Tributary of River Bollin 2	Ordinary watercourse	SJ8022984672 / SJ7968984089	1.7	0.5	<0.002	Yes	Moderate	Yes
	Tributary of River Bollin 4	Ordinary watercourse	SJ7903884439 / SJ7919684553	0.2	0.08	<0.002	Yes	Low	No
	Tributary of River Bollin 6	Ordinary watercourse	SJ7868684220 / SJ7862184645	0.5	0.17	<0.002	No	Moderate	Yes

WFD water body name and ID	Watercourse name	Watercourse designation	Watercourse upstream / downstream National Grid Reference (NGR)	Approx. watercourse length within water body extent (km)	Estimated catchment area of watercourse (km^2)	Estimated Q95 (m^3/s) at Proposed Scheme location	Watercourse surveyed?	Watercourse receptor value at Proposed Scheme location	Watercourse screened in for WFD preliminary assessment?
	Tributary of River Bollin 7	Ordinary watercourse	SJ7845584333 / SJ7858584638	0.4	0.07	<0.002	Yes	Low	No
	Drain to M56 1	Ordinary watercourse	SJ7981784533 / SJ7980684623	0.1	0.01	<0.002	No	Low	No
	Drain to M56 2	Ordinary watercourse	SJ7992884733 / SJ7976084668	0.2	0.04	<0.002	No	Low	No
Timperley Brook GB112069061260	Tributary of Timperley Brook 1	Ordinary watercourse	SJ8031185440 / SJ8001185967	0.6	1.1	<0.002	Yes	Low	No
	Timperley Brook	Main river	SJ8087685655 / SJ7962887149	3.9	5.1	0.00293	Yes	Moderate	Yes
	Tributary of Timperley Brook 3	Ordinary watercourse	SJ8041786576 / SJ7974586915	0.9	0.4	<0.002	No	Moderate	Yes
Sinderland Brook (Fairywell Bk and Baguley Bk) GB112069061270	Fairywell Brook	Main river	SJ8136486024 / SJ7984588916	3.9	2.6	0.0037	Yes	Low	No
	Mill Brook	Ordinary watercourse	SJ8123687346 / SJ7984488918	2.5	1.5	<0.002	Yes	Moderate	Yes
	Baguley Brook	Main river	SJ8192386154 / SJ7817290322	8.2	8.1	0.0111	Yes	Moderate	Yes
	Tributary of Baguley Brook	Ordinary watercourse	SJ8299088526 / SJ8205489201	1.2	2.8	<0.002	No	Low	No
Mersey (upstream of Manchester Ship Canal) GB112069061030	River Mersey	Main river	SJ8407589374 / SJ8243591340	6.5	614.6	1.471	Yes	Very high	Yes
	Tributary of River Mersey 2	Main river	SJ8403990787 / SJ8340390974	1.1	0.1	<0.002	Yes	Moderate	Yes

WFD water body name and ID	Watercourse name	Watercourse designation	Watercourse upstream / downstream National Grid Reference (NGR)	Approx. watercourse length within water body extent (km)	Estimated catchment area of watercourse (km^2)	Estimated Q95 (m^3/s) at Proposed Scheme location	Watercourse surveyed?	Watercourse receptor value at Proposed Scheme location	Watercourse screened in for WFD preliminary assessment?
Chorlton Brook (Princess Parkway to Mersey) GB112069061040	No watercourses within study area	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No
Fallowfield Brook GB112069061410	Cringle Brook	Main river	SJ8748293413 / SJ8425293853	3.8	4.1	0.00689	Yes	Moderate	Yes
Platt Brook (Source to Fallowfield Bk) GB112069061060	Fallowfield Brook	Ordinary watercourse	SJ8856493819 / SJ8425293853	4.4	9.2	0.0034	Yes	Moderate	Yes
	Tributary of Platt Brook 1	Ordinary watercourse	SJ8934595238 / SJ8576994726	3.7	2.8	<0.002	No	Low	No
	Gore Brook	Main river	SJ8858695875 / SJ8576994726	3.3	11.9	0.0139	Yes	Moderate	Yes
Irwell / Manchester Ship Canal (Irk to confluence with Upper Mersey) GB112069061452	Corn Brook	Ordinary watercourse	SJ8868197976 / SJ8221596954	10.5	14.3	0.006	No	Low	No
Medlock (Lumb Brook to Irwell) GB112069061152	River Medlock	Main river	SJ8642598795 / SJ8327197513	5.2	64.5	0.187	Yes	High	Yes
Rostherne Mere GB31232650	Rostherne Mere	Lake	N/A	N/A	N/A	N/A	N/A	High	Yes

Figure 5: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 1)

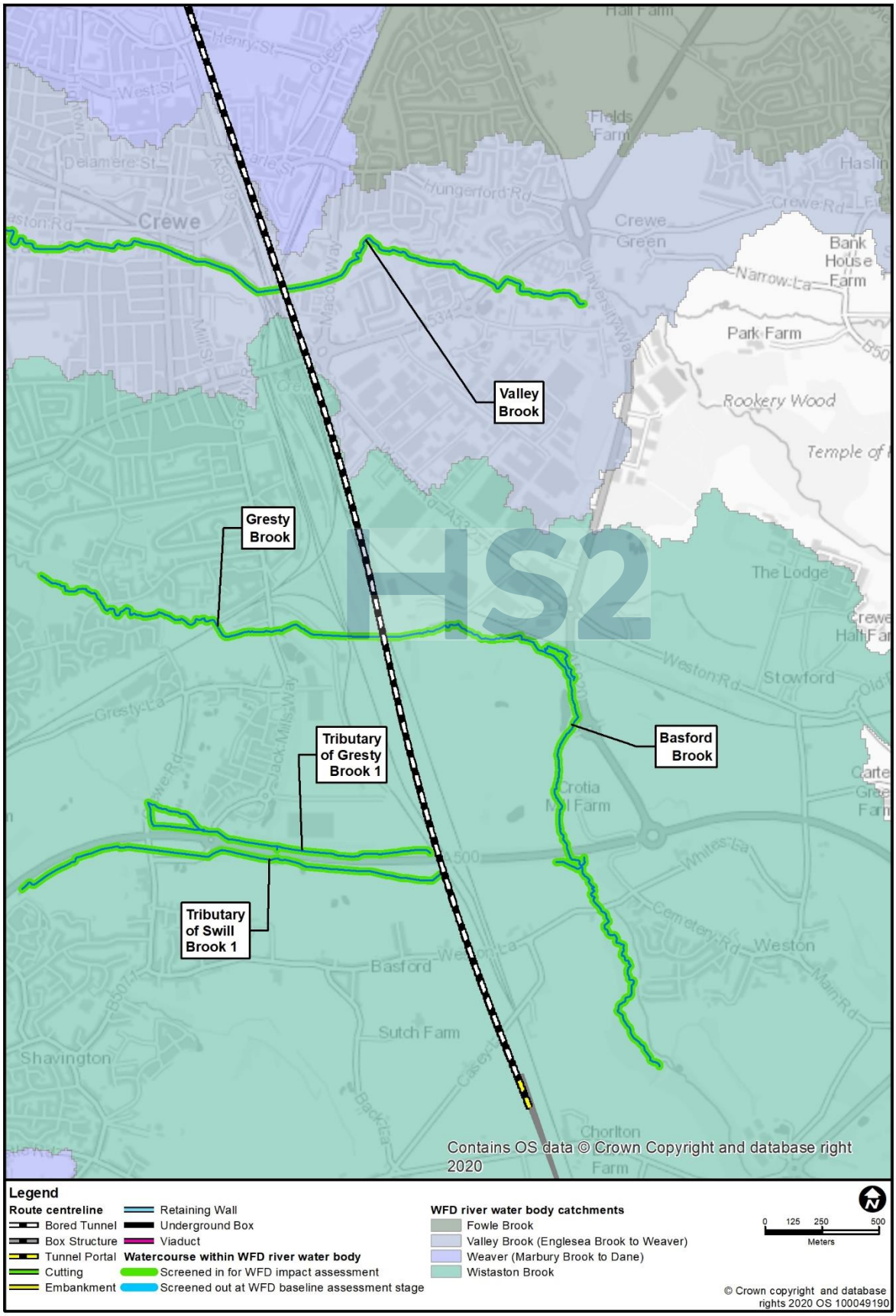


Figure 6: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 2)

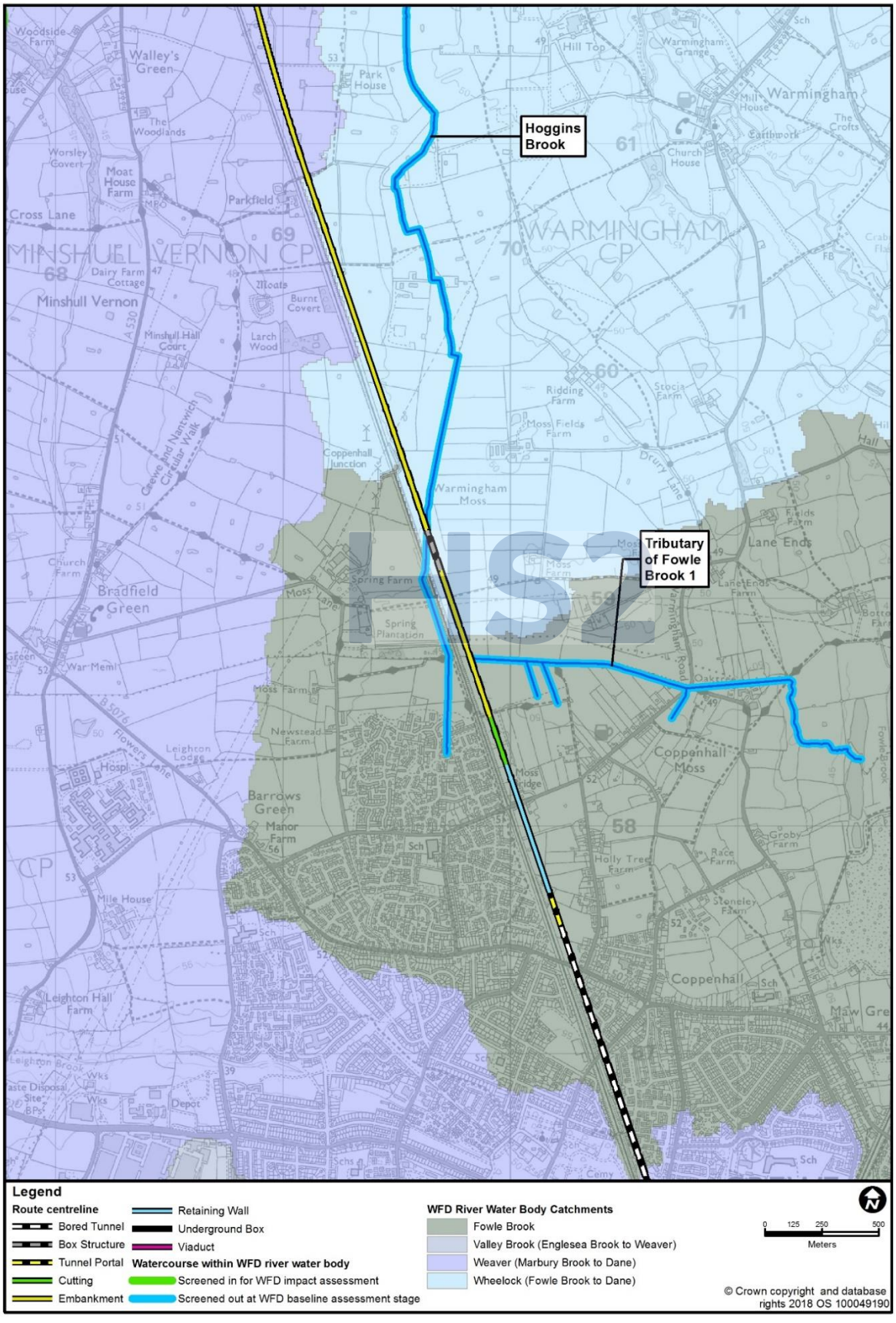


Figure 7: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 3)

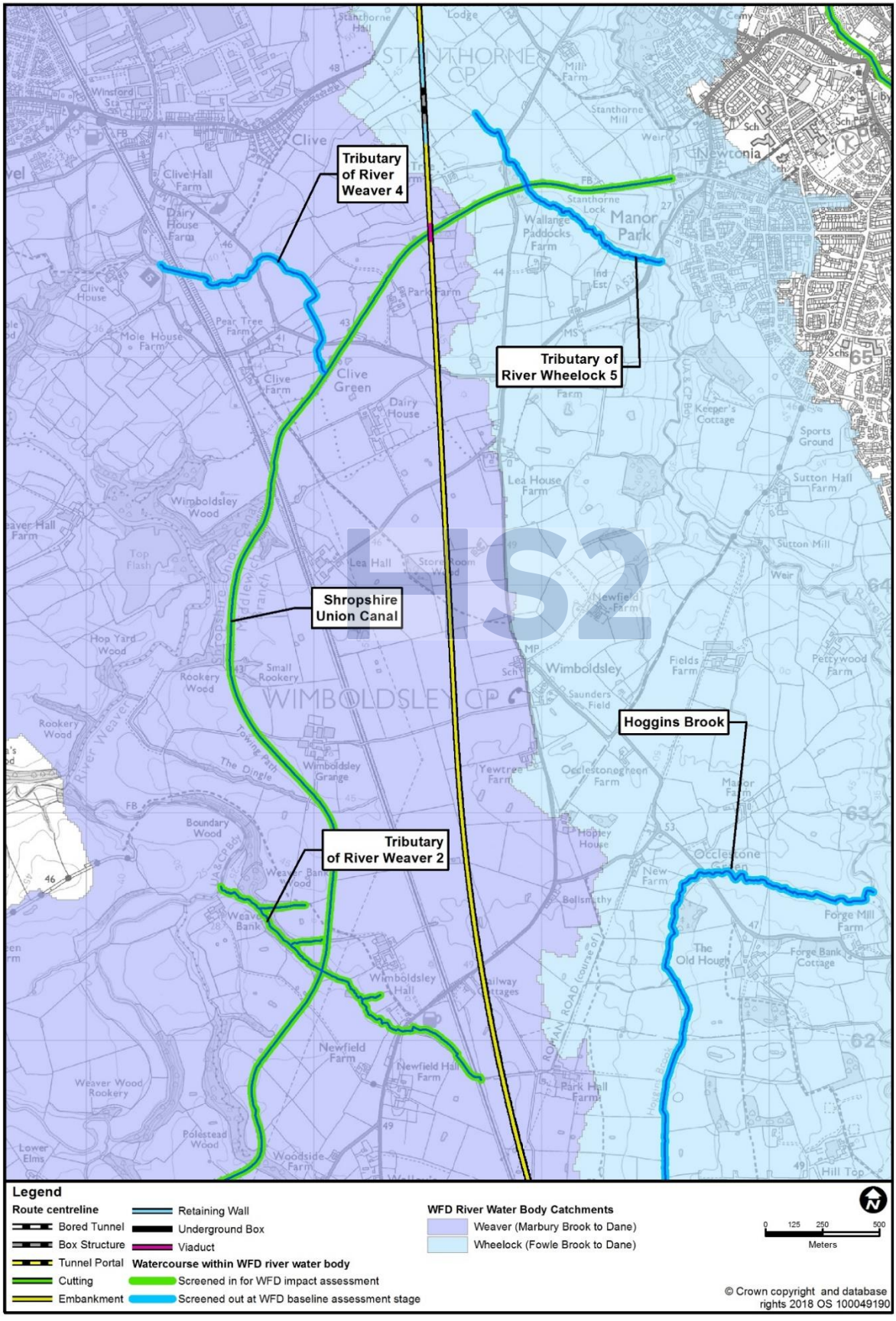


Figure 8: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 4)

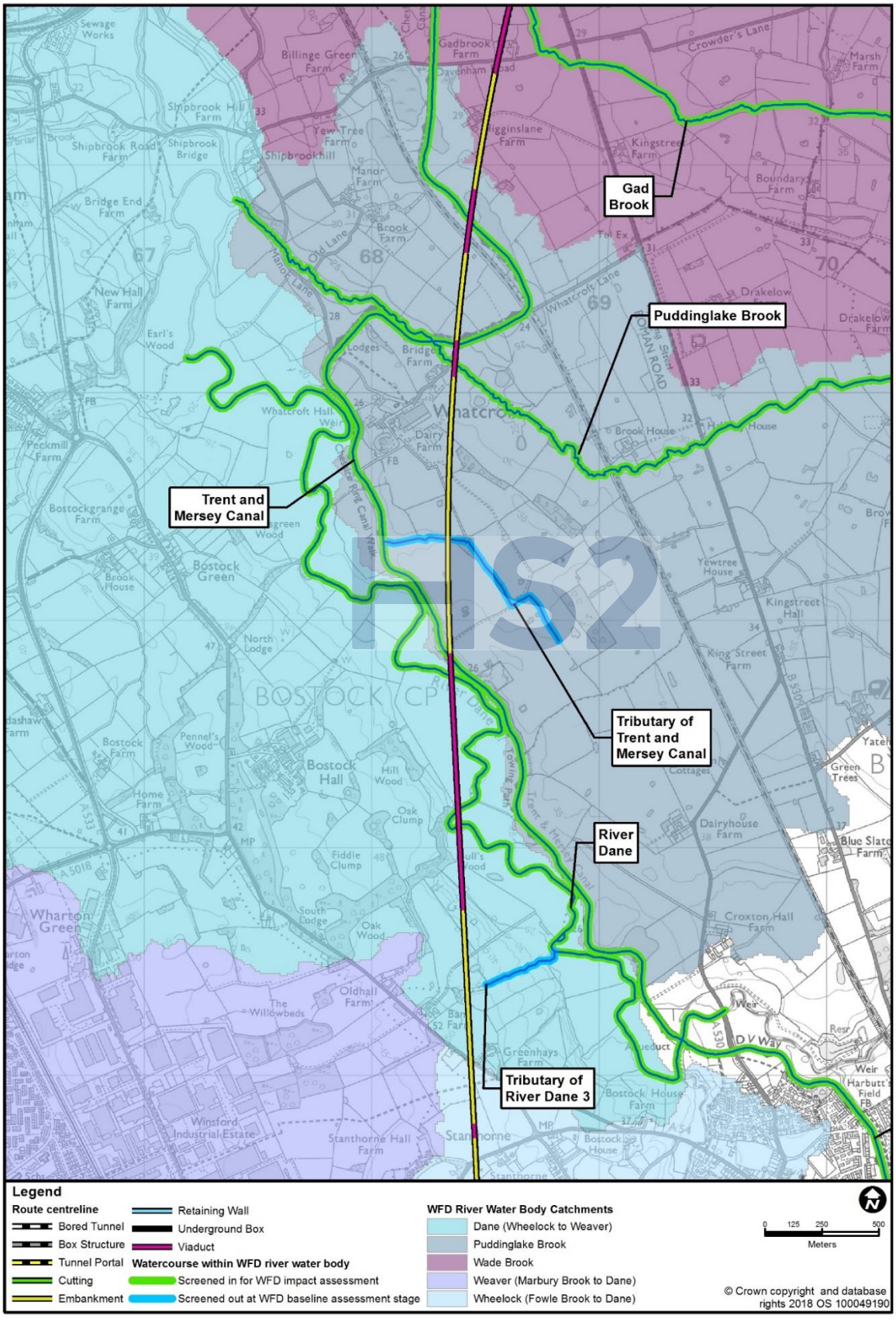


Figure 9: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 5)

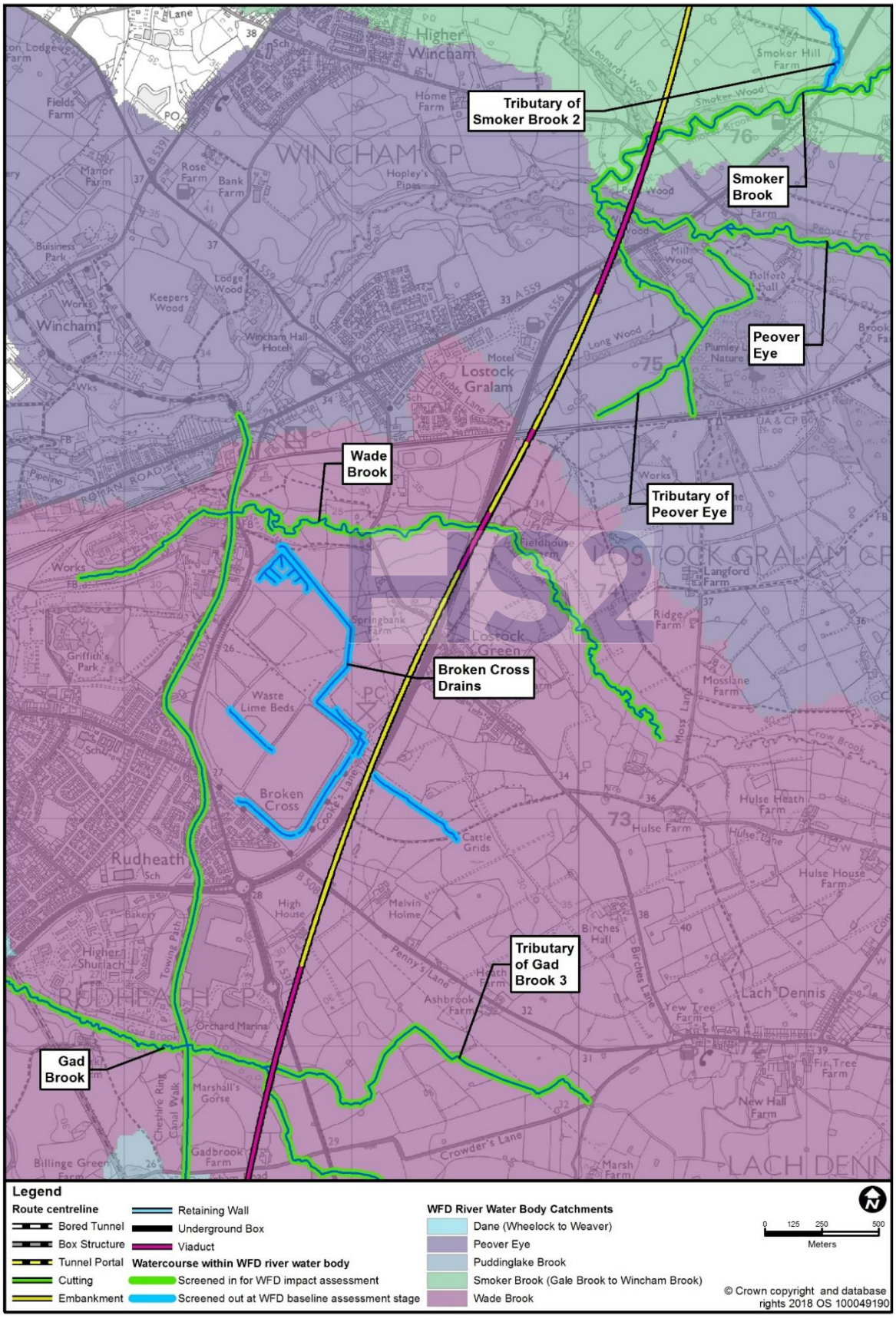


Figure 10: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 6)

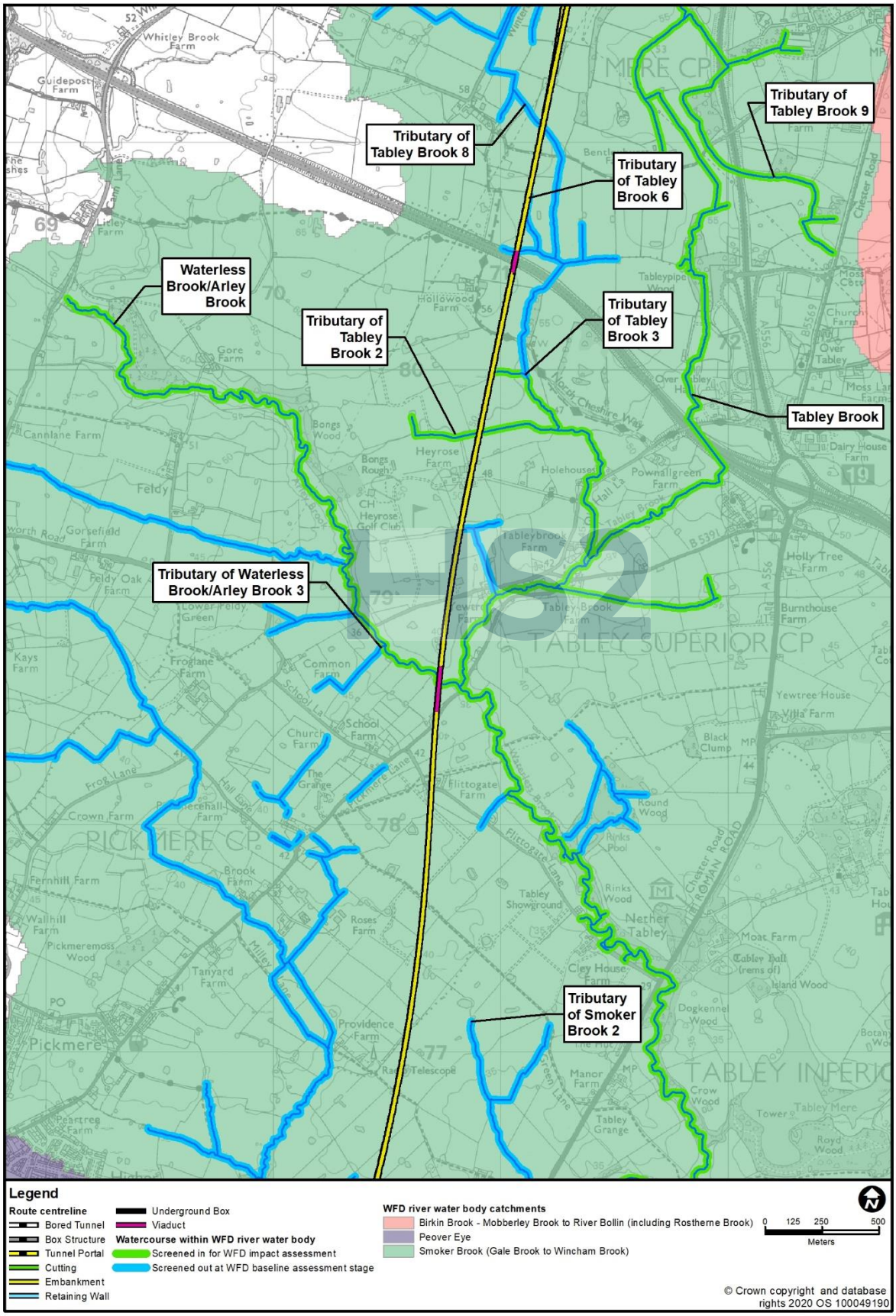


Figure 11: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 7)

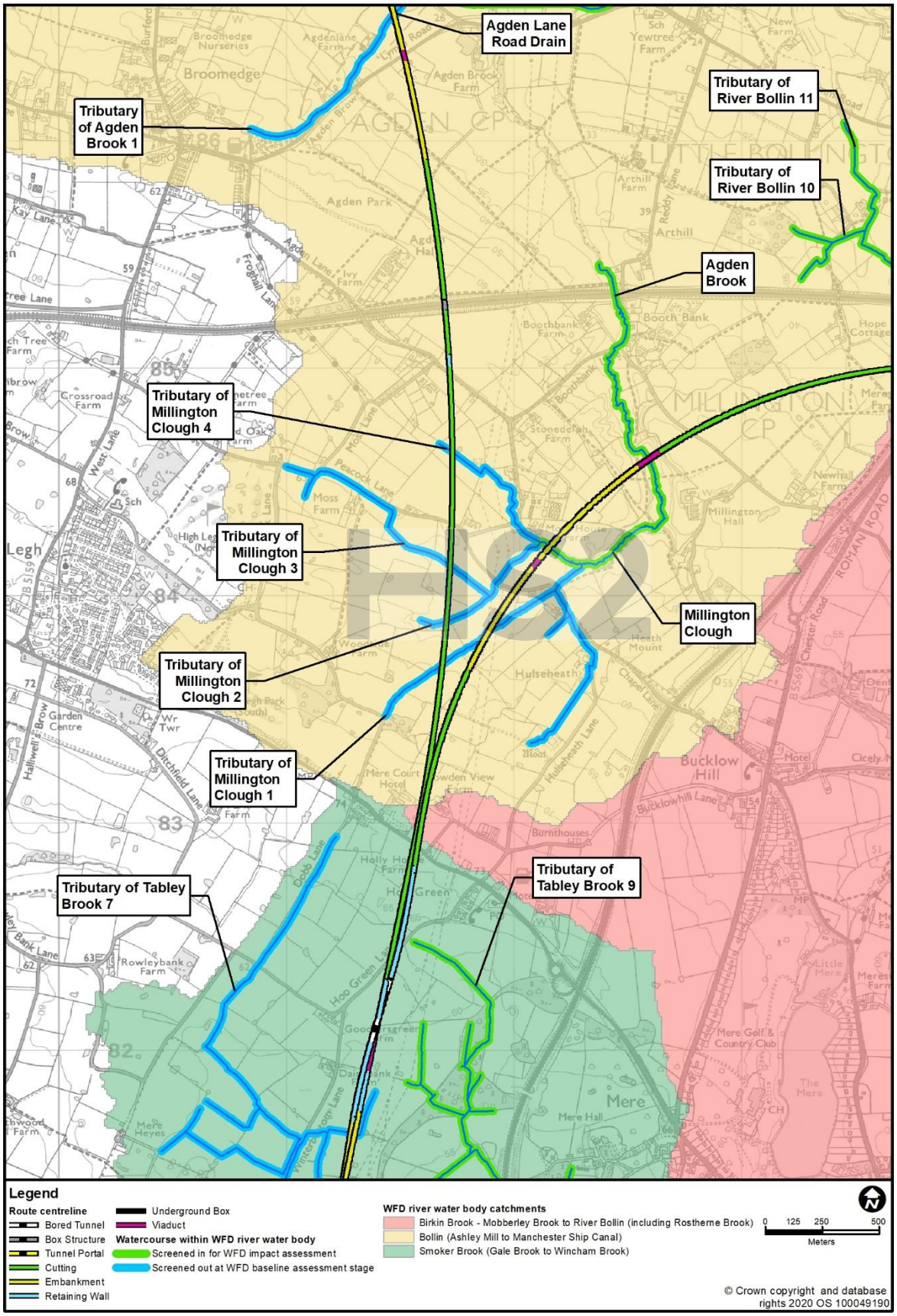


Figure 12: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 8)

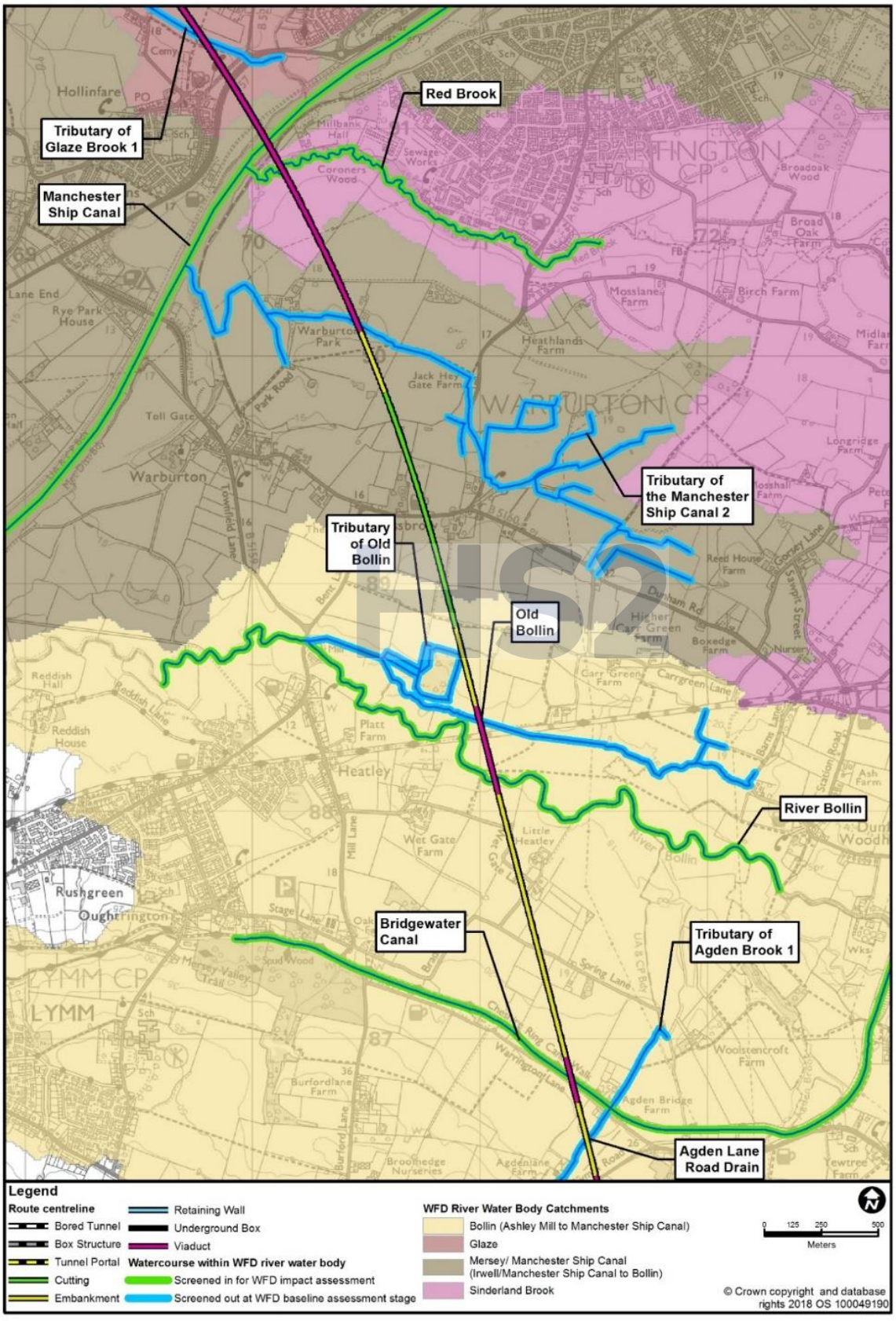


Figure 13: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 9)

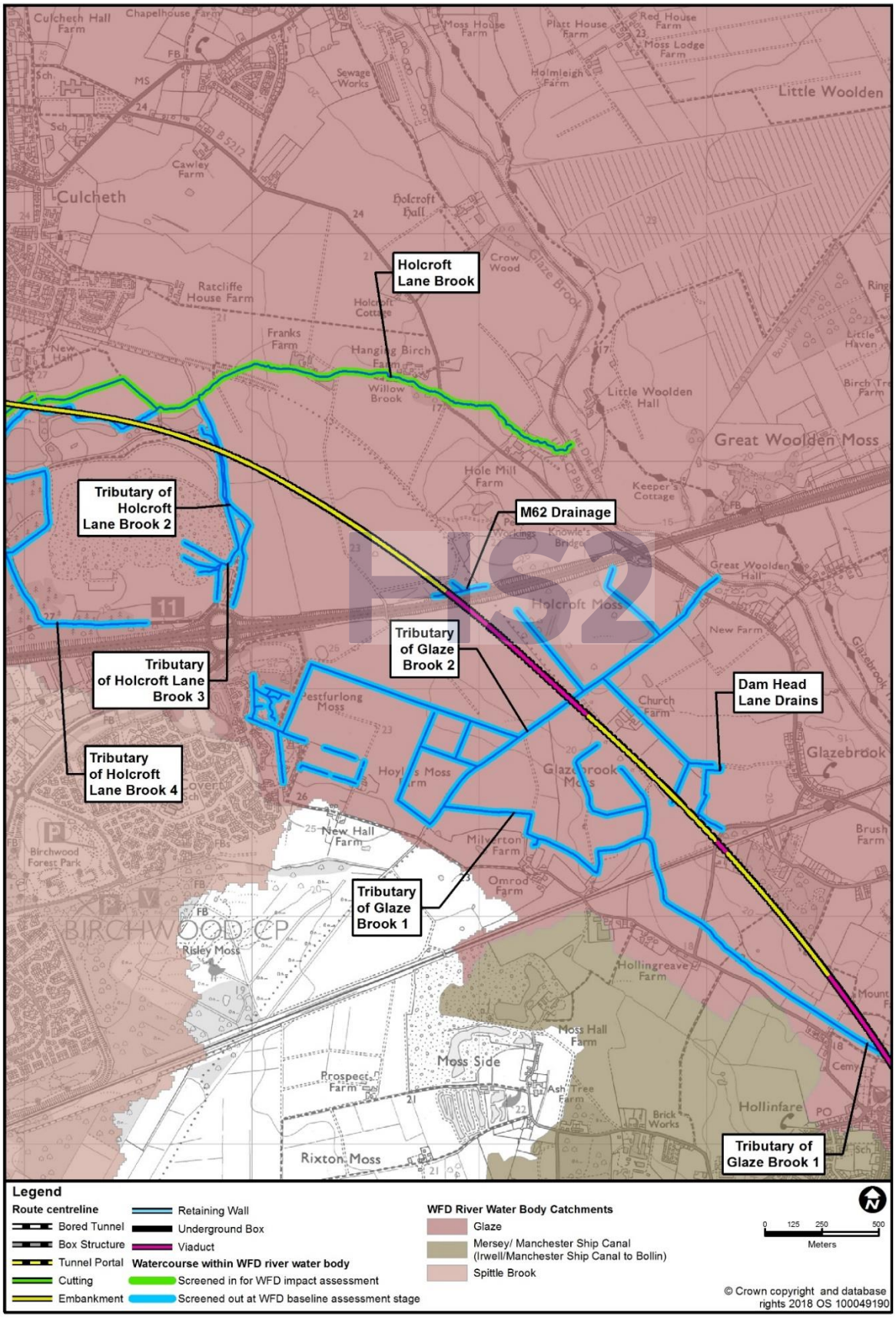


Figure 14: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 10)

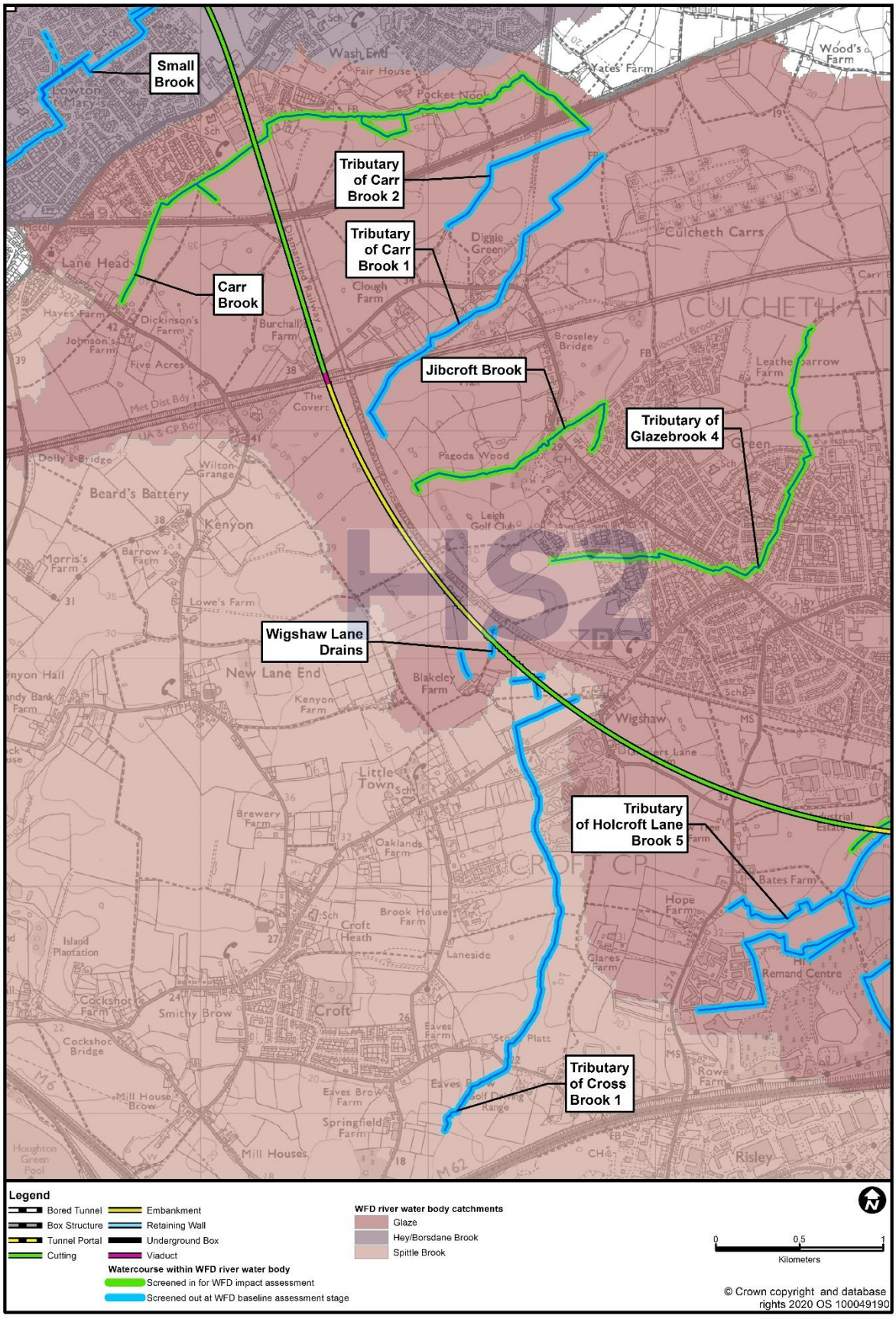


Figure 15: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 11)

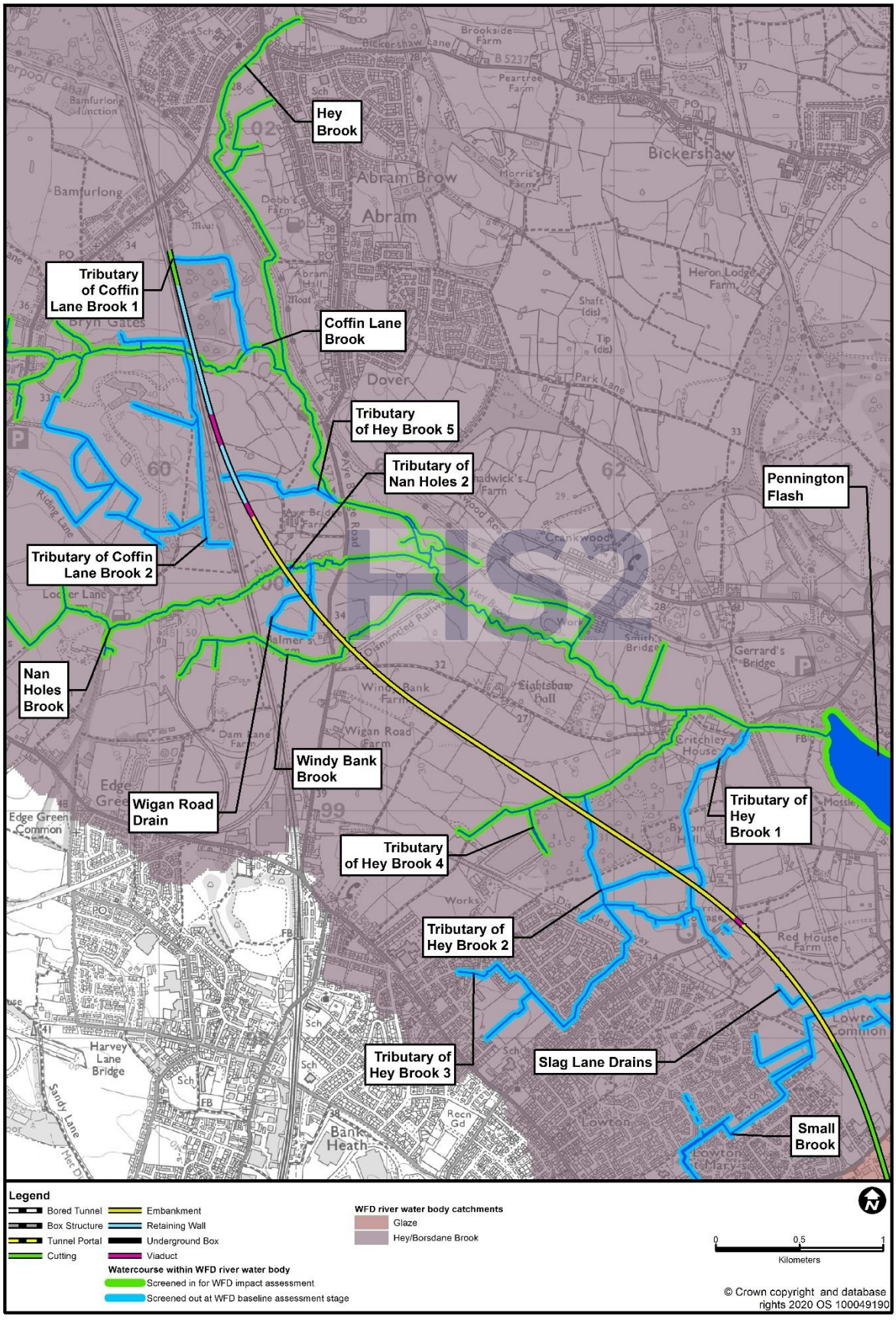


Figure 16: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 12)

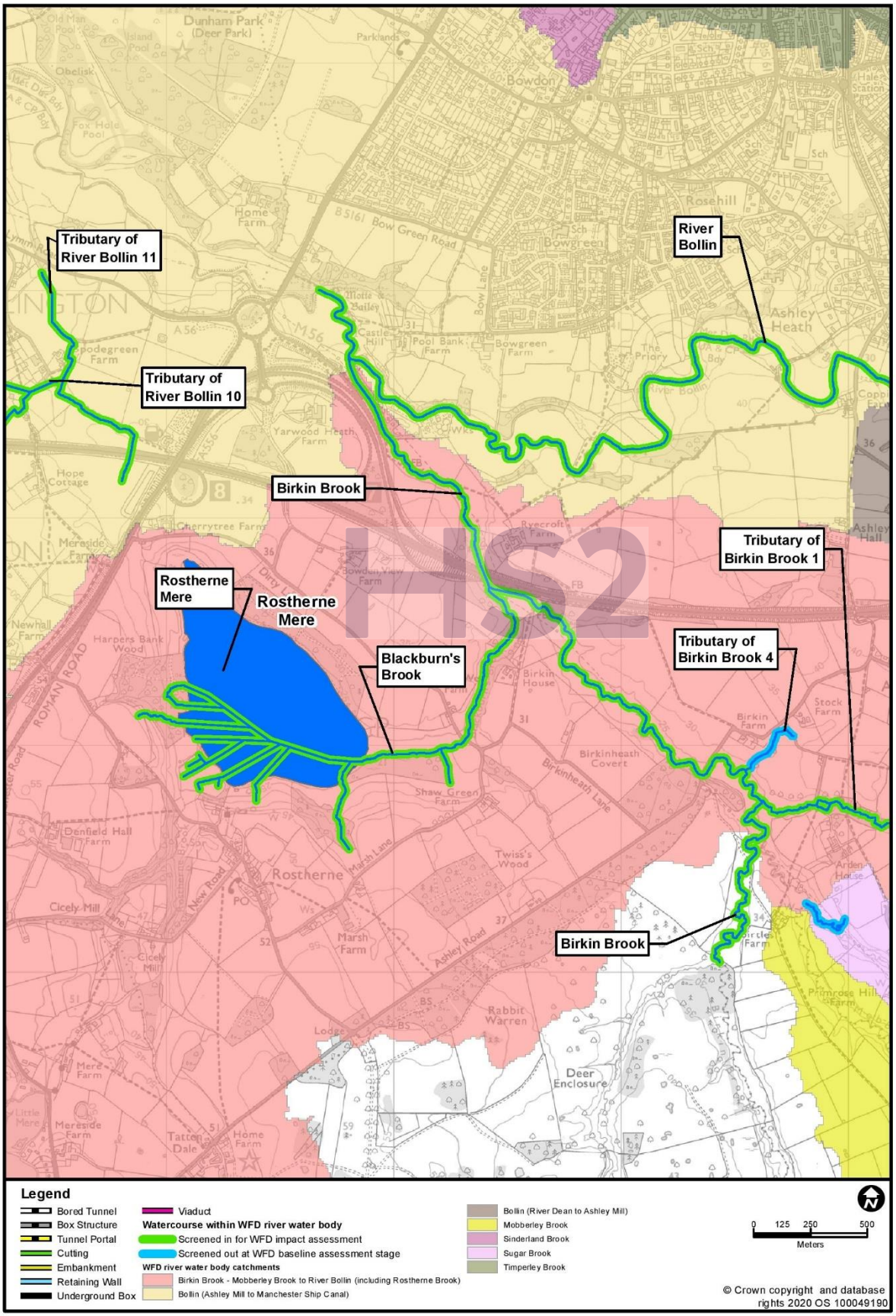


Figure 17: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 13)

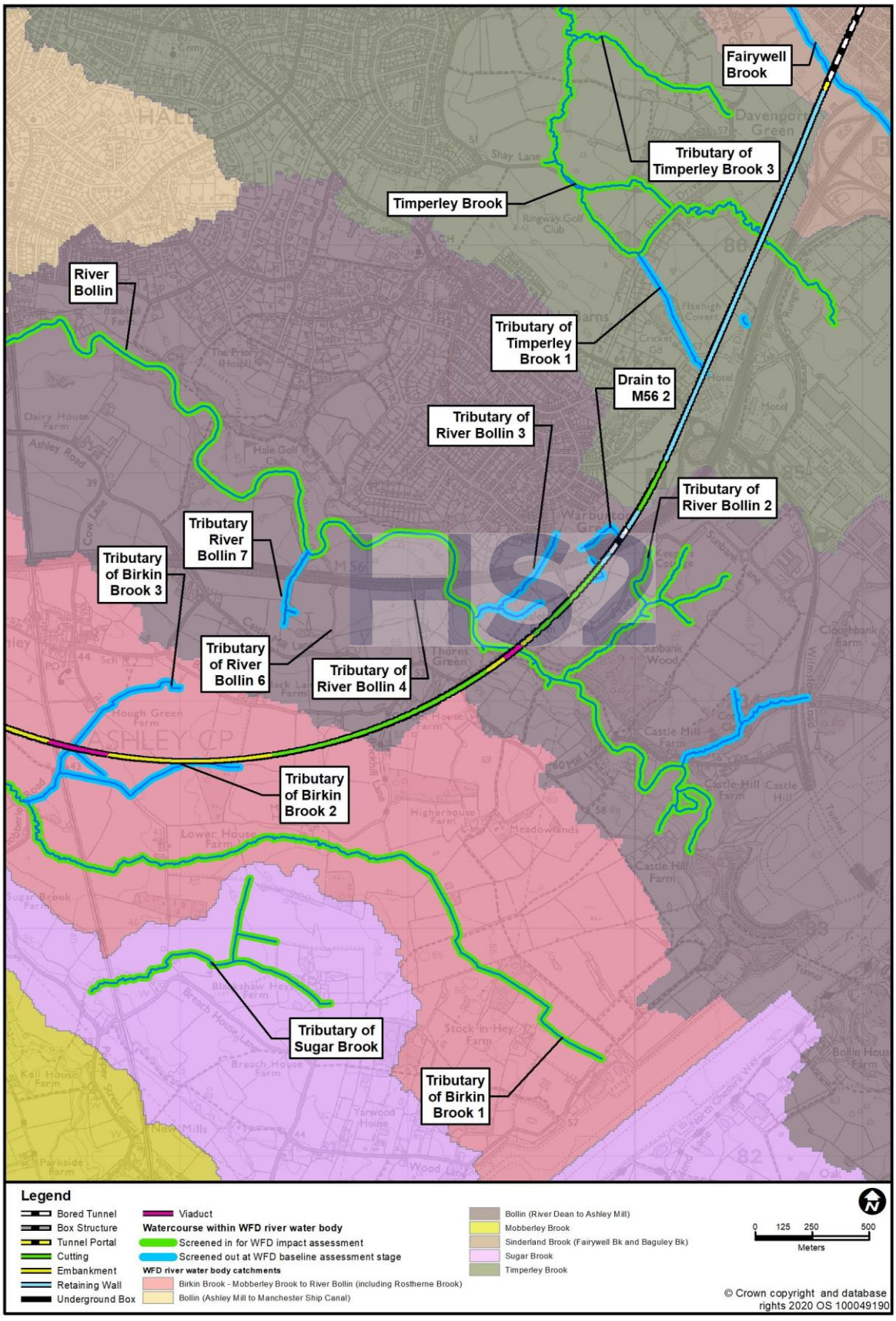


Figure 18: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 14)

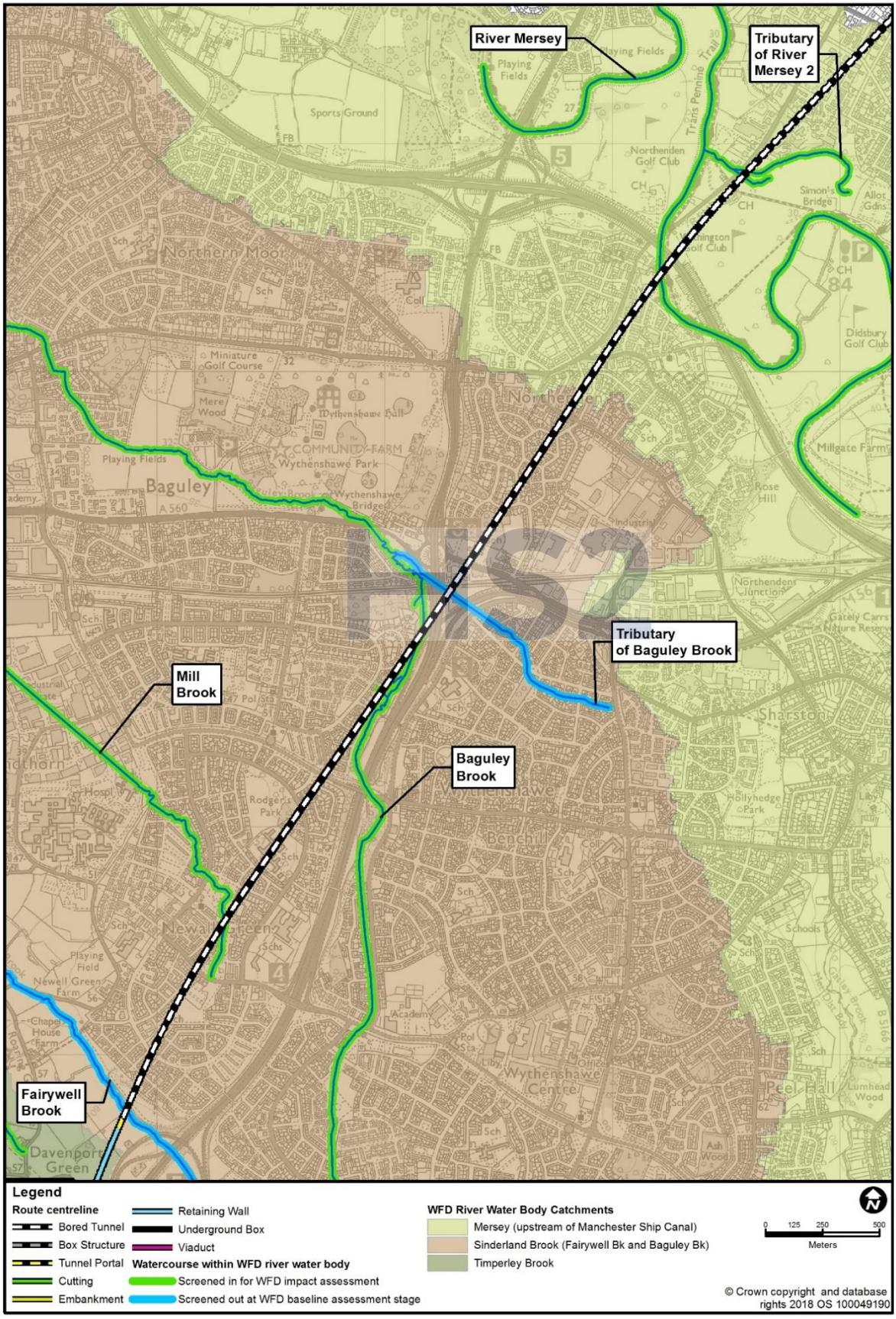


Figure 19: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 15)

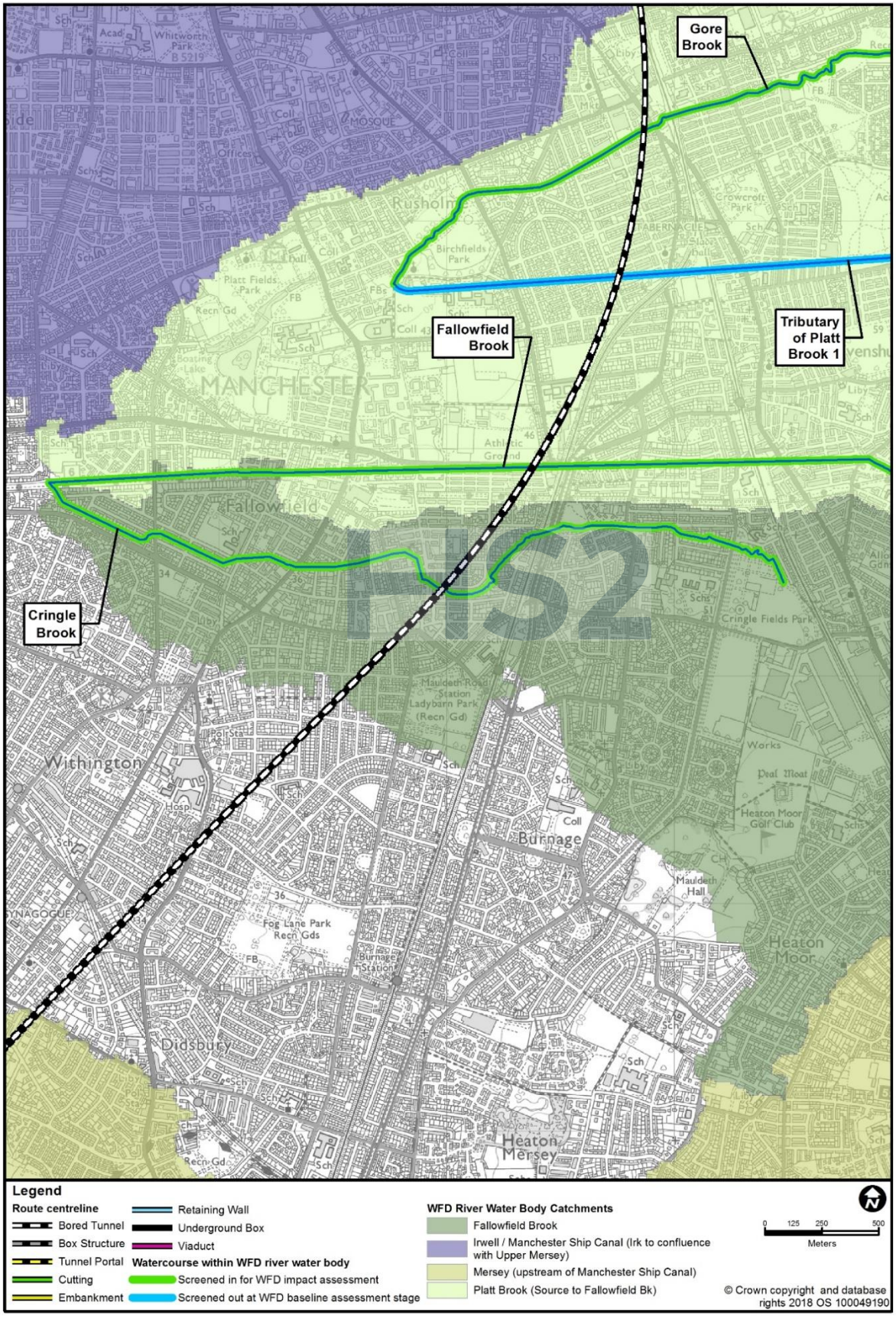
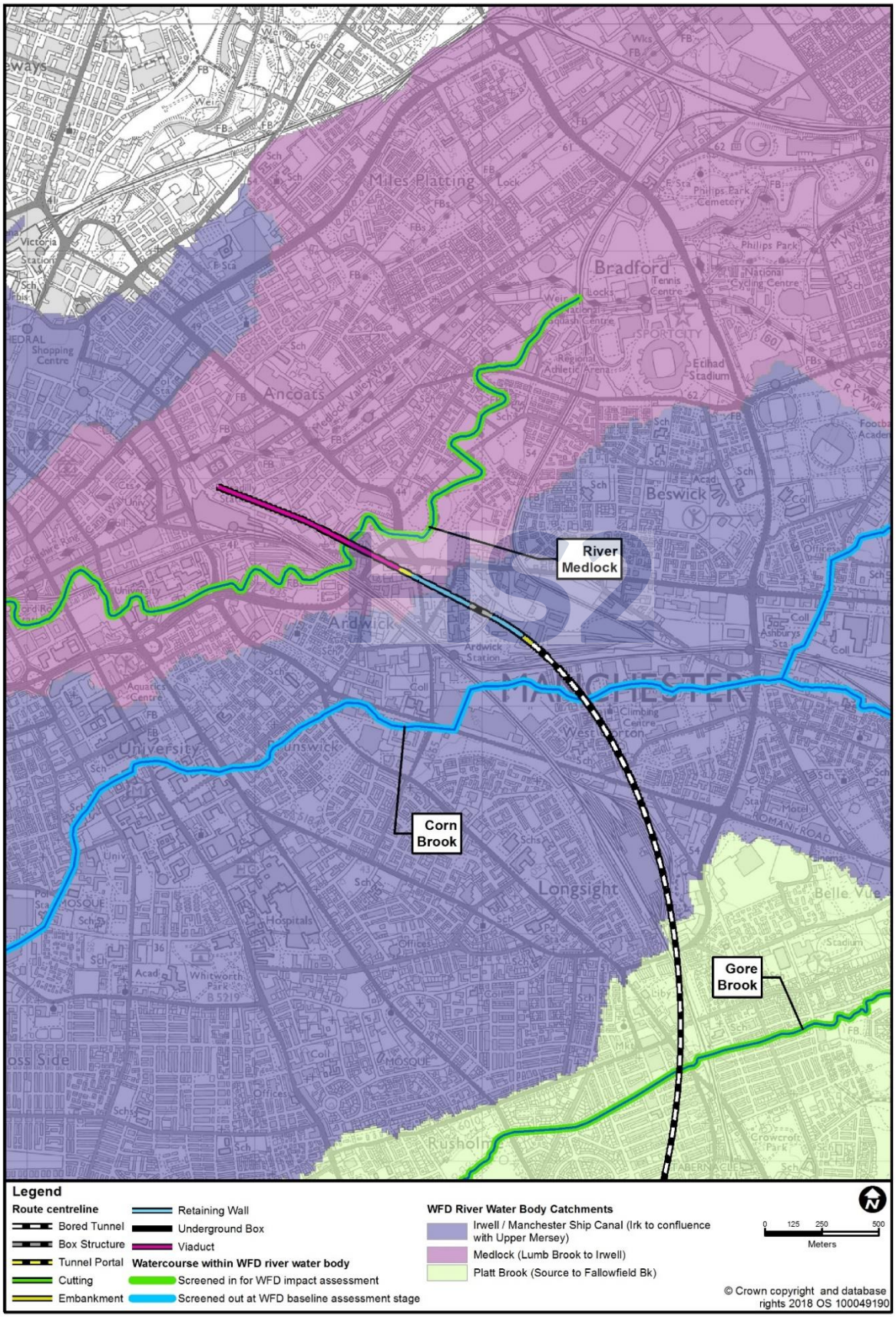


Figure 20: Watercourses potentially affected by Proposed Scheme within WFD surface water body catchments (Part 16)



Wistaston Brook (GB112068055280)

Tributary of Swill Brook 1

2.2.4 Tributary of Swill Brook 1 flows from the West Coast Main Line (WCML) north of Basford, south of Crewe (at NGR SJ7173352578), along the southern edge of the A500 to its confluence with Swill Brook north of Shavington (at NGR SJ6988952507). A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken. Desk study evidence indicates that this is a small watercourse carrying railway and road drainage. However, as no reconnaissance survey of this watercourse has been carried out, it has been assessed as Moderate value on a precautionary basis.

2.2.5 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Tributary of Gresty Brook 1

2.2.6 Tributary of Gresty Brook 1 flows from the WCML close to Basford Hall, south of Crewe (at NGR SJ7168752668), along the northern edge of the A500 to Crewe Road (at NGR SJ7044352890). Beyond Crewe Road the watercourse flows north-west to join Gresty Brook south of Crewe. A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken. Desk study evidence indicates that this is a small watercourse carrying railway and road drainage. However, as no reconnaissance survey of this watercourse has been carried out, it has been assessed as Moderate value on a precautionary basis.

2.2.7 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Gresty Brook

2.2.8 Gresty Brook begins at the confluence of Basford Brook with a small tributary that rises to the south of Crewe Hall Hotel and Enterprise Park. Gresty Brook flows westwards and joins Wistaston Brook at the A534 Nantwich Road. This reach of Gresty Brook flows from the south-eastern edge of Crewe (at NGR SJ7208653620) and west underneath the existing West Coast Main Line to the downstream extent (at NGR SJ6997353887). A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken. Desk study evidence indicates that this is a High value watercourse.

2.2.9 Based on the evidence from the baseline assessment the watercourse has been defined as High value and has been screened in for WFD preliminary assessment.

Basford Brook

2.2.10 Basford Brook begins in Burrow Coppice (at SJ7269251728). Basford Brook flows northwest and joins Gresty Brook adjacent to David Whitby road (at SJ7208753619). A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken. Desk study evidence indicates that this is a High value watercourse.

2.2.11 Based on the evidence from the baseline assessment the watercourse has been defined as High value and has been screened in for WFD preliminary assessment.

Valley Brook (Englesea Brook to Weaver) (GB112068055310)

Valley Brook

2.2.12 Valley Brook rises west of Alsager and flows west into and through the centre of Crewe, joining the River Weaver west of Crewe, close to Worleston. This reach of Valley Brook flows from the eastern edge of Crewe (at NGR SJ7236155084), west through Crewe to Queen's Park where it enters a culvert (at NGR SJ6867255508). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. This reach of Valley Brook is a straight, highly modified low gradient channel between culverted sections.

2.2.13 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 34.

2.2.14 Based on the evidence from the baseline assessment the watercourse has been defined as High value and has been screened in for WFD preliminary assessment.

Table 34: Summary of baseline condition of Valley Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Flow: Glide, run Substrate: Sand Riparian vegetation: Scrub and broadleaf vegetation on both banks, some overhanging vegetation, slight channel shading Morphological pressures / modifications: Straight channel between culverts up and downstream. Low gradient and highly modified in centre of Crewe. Very low habitat value. No macrophytes, silty, limited fish habitat Land use: Urban (with park areas)	 Photograph taken from NGR SJ7122255178

Fowle Brook (GB112068055400)

Tributary of Fowle Brook 1

2.2.15 Tributary of Fowle Brook 1 is a drain that flows from a residential area north of Crewe (at NGR SJ6972158317) in a north-easterly direction. The drain flows into a culvert approximately 150m upstream of the confluence with Fowle Brook (at NGR SJ7154258298). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.16 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 35.

2.2.17 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 35: Summary of baseline condition of Tributary of Fowle Brook 1 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Small watercourse/field ditch	 Photograph taken from NGR SJ6972058730

Weaver (Marbury Brook to Dane) (GB112068060460)

Tributary of River Weaver 2

2.2.18 Tributary of River Weaver 2 rises approximately 1.5km south of Wimboldsley, close to Park Hall (at NGR SJ6873561830) and flows north-west, under the Shropshire Union Canal, to Weaver Bank where it joins the River Weaver (at NGR SJ6759262677). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. Tributary of River Weaver 2 is a small, sinuous, incised channel flowing through grassland.

2.2.19 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 36.

2.2.20 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 36: Summary of baseline condition of Tributary of River Weaver 2 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Downstream of Proposed Scheme Flow: Run, glide, with some riffles Substrate: Obscured, banks cohesive earth Riparian vegetation: Scrub and broadleaf vegetation on both banks, some overhanging vegetation, high channel shading Morphological pressures / modifications: Incised channel Land use: Rough pasture grassland	 Photograph taken from NGR SJ6829062080

Tributary of River Weaver 4

2.2.21 Tributary of River Weaver 4 is located south of Winsford, and flows from Clive Green, west of the Shropshire Union canal (at NGR SJ6804764938) to Clive Lane (at NGR SJ6732565410). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. The watercourse is a small low gradient field ditch.

2.2.22 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 37.

2.2.23 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 37: Summary of baseline condition of Tributary of River Weaver 4 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Small channel, low gradient field ditch, ponded and high sediment load Culverted under Shropshire Union Canal	 Photograph taken from NGR SJ6800065000

Shropshire Union Canal, Market Drayton to Ellesmere Port (GB71210133)

Shropshire Union Canal

2.2.24 The Shropshire Union Canal is a navigable canal starting from Ellesmere Port (SJ4061577250), flowing in a southerly direction towards Wolverhampton (at NGR SJ9018002029). This reach of the canal is close to the village of Church Minshull (at NGR SJ6733461270) to Middlewich (at NGR SJ6957365786). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. The canal is impounded, with reinforced banks.

2.2.25 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 38.

2.2.26 Based on the evidence from the baseline assessment the watercourse has been defined as Very high value and has been screened in for WFD preliminary assessment.

Table 38: Summary of baseline condition of Shropshire Union Canal within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Flow: Impounded by canal locks Substrate: Not visible but expected to be a mixture of silt, sand and clay Riparian vegetation: Grasses on both banks, no low overhanging vegetation, occasional shading from isolate trees Morphological pressures / modifications: Canal - reinforced banks Land use: Improved and rough pasture, arable and scrub	 Photograph taken from NGR SJ6820065100

Wheelock (Fowle Brook to Dane) (GB112068055380)

Hoggins Brook

2.2.27 Hoggins Brook flows in a northerly direction from Warmingham Moss (at NGR SJ6977560072) to its confluence with the River Wheelock close to Occlestone Green (at NGR SJ6265070452). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.28 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 39.

2.2.29 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 39: Summary of baseline condition of Hoggins Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Downstream of Proposed Scheme Small watercourse/field ditch	 Photograph taken from NGR SJ6953061740

Tributary of River Wheelock 5

2.2.30 Tributary of River Wheelock 5 is a field drain that flows in a south-easterly direction from close to Yew Tree Farm (at NGR SJ6871066073) to Manor Park on the western edge of Middlewich (at NGR SJ6952865423). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.31 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 40.

2.2.32 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 40: Summary of baseline condition of Tributary of River Wheelock 5 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Downstream of Proposed Scheme Small, incised stream flowing through agricultural land	 Photograph taken from NGR SJ6891065810

Dane (Wheelock to Weaver) (GB112068060470)

River Dane

2.2.33 The River Dane rises in the south-west of the Peak District, south of Macclesfield, and flows through Congleton, Holmes Chapel and along the northern edge of Middlewich before joining the River Weaver in Northwich. This reach of the River Dane flows between Middlewich (at NGR SJ6935066991) to Davenham (at NGR SJ6717670159), past Bostock Green and Whatcroft. A baseline desk study and reconnaissance survey of the watercourse have been undertaken. The receptor value of the watercourse is Very high. The River Dane is a large river within a wide floodplain.

2.2.34 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with some example photographs, are provided in Table 41.

2.2.35 Based on the evidence from the baseline assessment the watercourse has been defined as Very high value and has been screened in for WFD preliminary assessment.

Table 41: Summary of baseline condition of River Dane within the vicinity of the Proposed Scheme

Baseline description	Example photographs
Upstream of Proposed Scheme Flow: Glides and runs, with pools Substrate: Clay, coarse and fine gravel, sand and silt Riparian vegetation: Scrub and shrub, little overhanging vegetation and slight channel shading from isolated trees Morphological pressures / modifications: Land use - grazing to bank top and lack of tree-line contributing to erosion processes Land use: Improved pasture and scrub, with occasional pockets of broadleaf woodland	 Photograph taken from NGR SJ6860067900
At location of Proposed Scheme Flow: Glides and runs, with pools Substrate: Clay, coarse and fine gravel, sand and silt Riparian vegetation: Scrub and shrub, little overhanging vegetation, and slight channel shading Morphological pressures / modifications: Land use - grazing to bank top and lack of tree-line contributing to erosion processes Land use: Broadleaf woodland, improved pasture and scrub	 Photograph taken from NGR SJ6830068200
Downstream of Proposed Scheme Flow: Glides and runs, with pools Substrate: Clay, coarse and fine gravel, sand and silt Riparian vegetation: Scrub and shrub, little overhanging vegetation and slight channel shading Morphological pressures / modifications: Land use - grazing to bank top and lack of tree-line contributing to erosion processes Land use: Improved and rough pasture and scrub, occasional pockets of woodland	

Baseline description	Example photographs
	 Photographs taken from NGR SJ6850068400

Tributary of River Dane 3

2.2.36 Tributary of River Dane 3 flows from behind Bank Farm (at NGR SJ6850567400) in an easterly direction, forming a confluence with the River Dane (at NGR SJ6880667548). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. The tributary is a very small stream which flows from a spring through a wooded valley.

2.2.37 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 42.

2.2.38 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 42: Summary of baseline condition of Tributary of River Dane 3 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Small undefined channel, stream source from spring near farm	 Photograph taken from NGR SJ6840067300

Trent and Mersey Canal, summit to Preston Brook Tunnel (GB71210247)

Trent and Mersey Canal

2.2.39 The Trent and Mersey Canal is a navigable canal starting close to the village of Great Wilne, south-west of Nottingham. It flows in a south-westerly direction through Burton upon Trent to Lichfield, then changes direction to flow north-west through Stoke-on-Trent and continues to join the Bridgewater Canal in the Preston Brook tunnel north-west of Northwich. This reach of the canal passes through Middlewich (at NGR SJ7063565714), and to the north of Northwich (at NGR SJ6850574774). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.40 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with some example photographs, are provided in Table 43.

2.2.41 Based on the evidence from the baseline assessment the watercourse has been defined as Very high value and has been screened in for WFD preliminary assessment.

Table 43: Summary of baseline condition of Trent and Mersey Canal within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme – Crossing 1 Flow: Impounded by canal locks Substrate: Not visible but expected to be silt, sand and clay Riparian vegetation: Broadleaf vegetation on right bank, grasses on left bank, some low overhanging vegetation and moderate channel shading Morphological pressures / modifications: Canal - reinforced banks Land use: Improved pasture, broadleaf woodland, urban/suburban, amenity grassland, scrub	 Photograph taken from NGR SJ6840070800

Baseline description	Example photograph
At location of Proposed Scheme – Crossing 2 Flow: Impounded by canal locks Substrate: Not visible but expected to be silt, sand and clay Riparian vegetation: Broadleaf vegetation on right bank, grasses on left bank, no low overhanging vegetation and slight channel shading Morphological pressures / modifications: Canal - reinforced banks Land use: Improved pasture, broadleaf woodland, arable and scrub	 Photograph taken from NGR SJ6830070300
At location of Proposed Scheme – Crossing 3 Flow: Impounded by canal locks. Large backwaters formed from subsidence Substrate: Not visible but expected to be silt, sand and clay Riparian vegetation: Grasses on both banks, reedbed margin on right bank and slight channel shading Morphological pressures / modifications: Canal - reinforced banks Land use: Improved pasture, arable, woodland, scrub and wetland	 Photograph taken from NGR SJ6850068700

Puddinglake Brook (GB112068060220)

Puddinglake Brook

2.2.42 Puddinglake Brook flows from Byley, close to Holly Bank (at NGR SJ6994970019). The watercourse flows in a westerly direction, with its confluence with the River Dane east of Davenham (at NGR SJ6740370848). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.43 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 44.

2.2.44 Based on the evidence from the baseline assessment the watercourse has been defined as High value and has been screened in for WFD preliminary assessment.

Table 44: Summary of baseline condition of Puddinglake Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Flow: Run, glide, riffle and pool Substrate: Coarse gravel, cobbles, fine gravel, sand, silt and clay Riparian vegetation: Broadleaf trees on both banks, some overhanging vegetation and high channel shading Morphological pressures / modifications: Culvert under canal (possible siphon). Planform constrained by canal embankment. Disconnected from floodplain due to steep high banks - possibly historically modified as well as local topography. Localised bank undercutting. Small culverts for farm tracks Land use: Improved pasture and broadleaf woodland, some arable and scrub	 Photograph taken from NGR SJ6842870075

Tributary of Trent and Mersey Canal

2.2.45 Tributary of Trent and Mersey Canal flows from approximately 700m south of Whatcroft (at NGR SJ6882468911), in a north-westerly direction to the Trent and Mersey Canal (at NGR SJ6805269349). A baseline desk study has been undertaken. The watercourse was observed from the opposite side of the canal. Although no reconnaissance survey has been carried out desk study and the field evidence indicate that this is a small Low value watercourse, and it is labelled as a Drain on Ordnance Survey mapping.

2.2.46 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 45.

2.2.47 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 45: Summary of baseline condition of Tributary of Trent and Mersey Canal within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Small watercourse/field ditch (note: watercourse enters Trent and Mersey Canal on opposite bank from photo location)	 Photograph taken from NGR SJ6805269349

Wade Brook (GB112068060370)

Gad Brook

2.2.48 Gad Brook flows approximately 2km east of Rudheath (at NGR SJ6976571265) and flows west around the southern edge of the village (at NGR SJ6723572515). A baseline desk study and reconnaissance survey of the watercourse (upstream of the proposed crossing, due to accessibility) have been undertaken.

2.2.49 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 46.

2.2.50 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 46: Summary of baseline condition of Gad Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Flow: Glide, run Substrate: Silt, fine gravel and clay Riparian vegetation: Scrub vegetation on both banks, some overhanging vegetation and moderate channel shading Morphological pressures / modifications: Culverted and realigned under existing road crossings Land use: Improved pasture, urban/suburban, woodland	 Photograph taken from NGR SJ6870071500

Tributary of Gad Brook 3

2.2.51 Tributary of Gad Brook 3 flows from Crowder's Lane (at NGR SJ7004271760) to its confluence with Gad Brook at Marshall's Gorse (at NGR SJ6861471909). A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken. Desk study evidence indicates that this is a small watercourse, however, as no reconnaissance survey of this watercourse has been carried out, it has been assessed as Moderate value on a precautionary basis.

2.2.52 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Broken Cross Drains

2.2.53 Broken Cross Drains flow between land south of Lostock Green (at NGR SJ6946172909) and an industrial area north of Rudheath (at NGR SJ6867774198). A baseline desk study of the watercourse has been undertaken. The direction of flow is not clear. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence indicates that this is a small Low value watercourse, which is not connected to other watercourses and named as a drain on Ordnance Survey (OS) mapping.

2.2.54 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Wade Brook

2.2.55 Wade Brook flows close to Lostock Green east of Northwich, around the north-east of Northwich into Witton Brook on the edge of Carey Park. This reach of Wade Brook is north-east of Lostock Green (at NGR SJ7035773356), under the A556 to the chemical works (at NGR

SJ6780874058). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.56 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 47.

2.2.57 Based on the evidence from the baseline assessment the watercourse has been defined as High value and has been screened in for WFD preliminary assessment.

Table 47: Summary of baseline condition of Wade Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme: Flow: Glide, run, riffles Substrate: Partly artificial under bridge, also cobbles, coarse and fine gravel, sand and silt Riparian vegetation: Bare on right bank, broadleaf trees on left bank, some overhanging vegetation and slight-moderate channel shading Morphological pressures / modifications: Existing substantial bridge structure with associated hard bank protection and straightening Land use: Scrub, improved pasture, urban/suburban, woodland	 Photograph taken from NGR SJ6954874294

Peover Eye (Wincham Brook) (GB112068060390)

Tributary of Peover Eye

2.2.58 Tributary of Peover Eye flows from Plumley Lime Beds (at NGR SJ7008574773) to its confluence with Peover Eye at Winnington Wood (at NGR SJ7009675711). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. Tributary of Peover Eye is a small sinuous, incised channel flowing through woodland.

2.2.59 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 48.

2.2.60 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been scoped in for WFD preliminary assessment.

Table 48: Summary of baseline condition of Tributary of Peover Eye within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Flow: Run, glide, riffles, pools Substrate: Silt, with some coarse gravel, fine gravel, sand and clay. Some exposed bedrock in places Riparian vegetation: Broadleaf trees on both banks, some overhanging vegetation, moderate channel shading Morphological pressures / modifications: None in survey location, flows under A559 upstream of survey location Land use: Broadleaf woodland	 Photograph taken from NGR SJ7018075530

Peover Eye

2.2.61 Peover Eye flows from a lake north near Chelford (at NGR SJ8129673995). The watercourse flows in a westerly direction past Over Peover and through Lower Peover, underneath the M6 to Plumley, forming a confluence with Smoker Brook at Peas Wood (at NGR SJ7006075781). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.62 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 49.

2.2.63 Based on the evidence from the baseline assessment the watercourse has been defined as High value and has been screened in for WFD preliminary assessment.

Table 49: Summary of baseline condition of Peover Eye within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Flow: Glide, run, pools Substrate: Sand, coarse and fine gravel, silt and clay Riparian vegetation: Broadleaf trees on both banks, some overhanging vegetation and high channel shading Morphological pressures / modifications: None in survey location, straightened further upstream alongside A559 Land use: Broadleaf woodland and some arable	 Photograph taken from NGR SJ7022075680

Smoker Brook (Gale Brook to Wincham Brook) (GB112068060410)

Smoker Brook

2.2.64 Smoker Brook flows from close to Smoker Hill Farm, between the villages of Plumley and Higher Wincham (at NGR SJ7105776204), alongside Smoker Wood to its confluence with Peover Eye in Peas Wood (at NGR SJ7006075781). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. Smoker Brook is a natural watercourse in a confined wooded valley.

2.2.65 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 50.

2.2.66 Based on the evidence from the baseline assessment the watercourse has been defined as High value and has been screened in for WFD preliminary assessment.

Table 50: Summary of baseline condition of Smoker Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Downstream of Proposed Scheme Flow: Run, glide, riffles, pools Substrate: Coarse and fine gravel, sand, silt, clay and cobbles Riparian vegetation: Broadleaf vegetation on both banks, grasses and shrubs, some low overhanging vegetation and moderate channel shading Morphological pressures / modifications: Existing road bridge at Leonard's Bridge/Linnards Lane - does not appear to affect morphology Land use: Broadleaf woodland, improved pasture	 Photograph taken from NGR SJ7029375965

Tributary of Smoker Brook 2

2.2.67 Tributary of Smoker Brook 2 flows from north of Smoker Hill Farm (at NGR SJ7095976810) to its confluence with Smoker Brook at Allens Bridge at the east end of Smoker Wood (at NGR SJ7107976199). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.68 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 51.

2.2.69 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 51: Summary of baseline condition of Tributary of Smoker Brook 2 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Very small incised watercourse/field ditch flowing through agricultural land with riparian trees/shrubs	 Photograph taken from NGR SJ7114076380

Waterless Brook

2.2.70 Waterless Brook is formed at the confluence of Arley Brook and Tabley Brook, at Pickmere Lane (at NGR SJ7081178608), and then becomes named Smoker Brook in Smoker Wood, between Plumley and Higher Wincham (at NGR SJ7105776204). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.71 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 52.

2.2.72 Based on the evidence from the baseline assessment the watercourse has been defined as High value and has been screened in for WFD preliminary assessment.

Table 52: Summary of baseline condition of Waterless Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Flow: Run, glide, riffles, pools Substrate: Coarse and fine gravel and cobbles Riparian vegetation: Grasses on right bank, broadleaf trees on left bank, some low overhanging vegetation and high channel shading Morphological pressures / modifications: Existing bridge crossing at Budworth Road/Waterless Bridge - no clear impact on morphology Land use: Improved pasture, scrub, woodland and arable	 Photograph taken from NGR SJ7069778672

Tabley Brook

2.2.73 Tabley Brook flows from Tableypipe Wood (at NGR SJ7183780442) southwards, through Over Tabley and beneath the M6 motorway. The brook subsequently flows south-westerly past Tabley Brook Farm and Yewtree Farm, to its confluence with Waterless Brook/Arley Brook (at NGR SJ7081978607). A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken, therefore it has been assessed as Moderate value on a precautionary basis.

2.2.74 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Tributary of Tabley Brook 2

2.2.75 Tributary of Tabley Brook 2 flows from land close to Neild's Rough north of Heyrose Farm (at NGR SJ7060879793) to its confluence with Tabley Brook close to Tableybrook Farm (at NGR SJ7137379138). A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken. Desk study evidence and reconnaissance surveys of nearby watercourses indicate that this is a small watercourse. However, as no reconnaissance survey of this watercourse has been carried out, it has been assessed as Moderate value on a precautionary basis.

2.2.76 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Tributary of Tabley Brook 3

2.2.77 Tributary of Tabley Brook 3 flows from north of Heyrose Farm (at NGR SJ7098279990) to its confluence with Tributary of Tabley Brook 2 (at NGR SJ7110979980). A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken. Desk study evidence and reconnaissance surveys of nearby watercourses indicate that this is a small watercourse. However, as no reconnaissance survey of this watercourse has been carried out, it has been assessed as Moderate value on a precautionary basis.

2.2.78 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Tributary of Tabley Brook 4

2.2.79 Tributary of Tabley Brook 4 flows from the northern edge of the M6 close to Hollowood Farm (at NGR SJ7100880534) to its confluence with Tributary of Tabley Brook 3 (at NGR SJ7110979980). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.80 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 53.

2.2.81 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 53: Summary of baseline condition of Tributary of Tabley Brook 4 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Small field ditch through agricultural land, overgrown with trees and scrub	 Photograph taken from NGR SJ7108080520

Tributary of Tabley Brook 6

2.2.82 Tributary of Tabley Brook 6 flows from north of the M6 (at NGR SJ7112780772) to its confluence with Tributary of Tabley Brook 4 (at NGR SJ7115780520). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.83 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 54.

2.2.84 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 54: Summary of baseline condition of Tributary of Tabley Brook 6 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Small field ditch through agricultural land, overgrown with trees and scrub	 Photograph taken from NGR SJ7111580665

Tributary of Tabley Brook 7

2.2.85 Tributary of Tabley Brook 7 flows from close to Mere Court Hotel, approximately 1km south east of High Legh (at NGR SJ7121882949) and flows south to join Tributary of Tabley Brook 8 at Winterbottom Lane (at NGR SJ7098881459). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.86 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 55.

2.2.87 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 55: Summary of baseline condition of Tributary of Tabley Brook 7 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Straight, field drainage ditch Over-deep Several short culverts beneath field access tracks Bare, exposed earth banks and intermittent tree cover Some fine gravels on bed but predominantly silts Low flow velocities and shallow Bare earth at base of banks suggests recent channel excavation Shallow field ditch shaded by tall ruderal vegetation. Low habitat potential	 Photograph taken from NGR SJ7108582707

Tributary of Tabley Brook 8

2.2.88 Tributary of Tabley Brook 8 flows from close to Daisybank Farm (at NGR SJ7138981817) to its confluence with Tributary of Tabley Brook 4 just north of the M6 (at NGR SJ7107381608). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.89 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 56.

2.2.90 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 56: Summary of baseline condition of Tributary of Tabley Brook 8 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Small silty field ditch, with partial tree-lining	 Photograph taken from NGR SJ7126380939

Tributary of Tabley Brook 9

2.2.91 Tributary of Tabley Brook 9 rises just south of Hoo Green (at NGR SJ7155682477), flowing in a southerly direction to Tabley Brook at Tableypipe Wood (at NGR SJ7183780441). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.92 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with some example photographs, are provided in Table 57.

2.2.93 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 57: Summary of baseline condition of Tributary of Tabley Brook 9 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Downstream of Proposed Scheme: upstream section through woodland Typically, field drainage ditch with some sinuosity in woodland Watercourse in woodland is heavily shaded, with substantial leaf litter and silty substrate Roots and undercut banks Very turbid and bed choked with fine sediment – likely to be dry in summer	 Photograph taken from NGR SJ7179181768
Downstream of Proposed Scheme: downstream surveyed section through farmland Becomes more of a straight, field ditch downstream Some sections with very scarce riparian vegetation Several culverts and small pond area Some submerged and emergent plant species and limited flow variation	 Photography taken from NGR SJ7176581109

Bollin (Ashley Mill to Manchester Ship Canal) (GB112069061382)

Tributary of Millington Clough 1

2.2.94 Tributary of Millington Clough 1 flows from close to Hulseheath Lane (at NGR SJ7143483472) to its confluence with Millington Clough close to Moss House Farm (at NGR SJ7229684139). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. The watercourse is a small agricultural field ditch.

2.2.95 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 58.

2.2.96 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 58: Summary of baseline condition of Tributary of Millington Clough 1 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Steep-sided field ditch, limited flow	 Photograph taken from NGR SJ7190083800

Tributary of Millington Clough 2

2.2.97 Tributary of Millington Clough 2 flows from close to Woodside Farm (at NGR SJ7158983894) to its confluence with Millington Clough close to Moss House Farm (at NGR SJ7211584234). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. The watercourse is a small agricultural field ditch.

2.2.98 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 59.

2.2.99 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 59: Summary of baseline condition of Tributary of Millington Clough 2 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Agricultural field ditch. Banks poached in places, heavily grazed adjacent fields, potential high sediment input. Marginal vegetation present	 Photograph taken from NGR SJ7170083900

Tributary of Millington Clough 3

2.2.100 Tributary of Millington Clough 3 flows from close to Broad Oak Farm (at NGR SJ7099784568) to its confluence with Tributary of Millington Clough 2 close to Broom Manor (at NGR SJ7189283998). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. The watercourse is a small agricultural field ditch.

2.2.101 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 60.

2.2.102 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 60: Summary of baseline condition of Tributary of Millington Clough 3 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Field ditch following boundary hedgerow Heavily overgrown with terrestrial vegetation	 Photograph taken from NGR SJ7170084200

Millington Clough

2.2.103 Millington Clough flows from Moss House Farm (at NGR SJ7211584234) east to the confluence with Agden Brook close to Millington Hall (at NGR SJ7263084306). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. Millington Clough is a small stream in a confined valley with woodland.

2.2.104 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 61.

2.2.105 Based on the evidence from the baseline assessment the watercourse has been defined as High value and has been screened in for WFD preliminary assessment.

Table 61: Summary of baseline condition of Millington Clough within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Flow: Riffles, glide, run Substrate: Coarse and fine gravel, and cobbles Riparian vegetation: Broadleaf trees on both banks, some overhanging vegetation and moderate channel shading Morphological pressures / modifications: No clear pressures within area surveyed Land use: Improved and rough pasture, broadleaf woodland	 Photograph taken from NGR SJ7230084200

Tributary of Millington Clough 4

2.2.106 Tributary of Millington Clough 4 flows from land south of Middlemoss Farm (at NGR SJ7167284667) to its confluence with Millington Clough close to Moss House Farm (at NGR SJ7211584234). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. The watercourse is a small agricultural field ditch.

2.2.107 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 62.

2.2.108 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 62: Summary of baseline condition of Tributary of Millington Clough 4 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Field ditch with existing road culverts	 Photograph taken from NGR SJ7200084400

Agden Brook

2.2.109 Agden Brook flows in a northerly direction from close to Millington Hall (at NGR SJ7263084306) under the M56 close to Booth Bank, and under the Bridgwater Canal to the confluence with the River Bollin to the west of Little Bollington (at NGR SJ7173787920). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.110 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with some example photographs, are provided in Table 63.

2.2.111 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 63: Summary of baseline condition of Agden Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Downstream of Proposed Scheme Flow: Glide, run, riffles, pools Substrate: Coarse and fine gravel, silt and clay Riparian vegetation: Broadleaf trees on right bank and herbaceous on left bank, some overhanging vegetation and high channel shading Morphological pressures / modifications: Substantial pipe culvert, and road bridge at end of reach Land use: Mixed woodland, scrub and improved pasture	 Photograph taken from NGR SJ7190086300
At location of Proposed Scheme Flow: Glide, run, riffles Substrate: Silt, sand, clay and fine gravel Riparian vegetation: Herbaceous on both banks, some overhanging vegetation and slight channel shading Morphological pressures / modifications: Road bridges and culverts at downstream end, some straightened sections upstream Land use: Improved and rough pasture, with scrub and woodland and urban/suburban	 Photograph taken from NGR SJ7245384840

Tributary of River Bollin 10

2.2.112 Tributary of River Bollin 10 flows from Grey's Gorse and Coe Lane at NGR SJ7337885549, meeting Tributary of River Bollin 11 near Spodegreen Farm (at NGR SJ7354085599). A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken. Desk study evidence indicates that this is a small watercourse. However, as no reconnaissance survey of this watercourse has been carried out, it has been assessed as Moderate value on a precautionary basis.

2.2.113 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Tributary of River Bollin 11

2.2.114 Tributary of River Bollin 11 flows from south of the M56 at NGR SJ7378485170 in a northerly direction joining the River Bollin at Little Bollington Mill (at NGR SJ7305687015). A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken. Desk study evidence indicates that this is a small watercourse. However, as no reconnaissance survey of this watercourse has been carried out, it has been assessed as Moderate value on a precautionary basis.

2.2.115 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Agden Lane Road Drain 1

2.2.116 Agden Lane Road Drain 1 is a very short watercourse that flows for approximately 40m along the east side of Agden Lane (on opposite side of the road to Tributary of Agden Brook 1), close to Agden Lane Farm (between NGR SJ7148886564 and SJ7146186534). A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence indicates that this is a small Low value watercourse, which is named as a drain on OS mapping.

2.2.117 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Tributary of Agden Brook 1

2.2.118 Tributary of Agden Brook 1 flows from Broomedge (at NGR SJ7084086054) to its confluence with Tributary of Agden Brook 2 close to Woolstencroft Farm (at NGR SJ7182287008). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.119 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 64.

2.2.120 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 64: Summary of baseline condition of Tributary of Agden Brook 1 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Roadside drainage ditch, culverted in places	 Photograph taken from NGR SJ7150086600

River Bollin (Ashley Mill to Manchester Ship Canal)

2.2.121 The River Bollin rises south-east of Macclesfield, flowing through Macclesfield, Wilmslow, underneath Manchester Airport, south of Hale and joins the Manchester Ship Canal north of Lymm. This reach of the River Bollin flows south of Dunham Woodhouses (at NGR SJ7232087656) to its confluence at the Manchester Ship Canal (at NGR SJ6960988559). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.122 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 65.

2.2.123 Based on the evidence from the baseline assessment the watercourse has been defined as Very high value and has been screened in for WFD preliminary assessment.

Table 65: Summary of baseline condition of River Bollin within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Flow: Glide, run Substrate: Sand, coarse and fine gravel, silt and clay Riparian vegetation: Herbaceous on both banks, little overhanging vegetation and slight channel shading Morphological pressures / modifications: Embankments and over-deepening mean watercourse is not active and is relatively uniform despite meandering planform Land use: Arable with some scrub	 Photograph taken from NGR SJ7126888131

Old Bollin

2.2.124 Old Bollin flows from close to Dunham Woodhouses (at NGR SJ7221288174) to its confluence with the River Bollin north of Lymm (at NGR SJ7024288749). A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken because the watercourse is culverted. The Old Bollin is a previous channel of the Bollin which now flows in a culvert for the majority of its length.

2.2.125 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Tributary of Old Bollin

2.2.126 Tributary of Old Bollin flows from land north-east of Lymm (at NGR SJ7091688690) to its confluence with the Old Bollin at Bent Lane north of Heatley (at NGR SJ7057188675). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. The watercourse is a small agricultural field ditch.

2.2.127 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 66.

2.2.128 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 66: Summary of baseline condition of Tributary of Old Bollin within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Field ditch with online pond	 Photograph taken from NGR SJ7090088700

Bridgewater Canal (GB71210001)

Bridgewater Canal

2.2.129 The Bridgewater Canal is a navigable canal from Leigh to Runcorn passing through Manchester and Warrington. This section of the Bridgewater Canal flows from Dunham (at NGR SJ7285787460) to Lymm (at NGR SJ6992387441). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.130 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 67.

2.2.131 Based on the evidence from the baseline assessment the watercourse has been defined as Very high value and has been screened in for WFD preliminary assessment.

Table 67: Summary of baseline condition of Bridgewater Canal within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Flow: Ponded reach Substrate: Expected to be silty Riparian vegetation: Grass on both banks, no overhanging vegetation and no channel shading Morphological pressures / modifications: Canal - reinforced banks Land use: Improved pasture, amenity grassland and urban/suburban	 Photograph taken from NGR SJ7160686672

Mersey/Manchester Ship Canal (Irwell/Manchester Ship Canal to Bollin) (GB112069061011)

Tributary of Manchester Ship Canal 2 (also known as Warburton Park Brook)

2.2.132 Tributary of Manchester Ship Canal 2 flows from Mossbrow (at NGR SJ7192589141) through Warburton Park to the Manchester Ship Canal south of Hollins Green (at NGR SJ6970290401). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. The watercourse is a small agricultural field ditch.

2.2.133 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 68.

2.2.134 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 68: Summary of baseline condition of Tributary of Manchester Ship Canal 2 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Downstream of Proposed Scheme Field ditch	 Photograph taken from NGR SJ7061590047

Field Drains A6144

2.2.135 Field Drains A6144 is a short watercourse (approximately 200m in length) located approximately 400m north of Mossbrow (between NGR SJ7085889735 and SJ7092589572). A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence indicates that this is a small Low value watercourse, which is named as a drain on OS mapping.

2.2.136 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Manchester Ship Canal

2.2.137 Manchester Ship Canal is a significant artificial water body between Liverpool and Manchester following the routes of the River Mersey and River Irwell through Cheshire and Lancashire. The section affected by the Proposed Scheme is close to Partington and is a length where the Manchester Ship Canal shares a channel with the River Mersey. A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.138 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 69.

2.2.139 Based on the evidence from the baseline assessment the watercourse has been defined as Very high value and has been screened in for WFD preliminary assessment.

Table 69: Summary of baseline condition of Manchester Ship Canal within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Flow: Impounded reach Substrate: Obscured Riparian vegetation: Broadleaf trees on both banks, some low overhanging vegetation and slight channel shading Morphological pressures / modifications: Canalised reach with large earth embankments and majority hard banks at toe. Impounded by downstream lock structures Land use: Scrub, industrial, urban/suburban, amenity grassland rough and improved pasture and woodland	 Photograph taken from NGR SJ7003390913

Sinderland Brook (GB112069060980)

Red Brook

2.2.140 Red Brook flows from the confluence of Sinderland Brook and Caldwell Brook at Sinderland Green south-east of Partington and flows in a westerly direction to the Manchester Ship Canal. This reach of Red Brook flows from the A6144 (at NGR SJ7153190500), adjacent to Coroners Wood, to its confluence with Manchester Ship Canal close to Hollins Green (at NGR SJ6996890836). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.141 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with some example photographs, are provided in Table 70.

2.2.142 Based on the evidence from the baseline assessment the watercourse has been defined as High value and has been screened in for WFD preliminary assessment.

Table 70: Summary of baseline condition of Red Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Downstream of Proposed Scheme Flow: Glide, run, pools, riffles Substrate: Silt, coarse and fine gravel Riparian vegetation: Broadleaf trees on both banks, some low overhanging vegetation and high channel shading Morphological pressures / modifications: Footbridge at downstream extent near confluence with Manchester Ship Canal/Mersey Land use: Broadleaf woodland, improved pasture, arable and scrub	 Photograph taken from NGR SJ7001990804
At location of Proposed Scheme Similar condition to downstream section	 Photograph taken from NGR SJ7010190810

Glaze (GB112069061420)

Tributary of Glaze Brook 1 (also known as Hollins Green Brook)

2.2.143 Tributary of Glaze Brook 1 flows from Glazebrook Moss to the west of Glazebrook (at NGR SJ6784292485) to the confluence with Glaze Brook between Hollins Green and Cadishead (at NGR SJ7012691318). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. Tributary of Glaze Brook 1 flows in a culvert at the location of the Proposed Scheme, although further upstream the watercourse is a small field ditch.

2.2.144 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 71.

2.2.145 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 71: Summary of baseline condition of Tributary of Glaze Brook 1 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme No watercourse at location – culverted reach	 Photograph taken from NGR SJ6976091380

Dam Head Lane Drains

2.2.146 Dam Head Lane Drains are located west of Glazebrook village between Moss Farm (at NGR SJ6906492659) and Dam Head Lane (at NGR SJ6906992387). The direction of flow is not clear. A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence indicates that this is a small Low value watercourse, which is not connected to other watercourses and named as a Drain on Ordnance Survey mapping.

2.2.147 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Tributary of Glaze Brook 2

2.2.148 Tributary of Glaze Brook 2 flows from Pestfurlong Moss on the eastern edge of Gorse Covert (at NGR SJ6700793060) to the confluence with Glaze Brook close to Great Woolden Hall (at

NGR SJ6904793487). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.149 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 72.

2.2.150 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 72: Summary of baseline condition of Tributary of Glaze Brook 2 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Small overgrown field ditch through agricultural land. Some reaches recently dredged/cleared	 Photograph taken from NGR SJ6789092700

M62 Drainage

2.2.151 M62 Drainage is a short watercourse that flows along the northern edge of the M62 for approximately 250m close to Holcroft Moss (between NGR SJ6780093408 and SJ6803393453). A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence indicates that this is a small Low value watercourse, which is not connected to other watercourses and named as a drain on OS mapping.

2.2.152 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Tributary of Holcroft Lane Brook 2 (also known as Silver Lane Brook)

2.2.153 Tributary of Holcroft Lane Brook 2 flows from the northern edge of junction 11 of the M62 (at NGR SJ6691893370) in a northerly direction along the edge of a disused landfill site to Holcroft Lane Brook (at NGR SJ6676694275). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. The watercourse is a small, Low value drainage channel adjacent to a disused landfill site.

2.2.154 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 73.

2.2.155 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 73: Summary of baseline condition of Tributary of Holcroft Lane Brook 2 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Drainage channel Narrow channel overgrown with terrestrial vegetation Heavily shaded	 Photograph taken from NGR SJ6690093400

Tributary of Holcroft Lane Brook 3

2.2.156 Tributary of Holcroft Lane Brook 3 flows from the northern edge of junction 11 of the M62 (at NGR SJ6684693395) in a northerly direction along the edge of a disused landfill site to a series of ponds (at NGR SJ6678094147). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.157 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided Table 74.

2.2.158 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 74: Summary of baseline condition of Tributary of Holcroft Lane Brook 3 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Field ditch. Narrow, managed steep-sided channel. Heavily shaded	 Photograph taken from NGR SJ6680094100

Tributary of Holcroft Lane Brook 4

2.2.159 Tributary of Holcroft Lane Brook 4 has three branches that flow from the northern edge of the M62, close to Risley Remand Centre (at NGR SJ6653893292) joining together east of Bates Farm. The watercourse then flows into Holcroft Lane Brook (at NGR SJ6658894233). A baseline desk study has been undertaken. Desk study evidence and reconnaissance surveys of nearby watercourses indicate that this is a small Low value watercourse, and it is named as a drain on OS mapping.

2.2.160 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Holcroft Lane Brook

2.2.161 Holcroft Lane Brook rises between Risley and Culcheth (at NGR SJ6607394270) and flows north of a disused landfill site to its confluence with the Glaze Brook (at NGR SJ6840394075). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.162 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 75.

2.2.163 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 75: Summary of baseline condition of Holcroft Lane Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Small, narrow channel Mostly straight with occasional sharp bends and small culverts Heavily shaded	 Photograph taken from NGR SJ6670094300

Tributary of Glaze Brook 4

2.2.164 Tributary of Glaze Brook 4 flows from the western edge of Culcheth (at NGR SJ6454295431). The watercourse flows through Culcheth to its confluence with Jibcroft Brook in land to the north of Culcheth (at NGR SJ6568896454). A baseline desk study of the watercourse has been undertaken. As no reconnaissance survey of this watercourse has been carried out, it has been assessed as Moderate value on a precautionary basis.

2.2.165 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Wigshaw Lane Drains

2.2.166 Wigshaw Lane Drains are located west of Culcheth. The watercourse consists of three separate watercourses near to Blakely Farm Cottage (between NGR SJ6414295028 and SJ6450494922). It is not clear which direction the drains flow in. A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence indicates that this is a small Low value watercourse, named as a drain on OS mapping.

2.2.167 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Jibcroft Brook

2.2.168 Jibcroft Brook flows from the western edge of Leigh Golf Club (at NGR SJ6395895740) to the northern edge of Twiss Green (at NGR SJ6477796122). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.169 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 76.

2.2.170 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 76: Summary of baseline condition of Jibcroft Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Downstream of Proposed Scheme Heavily managed and modified channel through golf course, with largely sinuous planform Informal embankments (expect created from dredged material deposited on banks) Length through golf course has poor riparian vegetation cover; mown grass and no diversity Upstream and downstream wooded reaches demonstrate greater diversity although channel appears straightened and modified Several culverts, bed profile drops (through culverts) and bridges throughout course, affecting longitudinal connectivity Turbid flow	 Photograph taken from NGR SJ6444695892

Tributary of Carr Brook 1

2.2.171 Tributary of Carr Brook 1 flows from land to the north-west of Culcheth (at NGR SJ6380795983) to its confluence at the Carr Brook (at NGR SJ6476897209). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.172 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 77.

2.2.173 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 77: Summary of baseline condition of Tributary of Carr Brook 1 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Small, overgrown field ditch	 Photograph taken from NGR SJ6406096500

Carr Brook

2.2.174 Carr Brook flows from the east of Golborne, north of B5207 Church Lane (at NGR SJ6265496570). It flows in an easterly direction, around the southern edge of Lowton St Mary's and Wash End, before discharging into Glaze Brook just north of Glazebury. A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.175 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 78.

2.2.176 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 78: Summary of baseline condition of Carr Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Flow: Slow, shallow flow Substrate: Silt Riparian vegetation: Scrub, broadleaf trees Morphological pressures / modifications: Straight channel, field ditch Land use: Pasture, industrial	 Photograph taken from NGR SJ6323097260

Tributary of Carr Brook 2

2.2.177 Tributary of Carr Brook 2 flows from land to the north of Diggle Green (at NGR SJ6408696895) to its confluence with Carr Brook close to the A580 East Lancashire Road (at NGR SJ6470097326). A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence indicates that this is a small Low value watercourse, which is named as a drain on OS mapping.

2.2.178 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Spittle Brook (GB112069061020)

Tributary of Cross Brook 1

2.2.179 Tributary of Cross Brook 1 rises between Wigshaw and Little Town (at NGR SJ6438494706) and flows south close to Croft Interchange M62/M6 (at NGR SJ6407592928). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.180 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 79.

2.2.181 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 79: Summary of baseline condition of Tributary of Cross Brook 1 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Straight drainage ditch Informal embankment along right bank; assumed to be dredged material left and vegetated over Very low flow and low energy Silty substrate and turbid Long culverted section (>200m) Limited riparian vegetation cover; heavily managed through farmland Heavily managed field ditch with low habitat potential	 Photograph taken from NGR SJ6454594781

Hey/Borsdane Brook (GB112069064520)

Small Brook

2.2.182 Small Brook flows from the northern edge of the A580 East Lancashire Road south of Lowton (at NGR SJ6201196948) through Lowton St Mary's and Lowton Common to Pennington Flash (at NGR SJ6345598683). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. Small Brook is a very small watercourse flowing through park and scrubland adjacent to a housing estate.

2.2.183 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 80.

2.2.184 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 80: Summary of baseline condition of Small Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Flow: Glide Substrate: Silt Riparian vegetation: Scrub, overhanging terrestrial vegetation Morphological pressures / modifications: Likely to be fed largely by urban runoff, straight channel Land use: Urban/suburban, with amenity grassland and woodland	 Photograph taken from NGR SJ6285097990

Slag Lane Drains

2.2.185 Slag Lane Drains are located north of Lowton (between NGR SJ6272098228 and SJ6284598183). It is not clear which direction the drains flow in. A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence indicates that this is a small Low value watercourse, which is not connected to other watercourses and named as a drain on OS mapping.

2.2.186 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Tributary of Hey Brook 1

2.2.187 Tributary of Hey Brook 1 flows from Garton Common (at NGR SJ6249598369) to the confluence with Hey Brook close to Hey Brook Farm (at NGR SJ6259599366). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.188 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 81.

2.2.189 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 81: Summary of baseline condition of Tributary of Hey Brook 1 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Downstream of Proposed Scheme Straight and overgrown field ditch	 Photograph taken from NGR SJ6240098800

Tributary of Hey Brook 2

2.2.190 Tributary of Hey Brook 2 flows from the west of Byrom Hall (at NGR SJ6234498752) to join Tributary of Hey Brook 3 north of Lowton (at NGR SJ6194498652). A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence and reconnaissance surveys of nearby watercourses indicate that this is a small Low value watercourse, which is named as a Drain on Ordnance Survey mapping.

2.2.191 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Tributary of Hey Brook 3

2.2.192 Tributary of Hey Brook 3 flows from Lowton (at NGR SJ6144298003) to join Tributary of Hey Brook 4 on the northern edge of woodland close to Byrom Hall (at NGR SJ6187299071). A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence and reconnaissance surveys of nearby watercourses indicate that this is a small Low value watercourse, which is named as a drain on OS mapping.

2.2.193 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Tributary of Hey Brook 4

2.2.194 Tributary of Hey Brook 4 flows from north of Lowton (at NGR SJ6131798914) to its confluence with Hey Brook close to Critchley House (at NGR SJ6231999445). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.195 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 82.

2.2.196 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 82: Summary of baseline condition of Tributary of Hey Brook 4 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Flow: Riffle, pool, run Substrate: Coarse gravel, fine gravel Riparian vegetation: Broadleaf trees on both banks, no low overhanging vegetation, high channel shading Morphological pressures / modifications: Relatively natural at top end and increasingly straight downstream Land use: Broadleaf woodland, scrub and improved pasture	 Photograph taken from NGR SJ6170099100

Windy Bank Brook

2.2.197 Windy Bank Brook flows from the north of Edge Green (at NGR SJ6008999597) in an easterly direction to its confluence with Hey Brook north-west of Lightshaw Hall (at NGR SJ6130099935). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.198 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 83.

2.2.199 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 83: Summary of baseline condition of Windy Bank Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Downstream of Proposed Scheme Flow: Riffle, pool, run Substrate: Coarse and fine gravel, cobbles Riparian vegetation: Broadleaf vegetation on right bank, herbaceous on left bank, some overhanging vegetation and high channel shading Morphological pressures / modifications: Culvert downstream Land use: Mixed woodland, scrub and improved pasture	 Photograph taken from NGR SJ6090099800

Tributary of Nan Holes Brook 1

2.2.200 Tributary of Nan Holes Brook 1 is a short watercourse that flows from Balmer's Farm (at NGR SJ6067099793) to its confluence with Nan Holes Brook south of Aye Bridge Farm (at NGR SD6066700088). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.201 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 84.

2.2.202 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 84: Summary of baseline condition of Tributary of Nan Holes Brook 1 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Field ditch with overgrown vegetation	 Photograph taken from NGR SJ6070099900

Wigan Road Drain

2.2.203 Wigan Road Drain flows from close to Balmer's Farm (at NGR SJ6065299773) to Tributary of Nan Holes Brook 1 between Balmer's Farm and Aye Bridge Farm (at NGR SJ6066399952). A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence indicates that this is a small Low value watercourse, which is named as a drain on OS mapping.

2.2.204 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Tributary of Nan Holes Brook 2

2.2.205 Tributary of Nan Holes Brook 2 is a short watercourse located approximately 1km south of Abram (between NGR SD6056300004 and SD6057600070). A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence indicates that this is a small Low value watercourse, which is named as a drain on OS mapping.

2.2.206 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Nan Holes Brook

2.2.207 Nan Holes Brook flows from the eastern edge of Ashton-in-Makerfield (at NGR SJ5926299999) to its confluence with Hey Brook between the A573 Aye Bridge Road and the Leeds and Liverpool Canal (at NGR SD6118700084). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.208 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with some example photographs, are provided in Table 85.

2.2.209 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 85: Summary of baseline condition of Nan Holes Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Flow: Glide, ponded Substrate: Silt, sand and artificial Riparian vegetation: Grasses and scrub/shrubs. Uniform and managed Morphological conditions and pressures / modifications: Straight drainage ditch Over-deep channel and informal embankment on both banks (likely excavated material). Silty bed substrate. Limited flow. Long culvert >10m, partially blocked Land use: Arable farmland	 Photograph taken at NGR SJ5965699876
At location of Proposed Scheme Flow: Riffles, pools, run Substrate: Coarse and fine gravel, cobbles Riparian vegetation: Herbaceous on right bank and broadleaf vegetation on left bank, some overhanging vegetation and high channel shading Morphological pressures / modifications: Existing culverts 200m downstream under A573 Wigan Road, and 200m upstream under WCML (not visible during survey) Land use: Scrub and improved pasture, woodland and urban/suburban	 Photograph taken at NGR SD6060000100

Tributary of Hey Brook 5

2.2.210 Tributary of Hey Brook 5 flows from the east of Viridor Wood (at NGR SD6028200466) to its confluence with Hey Brook close to Aye Bridge Road (at NGR SD6076700369). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.211 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 86.

2.2.212 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 86: Summary of baseline condition of Tributary of Hey Brook 5 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Downstream of Proposed Scheme Small, overgrown field ditch	 Photograph taken from NGR SD6067000420

Hey Brook

2.2.213 Hey Brook flows from the areas between Bickershaw and Abram, near Wigan. It flows in a south-westerly direction towards the Leeds and Liverpool Canal, under the canal and continues in a south-easterly direction until it flows into Pennington Flash[7]. A baseline desk study and reconnaissance survey of the watercourse have been undertaken. Hey Brook is a medium sized, low-moderate energy river, with steep banks confining the channel from the floodplain.

2.2.214 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with some example photographs, are provided in Table 87.

2.2.215 Based on the evidence from the baseline assessment the watercourse has been defined as High value and has been screened in for WFD preliminary assessment.

[7] Natural England (2014), *Pennington Flash LNR Citation*. Available online at: https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1481549&SiteName=pennington&countyCode=&responsiblePerson=&SeaArea=&IFCAArea.

Table 87: Summary of baseline condition of Hey Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Flow: Glide, run, pool Substrate: Not visible, but assumed to be coarse and fine gravel, sand, silt and clay Riparian vegetation: Scrub and shrub, some low overhanging vegetation and moderate channel shading Morphological pressures / modifications: Historical re-sectioning (straightened/ deepened). Existing road bridge at downstream end. Some erosion/collapse of overstep banks around meander bend Land use: Improved and rough pasture, with scrub, within wider urban area	 Photograph taken from NGR SD6068500530
Downstream of Proposed Scheme Flow: Glide, pool Substrate: Very turbid (bed substrate not visible) Riparian vegetation: Limited riparian vegetation upstream, more tree cover further downstream with in-channel woody material and associated flow diversity Morphological conditions and pressures / modifications: Sinuous morphology upstream but minimal morphological diversity. Typically, very steep banks and poor connectivity. Banks vegetated and stable Land use: Improved pasture	 Photograph taken from NGR SJ6212499473

Tributary of Coffin Lane Brook 2

2.2.216 Tributary of Coffin Lane Brook 2 flows from the north-east edge of Ashton-in-Makerfield (at NGR SD5938900487) to its confluence with Coffin Lane Brook south of Bamfurlong (at NGR SD6011601019). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.217 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 88.

2.2.218 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 88: Summary of baseline condition of Tributary of Coffin Lane Brook 2 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Flow: Glide, ponded Substrate: Predominantly silts and sands with some fine gravels Riparian vegetation: Dense tree cover with high channel shading Morphological conditions and pressures / modifications: Straight, modified drainage ditch, low energy and stagnant conditions. Very low gradient and high turbidity. Dominant silty substrate, with some fine gravels upstream of culvert intake. Culvert partially infilled beneath footpath Land use: Grassland on adjacent floodplain. Tree lined river corridor	 Photograph taken from NGR SD6014500772

Coffin Lane Brook

2.2.219 Coffin Lane Brook flows from the east of Bryn Gates (at NGR SD5884301248) in an existing culvert under the West Coast Main Line, to its confluence with Hey Brook close to the eastern edge of the Leeds and Liverpool Canal near Abram (at NGR SD6055700932). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.220 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with some example photographs, are provided in Table 89.

2.2.221 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 89: Summary of baseline condition of Coffin Lane Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of the Proposed Scheme Flow: Glide, pool, ponded Substrate: Predominantly silts, sands and clays, with some fine gravels identified through sinuous upstream reach Riparian vegetation: Broadleaf trees and shrubs/scrub, non-native species present Morphological conditions and pressures / modifications: Channel largely straight with some slightly sinuous sections Heavily modified with realigned and excavated sections. Several culverts including long culvert beneath the WCML. Very turbid upstream of WCML culvert Land use: Typically mixed woodland	 Photograph taken from NGR SD5911301125
Immediately upstream of the Proposed Scheme Long culvert beneath West Coast Mainline, indicating significant habitat fragmentation Very turbid upstream of WCML culvert. Little habitat or flow heterogeneity	 Photograph taken from NGR SD6017000995

Baseline description	Example photograph
At location of Proposed Scheme Flow: Run, glide Substrate: Silt Riparian vegetation: Scrub, some overhanging vegetation and moderate channel shading Morphological pressures / modifications: Existing culvert under WCML Land use: Scrub and rough pasture	 Photograph taken from NGR SD5993101030

Tributary of Coffin Lane Brook 1

2.2.222 Tributary of Coffin Lane Brook 1 is a drain flowing from south of Bamfurlong, immediately next to the WCML (at NGR SD6005901424), forming a confluence with Coffin Lane Brook at Abram (at NGR SD6038601024). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.223 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 90.

2.2.224 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 90: Summary of baseline condition of Tributary of Coffin Lane Brook 1 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Small ditch overgrown with trees and scrub, receives flow from culvert under WCML	 Photograph taken from NGR SD6006001420

Bamfurlong Drain

2.2.225 Bamfurlong Drain is located close to Bamfurlong Hall Farm (at NGR SD6017001665). A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence indicates that this is a small Low value watercourse, which is named as a drain on OS mapping.

2.2.226 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Birkin Brook - Mobberley Brook to River Bollin (including Rostherne Brook) (GB112069061370)

Blackburn's Brook

2.2.227 Blackburn's Brook flows from Rostherne Mere (at NGR SJ7481283929) in a north-easterly direction, forming a confluence with Birkin Brook at the M56 (at NGR SJ7542084696). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.228 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 91.

2.2.229 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 91: Summary of baseline condition of Blackburn's Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Flow: Glide, run Substrate: Sand, fine gravel and silt Riparian vegetation: Herbaceous on both banks, some overhanging vegetation and moderate channel shading Morphological pressures / modifications: Culvert under road at Rostherne Lane Land use: Rough and improved pasture, patches of woodland and wetland	 Photograph taken from NGR SJ7531784030

Birkin Brook

2.2.230 Birkin Brook flows northwards from Knutsford to join the River Bollin. This reach of Birkin Brook flows from the south-west of Ashley (at NGR SJ7643583044), under the M56 to its confluence at the River Bollin close to the A56 Dunham Road (at NGR SJ7467286002). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.231 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 92.

2.2.232 Based on the evidence from the baseline assessment the watercourse has been defined as High value and has been screened in for WFD preliminary assessment.

Table 92: Summary of baseline condition of Birkin Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Flow: Glide, run, pools, riffles Substrate: Coarse and fine gravel, sand, silt and clay Riparian vegetation: Broadleaf vegetation on both banks, some overhanging vegetation and high channel shading Morphological pressures / modifications: Bridge crossings under roads and the channel has been straightened adjacent to the M56 Land use: Improved and rough pasture, broadleaf woodland and scrub	 Photograph taken from NGR SJ7635083871

Tributary of Birkin Brook 4

2.2.233 Tributary of Birkin Brook 4 flows in a south-westerly direction from close to Stock Farm (at NGR SJ7676084040) to its confluence with Birkin Brook (at NGR SJ7654683890). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.234 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 93.

2.2.235 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 93: Summary of baseline condition of Tributary of Birkin Brook 4 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Field ditch	 Photograph taken from NGR SJ7674484045

Tributary of Birkin Brook 3

2.2.236 Tributary of Birkin Brook 3 flows in a south-westerly direction close to the village of Ashley (at NGR SJ7800084058) to its confluence with Tributary of Birkin Brook 1 (at NGR SJ7752383786). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.237 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 94.

2.2.238 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 94: Summary of baseline condition of Tributary of Birkin Brook 3 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Very small channel, field drain/ditch	 Photograph taken from NGR SJ7735083550

Tributary of Birkin Brook 2

2.2.239 Tributary of Birkin Brook 2 flows from close to the village of Ashley (at NGR SJ7826383712), to its confluence with Tributary of Birkin Brook 3 (at NGR SJ7747283685). A baseline desk study of the watercourse has been undertaken. A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence and reconnaissance surveys of nearby watercourses indicate that this is a small Low value watercourse.

2.2.240 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Tributary of Birkin Brook 1 (also known as Middle House Brook)

2.2.241 Tributary of Birkin Brook 1 (also known as Middle House Brook) flows in a north-westerly direction from the southern edge of Manchester Airport runway (at NGR SJ7985282427) to its confluence with Birkin Brook (at NGR SJ7686483736). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.242 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with some example photographs, are provided in Table 95.

2.2.243 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 95: Summary of baseline condition of Tributary of Birkin Brook 1 (Middle House Brook) within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Flow: Glide, run, pools, riffles, ponds Substrate: Fine gravel, sand, silt and clay Riparian vegetation: Tree-lined, some overhanging vegetation and moderate to high channel shading Morphological pressures / modifications: Various existing bridges, short culverts under roads and railway, and sluices at Arden House	 Photograph taken from NGR SJ7713083678
Downstream of Proposed Scheme Flow: Glide, run, pools, riffles, ponded areas – low flow during survey Substrate: Coarse and fine gravel, sand, silt and clay Riparian vegetation: Grass on both banks, clumps of trees and moderate channel shading Morphological pressures / modifications: More natural than upstream	 Photograph taken from NGR SJ7691683728

Sugar Brook (GB112069061350)

Tributary of Sugar Brook 1

2.2.244 Tributary of Sugar Brook 1 is located to the west of Manchester Airport and flows in a westerly direction from Blackshaw Heys Farm (at NGR SJ7866782671) to the confluence with Sugar Brook (at NGR SJ7760882726). A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken. As no reconnaissance survey of this watercourse has been carried out, it has been assessed as Moderate value on a precautionary basis.

2.2.245 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Bollin (River Dean to Ashley Mill) (GB112069061381)

River Bollin (River Dean to Ashley Mill)

2.2.246 The River Bollin rises south-east of Macclesfield, flowing through Macclesfield, Wilmslow, underneath Manchester Airport, south of Hale and joins the Manchester Ship Canal north of Lymm. This reach of the River Bollin flows from Manchester Airport (at NGR SJ8024283338) to close to junction 7 of the M56, where it is joined by Birkin Brook (at NGR SJ7480485706). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.247 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 96.

2.2.248 Based on the evidence from the baseline assessment the watercourse has been defined as Very high value and has been screened in for WFD preliminary assessment.

Table 96: Summary of baseline condition of River Bollin within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Flow: Run, glide, pools, riffles Substrate: Sand, bedrock, cobbles, coarse and fine gravel, silt and clay Riparian vegetation: Broadleaf trees on both banks, some overhanging vegetation and high channel shading Morphological pressures / modifications: Footbridge present, no other clear pressures/modifications Land use: Rough pasture and broadleaf woodland, improved pasture and scrub	 Photograph taken from NGR SJ7941684238

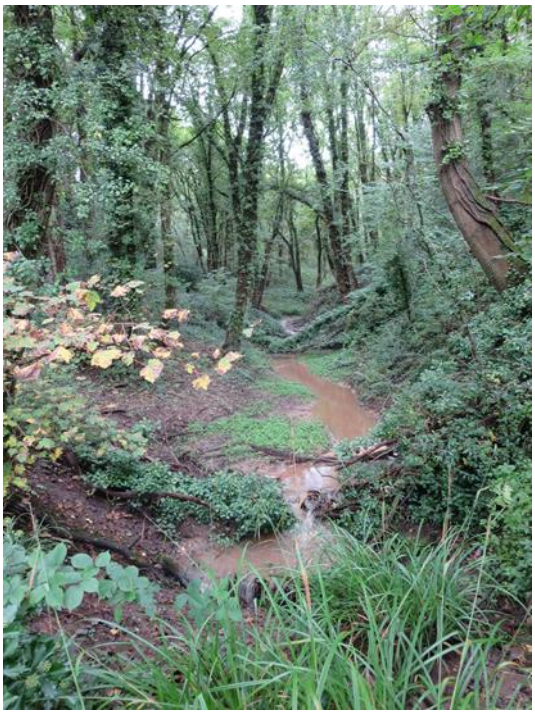
Tributary of River Bollin 2

2.2.249 Tributary of River Bollin 2 flows in a south-westerly direction from the north of Sunbank Wood (at NGR SJ8022984672) to its confluence with the River Bollin (at NGR SJ7968984089). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. Tributary of River Bollin 2 is a small relatively high gradient stream in a deep wooded valley.

2.2.250 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 97.

2.2.251 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 97: Summary of baseline condition of Tributary of River Bollin 2 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Flow: Riffle, run, glide, pool, cascade Substrate: Coarse and fine gravel, sand, silt, clay with some exposed bedrock Riparian vegetation: Broadleaf trees on both banks, some low overhanging vegetation and high channel shading Morphological pressures / modifications: Culvert and footbridge at downstream end Land use: Broadleaf woodland	 Photograph taken from NGR SJ7974084140

Tributary of River Bollin 3

2.2.252 Tributary of River Bollin 3 flows in a south-westerly direction from the southern edge of Warburton Green (at NGR SJ7965484731) to its confluence with the River Bollin (at NGR SJ7929084367). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. Tributary of River Bollin 3 is a small relatively high gradient stream in a deep wooded valley.

2.2.253 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 98.

2.2.254 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 98: Summary of baseline condition of Tributary of River Bollin 3 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Downstream of Proposed Scheme Flow: Riffle, run, glide, pool, cascade Substrate: Coarse and fine gravel, sand, silt, clay with some exposed bedrock Riparian vegetation: Broadleaf trees on both banks, some low overhanging vegetation and high channel shading Morphological pressures / modifications: Footbridge at downstream end Land use: Broadleaf woodland	 Photograph taken from NGR SJ7932084360

Tributary of River Bollin 4

2.2.255 Tributary of River Bollin 4 flows in a northerly direction, crossing the M56 motorway. The watercourse originates to the north of Lower Thornsgreen Farm (at NGR SJ7903884439) and discharges into the River Bollin approximately 220m north of its source (at NGR SJ7919684553). A baseline desk study of the watercourse has been undertaken. A WFD groundwater feature survey was completed in November 2019. The survey confirmed that the channel is a minor watercourse with limited flow, predominantly fed by land drainage.

2.2.256 A summary of the baseline conditions of the watercourse, together with example photographs taken during the November 2019 survey, are provided in Table 99.

2.2.257 Based on the evidence from the baseline assessment and groundwater feature survey, the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 99: Summary of baseline condition of Tributary of River Bollin 4 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Flow: Shallow flow. No distinct flow type due to minor watercourse Substrate: Predominantly fines/earth Riparian vegetation: Woodland Morphological pressures / modifications: Two land drainage outfalls. Turbid flow originating from outfalls. Modified, culverted section of watercourse through M56 motorway Land use: Scrub and woodland upstream of M56 motorway crossing	 Photograph taken from NGR SJ7955584544

Tributary of River Bollin 6

2.2.258 Tributary of River Bollin 6 flows from Castle Mill Lane (at NGR SJ7862184645), joining the River Bollin approximately 120m north of the M56 motorway (at NGR SJ7862184645). Approximately 45m to 50m of the watercourse is modified beneath the M56 motorway. A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken. Desk study evidence indicates that this is a small watercourse. However, as no reconnaissance survey or groundwater features survey of this watercourse has been carried out, it has been assessed as Moderate value on a precautionary basis.

2.2.259 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Tributary of River Bollin 7

2.2.260 Tributary of River Bollin 7 originates approximately 110m north of Castle Mill Lane (at NGR SJ7845584333), flowing in a northerly direction joining the River Bollin (at NGR SJ7858584638). The watercourse passes beneath the M56 motorway approximately 90m south of the River Bollin confluence. A baseline desk study of the watercourse has been undertaken, indicating the watercourse is a small field drainage ditch. Two groundwater spring feature surveys were undertaken in May and November 2019, confirming the characteristics of the channel as a drainage ditch with several piped discharges predicted to be from land drainage.

2.2.261 A summary of the baseline conditions of the watercourse, together with example photographs taken during the May 2019 survey, are provided in Table 100.

2.2.262 Based on the evidence from the baseline assessment and groundwater feature survey, the watercourse has been defined as Low value and has been screened out of the WFD preliminary assessment.

Table 100: Summary of baseline condition of Tributary of River Bollin 7 within the vicinity of the Proposed Scheme

Baseline description	Example photographs
Downstream of Proposed Scheme Flow: Still water with no flow evident. No distinct flow type due to artificial nature of watercourse Substrate: Predominantly fines/earth Riparian vegetation: Scrub and woodland Morphological pressures / modifications: Artificial drainage ditch. Piped discharges into ditch predicted to be land drainage outfalls Land use: Wetland area with scrub and woodland, upstream of M56 motorway crossing	 Photographs taken from NGR SJ7862684637

Drain to M56 1

2.2.263 Drain to M56 1 flows on the southern edge of the M56, from north-east of Halebank (at NGR SJ7981784533) to the M56 (at NGR SJ7980684623). A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence indicates that this is a small Low value watercourse, which is not connected to other watercourses and named as a drain on OS mapping.

2.2.264 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Drain to M56 2

2.2.265 Drain to M56 2 flows on the northern edge of the M56, from south of Warburton Green (at NGR SJ7992884733) to the M56 (at NGR SJ7976084668). A baseline desk study of the watercourse has been undertaken. Although no reconnaissance survey of the watercourse has been undertaken, desk study evidence indicates that this is a small Low value watercourse, which is not connected to other watercourses and named as a drain on OS mapping.

2.2.266 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Timperley Brook (GB112069061260)

Tributary of Timperley Brook 1

2.2.267 Tributary of Timperley Brook 1 flows from the north-eastern edge of Hale Barns (at NGR SJ8031185440) to its confluence with the Timperley Brook (at NGR SJ8001185967). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.268 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 101.

2.2.269 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 101: Summary of baseline condition of Tributary of Timperley Brook 1 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Small, overgrown field ditch	 Photograph taken from NGR SJ8026085510

Timperley Brook

2.2.270 Timperley Brook flows from the Manchester Airport Terminal 2, around the eastern outskirts of Hale and then through Altrincham to its confluence with Sinderland Brook. This reach of Timperley Brook flows from Manchester Airport (at NGR SJ8087685655), under the M56 to Well Green on the north-eastern edge of Hale (at NGR SJ7962887149). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.271 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with some example photographs, are provided in Table 102.

2.2.272 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 102: Summary of baseline condition of Timperley Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Flow: Ponded reach between culverts Substrate: Silt and clay Riparian vegetation: Broadleaf vegetation on both banks, some low overhanging vegetation and high channel shading Morphological pressures / modifications: Culverted under M56, carrying runoff from Manchester Airport in upper catchment Land use: Improved pasture, urban/suburban and woodland	 Photograph taken from NGR SJ8060086003
At location of Proposed Scheme Flow: glide Substrate: Silt and clay Riparian vegetation: Broadleaf vegetation on both banks, some low overhanging vegetation and high channel shading Land use: Improved pasture, urban/suburban and woodland	 Photograph taken from NGR SJ8060086003

Baseline description	Example photograph
Downstream of Proposed Scheme Flow: More free flow – shallow riffles and runs Substrate: Fine and coarse gravel Riparian vegetation: Broadleaf vegetation on both banks, some low overhanging vegetation and high channel shading Land use: Improved pasture, urban/suburban and woodland	 Photograph taken from NGR SJ8021786160

Tributary of Timperley Brook 3

2.2.273 Tributary of Timperley Brook 3 flows from north of Davenport Green (at NGR SJ8041786576) in a north westerly direction to its confluence with Timperley Brook (at NGR SJ7974586915). A baseline desk study of the watercourse has been undertaken. As no reconnaissance survey of this watercourse has been carried out, it has been assessed as Moderate value on a precautionary basis.

2.2.274 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Sinderland Brook (Fairywell Bk and Baguley Bk) (GB112069061270)

Fairywell Brook

2.2.275 Fairywell Brook flows junction 5 of the M56 north of Manchester Airport (at NGR SJ8136486024), in a north-westerly direction past Newall Green towards Roundthorn where it is joined by Mill Brook, and then Baguley Brook close to the Cheshire Ring Canal (at NGR SJ7984588916). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.276 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 103.

2.2.277 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Table 103: Summary of baseline condition of Fairywell Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Very small headwater stream, little flow and overgrown by terrestrial vegetation	 Photograph taken from NGR SJ8072886961

Mill Brook

2.2.278 Mill Brook flows in a north-westerly direction from Newall Green (at NGR SJ8123687346) to its confluence with Fairywell Brook (at NGR SJ7984488918). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.279 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 104.

2.2.280 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 104: Summary of baseline condition of Mill Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Flow: Run Substrate: Fine and coarse gravel, silt Riparian vegetation: Broadleaf vegetation (willow, alder), grass and scrub, some low overhanging vegetation Morphological pressures / modifications: Urbanised catchment, culverted approximately 150m downstream of the Proposed Scheme Land use: Urban/suburban, amenity grassland	 Photograph taken from NGR SJ8129087600

Baguley Brook

2.2.281 Baguley Brook flows northwards from Woodhouse Park (at NGR SJ8192386154), to junction 3 of the M56, then through urbanised and park areas of south Manchester to its confluence with Sinderland Brook (at NGR SJ7817290322). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.282 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with some example photographs, are provided in Table 105.

2.2.283 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 105: Summary of baseline condition of Baguley Brook within the vicinity of the Proposed Scheme

Baseline description	Example photographs
Downstream of Proposed Scheme Flow: Run, glide Substrate: Gravel, fine gravel, silt Riparian vegetation: Grass, scrub, some woodland Morphological pressures / modifications: Mostly urban catchment. Straightened and deepened in places Land use: Urban area, parkland	  Photograph taken from SJ8151789561

Tributary of Baguley Brook

2.2.284 Tributary of Baguley Brook flows in a westerly direction from Wythenshaw, underneath the M56 in a culvert (at NGR SJ8299088526), forming a confluence with Baguley Brook close to junction 3a of the M56 (at NGR SJ8205489201). A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken because the watercourse is culverted.

2.2.285 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Mersey (upstream of Manchester Ship Canal) (GB112069061030)

River Mersey

2.2.286 The River Mersey flows from Stockport (where the River Gory and River Tame meet), to the south of Manchester joining the Manchester Ship Canal at Irlam. This reach of the River Mersey flows from close to junction 3/4 of the M60, east of Northenden (at NGR SJ8407589374), past Didsbury, Withington and Northenden Golf Clubs under the M60 and A5103 Princess Parkway to Chorlton Water Park, close to junction 5 of the M60 (at NGR SJ8243591340). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.287 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 106.

2.2.288 Based on the evidence from the baseline assessment the watercourse has been defined as Very high value and has been screened in for WFD preliminary assessment.

Table 106: Summary of baseline condition of River Mersey within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Downstream of Proposed Scheme Flow: Glide, run, rapid Substrate: Obscured by flow. Substrate likely to be mixed cobbles, coarse gravel, fine gravel, sand, silt and clay Riparian vegetation: Grasses on both banks, trees behind bank top Morphological pressures / modifications: Heavily engineered in a trapezoidal channel with large earth embankments and rock reinforced toe. Floodplain controlled as flood storage areas with side-spill weirs/sluices. Series of rock ramps form grade control weirs which create small rapids Land use: Amenity grassland, urban/suburban, woodland	 Photograph taken from NGR SJ8337991733

Tributary of River Mersey 2

2.2.289 Tributary of River Mersey 2 flows from Simon's Bridge, south-west of Didsbury (at NGR SJ84039390787), under Palatine Road to the confluence with the River Mersey (at NGR SJ8340390974). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.290 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 107.

2.2.291 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 107: Summary of baseline condition of Tributary of River Mersey 2 within the vicinity of the Proposed Scheme

Baseline description	Example photograph
At location of Proposed Scheme Small watercourse deepened into a trapezoidal section discharging through embankment outfall structure into River Mersey	 Photograph taken from NGR SJ8344590959

Chorlton Brook (Princess Parkway to Mersey) (GB112069061040)

2.2.292 The Chorlton Brook water body is crossed by the Proposed Scheme. However, there are no watercourses that have potential to be affected within this water body. Therefore, no baseline desk study or reconnaissance survey have been completed, and the water body has been screened out for WFD preliminary assessment.

Fallowfield Brook (GB112069061410)

Cringle Brook

2.2.293 Cringle Brook flows from Cringle Fields Park in Levenshulme, Manchester (at NGR SJ8761693312), flowing in a north-westerly direction before forming a confluence with Platt Brook, close to Princess Road (at NGR SJ8424293853). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. Cringle Brook is an urban watercourse with only a short open section between culverts.

2.2.294 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with some example photographs, are provided in Table 108.

2.2.295 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 108: Summary of baseline condition of Cringle Brook within the vicinity of the Proposed Scheme

Baseline description	Example photographs
Upstream of Proposed Scheme Flow: Run, glide, riffle Substrate: Silt, coarse gravel, pebble Riparian vegetation: Grasses, scrub Morphological pressures / modifications: Bed level retained by culverts up and downstream. Very short open section Silt trap between culverts Land use: Urban	  Photographs taken from NGR SJ8597893382

Platt Brook (Source to Fallowfield Bk) (GB112069061060)

Fallowfield Brook

2.2.296 Fallowfield Brook flows from North Reddish (at NGR SJ8856493819), through Levenshulme and Fallowfield (mostly in culvert) to its confluence with Platt Brook (at NGR SJ8425293853). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.297 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 109.

2.2.298 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 109: Summary of baseline condition of Fallowfield Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Flow: Run, glide Substrate: Silt, coarse gravel Riparian vegetation: Grasses, scrub, broadleaf trees Morphological pressures / modifications: Straightened channel, bed level retained by culverts up and downstream. Very short open section Land use: Urban	 Photograph taken from NGR SJ8526393894

Tributary of Platt Brook 1

2.2.299 Tributary of Platt Brook 1 flows from Debdale (at NGR SJ8934595238) and flows in culverts through Levenshulme and Rusholme, to the confluence with the Platt Brook close to Birchfields Park (at NGR SJ8576994726). A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken because the watercourse is culverted.

2.2.300 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Gore Brook

2.2.301 Gore Brook flows from Gorton (at NGR SJ8858695875) to its confluence with Platt Brook close to Birchfields Park (at NGR SJ8576994726). A baseline desk study and reconnaissance survey of the watercourse have been undertaken.

2.2.302 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 110.

2.2.303 Based on the evidence from the baseline assessment the watercourse has been defined as Moderate value and has been screened in for WFD preliminary assessment.

Table 110: Summary of baseline condition of Gore Brook within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Flow: Run, glide Substrate: Artificial Riparian vegetation: Scrub, broadleaf trees, channel shading from overhanging trees Morphological pressures / modifications: Brick lined channel, culverted up and downstream but open section through parkland Land use: Urban, amenity grassland	 Photograph taken from NGR SJ8599294969

Irwell/Manchester Ship Canal (Irk to confluence with Upper Mersey) (GB112069061452)

Corn Brook

2.2.304 Corn Brook flows from Gorton/Openshaw (at NGR SJ8868197976) to the Bridgewater Canal close to Ordsall (at NGR SJ8221596954). A baseline desk study of the watercourse has been undertaken. No reconnaissance survey of the watercourse has been undertaken. The majority of the watercourse is culverted.

2.2.305 Based on the evidence from the baseline assessment the watercourse has been defined as Low value and has been screened out for WFD preliminary assessment.

Medlock (Lumb Brook to Irwell) (GB112069061152)

River Medlock

2.2.306 The River Medlock rises in Strinesdale reservoirs to the north-east of Oldham, flowing in a south-westerly direction towards central Manchester where it joins the Bridgewater Canal west of Deansgate Station. This reach of the River Medlock flows from close to the Manchester City football ground (at NGR SJ8642598795) to the confluence with the Bridgewater Canal (at NGR SJ8327197513). A baseline desk study and reconnaissance survey of the watercourse have been undertaken. The River Medlock is a highly modified urban river.

2.2.307 A summary of the baseline habitat potential and hydromorphological condition of the watercourse at the location of the Proposed Scheme, together with an example photograph, are provided in Table 111.

2.2.308 Based on the evidence from the baseline assessment the watercourse has been defined as Very high value and has been screened in for WFD preliminary assessment.

Table 111: Summary of baseline condition of River Medlock within the vicinity of the Proposed Scheme

Baseline description	Example photograph
Upstream of Proposed Scheme Flow: Run, glide, pools, riffles Substrate: Artificial with cobbles, coarse gravel and silt Riparian vegetation: Broadleaf vegetation on both banks where not industrial buildings, occasional overhanging vegetation. Channel shading from trees and walls Morphological pressures / modifications: Highly modified channel with extensive bank reinforcement (possibly also to the bed) Land use: Urban/suburban, with industrial, amenity grassland and woodland	 Photograph taken from NGR SJ8550297830

2.3 Lakes

2.3.1 Lakes are WFD water bodies in their own right and have been screened in for WFD preliminary assessment.

2.3.2 A summary of the baseline condition of each lake potentially affected by the Proposed Scheme is provided in the sections below.

Rostherne Mere (GB31232650)

2.3.3 Rostherne Mere is located to the south of the M56, junction 7/8 south of Hale (at NGR SJ7445084320). A baseline desk study of the watercourse has been undertaken. A reconnaissance survey of the water body has been undertaken for the groundwater assessment, and information from this survey has been used to inform the baseline condition.

2.3.4 A summary of the baseline condition of the lake at the location of the Proposed Scheme, together with an example photograph, are provided in Table 112.

2.3.5 Based on the evidence from the baseline assessment, the water body has been defined as Very high value and has been screened in for WFD preliminary assessment.

Table 112: Summary of baseline condition of Rostherne Mere

Description of feature	Example photograph
Rostherne Mere has a surface area of approximately 48ha and a mean depth of 13.6m The Mere is fringed in places by a band of reedbed swamp There are also areas of willow carr[8] Rostherne Mere is supported by watercourses feeding in from the catchment. Rostherne Brook provides approximately 80% of the inflow into Rostherne Mere These streams are determined to be fed by spring, hence Rostherne Mere is at least partly a groundwater dependent habitat	 Photograph taken from NGR SJ7430483802

[8] Natural England (1981), *Rostherne Mere SSSI Citation.* Available online at: https://designatedsites.naturalengland.org.uk/PDFsForWeb/Citation/1003353.pdf.

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