Tionscadal Soláthair Uisce
Water Supply Project

Environmental Impact Assessment Report (EIAR)

Volume 6 of 6: Appendices

(Appendix 8.14) Watercourse Crossing Data

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Environmental Impact Assessment Report (EIAR) Volume 6 of 6: Environmental Assessment (Appendix A8.14) Watercourse Crossing Data

Table 1: Watercourse Crossing Data - Ecological Ranking Matrix and Notes

Environmental Criteria		Fossitt Category				Q - value					Spawning Habitat			Protected Species		EPA Mapped Watercourse	Ephemeral
		FW1	FW2	FW3	FW4	Q5, Q4-5	Q4	Q3-4	Q3, Q2-3	Q2, Q1-2, Q1	Poor	Moderate	Good	Presence	Absence		
Rank	High																
	Medium																
	Low																

NOTE:
WCX = waterbody with EPA segment codes (excludes minor drains)
WBX = smaller waterbody and streams
WBP = ditches which have been noted as having some water during field surveys
WCW = waterbody washouts
PSN = Poleset North

Table 2: Watercourse Crossing Data - Salmonid Watercourse Notes

Salmonid Watercourse Notes - Tier 1, IFI Fishery Systems Categorization	
Not on IFI GIS database, but IFI have mapped a "NOT" located d/s.	Watercourse crossing assumed not to have salmonid potential.
Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	Watercourse crossing assumed not to have salmonid potential as barrier d/s recorded nearby.
On IFI GIS database as being "Complete" barrier.	Watercourse crossing (river or drainage ditch) assumed not to have salmonid potential as a river has been recorded as containing a barrier d/s.
Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	Watercourse crossing (river or drainage ditch) assumed not to have salmonid potential.
Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	If the watercourse crossing is a river, it is assumed to have salmonid potential, as there is a SAL river immediately nearby or connected. If the watercourse crossing is a drainage ditch, it is assumed not to have salmonid potential even if there is a SAL river immediately nearby or connected.
Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	Watercourse crossing (river or drainage ditch) assumed not to have salmonid potential as it is located near a “non self sustaining”section of a Fishery System.
Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	Watercourse crossing (river or drainage ditch) assumed not to have salmonid potential as it is located immediately near a “non self sustaining” section of a Fishery System.
On IFI GIS database as being a "NSS" watercourse.	Watercourse crossing (river or drainage ditch) assumed not to have salmonid potential as it has been categorized as a “non self sustaining” section of a Fishery System.
Not on IFI GIS database, no "SAL" river located nearby.	Watercourse crossing (river or drainage ditch) assumed not to have salmonid potential as no fishery catergorization have been given to rivers nearby.
On IFI GIS database as Sal/ST River "SAL"	Watercourse crossing (river only) is a Salmonid river and has salmonid potential.
Salmonid Watercourse Notes - Tier 2, IFI WFD Rivers Fish Stock Survey Data (Watercourse crossing checked against IFI fish stock survey data if contained salmonids D/S, U/S or adjacent/nearby)	
Tier 1: Not on IFI GIS database, but IFI have mapped a "NOT" located d/s.	Yes, if IFI GIS database channel d/s contains Sal or BT or adjacent trib contains Sal or BT. No, if no IFI fish stock survey nearby.
Tier 1: Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	Yes, if channel d/s, u/s or adjacent tributary contains Sal or BT or adjacent trib contains Sal or BT. No, if no IFI fish stock survey nearby or it’s a drainage ditch.
Tier 1:On IFI GIS database as being "Complete" barrier.	Yes, if channel d/s, u/s or adjacent tributary contains Sal or BT or adjacent trib contains Sal or BT. No, if no IFI fish stock survey nearby or it’s a drainage ditch.
Tier 1:Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	Yes, if channel d/s, u/s or adjacent tributary contains Sal or BT or adjacent trib contains Sal or BT. Yes, if no IFI fish stock survey nearby as per Tier 1 rational. No, if it is a drainage ditch.
Tier 1: Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	Yes, if channel d/s, u/s or adjacent tributary contains Sal or BT or adjacent trib contains Sal or BT. No, if no IFI fish stock survey nearby or it’s a drainage ditch.

Tier 1: Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	Yes, if channel d/s, u/s or adjacent tributary contains Sal or BT or adjacent trib contains Sal or BT. No, if no IFI fish stock survey nearby, IFI GIS database channel d/s DOES NOT contain Sal or BT, or it's a drainage ditch.
Tier 1: Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	Yes, if channel d/s, u/s or adjacent tributary contains Sal or BT or adjacent trib contains Sal or BT. No, if no IFI fish stock survey nearby or it's a drainage ditch.
Tier 1: On IFI GIS database as being a "NSS" watercourse.	Yes, if channel d/s, u/s or adjacent tributary contains Sal or BT or adjacent trib contains Sal or BT. No, if no IFI fish stock survey nearby or it's a drainage ditch.
Tier 1: Not on IFI GIS database, no "SAL" river located nearby.	Yes, if channel d/s, u/s or adjacent tributary contains Sal or BT or adjacent trib contains Sal or BT. No, if no IFI fish stock survey nearby or it's a drainage ditch.
Tier 1: On IFI GIS database as Sal/ST River "SAL"	Yes, if channel d/s, u/s or adjacent tributary contains Sal or BT or adjacent trib contains Sal or BT. Yes, if no IFI fish stock survey nearby as per Tier 1 rational. No, if IFI GIS database channel d/s and u/s does not contain Sal or BT.

NOTES:
n.a. = On 1st order streams and lakes drained by 1st order streams.
SAL = Where the river reach or lake is part of an accessible "Salmon and Seatrout" system.
ST = Where the river reach or lake is part of an accessible "Seatrout only" system.
(nss) = Where the river channel or lake is above an impoundment which creates a "non self sustaining"section of a Fishery System.
Complete = Where the river channel or lake is above an impassable barrier.
no SAL = Where the river channel or lake is not utilised by salmon.
not = A river channel or lake not considered a significant producer of anadromous salmonids.
d/s = downstream
u/s = upstream
BT = brown trout

Environmental Impact Assessment Report (EIAR) Volume 6 of 6: Environmental Assessment (Appendix A8.14) Watercourse Crossing Data

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
PSNWBP001	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,640	—	—	—	May and June 2019	—	—	—	—
PSNWBP002	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,644	—	—	—	May and June 2019	—	—	—	—
PSNWBP003	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,744	—	—	—	May and June 2019	—	—	—	—
PSNWBP004	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,195	—	—	—	May and June 2019	—	—	—	—
PSNWBP005	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,474	—	—	—	May and June 2019	—	—	—	—
PSNWBP006	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,435	—	—	—	May and June 2019	—	—	—	—
PSNWBP007	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,313	—	—	—	May and June 2019	—	—	—	—
PSNWBP008	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	180	—	—	—	May and June 2019	—	28/07/2021	—	—
PSNWBP009	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	163	—	—	—	May and June 2019	—	—	—	—
PSNWBP010	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	192	—	—	—	May and June 2019	—	—	—	—
PSNWBP011	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	477	—	—	—	May and June 2019	—	28th July 2021	—	—
PSNWBP012	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	479	—	—	—	May and June 2019	—	28th July 2021	—	—
PSNWBP013	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	725	—	—	—	May and June 2019	—	27th July 2021	—	—
PSNWBP014	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	609	—	—	—	May and June 2019	—	27th July 2021	—	—
PSNWBP015	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	283	—	—	—	—	—	27th July 2021	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
PSNWBP001	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AB SC	1.5	0.75	1	No flow	No flow	—	—	—	—	—	—	—	—
PSNWBP002	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AB SC	1.5	0.75	1	No flow	No flow	—	—	—	—	—	—	—	—
PSNWBP003	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AB SC	1.5	0.75	1	No flow	No flow	—	—	—	—	—	—	—	—
PSNWBP004	17/06/2024	06/05/2025	Multidisciplinary Walkover Survey	JM SN CB	3	—	Dry	Dry	No flow	—	—	—	—	—	—	Medium (<50%)	—
PSNWBP005	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AB SC	1.5	0	0	—	—	—	—	—	—	—	—	—	—
PSNWBP006	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AB SC	2	1.5	2	No flow	No flow	—	—	—	—	—	Organics	—	—
PSNWBP007	19/06/2024	—	Multidisciplinary Walkover Survey	JF UB	4	1	3	Stagnant	100% Glide	—	Cobble 10%	—	Boulder 30%	Silt and Mud 60%	—	Full (>75%)	—
PSNWBP008	18/06/2024	—	Multidisciplinary Walkover Survey	RA CB	3	1	15	Stagnant	No flow	—	—	—	—	—	Silt and Mud 100%	Full (>75%)	—
PSNWBP009	18/06/2024	—	Multidisciplinary Walkover Survey	RA CB	3	1	Unknown	Stagnant	No flow	—	—	—	—	—	Silt and Mud 100%	Full (>75%)	None
PSNWBP010	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AB SC	1	0.5	—	—	—	—	—	—	—	—	—	—	—
PSNWBP011	18/06/2024	—	Multidisciplinary Walkover Survey	RA CB	1.5	1	Unknown due to heavy vegetation cover	Stagnant	—	—	—	—	—	—	Silt and Mud 100%	Medium (<50%)	90
PSNWBP012	18/06/2024	—	Multidisciplinary Walkover Survey	RA CB	1.5	0.5	NA	Very Slow	No flow	—	—	—	—	—	Silt and Mud 100%	Medium (<50%)	—
PSNWBP013	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	10	Dry	Dry	Stagnant	No flow	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	0
PSNWBP014	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	3	Dry	Dry	Dry	No flow	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	20
PSNWBP015	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	0.1	0.1	Unknown, vegetation too dense	Stagnant	No flow	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	95

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
PSNWBP001	—	—	Bramble, lesser celendine	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP002	—	—	Bramble, lesser celendine	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP003	—	—	Bramble, lesser celendine	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP004	Soft rush, meadow sweet	—	Harts tongue, bramble, bracken, ivy	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP005	—	—	—	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP006	watercress, Juncus effuses, Phragmites australis, duckweed minor	—	—	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP007	watermint, watercress, water forget me not, Ranunculus flammula, common starwort	—	Willow gorse holly, hazel	Not assessed	Not assessed	Not assessed	Agriculture	—	No potential	No potential
PSNWBP008	watermint, meadow sweet, Juncus spp	—	gorse, bramble, sycamore, ash, willow, bracken, harts tongue, ivy, nettle, blackthorn	Not assessed	Not assessed	Not assessed	Agriculture	—	No potential	No potential
PSNWBP009	—	—	gorse, bramble, sycamore, ash, willow, bracken, harts tongue, ivy, nettle, blackthorn	Not assessed	Not assessed	Not assessed	—	—	No	No
PSNWBP010	Juncus effuses, Fillipendula ulmaria	—	—	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP011	duckweed and watercress	—	soft rush, horsetail, willow, purple loosestrife, bramble, nettle, hogweed	Not assessed	Not assessed	Not assessed	Forestry and agriculture	—	No	No
PSNWBP012	Juncus effuses, meadowsweet , fools watercress	—	Rushes, grass, buttercup, willowherb, cleavers, watercress , nettle, bramble	Not assessed	Not assessed	Not assessed	Agriculture	—	No potential	No potential
PSNWBP013	None	—	Ivy, bramble, willow, oak, nettle, wood rush, cow parsley, herb robert, bracken, cleavers, honeysuckle	Not assessed	Not assessed	Not assessed	Agriculture, forestry	—	No potential	No potential
PSNWBP014	Phalaris arundinaceae	—	bramble, willow, oak, ivy, soft rush, hard rush, *carex spp*	Not assessed	Not assessed	Not assessed	Agriculture, forestry	—	No potential	No potential
PSNWBP015	soft rush, Fillipendula ulmaria	—	Meadow sweet, nettle, yorkshire fog, bramble,bracken	Not assessed	Not assessed	Not assessed	Agriculture, forestry	—	No potential	No potential

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
PSNWBP001	—	—	—	No	None recorded	Dry in places with standing water.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP002	—	—	—	No	None recorded	Dry in places with standing water.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP003	—	—	—	No	None recorded	Dry in places with standing water.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP004	No potential	—	—	No	None recorded	Dry ditch, straight, wide, abundance of leaf litter and dead wood present	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP005	—	—	—	No	None recorded	Dry ditch	Low	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	—
PSNWBP006	—	—	—	No	None recorded	—	Low	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	—
PSNWBP007	—	—	—	No	None recorded	—	Low	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	—
PSNWBP008	—	—	—	No	None recorded	Double ditch on other side of treeline. straight cut banks. lots of debris is water.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP009	No	—	—	No	None recorded	choked with vegetation. difficult to see start and end	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP010	—	—	—	No	None recorded	—	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP011	No	No	—	No	None recorded	Vegetated drainage ditch with some water. No flow. Located below 38kV line. Extends under road to other folio via culvert where the ditch ends, used by cattle for drinking.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP012	No potential	—	—	No	None recorded	Heavily vegetated. Likely much wetter in winter months. Connected under farm road via culvert	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP013	No potential	—	—	No	2019—Rhodendron ponticum located c.80m to the south of the line 2021— No invasive species seen	Drainage ditch below tree line. Likely much wetter in winter months.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP014	No potential	—	—	No	2019—Buddleja davidii located c.55m to the north 2021—No invasives seen	Abandoned land. no aquatic value. wet in winter. The drain enters forestry on both ends	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP015	No potential	—	—	No	None recorded	Heavily vegetated, unable to see ditch. No water. No aquatic value	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
PSNWBP016	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	265	—	—	—	May and June 2019	—	27th July 2021	—	—
PSNWBP017	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	256	—	—	—	May and June 2019	—	27th July 2021	—	—
PSNWBP018	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	247	—	—	—	May and June 2019	—	27th July 2021	—	—
PSNWBP019	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	211	—	—	—	May and June 2019	—	27th July 2021	—	—
PSNWBP020	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	232	—	—	—	May and June 2019	—	27th July 2021	—	—
PSNWBP023	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,017	—	—	—	—	—	28/07/2021	—	—
PSNWBP024	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,137	—	—	—	—	—	28/07/2021	—	—
PSNWBP025	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	1,630	—	—	—	—	—	28/07/2021	—	—
PSNWBP026	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	1,202	—	—	—	—	—	28/07/2021	—	—
PSNWBP027	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	1,204	—	—	—	—	—	28/07/2021	—	—
PSNWBP028	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	810	—	—	—	—	—	28/07/2021	—	—
PSNWBP029	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	639	—	—	—	—	—	28/07/2021	—	—
PSNWBP030	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	1	—	—	—	—	—	28/07/2021	—	—
PSNWBP031	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	17	—	—	—	—	—	28/07/2021	—	—
PSNWBP032	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	157	—	—	—	—	—	28/07/2021	—	—
PSNWBP033	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	159	—	—	—	May and June 2019	—	28/07/2021	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
PSNWBP016	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	0.5	0.1	Unknown, vegetation too dense	Stagnant	No flow	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	95
PSNWBP017	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	0.5	0.1	Unknown, vegetation too dense	Stagnant	No flow	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	95
PSNWBP018	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	0.5	0.1	Unknown, vegetation too dense	Stagnant	No flow	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	95
PSNWBP019	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	4	1.5	Unknown due to dense vegetation cover	Stagnant	No flow	—	—	—	—	—	Silt and Mud 100%	Full (>75%)	15
PSNWBP020	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	2	Dry	Dry	Dry	No flow	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	none
PSNWBP023	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JC	2	0	—	Stagnant	—	—	—	—	—	—	—	—	—
PSNWBP024	19/06/2024	—	Multidisciplinary Walkover Survey	JF, UB	4	0.5	2	Stagnant	—	—	—	—	—	—	Silt and Mud 100%	Medium (<50%)	35
PSNWBP025	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JC	2	0	—	Stagnant	—	—	—	—	—	—	—	—	90
PSNWBP026	20/06/2024	—	Multidisciplinary Walkover Survey	JF UB	3.5	0.8	4	Very Slow	10% Riffle, 10% Pool, 80% Glide	Boulder 5%	—	Cobble 10%, Sand 10%	—	Silt and Mud 45% Gravel 30%	—	Medium (<50%)	12
PSNWBP027	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JC	2.5	0	Unknown due to vegetation and silty water	Stagnant	—	—	—	—	—	—	—	—	—
PSNWBP028	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JC	2.5	0	Unknown due to vegetation and silty water	Stagnant	—	—	—	—	—	—	—	—	—
PSNWBP029	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JC	2.5	1.5	Unknown due to vegetation and silty water	Stagnant	—	—	—	—	—	—	—	—	—
PSNWBP030	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JC	2.5	1.5	Unknown due to vegetation and silty water	Stagnant	—	—	—	—	—	—	—	—	—
PSNWBP031	17/06/2024	—	Multidisciplinary Walkover Survey	RA CB	2	1.5	Unknown due to vegetation and silty water	Stagnant	—	—	—	—	—	—	Silt and Mud 100%	Full (>75%)	100
PSNWBP032	27/08/2024	—	Multidisciplinary Walkover Survey	SOR CB	2	0.75	N/A	Stagnant	No flow	—	—	—	—	—	Silt and Mud 100%	Full (>75%)	None
PSNWBP033	18/06/2024	—	Multidisciplinary Walkover Survey	RA CB	2	0	Dry	Dry	—	—	—	—	—	—	Silt and Mud 100%	Full (>75%)	None

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
PSNWBP016	soft rush, Fillipendula ulmaria	—	Meadow sweet, nettle, yorkshire fog, bramble,bracken,willow	Not assessed	Not assessed	Not assessed	Agriculture, forestry	—	No potential	No potential
PSNWBP017	soft rush, Fillipendula ulmaria	—	Meadow sweet, nettle, yorkshire fog, bramble,bracken	Not assessed	Not assessed	Not assessed	Agriculture, forestry	—	No potential	No potential
PSNWBP018	soft rush, Fillipendula ulmaria	—	Meadow sweet, nettle, yorkshire fog, bramble,bracken	Not assessed	Not assessed	Not assessed	Agriculture, forestry	—	No potential	No potential
PSNWBP019	Fools watercress	—	bramble, willow, nettle hogweed, bracken, elder, alder, oak	Not assessed	Not assessed	Not assessed	Agriculture, household waste water	—	No potential	No potential
PSNWBP020	none	—	Iris, soft rush, horsetail, willow, purple loosestrife, bramble, creeping buttercup, cuckoo flower	Not assessed	Not assessed	Not assessed	Forestry, agriculture	—	No potential	No potential
PSNWBP023	—	—	Ivy, bramble, willow , nettle, thistle, willow herb, oak, bracken, rowan, water mint	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP024	Ranunculus flammula, watermint, common starwort	—	Ivy, bramble, willow , nettle, thistle, willow herb, oak, bracken, rowan	Not assessed	Not assessed	Not assessed	Agriculture	—	No potential	No potential
PSNWBP025	Soft rush	—	Ivy, bramble, willow , nettle, thistle, willow herb, oak, bracken	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP026	common starwort, ivy leaved crowfoot, watermint, water forget me not	—	Bramble, gorse, bracken, bedstraw, duck weed	Not assessed	Not assessed	Not assessed	Agriculture	—	No potential	No potential
PSNWBP027	—	—	Soft rush, nettle, bedstraw, bramble, oak, gorse	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP028	—	—	Soft rush, nettle, bedstraw, bramble, oak, gorse	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP029	—	—	Soft rush, nettle, bedstraw, bramble, oak, gorse	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP030	Horsetail, reeds at approximately 30%	—	Horsetail, reeds, meadow sweet,bramble, willow	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP031	Phragmites australis, meadow sweet, Equisetum arvense	—	bramble, soft rush, perennial ryegrass, willow, Yorkshire fog	Not assessed	Not assessed	Not assessed	Agriculture	—	No potential	No potential
PSNWBP032	—	—	Ivy, bramble, willow , nettle, thistle, willow herb, alder, oak, gorse, bindweed	Not assessed	Not assessed	Not assessed	Agriculture	—	No potential	No potential
PSNWBP033	—	—	gorse, bramble, poplar, hawthorn, ash, oak, buttercup	Not assessed	Not assessed	Not assessed	Agriculture	—	No potential	No potential

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
PSNWBP016	No potential	—	—	No	None recorded	Heavily vegetated drainage ditch with some stagnant pools	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP017	No potential	—	—	No	None recorded	Heavily vegetated drainage ditch with some stagnant pools	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP018	No potential	—	—	No	None recorded	Heavily vegetated drainage ditch with some stagnant pools	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP019	No potential	—	—	No	None recorded	Heavily silted drainage ditche with slight flow. Strong sewage/grey water smell. Only portions of ditch can be seen due to limited access and views on accessible lands	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP020	No potential	—	—	No	None recorded	Vegetated drainage ditch with some water. Mostly fringed by young forestry	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP023	—	—	—	No	None recorded	Dry drainage ditch below hedge. Likely wet in winter.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP024	No potential	—	—	No	None recorded	Dry drainage ditch below hedge. Likely wet in winter.	Low	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	—
PSNWBP025	—	—	—	No	None recorded	Dry drainage ditch below hedge. Likely wet in winter. Only portions of ditch can be seen due to lack of access to folio. Drain runs north of hedge.	Low	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	—
PSNWBP026	No potential	—	—	No	None recorded	Wet drainage ditch under hedge. Used by sheep for drinking, small flow. Many glossostomatidae on rocks.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP027	—	—	—	No	None recorded	Wet drainage ditch under hedge. Limited view as no access to folio, seen from adjacent folio. Ditch runs to NE of hedge	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP028	—	—	—	No	None recorded	Dry drainage ditch between two folios, under tree line. Likely wet in winter	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP029	—	—	—	No	None recorded	Wet drainage ditch under tree line, heavily poached	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
PSNWBP030	—	—	—	No	None recorded	Wet drainage ditch under willow hedge. Very silty with some areas very vegetated	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
PSNWBP031	No potential	—	—	No	None recorded	Wet drainage ditch under willow hedge. Very silty with some areas very vegetated	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
PSNWBP032	No potential	—	—	No	None recorded	Ditch below tree line. Likely wet in winter. No flow, little eco value.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
PSNWBP033	No potential	—	—	No	None recorded	Dry drainage ditch below tree line.Likely wet in winter. Poaching by cattle.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
PSNWBP034	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	158	—	—	—	—	—	28/07/2021	—	—
PSNWBP035	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	162	—	—	—	May and June 2019	—	28/07/2021	—	—
PSNWBP036	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	615	—	—	—	May and June 2019	—	27th July 2021	—	—
PSNWBP037	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	673	—	—	—	—	—	27th July 2021	—	—
PSNWBP038	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	576	—	—	—	—	—	27th July 2021	—	—
PSNWBP039	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	535	—	—	—	—	—	27th July 2021	—	—
PSNWBP040	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	475	—	—	—	—	—	27th July 2021	—	—
PSNWBP041	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	379	—	—	—	—	—	27th July 2021	—	—
PSNWBP042	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	150	—	—	—	—	—	27th July 2021	—	—
PSNWBP043	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	196	—	—	—	—	—	27th July 2021	—	—
PSNWBP044	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	207	—	—	—	—	—	27th July 2021	—	—
PSNWBP045	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	196	—	—	—	—	—	27th July 2021	—	—
PSNWBP046	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	312	—	—	—	—	—	27th July 2021	—	—
PSNWBP047	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3	—	—	—	—	—	—	—	—
PSNWBP048	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,179	—	—	—	—	—	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
PSNWBP034	18/06/2024	—	Multidisciplinary Walkover Survey	RA CB	2	1	N/A	Stagnant	—	—	—	—	—	—	Silt and Mud 100%	Full (>75%)	None
PSNWBP035	18/06/2024	—	Multidisciplinary Walkover Survey	RA CB	2	Dry	Dry	Dry	No flow	—	—	—	—	—	Silt and Mud 100%	Full (>75%)	None
PSNWBP036	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JC	2	0	NA	Stagnant	—	—	—	—	—	—	—	—	—
PSNWBP037	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JC	2	0	NA	Stagnant	—	—	—	—	—	—	—	—	—
PSNWBP038	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	2	0	NA	Stagnant	—	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	—
PSNWBP039	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	2	0	NA	Stagnant	—	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	—
PSNWBP040	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	2	0	NA	Stagnant	—	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	—
PSNWBP041	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	4	0	Dry	Dry	No flow	—	—	—	—	—	Silt and Mud 100%	Full (>75%)	75
PSNWBP042	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	4	0	Dry	Dry	No flow	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	80
PSNWBP043	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JC	1	0.25	0.3	Stagnant	—	—	—	—	—	—	—	—	90
PSNWBP044	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	4	1	Unknown	Stagnant	No flow	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	90
PSNWBP045	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	1	Dry	Dry	Dry	Dry	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	90
PSNWBP046	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JC	2	0	NA	Stagnant	—	—	—	—	—	—	—	—	—
PSNWBP047	17/06/2024	—	Multidisciplinary Walkover Survey	RA	1	0.4	45	Slow	—	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	100
PSNWBP048	17/06/2024	—	Multidisciplinary Walkover Survey	UB JF	3	Dry	Dry	Dry	No flow	—	—	—	—	—	Silt and Mud 100%	Medium (<50%)	None

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
PSNWBP034	—	—	gorse, bramble, sycamore, ash, willow, bracken, harts tongue	Not assessed	Not assessed	Not assessed	Agriculture	—	No potential	No potential
PSNWBP035	—	—	gorse, bramble, sycamore, ash, willow, bracken	Not assessed	Not assessed	Not assessed	Agriculture	—	No potential	No potential
PSNWBP036	None	—	Iris, bramble, nettle, willow, oak, horse chestnut	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP037	None	—	Ivy, bramble, willow, oak, nettle, bramble	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP038	*None*	—	Ivy, bramble, willow, oak, nettle, bramble	Not assessed	Not assessed	Not assessed	Agriculture, forestry	—	No potential	No potential
PSNWBP039	*None*	—	Ivy, bramble, willow, oak, nettle, bramble	Not assessed	Not assessed	Not assessed	Agriculture, forestry	—	No potential	No potential
PSNWBP040	*None*	—	Ivy, bramble, willow, oak, nettle, bramble	Not assessed	Not assessed	Not assessed	Agriculture, forestry	—	No potential	No potential
PSNWBP041	*None*	—	bramble, willow, nettle hogweed, bracken, elder, alder, oak, elm, hawthorn, cleavers, harts tongue	Not assessed — drain	Not assessed	Not Assessed	Agriculture, forestry	No potential — No suitable habitat	No potential	No potential
PSNWBP042	soft rush, flag iris	Unknown	soft rush, willow herb, thistle, Yorkshire fog, Norwegian spruce, bramble, soft rush, ladies bedstraw	Not assessed	Not assessed	Not assessed	Forestry, agriculture	—	No potential	No potential
PSNWBP043	Soft Rush, thistle, reeds	—	Iris, soft rush, horsetail, purple loosestrife, bramble, creeping buttercup, thistle, birds foot tr	Not assessed	Not assessed	Not assessed	Forestry, agriculture	—	No potential	No potential
PSNWBP044	*soft rush, Phragmites australis*	—	soft rush, willow herb, thistle, Yorkshire fog, Norwegian spruce, bramble, soft rush	Not assessed	Not assessed	Not assessed	Forestry, agriculture	—	No potential	No potential
PSNWBP045	soft rush, Phragmites australis	—	Iris, soft rush, horsetail, purple loosestrife, bramble, creeping buttercup, thistle, birds foot trefoil ,Norwegian spruce	Not assessed	Not assessed	Not assessed	Forestry, agriculture	—	No potential	No potential
PSNWBP046	None	—	Ivy, bramble, willow, hawthorn, nettle	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP047	meadow sweet, rosebay willowherb	—	soft rush, perennial ryegrass, willow, Yorkshire fog, willow herb, nettle,	Not assessed	Not assessed	Not assessed	Agriculture	None	No potential	No potential
PSNWBP048	—	—	Harts tongue, bramble, bracken, ivy.	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
PSNWBP034	No potential	—	—	No	None recorded	Dry drainage ditch below tree line. Likely wet in winter	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
PSNWBP035	No potential	—	—	No	None recorded	Dry drainage ditch below tree line. Likely wet in winter	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
PSNWBP036	—	—	—	No	2019—Rhodendron ponticum located c.80m to the south of the line 2021— No invasive species seen	Shallow dry drainage ditch below tree line. Not previously recorded. Likely wet in winter months.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
PSNWBP037	—	—	—	No	2019—Rhodendron ponticum located c.80m to the south of the line 2021— No invasive species seen	Shallow dry drainage ditch below tree line. Not previously recorded. Likely wet in winter months.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
PSNWBP038	No potential	—	—	No	None recorded	Shallow drainage ditch below tree line. Likely much wetter in winter months. No aquatic potential. Lots of leaf litter. Connected to drains in conifer plantation .	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
PSNWBP039	No potential	—	—	No	None recorded	Shallow drainage ditch below tree line. Likely much wetter in winter months. No aquatic potential. Lots of leaf litter, wet underfoot though it appears dry. Connected to drains in conifer plantation.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP040	No potential	—	—	No	None recorded	Shallow drainage ditch below tree line. Likely much wetter in winter months. Drain filled with leaf litter, some water.no aquatic value.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
PSNWBP041	No potential	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch below tree line. Likely wet in winter months. No aquatic potential. Leafy litter 100%. dense and difficult to see. parts blocked by fallen trees and branches.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP042	No potential	—	—	No	None recorded	Vegetated drainage ditch with some water. No flow. Located below 38kV line. Difficult to get decent photos of ditch	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP043	—	—	—	No	None recorded	Vegetated drainage ditch with some water. Mostly fringed by young forestry	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP044	No potential	—	—	No	None recorded	Vegetated drainage ditch with some water. Mostly fringed by young forestry and some wet grassland, strong smell of sewage/grey water.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP045	No potential	—	—	No	None recorded	Vegetated drainage ditch. Mostly fringed by young forestry.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP046	—	—	—	No	None recorded	Dry drainage ditch below tree line. Not previously recorded. Likely wet in winter months	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
PSNWBP047	No potential	—	—	No	None recorded	Choked with vegetation, linked to SAC.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP048	No potential	—	—	No	None recorded	Dry, straight, wide, very little growing at base, abundance of leaf litter and dead wood present.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
PSNWBP049	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	4,087	—	—	—	—	—	—	—	—
PSNWBP050	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,800	—	—	—	—	—	—	—	—
PSNWBP051	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	1,469	—	—	—	—	—	—	—	—
PSNWBP052	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	1,355	—	—	—	—	—	—	—	—
PSNWBP053	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	1,246	—	—	—	—	—	—	—	—
PSNWBP054	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	1,245	—	—	—	—	—	—	—	—
PSNWBP055	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	976	—	—	—	—	—	—	—	—
PSNWBP056	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	205	—	—	—	—	—	—	—	—
PSNWBP057	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	168	—	—	—	—	—	—	—	—
PSNWBP058	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	517	—	—	—	—	—	—	—	—
PSNWBP059	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	382	—	—	—	—	—	—	—	—
PSNWBP060	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,437	—	—	—	Jun-19	—	—	—	—
PSNWBP061	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	1,772	—	—	—	—	—	—	—	—
PSNWBP062	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	408	—	—	—	—	—	—	—	—
PSNWBP063	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,907	—	—	—	—	—	—	—	—
PSNWBP064	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,728	—	—	—	—	—	—	—	—
PSNWBP065	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3900	—	—	—	—	—	—	—	—
PSNWBP066	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3820	—	—	—	—	—	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
PSNWBP049	18/06/2024	—	Multidisciplinary Walkover Survey	UB JF	2	NA	NA	—	—	—	—	—	—	—	Silt and Mud 100%	Heavy (<75%)	None
PSNWBP050	18/06/2024	—	Multidisciplinary Walkover Survey	UB JF	1.5	NA	Unknown	—	—	—	—	—	—	—	—	Light (<25%)	None
PSNWBP051	19/06/2024	—	Multidisciplinary Walkover Survey	UB JF	1.5	0.5	Unknown	—	—	—	—	—	—	—	Silt and Mud 100%	Light (<25%)	10
PSNWBP052	19/06/2024	—	Multidisciplinary Walkover Survey	UB JF	1.5	0.5	Unknown	—	—	—	—	—	—	—	Silt and Mud 100%	Light (<25%)	10
PSNWBP053	19/06/2024	—	Multidisciplinary Walkover Survey	UB JF	3	0	Unknown	—	—	—	—	—	—	—	Silt and Mud 100%	Medium (<50%)	50
PSNWBP054	20/06/2024	—	Multidisciplinary Walkover Survey	UB JF	3	0.5	Unknown	—	—	—	—	—	—	—	—	Full (>75%)	—
PSNWBP055	20/06/2024	—	Multidisciplinary Walkover Survey	UB JF	3	0.5	Unknown	—	—	Cobble 5%	Gravel 10%	—	—	—	Silt 85%	Medium (<50%)	6
PSNWBP056	18/06/2024	—	Multidisciplinary Walkover Survey	RA CB	5	Dry	Dry	No flow	No flow	—	—	—	—	—	Silt and Mud 100%	Full (>75%)	None
PSNWBP057	18/06/2024	—	Multidisciplinary Walkover Survey	RA CB	3	Dry	Dry	No flow	No flow	—	—	—	—	—	Silt and Mud 100%	Full (>75%)	None
PSNWBP058	19/06/2024	—	Multidisciplinary Walkover Survey	CB RA	0.2	—	—	—	—	—	—	—	—	—	—	Heavy (<75%)	—
PSNWBP059	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	3	1	Unknown	Stagnant	—	—	—	—	—	—	Silt and Mud 100%	Full (>75%)	30
PSNWBP060	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AB SC	1.5	Dry	Dry	—	—	—	—	—	—	—	—	—	—
PSNWBP061	02/10/2024	—	Multidisciplinary Walkover Survey	SW	1.5	Dry	Dry	—	—	—	—	—	—	—	—	Full (>75%)	—
PSNWBP062	01/10/2024	—	Multidisciplinary Walkover Survey	SW	2	1	3	Very slow	—	—	—	—	Cobble 30%	Silt 70%	—	Full (>75%)	—
PSNWBP063	17/06/2024	06/05/2025	Multidisciplinary Walkover Survey	JM SN CB	2	NA	Dry	Dry	Dry	—	—	—	—	—	—	None (0%)	—
PSNWBP064	18/06/2024	—	Multidisciplinary Walkover Survey	UB JF	3	0.5	1	Stagnant	—	—	—	—	—	—	Silt and Mud 100%	Medium (<50%)	1
PSNWBP065	—	06/05/2025	Multidisciplinary Walkover Survey	JM SN CB	2	0.5	20	Stagnant	—	—	—	—	—	—	—	Light (<25%)	—
PSNWBP066	—	06/05/2025	Multidisciplinary Walkover Survey	JM SN CB	1	0.5	10	Stagnant	—	—	—	—	—	—	—	Light (<25%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
PSNWBP049	—	—	Bramble, bracken, ivy, pedunculate oak, sycamore,	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP050	—	—	Soft rush bramble, bracken blackthorn, ivy	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP051	common starwort	—	Willow holly gorse willow ivy foxglove, honeysuckle	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP052	watermint, marsh bedstraw	—	Willow, honeysuckle	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP053	watermint, common starwort	—	Ivy willow hawthorn blackthorn ash	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP054	—	—	Hedgerowand pasture	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP055	common starwort, ivy leaved crowfoot	10	Hedgerow and pasture	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP056	None	—	gorse, bramble, sycamore, ash, willow, bracken, harts tongue,	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP057	None	—	bramble, willow, ivy, bracken, fox glove, hawthorn	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP058	—	—	Canary reed grass, Yorkshire fog, buttercup	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP059	duckweed minor	—	Bramble, willow, Sitka spruce, privet, nettle hogweed	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP060	—	—	Bramble and bracken	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP061	—	—	Bramble	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP062	—	—	hawthorn, bramble, gorse, sycamore, male fern, ivy	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP063	—	—	Bramble, bracken, ivy, holly.	Not assessed	Not assessed	Not assessed	—	None	No potential	No potential
PSNWBP064	common starwort	—	Marsh thistle, herb robert, buttercup, bramble gorse oak, hazel, holly, mountain ash	Not assessed	Not assessed	Not assessed	Agriculture	None	No potential	No potential
PSNWBP065	—	—	Soft rush, nettle, herb-robert, bracken	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP066	—	—	Perennial ryegrass, soft rush, creeping buttercup	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
PSNWBP049	No potential	—	—	No	None recorded	Dry, straight drainage ditch.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP050	No potential	—	—	No	None recorded	Mostly straight , wide drainage ditch.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP051	No potential	—	—	No	None recorded	—	Low	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	—
PSNWBP052	No potential	—	—	No	None recorded	—	Low	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	—
PSNWBP053	No potential	—	—	No	None recorded	—	Low	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	—
PSNWBP054	No potential	—	—	No	None recorded	Completely tunnelled with bramble and gorse, very steep banks, no access gained.	Low	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	—
PSNWBP055	No potential	—	—	No	None recorded	—	Low	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	—
PSNWBP056	No potential	—	—	No	None recorded	Dry with an double ditch on other side of treeline. Likely wet in winter. water pooling in areas but majority it dry.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP057	No potential	—	—	No	None recorded	Likely wet in winter but small amounts.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP058	No potential	—	—	No	None recorded	Drain completely vegetated can't see. No water. No aquatic value.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP059	No potential	—	—	No	None recorded	Between forestry and public walkway. No aquatic value. Likely wet in winter.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP060	No potential	—	—	No	None recorded	—	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP061	No potential	—	—	No	None recorded	Completely dry drainage ditch	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP062	No potential	—	—	No	None recorded	—	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
PSNWBP063	No potential	—	—	No	None recorded	Dry, straight drainage ditch.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP064	No potential	—	—	No	None recorded	—	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWBP065	No potential	—	—	No	—	Partially wet, stagnant, no flow	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	No fish stock survey nearby
PSNWBP066	No potential	—	—	No	—	Cutting through pasture, partially wet, stagnant, no flow,	Low	Overhead Line (power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	No fish stock survey nearby

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
PSNWBP067	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3800	—	—	—	—	—	—	—	—
PSNWBP068	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2970	—	—	—	—	—	—	—	—
PSNWBP069	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3075	—	—	—	—	—	—	—	—
PSNWBP070	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2439	—	—	—	—	—	—	—	—
PSNWBX001	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,870	—	—	—	May and June 2019	—	—	—	—
PSNWBX002	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,702	—	—	—	May and June 2019	—	—	—	—
PSNWBX003	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	1,258	—	—	—	May and June 2019	—	—	—	—
PSNWBX004	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	350	—	—	—	May and June 2019	—	29th July 2021	—	—
PSNWBX005	Off Pipeline	FW3 — Canals	CANAL	Lower Shannon	Canal	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	60	—	—	—	May and June 2019	—	—	12/07/2022	—
PSNWBX006	Off Pipeline	FW1 — Eroding/Upland River	UNNAMED TRIBUTARY	Lower Shannon	NA	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	588	—	—	—	May and June 2019	—	—	—	—
PSNWBX007	Off Pipeline	FW2 — Depositing/Lowland River	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	594	—	—	—	May and June 2019	—	—	—	—
PSNWBX008	Off Pipeline	FW2 — Depositing/Lowland River	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	870	—	—	—	May and June 2019	—	—	—	—
PSNWBX009	Off Pipeline	FW2 — Depositing/Lowland River	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	1,102	—	—	—	May and June 2019	—	—	—	—
PSNWBX010	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	1,336	—	—	—	May and June 2019	—	—	—	—
PSNWCX001	Off Pipeline	FW2 — Depositing/Lowland River	BLACKWATER (CLARE)_020 (IE_SH_25B060250)	Lower Shannon	Glenlonsouth	25_3882	Good	Yes (SAC: 002165 and SPA: 004077)	Yes	2,769	—	—	—	May and June 2019	—	—	11/07/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
PSNWBP067	—	06/05/2025	Multidisciplinary Walkover Survey	JM SN CB	2	0.5	20	Stagnant	—	—	—	—	—	—	—	Light (<25%)	—
PSNWBP068	—	06/05/2025	Multidisciplinary Walkover Survey	JM SN CB	3	Dry	Dry	—	—	—	—	—	—	—	—	Medium (<50%)	—
PSNWBP069	—	06/05/2025	Multidisciplinary Walkover Survey	SN CB JM	1	Dry	Dry	Dry	—	—	—	—	—	—	—	—	—
PSNWBP070	—	06/05/2025	Multidisciplinary Walkover Survey	SN CB JM	2	—	—	Stagnant	—	—	—	—	—	—	—	—	—
PSNWBX001	27/08/2024	—	Watercourse Crossing Survey	SOR CB	—	—	—	—	—	—	—	—	—	—	—	—	—
PSNWBX002	27/08/2024	—	Watercourse Crossing Survey	SOR CB	0.2	0.2	20	Very slow	—	—	—	—	—	—	Silt/ Gravel	—	—
PSNWBX003	27/08/2024	—	Watercourse Crossing Survey	SOR	5	1	2	—	Low flow	—	—	—	—	—	Cobble/ Gravel	—	—
PSNWBX004	27/08/2024	—	Watercourse Crossing Survey	SOR CB	2.5	1	10	Moderate	—	—	—	—	—	—	Organics	—	—
PSNWBX005	27/08/2024	—	Watercourse Crossing Survey	SOR CB	85	65	—	Moderate	No flow	—	—	—	—	—	—	—	1
PSNWBX006	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AB SC	2.5	2	75	—	Low flow	—	—	—	—	—	Organics	—	—
PSNWBX007	19/06/2024	—	Multidisciplinary Walkover Survey	RA CB	7	1.5	8	Moderate	Glide 100%	—	Silt 10%	Sand 20%, Cobble 20%, Boulder 20%	Gravel 30%	—	—	Heavy (<75%)	None
PSNWBX008	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AB SC	2 to 3	1.5 to 2	10	—	Riffle	—	—	—	—	—	Cobble/Gravel with some siltation	Full (>75%)	—
PSNWBX009	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AB SC	2 to 3	1.5 to 2	10	—	Riffle	—	—	—	—	—	Cobble/Gravel with some siltation	Full (>75%)	—
PSNWBX010	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AB SC	5 to 6	0.25 to 1	—	No flow	No flow	—	—	—	—	—	—	—	—
PSNWCX001	Verification Survey (June to October	—	Watercourse Crossing Survey	SOR CB SN	2	2	14	Slow	Riffle/ Pool	—	—	—	—	—	Cobble	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
PSNWBP067	—	—	Soft rush, nettle, herb-robert, bracken, gorse	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP068	—	—	Bramble, bracken, ivy	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP069	—	—	Ivy, bramble, bracken	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBP070	—	—	Ivy, bramble, nettle, bracken	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBX001	Gallium palustre, watercress	—	Birds foot trefoil, water mint, bush vetch , soft rush , cleavers male fern,ragged robin	Not assessed	Not assessed	Not assessed	—	—	—	—
PSNWBX002	Gallium palustre, watercress, Fools watercress	0	Bramble, fools watercress, brooklime , ragged robin	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBX003	watermint	—	Hedgerow, pasture, gorse, bramble, forget me not, spearwort	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBX004	Fools watercress, aquatic mosses	0	Nettle, elm, bramble, sycamore, elder, male fern, figwort's hazel	Not assessed	Not assessed	Not assessed	Agriculture	—	No potential	No potential
PSNWBX005	*Nuphar lutea*	0	Bull thistle, marsh thistle. Yorkshire fog, willow, beech, ash, oak, tall fescue, perennial ryegrass flag iris	Not assessed	Not assessed	Not assessed	Sheep grazing	—	Potential	Potential
PSNWBX006	Sparganium, Phalaris sp., Salix sp.	—	—	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWBX007	—	—	Bramble, hawthorn, thistle, ash, gorse, elder, blackthorn,hemlock,greater stichwort, tormentil,speedwell, harts tounge	Not assessed	Not assessed	Not assessed	Cattle access	—	No potential	No potential
PSNWBX008	Fools watercress, flag iris, meadow sweet, hemlock	—	—	Not assessed	Not assessed	Not assessed	—	—	—	—
PSNWBX009	Fools watercress, flag iris, meadow sweet, hemlock	—	—	Not assessed	Not assessed	Not assessed	—	—	—	—
PSNWBX010	soft rush, Mentha citrata, Fillipendula ulmaria, Equisetum fluviatile.	—	—	Not assessed	Not assessed	Not assessed	—	Good	Potential	Potential
PSNWCX001	—	—	Ivy, honey suckle, male fern, dock, bramble, meadowsweet, Hogweed, willow, alder	Yes (2022)	2022: *Gammarus* — 15 Great diving beetle larvae— 2 caddis case limnephilidae Drusus annulatus — 1 mayfly baetis — 1 *beraeidae beraeamaura* —1 non biting midge — 1 Empty cadis case drusus annulatus — 1 stone fly — 1	Q3	—	Good	Potential	Potential

Environmental Impact Assessment Report (EIAR) Volume 6 of 6: Environmental Assessment (Appendix A8.14) Watercourse Crossing Data

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
PSNWBP067	No potential	—	—	No	—	Partially wet, stagnant, no flow, evidence of cattle use	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	No fish stock survey nearby
PSNWBP068	No potential	—	—	No	—	Dry, straight, wide, abundance of leaf litter and dead wood present	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	No fish stock survey nearby
PSNWBP069	No potential	—	—	No	—	—	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	No fish stock survey nearby
PSNWBP070	No potential	—	—	No	—	—	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	No fish stock survey nearby
PSNWBX001	—	—	—	No	None recorded	—	Medium	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	No fish stock survey nearby
PSNWBX002	No potential	—	—	No	None recorded	Appears to be old riverbed with fast flow. This drain flows through the centre of a access track which continues the full length of the access track	Low	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	—
PSNWBX003	No potential	—	—	No	None recorded	Flowing stream. Completely tunnelled with bramble and gorse, very steep banks, no access gained.	Low	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	—
PSNWBX004	No potential	—	—	No	None recorded	Wet drainage ditch under treeline. Limited view as no access to folio, seen from road	Low	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	—
PSNWBX005	Potential	Potential	—	No	None recorded	Potential for otter on left bank. *Cyprinid Alvins* present, possibly roach, approx 2 months old. No potential for any lamprey due to weir D/S, Didn't survey, cormorant and black headed gull flying over.	High	38kV Overhead Line	N	Not on IFI GIS database, but IFI have mapped a "NOT" located d/s.	No fish stock survey nearby
PSNWBX006	—	—	—	No	None recorded	River culverted under road and along forestry.	Medium	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	No fish stock survey nearby
PSNWBX007	Potential	Potential	—	No	None recorded	—	Low	38kV Overhead Line	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database adjacent channel U/S contains Sal and BT
PSNWBX008	—	—	—	No	None recorded	—	Low	38kV Overhead Line	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database adjacent channel U/S contains Sal and BT
PSNWBX009	—	—	—	No	None recorded	—	Low	38kV Overhead Line	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database adjacent channel U/S contains Sal and BT
PSNWBX010	Potential	Potential	—	No	None recorded	95% Canopy. Good spawning potential	Medium	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
PSNWCX001	Potential	Potential	—	No	None recorded	Good meandering river. No otter potential. No kingfisher potential. Tunnelling present . Potential for salmonids, although not seen. Good spawning & nursery habitat. Undercutting present on both banks. Natural stream with no pressures, good quality river, no pollution or livestock.	High	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	No fish stock survey nearby

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
PSNWCX002	Off Pipeline	FW2 — Depositing/Lowland River	BLACKWATER (CLARE)_020 (IE_SH_25B060250)	Lower Shannon	Blackwater[Clare]	25_3885	Good	Yes (SAC: 002165 and SPA: 004077)	Yes	3,752	—	—	—	May and June 2019	—	—	11/07/2022	—
PSNWCX003	Off Pipeline	FW1 — Eroding/Upland River	BLACKWATER (CLARE)_020 (IE_SH_25B060250)	Lower Shannon	Oakfield 25	25_3884	Good	Yes (SAC: 002165 and SPA: 004077)	Yes	3,138	—	—	—	May and June 2019	—	—	11/07/2022	—
PSNWCX004	Off Pipeline	FW2 — Depositing/Lowland River	SHANNON (LOWER)_050 (IE_SH_25S012500)	Lower Shannon	Shannon [Lower]	25_3822	Poor	Yes (SAC: 002165 and SPA: 004077)	Yes	0	—	—	—	May and June 2019	—	—	12/07/2022	—
PSNWCX005	Off Pipeline	FW4 — Drainage Ditch	SHANNON (LOWER)_050 (IE_SH_25S012500)	Lower Shannon	O'Briensbridge	25_2442	Poor	Yes (SAC: 002165 and SPA: 004077)	Yes	170	—	—	—	May and June 2019	—	28th July 2021	—	—
PSNWCX006	Off Pipeline	FW4 — Drainage Ditch	SHANNON (LOWER)_050 (IE_SH_25S012500)	Lower Shannon	Fairyhall	25_916	Poor	Yes (SAC: 002165 and SPA: 004077)	Yes	147	—	—	—	May and June 2019	—	28th July 2021	—	—
WBP001	RW-800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	489	—	—	03/09/2018	—	—	—	—	—
WBP003	TW-5300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,239	—	—	27/06/2018	16/09/2019	08/07/2020	—	16/06/2022	—
WBP004	TW-6900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,579	—	—	—	—	08/07/2020	—	16/06/2022	—
WBP005	TW-9900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	5,596	—	—	—	—	08/07/2020	—	16/06/2022	—
WBP006	TWA-3600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000585)	Yes	4,472	—	—	10/07/2018	—	21/07/2020	—	—	—
WBP009	TWA-12800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000585)	Yes	2,446	—	—	11/07/2018	—	—	—	25/07/2022	—
WBP010	TWA-15300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000585)	Yes	2,900	—	—	12/07/2018	—	—	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
PSNWCX002	26/08/2024	—	Watercourse Crossing Survey	SOR CB	12	10	42	Slow	Riffle 50% Glide 50%	—	Cobble 10%	Boulder 15% Sand 25% Mud/silt 20%	Gravel 50%	—	—	Medium (<50%)	—
PSNWCX003	26/08/2024	—	Watercourse Crossing Survey	SOR CB	3	1.5	18	Slow	Glide 100%	—	Cobble 10%, Gravel 10%, Boulder 10%	—	Silt and Mud 40%, Sand 30%	—	—	Heavy (<75%)	—
PSNWCX004	27/08/2024	—	Multidisciplinary Walkover Survey	SOR CB	150	148	Unknown	Moderate	Glide 100%	—	—	—	—	—	—	—	45
PSNWCX005	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JC	2	0	NA	—	Low flow	—	—	—	—	—	Silt	—	—
PSNWCX006	19/09/2024	—	Watercourse Crossing Survey	CB SOR	1.5	1	Low	Very slow	Glide 100%	—	—	—	—	—	Silt 100%	Heavy (<75%)	None
WBP001	17/06/2024	07/05/2025	Multidisciplinary Walkover Survey	CB	2	1	—	Low	Glide 100%	Gravel 5%	—	Sand 15%	—	—	Silt and Mud 80%	Heavy (<75%)	0
WBP003	20/06/2024	13/05/2025	Multidisciplinary Walkover Survey	JS JF MW	2	0.5	10	Stagnant	Pool 100%	—	—	—	—	—	Silt 100%	Medium (<50%)	0
WBP004	21/06/2024	—	Multidisciplinary Walkover Survey	JS MB	2	Dry	Dry	—	—	—	—	—	—	—	—	Medium (<50%)	0
WBP005	—	14/05/2025	Multidisciplinary Walkover Survey	JS JF MW	2	Dry	Dry	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	—
WBP006	—	22/05/2025	Multidisciplinary Walkover Survey	SN BC	2	—	—	Dry	No flow	—	—	—	—	—	—	—	—
WBP009	11/07/2024	—	Multidisciplinary Walkover Survey	JS MB	2	1	Unknown, too vegetated	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	None (0%)	—
WBP010	14/10/2024	—	Multidisciplinary Walkover Survey	SW	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
PSNWCX002	—	—	male fern, hawthorn,ivy,oak,ash,bramble,cow parsley, liverworts, willow,alder, honeysuckle, sycamore	Yes (2022 and 2024)	2022: *Gammarus* - 20. *Baetis* -5. *Ecdyonurus disper* - 4. Empty cased caddis family Goeridae - 1. Riffle beetle - 1. Smaller *Dytiscid* - 1 (unknown species) 2024: *ecdyonurus* 1 *baetis* 40 *gammarus* 21 *seratella* 5 *chironomid* 1 case caddis 3	Q3—Q4	Pasture	Moderate potential	Salmonids recorded. High potential.	High potential
PSNWCX003	common starwort	—	Ivy,Bramble, male fern, willow, nettle, dock, gorse, hogweed, bracken , bush vetch, hawthorn, rowan	Yes (2024)	2024: 50+ *Coronomid* — red blood worm, 20 *Gammarus* , 1 Waterlouse	Q2—3	Tunnelling and agriculture	Limited	Trout potential	Potential
PSNWCX004	*Phalaris arundinaceae, Phragmites australis, Potamogeton natans, Nuphar lutea, Elodea canadensis, Iris psuedacorus*	1	Canary grass, meadow sweet, willow, alder, water mint	Not assessed	Not assessed	Not assessed	Urban, amenities, fuel from boats	—	Potential	No potential
PSNWCX005	watercress, Callitriche palustris, duckweed minor	—	Ivy, bramble, willow , nettle, thistle, willow herb, alder,	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
PSNWCX006	None	—	Willow hawthorn, sycamore, bramble, bracken, hogweed, male fern, ivy	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
WBP001	—	—	Ivy, hazel, soft shield fern	Not assessed — drain	Not assessed	Not Assessed	Agriculture, cattle access in places	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP003	—	0	Watercress, bramble, willowherb	Not assessed — low flow	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP004	—	—	Hemlock, creeping buttercup, blackthorn, hawthorn	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP005	Watercress	—	—	Not assessed — no flow	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP006	—	—	Hawthorn, elder, gorse, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP009	—	—	Nettle, bramble, hawthorn	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP010	Watermint	—	perennial ryegrass cocksfoot, creeping thistle, hard rush, st.Johns wort	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
PSNWCX002	—	Otter prints recorded .	Kingfisher potential	Yes	None recorded	No Instream vegetation. Good water quality and natural flow. Salmonids jumping downstream.Undercutting on both banks. Salmon spawning and nursery present but no redds. No Otter Holt identified. Lamprey identified in mud in front of cattle access point. No lamprey in this years sample. Otter paw prints in sediment on bank.	High	38kV Overhead Line	Y	On IFI GIS database as Sal/ST River "SAL"	No fish stock survey nearby
PSNWCX003	No	No	—	No	None recorded	Adult three spines stickleback observed. Cows in field. Undercutting on each bank. No potential for otter or kingfisher.Not suitable to survey full length due to vegetation. Brown trout potential. Limited spawning habitat for salmon. Suitable substrate for lamprey.	Medium	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	No fish stock survey nearby
PSNWCX004	Potential	Potential	—	No	None recorded	Not sampled. Potential for otter and kingfisher. No sighting. No silt observed for lamprey. Water in good condition, no evidence of pollution	High	38kV Overhead Line	Y	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	No fish stock survey nearby
PSNWCX005	—	—	—	No	None recorded	A lot of cattle poaching and faeces within stream	Low	38kV Overhead Line	N	Not on IFI GIS database, no "SAL" river located nearby.	No fish stock survey nearby
PSNWCX006	No potential	No potential	—	No	None recorded	Wet drainage ditch. Likely much wetter in winter months.Culverted under road upstream. Water is discoloured orange. Heavily silted.	Low	38kV Overhead Line	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	No fish stock survey nearby
WBP001	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Ditch running around perimeter of field.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP003	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Vegetated drain	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP004	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Overgrown dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP005	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Very overgrown	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP006	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poor quality dry drain parallel to treeline	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP009	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Wet drainage ditch under hedge	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP010	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry ditch with wet species	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP011	TWA-15300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000585)	Yes	2,938	—	—	12/07/2018	—	—	—	26/07/2022	—
WBP012	TWA-20300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,326	—	—	16/07/2018	—	—	—	26/07/2022	—
WBP013	TWA-23200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,805	—	—	16/07/2018	—	—	—	—	—
WBP014	TWA-27400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,455	—	—	17/07/2018	—	29/07/2020	—	27/07/2022	—
WBP016	TWB-5900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	13,697	—	—	20/07/2018	—	30/07/2020	—	05/08/2022	—
WBP017	TWB-6300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	14,128	—	—	21/08/2018	—	—	—	05/08/2022	—
WBP018	TWB-6300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	14,205	—	—	21/08/2018	—	—	—	05/08/2022	—
WBP019	TWB-6500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	14,356	—	—	21/08/2018	—	—	—	05/08/2022	—
WBP020	TWB-6700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	14,553	—	—	19/07/2018	—	30/07/2020	—	—	—
WBP021	TWB-6800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	14,228	—	—	19/07/2018	—	90/07/2020	—	—	—
WBP022	TWB-14200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	8,980	—	—	21/08/2018	—	05/08/2020	—	28/07/2022	—
WBP023	TWC-5200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	6,093	—	—	22/08/2018	—	12/08/2020	—	—	—
WBP024	TWC-7100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	7,508	—	—	23/07/2018	—	12/08/2020	—	17/08/2022	—
WBP025	TWC-7200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	7,562	—	—	23/07/2018	—	12/08/2020	—	17/08/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBP011	11/07/2024	23/05/2025	Multidisciplinary Walkover Survey	SN CB	2	1	20	Slow	Riffle 70% Glide 30%	Boulder 5%	Cobble 10% Mud/Silt 10%	—	Gravel 30% Sand 45%	—	—	Heavy (<75%)	—
WBP012	15/07/2024	20/05/2025	Multidisciplinary Walkover Survey	UB AS	2	0.3	10	Stagnant	—	—	—	—	—	—	Mud/Slit 100%	Heavy (<75%)	—
WBP013	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	KD SC	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP014	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JC JM CB	1.5	0	0	Moderate	Glide	—	—	—	—	—	Silt	Full (>75%)	—
WBP016	—	12/06/2025	Multidisciplinary Walkover Survey	CB UB	1.5	0	0	No flow	No flow	—	—	—	—	—	Clay and silt	Full (>75%)	0
WBP017	—	12/06/2025	Multidisciplinary Walkover Survey	UB CB	1	0	0	Dry	No flow	—	—	—	—	—	—	Medium (<50%)	0
WBP018	—	12/06/2025	Multidisciplinary Walkover Survey	CB UB	1	0	0	Dry	No flow	—	—	—	—	—	—	Medium (<50%)	0
WBP019	Verification Survey (June to October	—	Watercourse Crossing Survey	JC CB	1	0	0	—	—	—	—	—	—	—	—	—	—
WBP020	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA SC	2	0.5	NA	No flow	No flow	—	—	—	—	—	Silt	Light (<25%)	100
WBP021	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA SC	2	1	NA	No flow	No flow	—	—	—	—	—	Silt	—	—
WBP022	24/07/2024	—	Multidisciplinary Walkover Survey	JS MB	2	Dry	Dry	Low	—	—	—	—	—	—	—	None (0%)	—
WBP023	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA JM	3	1	—	No flow	No flow	—	—	—	—	—	Silt	None (0%)	50
WBP024	25/07/2024	27/05/2025	Multidisciplinary Walkover Survey	UB LH	1.5	—	—	No flow	No flow	—	—	—	—	—	—	Full (>75%)	—
WBP025	25/07/2024	27/05/2025	Multidisciplinary Walkover Survey	UB	3	1	5	Stagnant	No flow	—	—	—	—	—	—	Full (>75%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP011	Watercress, watermint	0	Nettle, creeping buttercup, bramble, blackthorn, hawthorn	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	Potential recorded	None recorded. No potential.
WBP012	Fools watercress	—	Greater willowherb, hawthorn, ash, bramble , bindweed	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP013	—	—	—	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP014	—	—	Pasture	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP016	—	—	Treeline, conifer plantation	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP017	None	0	arable, woodland	Not assessed — no access	Not assessed	Not assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP018	—	0	arable, Woodland	Not assessed — no access	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP019	—	—	—	Not assessed — no access	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP020	Meadowsweet, soft rush, vetch, Yorkshire fog	—	Yorkshire fog, ryegrass, marsh thistle, willow, bramble, nettles, Cocksfoot, hawthorn, meadowsweet, soft rush	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP021	Willowherb, fools watercress, cleavers, yorkshire fog, bittercress, bent	—	Yorkshire fog, ryegrass, marsh thistle, willow, bramble, nettles, Cocksfoot, hawthorn, meadowsweet, soft rush	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP022	—	—	Soft rush, willowherb, nettle, meadowsweet, bramble	Not suitable for kick sample	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP023	Willowherb, fools watercress cress, duckweed	—	Yorkshire fog, thistle, rye grass	Not assessed — dry	Not assessed	Not Assessed	Lots of cattle poaching and grazing	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP024	Watercress, watermint, willowherb, canary grass, meadowsweet	—	Hawthorn , willow, hazel	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP025	Watercress, watermint, Phragmites	—	Meadowsweet, gorse, bramble, willowherb	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP011	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Flowing ditch along road. bed containing large amount of boulders and cobbles and some flow observed. Small fish species seen but can't ID. Some tufa present 2025: good flow, limited aquatic potential, heavily shaded, modified and channelised	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP012	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated drainage ditch. Very low water levels	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP013	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP014	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry muddy drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP016	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Deep dry drainage ditch at base of treeline, heavily shaded	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP017	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Shallow dry drainage ditch at edge of woodland and field, some areas bare ground, some vegetation encroaching from bank	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP018	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Deep dry drainage ditch at edge of woodland and field, some areas bare ground, some vegetation encroaching from bank	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP019	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	dry drainage ditch covered with willow scrub and other vegetation	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP020	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Mainly dry, bank height 1m.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP021	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry in places. Bank height 2m.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP022	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry and heavily vegetated. Difficult to see bed of ditch	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP023	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: No flow, very dry in parts but with pools of water throughout	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP024	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Straight narrow channel, Drainage ditch heavily vegetated unable to see water level	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP025	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: No flow, heavily vegetated ditch. Bank height 1.25m	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP026	TWC-11900	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	11,886	—	—	24/07/2018	—	14/08/2020	—	12/09/2022	—
WBP027	TWC-16000	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	13,425	—	—	23/08/2018	—	18/08/2020	—	15/08/2022	—
WBP028	TWC-20000	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,196	—	—	23/08/2018	—	20/08/2020	—	16/08/2022	—
WBP029	TWC-23200	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,204	—	—	30/07/2018	—	21/08/2020	—	—	—
WBP030	TWD-3200	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,533	—	—	01/08/2018	—	02/10/2020	—	19/08/2022	—
WBP031	TWD-3200	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,516	—	—	01/08/2018	—	03/10/2020	—	—	—
WBP032	TWD-6600	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,597	—	—	31/07/2018	—	—	—	14/09/2022	—
WBP033	TWD-8400	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,607	—	—	02/08/2018	—	—	—	14/09/2022	—
WBP034	TWD-8800	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,769	—	—	02/08/2018	—	—	—	—	—
WBP035	TWD-9300	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,963	—	—	03/08/2018	—	—	—	22/08/2022	—
WBP036	TWD-9100	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,899	—	—	02/08/2018	—	—	—	22/08/2022	—
WBP037	TWD-17500	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,556	—	—	02/08/2018	—	—	—	24/08/2022	—
WBP039	TWD-21600	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	13,733	—	—	27/08/2018	—	—	—	25/08/2022	—
WBP040	TWD-24600	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	14,434	—	—	31/07/2018	—	—	—	03/10/2022	—
WBP041	TWD-26200	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	15,064	—	—	02/08/2018	24/09/2019	—	—	03/10/2022	—
WBP042	TWD-26900	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	15,456	—	—	02/08/2018	—	—	31/08/2021	03/10/2022	—
WBP043	TWD-27800	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	14,541	—	—	27/08/2018	—	24/08/2020	—	—	—
WBP044	TWD-28800	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	13,621	—	—	06/08/2018	—	24/08/2020	—	23/08/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBP026	26/07/2024	—	Multidisciplinary Walkover Survey	SN CB	4	—	—	No flow	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBP027	06/08/2024	—	Multidisciplinary Walkover Survey	JS JMT	2	Dry	Dry	Stagnant	No flow	—	—	—	—	—	—	Light (<25%)	—
WBP028	07/08/2024	—	Multidisciplinary Walkover Survey	RA JM	1	Dry	Dry	No flow	No flow	—	—	—	—	—	—	Light (<25%)	—
WBP029	07/08/2024	—	Multidisciplinary Walkover Survey	RA	1	1	—	No flow	No flow	—	—	—	—	—	100%	Heavy (<75%)	—
WBP030	08/08/2024	—	Multidisciplinary Walkover Survey	JS RA JMT	2	—	—	No flow	No flow	—	—	—	—	—	100%	Medium (<50%)	—
WBP031	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SOR RA	3	Dry	Dry	No flow	No flow	—	—	—	—	—	Peat	Full (>75%)	—
WBP032	09/08/2024	—	Multidisciplinary Walkover Survey	RA	2	0.05	5	Stagnant	—	—	—	—	—	—	100%	Light (<25%)	20
WBP033	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SN AS	5	NA		—	—	—	—	—	—	—	—	—	—
WBP034	06/08/2024	—	Multidisciplinary Walkover Survey	KD FH	3	0.5	5	Stagnant	—	—	—	—	—	—	—	—	—
WBP035	06/08/2024	—	Multidisciplinary Walkover Survey	JC UB	2	0.5	0	Stagnant	—	—	—	—	—	—	—	Heavy (<75%)	—
WBP036	06/08/2024	—	Multidisciplinary Walkover Survey	JC UB	1.5	0.5	5	—	—	—	—	—	—	—	—	Light (<25%)	—
WBP037	17/10/2024	11/06/2025	Multidisciplinary Walkover Survey	JS EP MW	3	—	0	Dry	No flow	—	—	—	—	—	—	Medium (<50%)	0
WBP039	07/08/2024	—	Watercourse Crossing Survey	JC UB	3.5	2.5	—	—	—	—	—	—	—	—	—	Heavy (<75%)	—
WBP040	18/10/2024	—	Multidisciplinary Walkover Survey	SN JS	1.5	NA	—	Stagnant	No flow	—	—	—	—	—	—	Light (<25%)	—
WBP041	24/10/2024	—	Watercourse Crossing Survey	JF SW	4	1	—	Stagnant	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBP042	09/08/2024	—	Multidisciplinary Walkover Survey	JS SN	4	2	—	Stagnant	—	—	—	—	—	—	Silt 100%	Light (<25%)	—
WBP043	Verification Survey (June to October	—	Watercourse Crossing Survey	JS JG	1.5	Dry	Dry	No flow	No flow	—	—	—	—	—	Silt and peat	Full (>75%)	90
WBP044	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SOR cb	3	NA	NA	No flow	No flow	—	—	—	—	—	Silt	Full (>75%)	90

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP026	—	—	Birch, bracken, bramble, bindweed, willowherb	Not assessed — drain	Not assessed	Not Assessed	Peat extraction and agricultural	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP027	—	0 (shaded and dry)	Downy birch, willow, purple moore grass	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP028	—	—	Bramble, nettles	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP029	—	—	Bracken, birch, hawthorn,	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP030	—	—	Birch, willow, bramble, herb robert	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP031	—	—	Bracken, birch, ivy, bramble, oak, sycamore, beech, holly	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP032	Canary reed grass, duckweed,horsetail, pondweed	15	Grass sp., thistle, meadowsweet, purple loosestrife, tormentil, vetch, silverweed	Not assessed	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP033	Bull rush	—	Willow, birch, fern, Juncus, ling heather	Not assessed — drain	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP034	Sparganium, duckweed	—	Pasture	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP035	Branched Bur-reed, duckweed	—	Birch, willow, bramble, Yorkshire fog, nettle, hogweed, soft rush	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP036	—	—	Canary reed grass, sweet grass, water dock, tufted vetch, meadowsweet,	Not assessed — drain	Not assessed	Not Assessed	Agricultural	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP037	—	0	Hawthorn, ash, elder, bramble, crop stubble, willowherb, willow	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP039	—	—	Roadside verge and construction site	Not assessed — dry	Not assessed	Not Assessed	Forestry, peat run off	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP040	—	—	Nettle, willowherb, soft rush, thistle, bramble,hawthorn	Not assessed — drain	Not assessed	Not Assessed	Intensive agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP041	Duckweed, foolscress, bur reed	—	Nettle, willowherb, bramble,ash, blackthorn, willow	Not assessed — No flow and heavy siltation	Not assessed	Not Assessed	Agriculture and road runoff	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP042	Bog pondweed	—	Ling heather	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP043	Bramble, cleavers, willowherb	0	Willow, willowherb, bramble bracken, cleavers, horsetail	Not assessed — dry	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP044	Meadowsweet, willowherb, willow	—	Ivy, ash, alder, elder, hawthorn, nettles, willow, meadowsweet, willow herb, canary grass	Not assessed — drain	Not assessed	Not Assessed	Surface water runoff	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP026	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poor quality dry drainage ditch heavily vegetated and overgrown. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP027	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP028	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Dry ditch dug along Sitka spruce plantation. Very little vegetation present, high detritus cover	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP029	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Bog drain, no aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP030	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, heavily vegetated, no aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP031	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Fenced on one side. No aquatic potential. Bank height 1m.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP032	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	No aquatic potential. Connects bog to river	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP033	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch in bog, no aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP034	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP035	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch at base of treeline.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP036	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry vegetated drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP037	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry heavily vegetated drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP039	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Pool of water at one end, rest of ditch completely dry and vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP040	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch heavily vegetated with nettle and bramble. Poor quality. No aquatic potential.	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP041	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Wet drainage ditch. No aquatic potential. Heavily vegetated instream. No flow. Low water level.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP042	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily silted uniform bog drain	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP043	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP044	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	100% shading due to tunnelling from treeline. Drainage ditch dry. No instream veg present. No fisheries value or potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP045	TWD-29400	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	13,150	—	—	06/08/2018	—	25/08/2020	—	24/08/2022	—
WBP046	TWD-31900	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	10,618	—	—	07/08/2018	—	25/08/2020	—	22/08/2022	—
WBP047	TWD-32400	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	10,087	—	—	30/08/2018	—	25/08/2020	—	17/06/2022	—
WBP048	TWD-32500	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	9,988	—	—	30/08/2018	—	25/08/2020	—	—	—
WBP050	TWE-400	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	8,377	—	—	07/08/2018	—	27/08/2020	—	26/08/2022	—
WBP051	TWE-500	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	8,257	—	—	07/08/2018	—	27/08/2020	—	26/08/2022	—
WBP052	TWE-5900	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	7,105	—	—	09/08/2018	—	—	—	05/10/2022	—
WBP055	TWE-11600	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	NA	—	No	No	—	—	—	12/09/2018	—	—	—	07/10/2022	—
WBP056	TWE-11900	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	11/09/2018	—	30/09/2020	—	07/10/2022	—
WBP057	TWE-12700	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	11/09/2018	—	29/09/2020	—	06/10/2022	—
WBP058	TW-3300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,149	—	—	2018	—	—	—	—	—
WBP059	TW-11000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	6,307	—	—	2018	—	—	—	—	—
WBP061	TWB-10100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	11,749	—	—	23/07/2018	—	04/08/2020	—	27/07/2022	—
WBP062	RW-100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	128	—	—	03/09/2018	—	—	26/10/2021	14/06/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBP045	—	10/06/2025	Multidisciplinary Walkover Survey	JS EP MW	4	Dry	Dry	Stagnant	No flow	—	—	—	—	—	Silt	Heavy (<75%)	90
WBP046	20/08/2024	—	Multidisciplinary Walkover Survey	SN UB	2	—	—	Stagnant	—	—	—	—	—	—	—	Medium (<50%)	—
WBP047	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS, CB	2	0	Dry	No flow	No flow	—	—	—	—	—	Silt	Heavy (<75%)	90
WBP048	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JG	2	0.5	10	No flow	No flow	—	—	—	—	—	Silt	Heavy (<75%)	90
WBP050	21/08/2024	—	Multidisciplinary Walkover Survey	SN UB	2	—	—	—	—	—	—	—	—	—	—	Medium (<50%)	—
WBP051	21/08/2024	—	Multidisciplinary Walkover Survey	SN UB	1	—	—	—	—	—	—	—	—	—	—	Medium (<50%)	—
WBP052	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SN	4	1	—	Stagnant	—	—	—	—	—	—	—	—	—
WBP055	23/08/2024	—	Multidisciplinary walkover survey	SN UB	3	1	—	No flow	—	—	—	—	—	—	—	Light (<25%)	—
WBP056	23/08/2024	—	Multidisciplinary Walkover Survey	SN UB	2	0.5	—	Stagnant	—	—	—	—	—	—	Silt	Light (<25%)	70
WBP057	23/08/2024	—	Multidisciplinary Walkover Survey	SN UB	2	1	10	Moderate	—	—	—	—	Boulder 33% Cobble 33%	—	Silt	Medium (<50%)	30
WBP058	20/06/2024	—	Multidisciplinary Walkover Survey	JS MB	10	50	20	Slow	Riffle 100%	Boulder 5%	—	Gravel 20% Sand 20% Mud/silt 20%	Cobble 30%	—	—	Full (>75%)	—
WBP059	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP061	19/09/2024	—	Multidisciplinary Walkover Survey	JS SOR	1.5	Dry	Dry	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	60
WBP062	17/06/2024	—	Multidisciplinary Walkover Survey	JS MB	2.5	0.3	10	Low	Glide 100%	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP045	—	—	Beech, heart tongue, fern spp, bramble, holly, watermint, duckweed, watercressm meadowsweet, ash, willow	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP046	—	—	Ash, hawthorn, bramble, hazel	Not assessed — not suitable	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP047	Watermint, fool's water cress, moss sp, Willowherb, soft rush, dogrose, nightshade. Bramble, ivy, horsetail	0 (Dry)	Fragmented treeline: hawthorn, sycamore, ash, bramble, ivy, thistle, hazel, nightshade, willow. nettle	Not assessed — dry	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP048	Watermint, fool's water cress, moss sp, Willowherb, soft rush, dogrose, nightshade. Bramble, ivy, horsetail	0 (Dry)	Fragmented treeline: hawthorn, sycamore, ash, bramble, ivy, thistle, hazel, nightshade, willow. nettle	Not assessed — dry	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP050	—	—	Hawthorn, bramble, ash, sycamore	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP051	—	—	Ash, hawthorn, bramble, dog rose	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP052	Duckweed	—	Hawthorn, blackthorn, bramble, Willowherb, Cocksfoot, Yorkshire fog	Not assessed — dry	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP055	—	—	Bramble, meadowsweet, Willowherb, ivy, ash, hawthorn, nettle, dog rose, dog wood	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP056	Watercress	—	Hawthorn, meadowsweet, bramble, Willowherb, vetch, nettle, alder	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP057	—	—	Hawthorn, bramble, sycamore, ivy, blackthorn	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP058	—	—	Hazel, ivy, herb Robert, soft shield fern, bramble	Not assessed — drain	Not assessed	Not assessed	Cattle access to water	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP059	Mint flag iris, cuckoo flower.	—	—	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP061	Fool's watercress	—	Privet bramble, dog rose, holly, cocksfoot, herb robert, nettle, cleavers, ash	Not assessed — dry	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP062	—	—	Ivy, hazel, willow, oak, nettle	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP045	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drainage ditch with no water in some areas, not sampled. No fish potential, no substrate. Potential for amphibians. Possible stickleback present. Unmanaged. Drains into river. Variations in width due to large area of drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP046	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry ditch, heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP047	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Deep ditch 2020: Drainage ditch along edge of field underneath treeline, heavily vegetated with some water	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP048	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Deep ditch 2020: Drainage ditch along edge of field underneath treeline, heavily vegetated with some water	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP050	None recorded. No potential.	None recorded. No potential.	Amphibian spawning potential.	No	None recorded	Dry vegetated drainage ditch, no fish potential.Amphibian spawning potential. Not fenced off frm grassland. Long drainage system, some areas wider than others.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP051	None recorded. No potential.	None recorded. No potential.	Amphibian spawning potential.	No	None recorded	Dry vegetated drainage ditch, no fish potential.Amphibian spawning potential. Not fenced off from grassland. Long drainage system, some areas wider than others.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP052	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Wet drainage ditch in grassland field. Poor quality. No aquatic potential.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP055	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drainage ditch leading to river reeves. Heavily vegetated and choked in stream. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP056	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poor quality drain. Stagnant. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP057	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Shallow drainage ditch at roadside	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP058	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Flowing drain (potentially a stream) at bottom of very deep and steep gorge	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP059	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2m deep dry ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP061	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Unmanaged dry ditch, gently sloping south. Potential to be wet in winter. Potential for Amphibians.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP062	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Low flow drain under treeline	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP063	RW-2000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	843	—	19/06/2017	—	—	06/07/2020	—	15/06/2022	—
WBP066	TW-2400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,325	—	—	05/09/2018	—	—	—	15/06/2022	—
WBP068	TW-2800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,673	—	—	05/09/2018	—	07/07/2020	—	—	—
WBP069	TW-9400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	5,183	—	19/07/2017	—	17/09/2019	—	—	16/06/2022	—
WBP070	TW-9600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	5,465	—	—	2018	—	—	—	16/06/2022	—
WBP071	TW-10000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	5,744	—	—	2018	—	09/07/2020	—	—	—
WBP072	TW-11100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	6,395	—	—	2018	—	09/07/2020	—	—	—
WBP073	TW-12500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	7,547	—	—	—	—	—	21/04/2021	—	—
WBP074	TW-14800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	4,847	—	—	2018	—	—	—	—	—
WBP075	TW-16000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	4,312	—	—	02/07/2018	—	—	—	02/08/2022	—
WBP076	TW-18100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	3,405	—	—	02/07/2018	—	13/07/2020	—	03/08/2022	—
WBP077	TW-18300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	3,479	—	—	02/07/2018	—	13/07/2020	—	—	—
WBP078	TW-18400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	3,433	—	—	02/07/2018	—	13/07/2020	—	—	—
WBP079	TW-18800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	3,604	—	19/07/2017	—	—	13/07/2020	—	03/08/2022	—
WBP080	TWA-16000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002147)	Yes	2,476	—	—	2018	—	—	—	26/07/2022	—
WBP081	TWA-25600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,223	—	—	2018	—	28/07/2020	—	27/07/2022	—
WBP082	TWA-26300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,567	—	—	18/07/2018	—	29/07/2020	—	27/07/2022	—
WBP083	TWA-26500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,573	—	—	—	—	—	22/04/2021 (JACOBS)	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WBP063	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS CB	1	Dry	NA	No flow	No flow	—	—	—	—	—	—	—	—
WBP066	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS CB	2	Dry	Dry	No flow	—	—	—	—	—	—	—	—	—
WBP068	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA JD	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP069	—	13/05/2025	Multidisciplinary Walkover Survey	JF JS MW	3	Dry	2	Stagnant	Glide	—	—	—	—	—	Mud/Silt 100%	—	None
WBP070	—	14/05/2025	Multidisciplinary Walkover Survey	JF JS MW	4	1	Dry	—	—	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	1
WBP071	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP072	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP073	—	15/05/2025	Multidisciplinary Walkover Survey	JF JS MW	4	1	Dry	Dry	No flow	—	—	—	—	—	Mud/Silt 100%	—	None
WBP074	—	19/05/2025	Multidisciplinary Walkover Survey	SN CB	1	0.5	Low	Moderate	—	—	—	Cobble 20% Gravel 20% Sand 10%	—	Boulder 50%	—	—	—
WBP075	21/06/2024	—	Multidisciplinary Walkover Survey	CB RA	1.5	Dry	—	—	—	—	—	—	—	—	—	Medium (<50%)	—
WBP076	24/06/2024	—	Multidisciplinary Walkover Survey	JS	1	Dry	—	No flow	No flow	—	—	—	—	—	—	Light (<25%)	—
WBP077	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA JG	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP078	09/09/2024	—	Multidisciplinary Walkover Survey	JF UB	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP079	09/09/2024	—	Multidisciplinary Walkover Survey	JF UB	2	0.5	0	—	—	—	—	—	Mud/Silt 50% Cobble 50%	—	—	Medium (<50%)	—
WBP080	12/07/2024	—	Multidisciplinary Walkover Survey	JS MB	2	1	5	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—
WBP081	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JC JM CB	1.5	0	0	No flow	No flow	—	—	Silt	—	—	—	Heavy (<75%)	80
WBP082	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JC JM CB	1	Dry	Dry	No flow	No flow	—	—	—	—	—	Silt	Medium (<50%)	100
WBP083	Verification Survey (June to October	—	Water Team	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP063	—	—	—	Not assessed — drain	Not assessed	Not Assessed	Very heavily poached by cattle.	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP066	—	—	Ivy, bramble, Gorse	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP068	—	—	Tall unmanaged hedge/treelines of gorse, mixed thorn, bramble with ditches.	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP069	—	0	Thistle, bramble, buttercup	Not assessed	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP070	Watercress	—	Hedge, ferns, ivy	Not assessed — dry	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP071	—	—	—	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP072	—	—	—	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP073	—	—	Hedgerow	Not assessed	Not assessed	Not assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP074	Fools watercress, brook lime, watercress, duckweed	—	Hawthorn, grey willow, gorse, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP075	—	—	Buttercup, dog rose, nettle	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP076	—	—	Water mint, Yorkshire fog, gorse	Not assessed — drain	Not assessed	Not Assessed	Accessible by livestock	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP077	—	—	—	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP078	—	—	—	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP079	—	—	Nettle, hogweed, thistle	Not assessed — drain	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP080	—	—	Willow, meadowsweet, bramble, hazel	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP081	Fools watercress	—	Pasture	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP082	Watercress, willowherb (dominant), *Juncus* sp. (occasional), bittercress, bent, yorkshire fog	—	Yorkshire fog, ash, willow, Cocksfoot, nettle, willowherb	Not assessed — drain	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP083	—	—	—	Not assessed	Not assessed	Not assessed	—	—	—	—

Environmental Impact Assessment Report (EIAR) Volume 6 of 6: Environmental Assessment (Appendix A8.14) Watercourse Crossing Data

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP063	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poaching evident	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP066	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Deep dry ditch running along base of hedge.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP068	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP069	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP070	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Very overgrown	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP071	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP072	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drain along fence ditch line	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP073	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP074	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Appears to be spring fed from point in field. Good flow, limited aquatic potential . Unmapped stream	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP075	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Cattle access. Completely dry ditch, might be wet in winter, no aquatic value	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP076	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP077	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Shallow ditch.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP078	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Shallow ditch.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP079	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry vegetated drainage ditch at base of treeline	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP080	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Stagnant ditch along edge of forestry and field.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP081	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, covered in terrestrial vegetation	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP082	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry vegetated drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP083	—	—	—	No	—	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP084	TWB-5100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	12,975	—	—	2018	—	—	—	—	—
WBP085	TWB-10800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	11,285	—	—	—	—	04/08/2020	—	27/07/2022	—
WBP087	TWB-15300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	7,993	—	—	24/07/2018	—	06/08/2020	—	29/07/2022	—
WBP089	TWB-25200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	3,382	—	—	2018	—	29/09/2020	—	21/07/2022	—
WBP090	TWC-20300	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,191	—	—	23/08/2018	—	20/08/2020	—	15/06/2022	—
WBP091	TWC-22600	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,036	—	—	2018	08/10/2019	21/08/2020	—	17/08/2022	—
WBP092	TWD-6100	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,804	—	—	27/08/2018	—	—	—	14/09/2022	—
WBP093	TWD-8100	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,500	—	—	02/08/2018	—	28/10/2020	—	14/09/2022	—
WBP094	TWD-15000	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,860	—	—	2018	—	06/08/2020	—	—	—
WBP095	TWD-15100	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,836	—	—	31/07/2018	—	—	—	—	—
WBP096	TWD-15200	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,745	—	—	31/07/2018	—	—	—	—	—
WBP097	TWD-16300	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,271	—	—	31/07/2018	—	—	—	24/08/2022	—
WBP098	TWD-16600	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,210	—	—	31/07/2018	—	—	—	24/08/2022	—
WBP099	TWD-16500	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,304	—	29/09/2017	—	—	—	—	—	—
WBP100	TWD-16700	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,208	—	—	31/07/2018	—	—	—	24/08/2022	—
WBP101	TWD-17800	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,548	—	—	31/07/2018	—	—	—	24/08/2022	—
WBP102	TWD-32300	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	10,197	—	—	08/08/2018	—	26/08/2020	—	—	—

Environmental Impact Assessment Report (EIAR) Volume 6 of 6: Environmental Assessment (Appendix A8.14) Watercourse Crossing Data

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBP084	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP085	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS KL	2	NA	Dry	No flow	No flow	—	—	—	—	—	Silt	Light (<25%)	95
WBP087	24/07/2024	—	Multidisciplinary Walkover Survey	JS KL	2	Dry	Dry	Low	Very slow	—	—	—	—	—	—	None (0%)	—
WBP089	06/08/2024	—	Watercourse Crossing Survey	RA	2	Dry	Dry	Dry	—	—	—	—	—	—	Silt	Heavy (<75%)	—
WBP090	07/08/2024	—	Multidisciplinary Walkover Survey	RA	6	3	0.75	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	10
WBP091	07/08/2024	—	Multidisciplinary Walkover Survey	RA	1	Dry	—	No flow	No flow	—	—	—	—	—	Peat 100%	Medium (<50%)	15
WBP092	09/08/2024	29/05/2025	Multidisciplinary Walkover Survey	UB LH	8	0.3	10	Stagnant	No flow	—	—	—	—	—	Peat 100%	Light (<25%)	40
WBP093	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SN AS	3	1	6	Slow	Low flow	—	—	—	—	—	Peat	Full (>75%)	20
WBP094	08/08/2024	—	Multidisciplinary Walkover Survey	MB JF	2	Dry	Dry	Dry	Low flow	—	—	—	—	—	—	—	—
WBP095	08/08/2024	—	Multidisciplinary Walkover Survey	JF MB	3.5	1.5	—	—	—	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—
WBP096	17/10/2024	—	Multidisciplinary Walkover Survey	SN UB	3	Dry	Dry	—	—	—	—	—	—	—	—	Heavy (<75%)	—
WBP097	17/10/2024	—	Multidisciplinary Walkover Survey	SN UB	2	Dry	Dry	No flow	—	—	—	—	—	—	—	Medium (<50%)	—
WBP098	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JC UB	0.5	Dry	Dry	No flow	—	—	—	—	—	—	—	—	—
WBP099	17/10/2024	—	Multidisciplinary Walkover Survey	SN UB	0.5	—	—	No flow	—	—	—	—	—	—	—	Medium (<50%)	—
WBP100	17/10/2024	—	Multidisciplinary Walkover Survey	SN UB	1	—	—	No flow	—	—	—	—	—	—	—	Heavy (<75%)	—
WBP101	17/10/2024	11/06/2025	Multidisciplinary Walkover Survey	JS EP MW	3	—	0	No flow	No flow	—	—	—	—	—	—	Medium (<50%)	0
WBP102	20/08/2024	—	Multidisciplinary Walkover Survey	SN UB	2	—	—	No flow	—	—	—	—	—	—	—	Heavy (<75%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP084	Watercress, willowherb (dominant), *Juncus* (occasional)	—	—	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP085	Willowherb, perennial ryegrass, Yorkshire fog,	—	Perennial ryegrass, selfheal, Yorkshire fog, willow, willowherb, thistle, bramble,	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP087	—	—	Soft rush, willowherb, nettle, meadowsweet, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP089	—	—	Meadowsweet, bramble, ragwort, hawthorn, willow, cow parsley, alder, hogweed, ash, hazel	Not assessed — dry	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP090	Duckweed, fools watercress	—	Duckweed, fools watercress, reed grass	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP091	duckweed	—	Ash, hawthorn, blackthorn, flag iris	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	2019: None observed. No spawning potential — peat and sand substrate and instream vegetation.	2019: None observed. No spawning potential — peat and sand substrate and instream vegetation.
WBP092	Horsetail, canary grass, meadowsweet	—	Willow, bulrush, bramble, bracken	Not assessed — drain	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP093	Bramble, willow, bindweed,	—	Patches of shrub treeline along drain, Willow, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP094	—	—	—	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP095	—	—	Treeline and pasture	Not assessed — drain	Not assessed	Not Assessed	Dumping	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP096	—	—	Ash, hawthorn, blackthorn, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP097	—	—	Hawthorn, ash, bramble, ivy, blackthorn	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP098	None	—	Hawthorn, ash, bramble,	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP099	—	—	Blackthorn, bramble, ivy	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP100	—	—	Hawthorn, bramble, cleavers, privet, ivy, willow, knapweed, meadowsweet	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP101	—	0	Beech, nettle, hawthorn, elder, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP102	—	—	Ash, hawthorn, willow, nettle,	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP084	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drain immediately south—east of scrub.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP085	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated dry drainage ditch.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP087	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry and heavily vegetated. Difficult to see bed of ditch	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP089	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated with lots of leaf litter	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP090	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drainage ditch, approx 4—5m deep between works area and scrub area.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP091	2019: None observed. No suitable habitat. Acidic water and peat substrate.	None recorded. No potential.	None recorded	No	None recorded	Some stagnant pools in areas. Otherwise dry with no potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP092	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP093	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily overgrown drainage ditch, unable to see. Cannot estimate bank height or width due to heavy vegetation. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP094	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry heavily vegetated drain	Low	Trenchless	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP095	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Trenchless	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP096	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poor quality dry drain beneath treeline, cattle access. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP097	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch at present base of treeline	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP098	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch at present base of Treeline	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP099	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poor quality dry drain, narrow, leaf litter, heavy coverage from hedge. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP100	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry deep drainage ditch, heavily vegetated, very shaded	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP101	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry heavily vegetated drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP102	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP103	TWE-5600	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	7,213	—	—	2018	—	28/08/2020	—	05/10/2022	—
WBP104	TWE-12100	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	26/07/2017	—	—	30/09/2020	—	07/10/2022	—
WBP106	TWB-8000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	13,815	—	—	—	—	30/07/2020	—	—	—
WBP107	TW-10700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	6,168	—	—	—	—	—	22/04/2021 (JACOBS)	—	—
WBP108	TW-15600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	4,466	—	—	—	—	—	22/04/2021 (JACOBS)	—	—
WBP109	TWA-16600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002147)	Yes	1,874	—	—	—	—	—	22/04/2021 (JACOBS)	—	—
WBP110	TWA-18800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002147)	Yes	679	—	—	—	—	—	22/04/2021 (JACOBS)	—	—
WBP111	TWB-4700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	12,602	—	—	—	—	—	22/04/2021 (JACOBS)	—	—
WBP112	TWB-8000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	13,782	—	—	—	—	—	—	—	—
WBP113	TWB-8100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	13,689	—	—	—	—	30/07/2020	—	—	—
WBP115	TWB-18900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	5,745	—	—	—	—	06/08/2020	—	07/09/2022	—
WBP116	TWC-15600	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	12,977	—	—	—	—	—	22/04/2021 (JACOBS)	—	—
WBP117	TWD-400	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,984	—	—	—	—	01/10/2020	—	—	—
WBP118	TWD-15900	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,310	—	—	—	—	1709/2020	—	24/08/2022	—
WBP119	TWE-8200	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	02/10/2020	—	06/10/2022	—
WBP120	TWE-13900	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	30/09/2020	—	06/10/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBP103	22/08/2024	09/06/2025	Multidisciplinary Walkover Survey	JS EP MW	3	—	Dry	No flow	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBP104	23/08/2024	—	Multidisciplinary Walkover Survey	SN UB	3	1	7.5	Slow	—	—	—	—	—	—	—	Heavy (<75%)	—
WBP106	18/07/2024	—	Multidisciplinary Walkover Survey	UB AS	3	2	15 to 30	No flow	—	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	50
WBP107	Verification Survey (June to October	—	Water Team	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP108	Verification Survey (June to October	—	Water Team	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP109	Verification Survey (June to October	—	Water Team	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP110	Verification Survey (June to October	—	Water Team	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP111	Verification Survey (June to October	—	Water Team	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP112	18/07/2024	—	Multidisciplinary Walkover Survey	UB AS	3	—	—	—	Dry	—	—	—	—	—	—	—	—
WBP113	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA SC	3	3	15	No flow	No flow	—	—	—	—	—	Silt	Light (<25%)	90
WBP115	25/07/2024	—	Multidisciplinary Walkover Survey	JS MB	3	0	0	Stagnant	No Flow	—	—	—	—	—	—	Light (<25%)	—
WBP116	Verification Survey (June to October	—	Water Team	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP117	08/08/2024	30/05/2025	Multidisciplinary Walkover Survey	UB LH	4	2	10	Slow	—	—	Gravel 10% Sand 10%	Cobble 20%	—	—	Mud/Silt 60%	Full (>75%)	5
WBP118	19/08/2024	—	Multidisciplinary Walkover Survey	SN UB	4	NA	NA	No flow	—	—	—	—	—	—	—	Heavy (<75%)	—
WBP119	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SN	4	NA	NA	No flow	No flow	—	—	—	—	—	Silt	Full (>75%)	80
WBP120	03/09/2024	27/05/2025	Multidisciplinary Walkover Survey	EP JS MW	2	1	9	Very Slow	—	—	Gravel 10%	—	Sand 30%	—	Mud/Silt 60%	Medium (<50%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP103	—	—	Hawthorn, blackthorn, guelder rose, ash, meadowsweet	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP104	—	—	Hawthorn, bramble, dog rose, blackthorn, oak	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP106	soft rush, duckweed, reed, foolswatercress, willowherb, mint, horsetail, waterlily, callitriche, narrowleaved water plantain	Yes, in some parts with standing stagnant water	Yorkshire fog, ryegrass, marsh thistle, thistle, blackthorn, ash	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP107	—	—	—	Not assessed	Not assessed	Not assessed	—	—	—	—
WBP108	—	—	—	Not assessed	Not assessed	Not assessed	—	—	—	—
WBP109	—	—	—	Not assessed	Not assessed	Not assessed	—	—	—	—
WBP110	—	—	—	Not assessed	Not assessed	Not assessed	—	—	—	—
WBP111	—	—	—	Not assessed	Not assessed	Not assessed	—	—	—	—
WBP112	—	—	Bramble, hawthorn, meadowsweet, sweet vernal, cocksfoot, red clover	Not assessed	Not assessed	Not assessed	—	—	—	—
WBP113	Yorkshire fog, Timothy, marsh thistle, soft rush, duckweed, reed	—	Yorkshire fog, ryegrass, marsh thistle, thistle	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP115	Water mint, meadowsweet, horsetail	—	Gorse, willow, thistle, tufted vetch , silverweed	Not assessed — drain	Not assessed	Not Assessed	Enrichment	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP116	—	—	—	Not assessed	Not assessed	Not assessed	—	—	—	—
WBP117	Water parsnip	20	Hawthorn, nettles, meadowsweet, elder	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP118	Fools watercress	—	Bramble, spear thistle, horsetail, Yorkshire fog, false oat grass,cocksfoot	Not assessed — drain	Not assessed	Not Assessed	None	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP119	Bramble, nettle	—	Sycamore, ivy, hazel , dog rose, hogweed, bramble	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP120	—	—	Hawthorn, dog rose, bramble, sycamore, ash, spindle, holly, honeysuckle	Not assessed — drain	Not assessed	Not Assessed	Agriculture runoff	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Environmental Impact Assessment Report (EIAR) Volume 6 of 6: Environmental Assessment (Appendix A8.14) Watercourse Crossing Data

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP103	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated dry ditch. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP104	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	slow flowing ditch, heavily vegetated and shaded	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP106	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Stagnant Water pooling in some areas.Poaching evident.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP107	—	—	—	No	—	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP108	—	—	—	No	—	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP109	—	—	—	No	—	—	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP110	—	—	—	No	—	—	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP111	—	—	—	No	—	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP112	—	—	—	No	—	Very shallow dry drain	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP113	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Slight/low flow downstream. Stagnant water, pooling in places. Poaching evident.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP115	None recorded. No potential.	None recorded. No potential.	Stand of devils bit scabious present alongside ditch	No	None recorded	Stand of devils bit scabious present alongside ditch.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP116	—	—	—	No	—	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP117	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch under treeline	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP118	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poor quality dry drain in middle of BC1. Steep banks	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP119	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch. Dead leaf litter. No water, no aquatic potential	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP120	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Shallow clear water, slow flowing, substrate covered with dead vegetation	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP121	TWD-26600	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	15,408	—	—	—	—	—	—	—	—
WBP122	TWE-4800	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	7,359	—	—	—	—	—	—	04/10/2022	—
WBP123	TWB-8900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	12,966	—	—	—	—	04/08/2020	—	—	—
WBP124	TWB-9100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	12,834	—	—	—	—	04/08/2020	—	—	—
WBP125	TWB-10200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	11,628	—	—	—	—	04/08/2020	—	27/07/2022	—
WBP126	TW-12700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	7,663	—	—	2018	18/09/2019	09/07/2020	—	—	—
WBP128	TWB-13300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	9,827	—	—	—	—	05/08/2020	—	28/07/2022	—
WBP129	TWB-13400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	9,740	—	—	—	—	05/08/2020	—	28/07/2022	—
WBP130	TWB-13500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	9,539	—	—	—	—	05/08/2020	—	—	—
WBP131	TWB-14000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	9,116	—	—	—	—	05/08/2020	—	—	—
WBP132	TWB-14500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	8,763	—	—	—	—	05/08/2020	—	—	—
WBP133	TWB-14600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	8,653	—	—	—	—	05/08/2020	—	—	—
WBP134	TWB-14900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	8,351	—	—	—	—	05/08/2020	—	29/07/2022	—
WBP136	TWB-15100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	8,183	—	—	—	—	06/08/2020	—	29/07/2022	—
WBP137	TWB-15400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	7,846	—	—	—	—	06/08/2020	—	29/07/2022	—
WBP139	TWB-18700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	5,729	—	—	—	—	06/08/2020	—	07/09/2022	—
WBP140	TWB-18700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	5,638	—	—	—	—	06/08/2020	—	07/09/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WBP121	09/08/2024	—	Multidisciplinary Walkover Survey	JF MB	4	1	—	—	—	—	—	—	—	—	Peat 100%	—	—
WBP122	22/08/2024	11/06/2025	Multidisciplinary Walkover Survey	JS EP MW	3	1	—	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	—
WBP123	23/07/2024	19/05/2025	Multidisciplinary Walkover Survey	AS SOR	2.5	1	Dry	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	80
WBP124	23/07/2024	19/05/2025	Multidisciplinary Walkover Survey	AS SOR	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP125	22/07/2024	—	Multidisciplinary Walkover Survey	MB JM	2	—	—	Dry	—	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—
WBP126	Verification Survey (June to October	—	Watercourse Crossing Survey	RA JD	3.5	1.75	5	No flow	No flow	—	—	—	—	—	Silt	Medium (<50%)	100
WBP128	24/07/2024	—	Multidisciplinary Walkover Survey	JS KL	3	Dry	Dry	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—
WBP129	24/07/2024	—	Multidisciplinary Walkover Survey	JS KL	2	Dry	Dry	Low	No flow	—	—	—	—	—	—	None (0%)	—
WBP130	24/07/2024	—	Multidisciplinary Walkover Survey	SC JG	3	1	1	Low	Low flow	—	—	—	—	—	Peat 100%	None (0%)	—
WBP131	24/07/2024	—	Multidisciplinary Walkover Survey	SC JG	2	Dry	Dry	Low	No Flow	—	—	—	—	—	—	None (0%)	—
WBP132	24/07/2024	—	Multidisciplinary Walkover Survey	SC JG	3	Dry	Dry	No flow	No Flow	—	—	—	—	—	—	Medium (<50%)	—
WBP133	24/07/2024	—	Multidisciplinary Walkover Survey	SC JG	3	Dry	Dry	No flow	No Flow	—	—	—	—	—	—	Medium (<50%)	—
WBP134	24/07/2024	19/05/2025	Multidisciplinary Walkover Survey	SOR	5	0	0	Dry	No Flow	—	—	—	—	—	Mud/Silt 100%	None (0%)	0
WBP136	24/07/2024	—	Multidisciplinary Walkover Survey	JS KL	3	0.5	5	Stagnant	No Flow	—	—	—	—	—	Mud/Silt 100%	None (0%)	—
WBP137	24/07/2024	—	Multidisciplinary Walkover Survey	JS KL	2	Dry	Dry	Low	—	—	—	—	—	—	—	None (0%)	—
WBP139	25/07/2024	—	Multidisciplinary Walkover Survey	JS MB	1.5	1.5	0	Stagnant	No Flow	—	—	—	—	—	—	Light (<25%)	—
WBP140	25/07/2024	—	Multidisciplinary Walkover Survey	JS MB	2	Dry	Dry	No Flow	No Flow	—	—	—	—	—	—	None (0%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP121	Bog cotton,sphagnum	—	Heather, scrub	Not assessed	Not assessed	Not assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP122	—	—	Hawthorn, ivy, ash, blackthorn	Not assessed	Not assessed	Not assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP123	Fools watercress, willowherb, meadowsweet,	—	Fools watercress, blackthorn, bramble, willowherb, timothy, ash, hawthorn, herb robert	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP124	—	—	—	Not assessed	Not assessed	Not assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP125	—	—	Willow, bramble, willowherb, watercress, nettle, thistle	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP126	Watercress, mint, figwort, flag iris, Luzula	0	Willow, hawthorn, birch	Not assessed — No flow and choked with vegetation	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP128	—	—	Bramble, willowherb, watercress	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP129	—	—	Soft rush, willowherb, nettle	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP130	duckweed, flag iris, equisetum, watercress	—	—	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP131	—	—	Soft rush, willowherb, nettle, meadowsweet, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP132	Juncus	—	Hawthorn, poplar, blackthorn, willowherb, grass sp.	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP133	Juncus	—	Hawthorn, poplar , blackthorn, willow, grass sp.	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP134	—	—	Soft rush, willowherb, nettle, meadowsweet, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP136	—	—	Soft rush, willowherb, nettle, meadowsweet, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP137	—	—	Bramble, ivy	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP139	—	—	Thistle, nettle, hogweed, Yorkshire fog	Not assessed — drain	Not assessed	Not Assessed	Enrichment, pollution from road	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP140	—	—	Thistle, hogweed, dandelion, Yorkshire fog	Not assessed — drain	Not assessed	Not Assessed	Enrichment, pollution from road	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Environmental Impact Assessment Report (EIAR) Volume 6 of 6: Environmental Assessment (Appendix A8.14) Watercourse Crossing Data

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP121	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP122	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Completely dry, poor quality, leaf litter	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP123	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Could not see drain too vegetated 2025: Dry drain and heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP124	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	No access bullocks in field	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP125	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated dry drainage ditch.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP126	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Trenchless	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP128	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry and heavily vegetated and shaded by treeline.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP129	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry and heavily vegetated.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP130	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP131	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry and heavily vegetated. Difficult to see bed of ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP132	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP133	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP134	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Recently clear over winter of vegetation and deepened 2025: Dry, recently sprayed, all vegetation dead. No fisheries potential.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP136	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Recently clear over winter of vegetation and deepened	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP137	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry and heavily vegetated. Difficult to see bed of ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP139	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP140	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP142	TWB-20300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	5,342	—	—	—	—	07/08/2020	—	08/09/2022	—
WBP143	TWB-22700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	4,132	—	—	—	—	07/08/2020	—	08/09/2022	—
WBP145	TWB-23200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	4,071	—	—	—	—	08/08/2020	—	08/09/2022	—
WBP146	TWB-25000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	3,539	—	—	—	—	29/09/2020	24/08/2021	—	—
WBP147	TWC-4800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	5,778	—	—	—	—	12/08/2020	24/08/2021	—	—
WBP148	TWC-5200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	6,188	—	—	—	—	12/08/2020	—	—	—
WBP150	TWC-7400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	7,646	—	—	—	—	12/08/2020	—	17/08/2022	—
WBP151	TWC-7900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	8,318	—	—	—	—	12/08/2020	—	—	—
WBP152	TWC-8100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	8,485	—	—	—	—	12/08/2020	—	18/08/2022	—
WBP153	TWC-9900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	9,986	—	—	—	—	13/08/2020	25/08/2021	19/08/2022	—
WBP154	TWC-10800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	10,857	—	—	—	—	14/08/2020	—	—	—
WBP155	TWC-11200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	11,193	—	—	—	—	14/08/2020	—	19/08/2022	—
WBP156	TWC-12000	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	11,991	—	—	—	—	14/08/2020	—	12/09/2022	—
WBP157	TWC-12300	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	12,245	—	—	—	—	14/08/2020	—	—	—
WBP158	TWC-12800	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	12,559	—	—	—	—	14/08/2020	—	—	—
WBP159	TWC-13700	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	13,005	—	—	—	—	30/09/2020	—	—	—
WBP160	TWC-13700	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	12,953	—	—	—	—	30/09/2020	—	15/08/2022	—
WBP161	TWC-15700	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	13,002	—	—	—	—	19/08/2020	—	15/08/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WBP142	25/07/2024	12/06/2025	Multidisciplinary Walkover Survey	JS EP MW	1.5	Dry	Dry	No Flow	No flow	—	—	—	—	—	—	Light (<25%)	—
WBP143	26/07/2024	—	Multidisciplinary Walkover Survey	JS MB	2	Dry	Dry	No Flow	No Flow	—	—	—	—	—	—	Heavy (<75%)	—
WBP145	26/07/2024	—	Multidisciplinary Walkover Survey	JS MB	2	Dry	Dry	Stagnant	—	—	—	—	—	—	—	Medium (<50%)	—
WBP146	26/07/2024	—	Multidisciplinary Walkover Survey	JS MB	2	—	—	—	—	—	—	—	—	—	—	Heavy (<75%)	—
WBP147	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SOR	4	3	8	Slow	No flow	—	—	—	—	—	Silt	Heavy (<75%)	100
WBP148	24/07/2024	—	Multidisciplinary Walkover Survey	SN CB	3	1	15	Dry	—	—	—	—	—	—	Mud/Silt 100%	None (0%)	—
WBP150	25/07/2024	27/05/2025	Multidisciplinary Walkover Survey	UB LH	1	—	10	No Flow	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBP151	—	27/05/2025	Multidisciplinary Walkover Survey	UB LH	2	0.25	5	No Flow	No flow	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	0
WBP152	25/07/2024	—	Multidisciplinary Walkover Survey	UB	1	Dry	Dry	No Flow	No flow	—	—	—	—	—	Silt	Light (<25%)	—
WBP153	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	UB, JM, KL	4	NA	NA	Stagnant	No flow	—	—	—	—	—	Organics	Full (>75%)	—
WBP154	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JG JM	6	1.5	NA	No Flow	No flow	—	—	—	—	—	Silt	Medium (<50%)	60
WBP155	25/07/2024	—	Multidisciplinary Walkover Survey	SN CB	5	0	0	Stagnant	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBP156	26/07/2024	—	Multidisciplinary Walkover Survey	SN CB	4	1	—	Stagnant	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBP157	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JG JM	4	2	4	No Flow	No flow	—	—	—	—	—	Silt	Light (<25%)	60
WBP158	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JG JM	0.5	Dry	Dry	No flow	No flow	—	—	—	—	—	Peat	Light (<25%)	90
WBP159	26/07/2024	—	Multidisciplinary Walkover Survey	SN CB	4	Dry	Dry	Dry	No flow	—	—	—	—	—	Peat 100%	None (0%)	—
WBP160	26/07/2024	—	Multidisciplinary Walkover Survey	SN CB	7	4	unknown	Stagnant	No flow	—	—	—	—	—	Peat 100%	Light (<25%)	—
WBP161	06/08/2024	—	Multidisciplinary Walkover Survey	JS JMT	2	Dry	dry	Dry	No flow	—	—	—	—	—	—	Light (<25%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP142	—	0	Perennial ryegrass, willowherb, bramble, hawthorn, nettles, thistle, willow, meadowsweet, hogweed	Not assessed — drain	Not assessed	Not Assessed	Agriculture, weedkiller	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP143	—	—	Hawthorn, bramble, gorse	Not assessed — drain	Not assessed	Not Assessed	Enrichment	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP145	Willowherb	—	Willow, ivy, hawthorn, dog rose, thistle, bramble, ash	Not assessed — drain	Not assessed	Not Assessed	Enrichment	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP146	—	—	Nettle, hogweed, bramble, hawthorn, cocksfoot, dogrose, bindweed, thistle	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP147	Willowherb, fools watercress cress, duckweed	—	Bramble, bracken, hazel, willow, nettle, bindweed	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP148	Willowherb, fools watercress cress, duckweed	—	Bramble hawthorn, blackthorn	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP150	Watercress, water mint, Phragmites, willowherb, soft rush	—	Meadowsweet, hawthorn, willow, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP151	—	—	Willow, ryegrass, yorkshire fog	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP152	—	—	Hazel, bramble, hawthorn, dogrose, spear thistle	Not assessed — drain	Not assessed	Not Assessed	Cattle have access, banks of drainage ditch are showing some signs of erosion	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP153	None	—	Bramble, willow, blackthorn, dog rose , holly	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP154	Bracken, herb Robert, bramble, vetch, greater willowherb, meadowsweet	—	Bramble, hawthorn, Yorkshire fog, perennial ryegrass, ash, oak, bracken, herb robert, vetch, greater willowherb, meadowsweet	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP155	Willowherb, watermint	—	Willow, ash, bramble, nettle	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP156	Bull rush, flag iris	—	Willow, gorse, birch, thistle, bramble, common reed, flag iris	Not assessed — drain	Not assessed	Not Assessed	Peat run off, encroaching vegetation	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP157	Common reed, meadowsweet, willowherb, knapweed, ling heather	—	Willow, common reed, purple loosestrife, willowherb, meadowsweet, ling heather , knapweed	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP158	Marsh arrow grass, watermint, sharp flowered rush, redshank, purple loosestrife, colts foot, dandelion, thistle	—	Marsh arrow grass, sharp flowered rush, watermint, redshank, water plantain, purple loosestrife, forget me nots, coltsfoot, yarrow, thistle hawks bit, willow spp., dandelion	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP159	Bur-reed, willowherb, soft rush, bullrush	—	Bracken, heather, purple moor grass, cocksfoot, bramble, willow	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP160	Pondweed, green algae mint	20	Willow, bracken, knapweed, soft rush	Not assessed — drain	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP161	NA	—	Downy birch, willow, purple moore grass	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP142	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Straight uniform drain, maintained. No sampled, no fisheries value. Areas heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP143	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch heavily vegetated, frog potential, fenced off from cattle and sheep	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP145	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch heavily vegetated, frog potential, cattle have access, treeline causing tunnelling	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP146	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Width varies along ditch. Fenced off from cattle. Dry during summer. Drains into river nearby	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP147	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: No flow, very dry in parts but with pools of water throughout. 2021:Could not get good access or view due to heavy vegetation	Low	Trenchless	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP148	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: No flow, very dry in parts but with pools of water throughout	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP150	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Vegetated drain, little water present at boundary of forestry and field	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP151	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: No flow heavily vegetated ditch	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP152	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drain parallel to hedgerow	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP153	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, base completely covered in plant litter and debris.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP154	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP155	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Unable to access in 2024 due to cattle. 2022: Heavily vegetated drainage ditch, hard to see channel through thick vegetation, no water visible.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP156	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Deep drainage ditch with no flow running alongside access track	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP157	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Bank height 2m. Bog drain. Clonad Bog with approximately 30 drains throughout	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP158	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Bank height 2m. Bog drain. Clonad Bog with approximately 30 drains throughout. Dry drainage ditch in cutover bog with no water and heavily vegetated.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP159	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Dry/damp bog drain. No aquatic potential. Clonad bog with several other drains throughout.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP160	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Bog drain heavily vegetated with pond weed	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP161	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry, deep shaded drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP162	TWC-17600	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,213	—	—	—	—	19/08/2020	—	—	—
WBP163	TWC-17600	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,187	—	—	—	—	19/08/2020	—	—	—
WBP164	TWC-17600	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,259	—	—	—	—	19/08/2020	—	—	—
WBP165	TWC-20700	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,082	—	—	—	—	20/08/2020	—	—	—
WBP166	TWC-22100	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	14,956	—	—	—	—	20/08/2020	—	16/08/2022	—
WBP167	TWC-22200	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,015	—	—	—	—	21/08/2020	—	17/08/2022	—
WBP168	TWC-22900	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	14,910	—	—	—	—	21/08/2020	—	17/08/2022	—
WBP169	TWC-23100	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	14,936	—	—	—	—	21/08/2020	—	17/08/2022	—
WBP170	TWC-23500	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,277	—	—	—	—	30/09/2020	—	—	—
WBP172	TWC-23700	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,382	—	—	—	—	30/09/2020	—	—	26/06/2023
WBP173	TWC-23700	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,363	—	—	—	—	30/09/2020	—	—	29/06/2023
WBP174	TWC-23800	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,361	—	—	—	—	30/09/2020	—	17/08/2022	—
WBP175	TW-100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	715	—	—	—	—	17/08/2020	—	—	—
WBP176	TWD-2000	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,774	—	—	—	—	02/10/2020	—	—	—
WBP177	TWD-2200	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,665	—	—	—	—	02/10/2020	—	—	—
WBP178	TWD-2500	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,562	—	—	—	—	02/10/2020	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WBP162	07/08/2024	11/06/2025	Multidisciplinary Walkover Survey	JS EP MW	1	Dry	Dry	Dry	No flow	—	—	—	—	—	Peat 100%	Light (<25%)	90
WBP163	07/08/2024	11/06/2025	Multidisciplinary Walkover Survey	JS EP MW	1	Dry	Dry	Dry	No flow	—	—	—	—	—	Peat 100%	Medium (<50%)	95
WBP164	07/08/2024	11/06/2025	Multidisciplinary Walkover Survey	JS EP MW	4	Dry	Dry	Dry	No flow	—	—	Sand 25%	—	Peat 75%	—	Medium (<50%)	80
WBP165	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JG JS	2	1	2	No flow	No flow	—	—	—	—	—	Peat	None (0%)	2
WBP166	07/08/2024	—	Multidisciplinary Walkover Survey	RA	1	NA	NA	No flow	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBP167	07/08/2024	—	Multidisciplinary Walkover Survey	RA	2	1.5	NA	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—
WBP168	07/08/2024	—	Multidisciplinary Walkover Survey	RA	1	NA	NA	No flow	No flow	—	—	Sand	—	—	—	Medium (<50%)	—
WBP169	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SN AS CB	1	NA	NA	No flow	No flow	—	—	Sand	—	—	Silt	Full (>75%)	95
WBP170	08/08/2024	28/05/2025	Multidisciplinary Walkover Survey	UB LH	1	1	2	Stagnant	No flow	—	—	—	—	—	Peat 100%	—	—
WBP172	08/08/2024	28/05/2025	Multidisciplinary Walkover Survey	UB LH	1.5	1	2cm	Stagnant	Stagnant	—	—	—	—	—	Peat 100%	Light (<25%)	25
WBP173	08/08/2024	28/05/2025	Multidisciplinary Walkover Survey	UB LH	2	0.5	15	Stagnant	No flow	—	—	—	—	—	Peat 100%	Medium (<50%)	50
WBP174	08/08/2024	—	Multidisciplinary Walkover Survey	RA	1	Damp	Dry	No flow	No flow	—	—	—	—	—	Peat 100%	Heavy (<75%)	10
WBP175	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SC	3	0.5	2	Low	—	—	—	—	—	—	Silt	Full (>75%)	—
WBP176	16/10/2024	—	Multidisciplinary Walkover Survey	SN UB	2	Dry	Dry	Dry	No flow	—	—	—	—	—	—	Medium (<50%)	0
WBP177	16/10/2024	—	Multidisciplinary Walkover Survey	SN UB	2	Dry	Dry	Dry	No flow	—	—	—	—	—	—	Heavy (<75%)	0
WBP178	12/10/2024	—	Multidisciplinary Walkover Survey	—	—	—	—	—	—	—	—	—	—	—	Peat 100%	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP162	Greater willowherb, watermint, soft rush	—	Greater willowherb, gorse, bindweed, watermint, willow, nettle	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP163	Greater willowherb, watermint,	—	Greater willowherb, bindweed, watermint, willow, nettle, bracken, heather	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP164	Greater willowherb, watermint,	—	Greater willowherb, gorse, bindweed, watermint, birch, sycamore, ivy, ash, willow, bog cotton	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP165	Sharp flowered rush	—	Sharp flowered rush	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP166	—	—	Hawthorn, plum, hazel, Japanese knotweed	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP167	—	—	Bramble, gorse,willow,nettle,willowherb,watercress, hawthorn	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP168	—	—	Aspen, ash, blackthorn, hawthorn, willow	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP169	Bramble, bindweed, meadowsweet, perennial ryegrass, Bracken	—	Canary grass, hawthorn, ash	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP170	—	—	—	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP172	Duckweed, flag iris	—	Bracken, willow, bindweed, willowherb, meadowsweet, bramble,rapeseed	Not assessed — drain	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP173	Bog pondweed	—	Willow, purple moor grass, bracken, bindweed, rush, gorse	Not assessed — drain	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP174	Bulrush	—	Bramble, bracken, willowherb, nettle, bindweed, meadowsweet	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP175	—	—	—	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP176	—	0	Grey willow, elder, ivy, ash, hawthorn, nettle	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP177	—	0	Bracken, bramble, ivy, hawthorn, elder	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP178	Watercress, mint, duckweed, bulrush, bog pondweed	—	—	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP162	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Dry ditch heavily vegetated.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP163	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Dry ditch heavily vegetated.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP164	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Dry ditch heavily vegetated.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP165	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Bank height 2m. Bog drain, overflowing due to recent storm. Series of drains recorded throughout Esker Bog, some intersecting the construction corridor completely and some partially.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP166	None recorded. No potential.	None recorded. No potential.	None recorded	No	Japanese Knotweed	Dry drainage ditch, no aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP167	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	So heavily vegetated cannot see water, presumed dry. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP168	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry with lots of debris, no aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP169	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch. No evidence of water. Heavily vegetated.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP170	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Bog drain, bank height 1.8m 2025: in poor condition	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP172	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2022:Only wet in drain parallel to access track. No aquatic potential—steep banks for amphibian access. 2025: Bog drain in very poor condition	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP173	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Bog drain, bank height 1.8m. No aquatic habitat. 2025:Bog drain. Dragonfly and damselfly using this habitat, also suitable for amphibian	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP174	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP175	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP176	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020:Poor quality dry drain parallel to treeline. Heavily vegetated. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP177	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Heavily vegetated dry ditch. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP178	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Bog cluster of drains. 2024 data records drains have now been blocked and are flooded into ponds. Wide drains/ponds with good value. Series of bog drains intersecting the construction corridor on Cloncreen Bog	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP179	TWD-2900	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,478	—	—	—	—	03/10/2020	—	18/08/2022	—
WBP180	TWD-3200	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,485	—	—	—	—	03/10/2020	—	19/08/2022	—
WBP182	TWD- 28600	FW4 — Drainage Ditch	DRAIN	Boyne	DRAIN	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	13,722	—	—	—	—	01/09/2020	—	03/10/2022	—
WBP183	TWD-29800	FW4 — Drainage Ditch	DRAIN	Boyne	DRAIN	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	12,691	—	—	—	—	25/08/2020	—	—	—
WBP184	TWD-30300	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	12,153	—	—	—	—	24/08/2020	—	—	—
WBP185	TWD-30900	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	11,576	—	—	—	—	24/08/2020	—	24/08/2022	—
WBP186	TWD-33000	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	9,485	—	—	—	—	26/08/2020	—	—	—
WBP187	TWD-33000	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	9,485	—	—	—	—	26/08/2020	—	25/08/2022	—
WBP188	TWD-33400	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	9,149	—	—	—	—	26/08/2020	27/08/2021	25/08/2022	—
WBP189	TWD-33900	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	9,122	—	—	—	—	26/08/2020	—	25/08/2022	—
WBP190	TWD-34000	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	9,006	—	—	—	—	26/08/2020	—	25/08/2022	—
WBP191	TWD-34100	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	8,821	—	—	—	—	26/08/2020	—	25/08/2022	—
WBP192	TWD-34200	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	8,734	—	—	—	—	27/08/2020	—	25/08/2022	—
WBP193	TWE-300	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	8,466	—	—	—	—	27/08/2020	—	26/08/2022	—
WBP194	TWE-900	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	7,829	—	—	—	—	27/08/2020	—	26/08/2022	—
WBP195	TWE-1400	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	7,870	—	—	—	—	27/08/2020	—	26/08/2022	—
WBP196	TWE-3100	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	7,501	—	—	—	—	23/10/2020	—	04/10/2022	—
WBP197	TWE-3100	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	7,495	—	—	—	—	23/10/2020	—	04/10/2022	—
WBP198	TWE-5000	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	7,383	—	—	—	—	28/08/2020	—	—	—
WBP199	TWE-5300	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	7,234	—	—	—	—	28/08/2020	—	05/10/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBP179	08/08/2024	29/05/2025	Multidisciplinary Walkover Survey	UB LH	4	1	5	Stagnant	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBP180	08/08/2024	—	Multidisciplinary Walkover Survey	JS RA JMT	3	—	—	No flow	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBP182	23/10/2024	—	Multidisciplinary Walkover Survey	JF SW	2.5	0.5	NA	—	—	—	—	—	—	—	—	Heavy (<75%)	15
WBP183	—	10/06/2025	Multidisciplinary Walkover Survey	JS EP MW	3	Dry	Dry	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	—
WBP184	20/08/2024	—	Multidisciplinary Walkover Survey	UB SN	3	1	10	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	90
WBP185	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	CB SOR	1	NA	NA	No flow	No flow	—	—	—	—	—	Silt	Light (<25%)	60
WBP186	22/10/2024	—	Multidisciplinary Walkover Survey	JF SW	2	1	20	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	0
WBP187	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SOR CB	2	NA	NA	No flow	No flow	—	—	—	—	—	Silt	Heavy (<75%)	70
WBP188	22/10/2024	—	Multidisciplinary Walkover Survey	JF SW	2	NA	NA	No flow	No flow	—	—	—	—	—	—	Full (>75%)	—
WBP189	21/08/2024	—	Multidisciplinary Walkover Survey	SN UB	1	Dry	NA	—	—	—	—	—	—	—	—	Medium (<50%)	—
WBP190	20/08/2024	—	Multidisciplinary Walkover Survey	SN UB	2	Dry	NA	No flow	No flow	—	—	—	—	—	—	Full (>75%)	—
WBP191	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	CB SOR	1	NA	NA	No flow	No flow	—	—	—	—	—	Silt	Heavy (<75%)	70
WBP192	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SOR CB	2	NA	NA	No flow	No flow	—	—	—	—	—	Silt	Heavy (<75%)	70
WBP193	21/08/2024	—	Multidisciplinary Walkover Survey	SN UB	2	NA	NA	—	—	—	—	—	—	—	—	Light (<25%)	None
WBP194	21/08/2024	—	Multidisciplinary Walkover Survey	SN UB	5	NA	NA	—	—	—	—	—	—	—	—	Medium (<50%)	None
WBP195	21/08/2024	—	Multidisciplinary Walkover Survey	SN UB	2	NA	NA	—	—	—	—	—	—	—	—	Heavy (<75%)	None
WBP196	—	28/05/2025	Watercourse Crossing Survey	JS EP MW	2	Dry	Dry	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	—
WBP197	—	28/05/2025	Watercourse Crossing Survey	JS EP MW	2	Dry	Dry	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	—
WBP198	22/08/2024	09/06/2025	Multidisciplinary Walkover Survey	JS EP MW	3	Dry	Dry	Dry	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—
WBP199	22/08/2024	09/06/2025	Multidisciplinary Walkover Survey	JS EP MW	3	NA	NA	Dry	No flow	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP179	—	—	Birch, willow, gorse, heather, fern	Not assessed — drain	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP180	—	—	Willow, gorse, snowberry, birch, butterfly bush, bramble, nettle	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP182	Watercress, reed canary grass	—	Alder, bramble, willow	Not assessed — drain	Not assessed	Not Assessed	Intensive agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP183	—	—	Hawthorn, ash, bramble, nettle, dogrose, grass spp, meadow buttercup, meadowsweet	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP184	Meadowsweet	—	Hawthorn, ash, bramble, nettle, dogrose, grass spp, meadow buttercup, meadowsweet	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP185	Nettle	—	Nettle, bramble, hawthorn, ivy	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP186	NA	—	Ash, hawthorn, willow, nettle, bramble, ivy, meadowsweet, harts tongue fern	Not assessed — drain	Not assessed	Not Assessed	Runoff from roadside	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP187	bramble, ivy	—	Meadowsweet, nettles, hawthorn, bramble, ash	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP188	None	—	Hawthorn, blackthorn, bramble, ash, ivy, dock, nettles	Not assessed — drain	Not assessed	Not Assessed	Animals access, tunnelling	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP189	None	—	Hawthorn, blackthorn, nettle, willow, bramble	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP190	None	—	Hawthorn, bramble, ash, ivy, soft rush	Not assessed — drain	Not assessed	Not Assessed	Cattle access, bank trampling	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP191	duckweed, watercress, meadow buttercup	—	Willowherb hawthorn nettle watercress bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP192	duckweed, watercress, meadow buttercup	—	Nettles, hawthorn, blackthorn, bramble ivy	Not assessed — drain	Not assessed	Not Assessed	Enrichment, bank erosion	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP193	None	0	Ash, sycamore, horse chestnut, bramble	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP194	None	0	Hawthorn, bramble, ash, elder, ivy	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP195	None	0	Hawthorn, blackthorn, ash, bramble	Not assessed — drain	Not assessed	Not Assessed	Agriculture, siltation	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP196	—	—	Ash, oak, sycamore, lime, ivy, hawthorn	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP197	—	—	Ash, oak, sycamore, lime, ivy, hawthorn	Not assessed — drain	Not assessed	Not Assessed	Runoff	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP198	—	—	Ash, hawthorn, bramble, ivy	Not assessed — not suitable	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP199	—	—	Hawthorn, ivy, ash, crab apple, meadowsweet, cleavers	Not assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP179	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2022: Dry drainage ditch 2025: Some water present	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP180	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2022:Dry drainage ditch. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP182	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2022:Dry drainage ditch, poor quality. Very narrow trench. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP183	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Dry ditch under hedges, heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP184	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Wet ditch under hedges, heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP185	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, no vegetation in ditch but heavy vegetation on either side. No fish potential	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP186	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, viewed along roadside. no fisheries potential, maybe suitable for frogs	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP187	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	No fisheries potential. Well maintained, tunnelled in sections under hedgerow.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP188	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry Drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP189	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry vegetated drainage ditch, no fish potential. Fenced off	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP190	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drain, steep banks, parallel to treeline, no aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP191	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry vegetated ditch, no fish potential. Fenced off from grassland. Amphibian potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP192	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	No fisheries value, Dry.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP193	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry vegetated drainage ditch, no fish potential.amphibian spawning potential. Not fenced off from grassland, sheep in ditch.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP194	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, very wide, heavily vegetated banks, no vegetation in ditch but lots of leaf litter. Cattle have access and walk in ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP195	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Extremely vegetated, ditch has dense bramble. No fish potential.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP196	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poor quality dry drainage ditch. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP197	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poor quality dry drainage ditch. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP198	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drain, steep bank, likely water during wetter times as watercress present, but leaf litter and encroachment of hedge vegetation at present	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP199	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch . Poor quality. No aquatic potential.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP200	TWE-5500	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	7,224	—	—	—	—	28/08/2020	—	05/10/2022	—
WBP201	TWE-5800	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	7,130	—	—	—	—	28/08/2020	—	05/10/2022	—
WBP202	TWE-6000	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	Yes (SAC: 001398)	Yes	7,085	—	—	—	—	28/08/2020	—	05/10/2022	—
WBP203	TWE-7500	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	02/10/2020	—	—	—
WBP205	TWE-7800	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	23/10/2020	—	—	—
WBP206	TW-33100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002241 and SPA: 004058)	Yes	11000	—	—	—	—	16/07/2020	—	—	—
WBP207	TWE-9100	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	23/10/2020	—	06/10/2022	—
WBP208	TWE-12000	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	02/10/2020	—	07/10/2022	—
WBP209	TWE-12700	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	30/09/2020	—	06/10/2022	—
WBP210	TWA-27700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,572	—	—	—	—	29/07/2020	—	—	—
WBP211	TWE-14100	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	02/09/2020	—	—	—
WBP212	TWE-14200	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	03/09/2020	—	—	—
WBP213	TWE-14800	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	29/09/2020	—	—	—
WBP214	TWE-14800	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	29/09/2020	—	—	—
WBP215	TWE-14900	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	29/09/2020	—	06/10/2022	—
WBP216	TWE-15600	FW1 — Eroding/Upland River	NA	Liffey	NA	—	—	No	No	—	—	—	—	—	29/09/2020	—	05/10/2022	—
WBP217	TWE-16000	FW1 — Eroding/Upland River	NA	Liffey	NA	—	—	No	No	—	—	—	—	—	29/09/2020	—	05/10/2022	—
WBP218	TWE-16200	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	28/09/2020	—	—	—
WBP219	TWE-16700	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	28/09/2020	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBP200	22/08/2024	09/06/2025	Multidisciplinary Walkover Survey	JS EP MW	3	1.5	10	Stagnant	No flow	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	—
WBP201	22/08/2024	—	Multidisciplinary Walkover Survey	SN UB	3	1	NA	No flow	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBP202	22/08/2024	—	Multidisciplinary Walkover Survey	SN UB	4	1	NA	Stagnant	No flow	—	—	—	—	—	—	Light (<25%)	—
WBP203	23/10/2024	—	Multidisciplinary Walkover Survey	JF SW	4	1	0.15	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	90
WBP205	23/08/2024	—	Watercourse Crossing Survey	SN UB	2	Dry	Dry	No flow	No flow	—	—	—	—	—	—	None (0%)	—
WBP206	13/09/2024	—	Multidisciplinary Walkover Survey	JF UB	4	1	N/A	—	—	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	10
WBP207	22/10/2024	—	Watercourse Crossing Survey	JF SW	2	1	5	Low	—	—	—	—	Gravel 33% Sand 33% Mud/Silt 33%	—	—	Medium (<50%)	Unknown
WBP208	23/08/2024	—	Multidisciplinary Walkover Survey	SN UB	2	1	NA	Stagnant	No flow	—	—	—	—	—	—	Light (<25%)	—
WBP209	23/08/2024	—	Multidisciplinary Walkover Survey	SN UB	1.5	Dry	0	—	—	—	—	—	—	—	—	Medium (<50%)	—
WBP210	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA SC	4	1	NA	No flow	No flow	—	—	—	—	—	Silt	Full (>75%)	90
WBP211	Verification Survey (June to October	—	Watercourse Crossing Survey	SC RA	6	4	—	Low	Glide	—	—	—	—	—	Silt and organics	Full (>75%)	10
WBP212	Verification Survey (June to October	—	Watercourse Crossing Survey	SC RA	6	Dry	Dry	No flow	No flow	—	—	—	—	—	Silt and organics	Full (>75%)	0
WBP213	03/09/2024	—	Multidisciplinary Walkover Survey	AS, JM	1	NA	Dry	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	60
WBP214	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JG	1	Dry	Dry	No flow	No flow	—	—	—	—	—	Silt	Heavy (<75%)	60
WBP215	03/09/2024	—	Multidisciplinary Walkover Survey	AS JM	2	1	6	Fast	—	—	—	—	—	—	—	Full (>75%)	—
WBP216	02/09/2024	—	Multidisciplinary Walkover Survey	AS JM	2	1.5	14	Fast	10	—	—	—	Gravel 40%	Sand 60%	—	Medium (<50%)	10
WBP217	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JC UB	2	1.5	14	Moderate	10	—	Cobble, Gravel	—	—	Silt	—	Full (>75%)	15
WBP218	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JG	4	3	50	Moderate	Riffle	—	Cobble	—	—	—	Silt	Light (<25%)	40
WBP219	02/09/2024	—	Multidisciplinary Walkover Survey	AS, JM	1.5	Dry	0.5	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	95

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP200	—	—	Hawthorn, ivy, ash, blackthorn, bramble	Not assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP201	—	—	Ash, hawthorn, oak, bramble, guelder rose	Not assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP202	—	—	Ash, hawthorn, bramble, guelder rose, blackthorn, alder, ivy	Not assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP203	—	—	Bramble, hogweed, nettle, dogrose, ash, willow, elder	Not assessed — not suitable	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP205	—	—	Hawthorn, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP206	Watercress	0	Ash, blackthorn, willow, thistle	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP207	Fools watercress, watercress water mint	0	Bramble, willowherb, nightshade , horsetail, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP208	Watercress, reed grass	—	Ash, dog rose, hawthorn, nettle, bindweed, alder	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP209	NA	—	Hawthorn, bramble, sycamore, ivy	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP210	Flag iris, Sparganium, duckweed, willowherb, gorse, bramble	—	Alder, willow, bramble, soft rush	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP211	Willowherb	—	Ash, willow, grass spp, Yorkshire fog, ribwort plantain, elder, hazel, bramble, wild cherry, dog rose, sycamore, oak beech	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP212	—	—	Ash, willow, grass spp, Yorkshire fog, ribwort plantain, elder, hazel, bramble, wild cherry, dog rose, sycamore, oak beech	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP213	willowherb	—	Holly, hawthorn, bramble, nettle, ash, bindweed, dogrose	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP214	Meadow buttercup, nettle, bramble, creeping buttercup, willowherb, herb robert	—	Holly, hawthorn, bramble, nettle, ash, bindweed, dogrose	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP215	NA	—	Ivy, willow, bramble, willowherb, nettle	Not assessed — drain	Not assessed	Not Assessed	Agriculture runoff	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP216	Watercress	—	Hawthorn,bramble, willowherb, dock	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP217	Nettles, bramble, ivy, vetch	—	Nettles, cleavers, brambles, hawthorn, ivy, ash, dogrose, blackthorn, willowherb, vetch	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP218	Nettles, bramble, ivy, willowherb, vetch	—	Nettles, cleavers, brambles, hawthorn, ivy, ash, dogrose, blackthorn, willowherb, vetch	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP219	willowherb	—	Nettles, cleavers, brambles, hawthorn, ivy	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP200	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Stagnant water, poor quality, leaf litter	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP201	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drain. Leaf litter. Poor quality. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP202	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Stagnant drain, encroachment of hedge and Bankside vegetation	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP203	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Wet drainage ditch under hedgrow, bordering tilled land. Recently cut bank	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP205	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Completely dry and vegetated. no aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP206	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP207	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP208	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Wet drainage ditch . Poor quality. Heavy instream vegetation — choked with watercress, nettle in places. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP209	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch at roadside	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP210	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Difficult to see water, heavily vegetated and running parallel with river	Low	Trenchless	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP211	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP212	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Trenchless	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP213	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Not previously surveyed	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP214	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Not previously surveyed	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP215	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Shallow fast flowing ditch, clear water, substrate covered with dead vegetation	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	No fish stock survey nearby
WBP216	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Clear water, shallow, fast flow	Low	Trenchless	N	Not on IFI GIS database, no "SAL" river located nearby.	No fish stock survey nearby
WBP217	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Clear water, alternating between fast and slow flow, no in stream vegetation	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP218	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Not previously surveyed	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP219	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP220	RW-2000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	722	—	—	—	—	06/07/2020	—	—	—
WBP221	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	86	—	—	—	—	06/07/2020	19/10/2021	—	—
WBP222	TW-2200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,138	—	—	—	—	07/07/2020	—	—	—
WBP223	TW-4200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,557	—	—	—	—	07/07/2020	—	—	—
WBP224	TW-4400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,518	—	—	—	—	07/07/2020	—	—	—
WBP225	TWA-20200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,404	—	—	—	—	28/07/2020	—	—	—
WBP226	TW-4800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,300	—	—	—	—	07/07/2020	—	—	—
WBP227	TW-5500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,178	—	—	—	—	08/07/2020	—	16/06/2022	—
WBP228	TW-6600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,512	—	—	—	—	08/07/2020	—	—	—
WBP229	TW-9700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	5,598	—	—	—	—	09/07/2020	—	16/06/2022	—
WBP230	TW-10300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	5,915	—	—	—	—	09/07/2020	—	—	—
WBP231	TW-10500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	5,970	—	—	—	—	10/07/2020	—	16/06/2022	—
WBP232	TW-12700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	7,669	—	—	—	—	09/07/2020	—	17/06/2022	—
WBP233	TW-12700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	7,728	—	—	—	—	09/07/2020	—	17/06/2022	—
WBP234	TW-12700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	7,728	—	—	—	—	09/07/2020	—	17/06/2022	—
WBP235	TW-13400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	5,765	—	—	—	—	09/07/2020	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WBP220	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA	—	Dry	Dry	Dry	Dry	—	—	—	—	—	Organics	—	—
WBP221	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS, UB	2	1	—	Stagnant	—	—	—	—	—	—	—	—	—
WBP222	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA JD	—	Dry	Dry	—	—	—	—	—	—	—	—	—	—
WBP223	—	13/05/2025	Multidisciplinary Walkover Survey	JS JF MW	Unable to see due to vegetation	1	20	Moderate	—	—	—	—	—	—	—	Heavy (<75%)	—
WBP224	—	13/05/2025	Multidisciplinary Walkover Survey	JF MW JS	4	1	5	Very slow	—	—	Cobble 5% Gravel 5% Sand 5%	—	—	—	Mud/Silt 85%	Heavy (<75%)	—
WBP225	—	20/05/2025	Multidisciplinary Walkover Survey	SOR AS	4	2	12	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	None (0%)	50
WBP226	—	13/05/2025	Multidisciplinary Walkover Survey	JF JS MW	1.5	0.5	—	—	—	—	—	—	—	—	—	—	—
WBP227	20/06/2024	—	Multidisciplinary Walkover Survey	JS MB	2	0.5	20	Very slow	Pool 100%	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	—
WBP228	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA JD	—	Dry	Dry	—	—	—	—	—	—	—	Organics	Full (>75%)	—
WBP229	—	14/05/2025	Multidisciplinary Walkover Survey	JF JS MW	4	1	2	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	85
WBP230	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA JD	3	2.5	—	No flow	No flow	—	—	—	—	—	Silt	—	—
WBP231	21/06/2024	—	Multidisciplinary Walkover Survey	JS MB	2	Dry	Dry	Stagnant	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—
WBP232	—	14/05/2025	Multidisciplinary Walkover Survey	JF JS MW	3	1	Dry	No flow	No flow	—	—	Cobble 10%	—	—	Mud/Silt 90%	—	—
WBP233	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS, CB	1	Dry	Dry	No flow	No flow	—	—	—	—	—	—	—	—
WBP234	21/06/2024	—	Multidisciplinary Walkover Survey	JF UB	4	0.5	3	Stagnant	No flow	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	65
WBP235	—	09/06/2025	Multidisciplinary Walkover Survey	UB CB	2	0.2	5	—	—	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	5

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP220	—	—	Beech, alder, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP221	Duckweed, watercress	—	Watercress, duckweed, rush, bramble, willow herb	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP222	—	—	Redshank	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP223	—	—	Gorse	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP224	Fools watercress, watercress, greater stitchwort	0	Gorse, willow	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP225	Lemna, fools watercress, Sparganium	10	Perennial ryegrass, soft rush, mint, mares tail, sparganium, fools watercress	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP226	Birdsfoot trefoil and perennial ryegrass	—	Rushes, grasses	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP227	NA	—	Hawthorn, bramble, watercress	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No Salmonid potential	None recorded. No Lamprey potential.
WBP228	—	—	Hawthorn, willow, ryegrass, cow parsley, mint	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP229	Watercress, water mint, buttercup, willowherb	—	—	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP230	Bulrush, horsetail, soft rush, watercress	—	Nettle, bracken	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP231	—	—	Bramble, willow, creeping buttercup	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP232	Willowherb, meadowsweet, buttercup, fools watercress	—	—	Not assessed — drain	Not assessed	Not Assessed	Tunnelling	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP233	Watercress, willowherb, flag iris	—	Scrub	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP234	fools watercress, duckweed, watermint	—	GA1 and hedgetow, dogrose, ash, gorse	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP235	Water parsnnip, brooklime	—	Bramble, Nettle, honeysuckle	Not assessed — drain	Not assessed	Not Assessed	Vegetation clearance	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP220	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Not previously surveyed	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP221	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Clear Span Bridge	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP222	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Recently dredged ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP223	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Ditch with standing silty water and dry in places 2025: Wet drain with some flow	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP224	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Recently dredged	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP225	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP226	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Recently dredged 2025: Pools of standing water	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP227	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated ditch under hedge	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP228	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Surrounded by scrub and bramble	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP229	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Very overgrown	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP230	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Heavily vegetated, not easily seen.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP231	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated ditch under hedge	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP232	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: High banks, heavily vegetated. 15m high ash and horse chestnut	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP233	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP234	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry vegetated drainage ditch. location of washout, no aquatic potential.	Low	Trenchless	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP235	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP236	TW-13800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	5,421	—	—	—	—	10/07/2020	—	—	—
WBP239	TW-14300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	5,272	—	—	—	—	10/07/2020	—	02/08/2022	—
WBP240	TW-14400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	5,233	—	—	—	—	10/07/2020	—	02/08/2022	—
WBP241	TW-15500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	4,499	—	—	—	—	10/07/2020	—	—	—
WBP242	TW-17700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	3,460	—	—	—	—	10/07/2020	—	03/08/2022	—
WBP243	TW-17900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	3,376	—	—	—	—	13/07/2020	—	03/08/2022	—
WBP244	TWD-27300	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	15,063	—	—	—	—	07/09/2020	—	04/10/2022	—
WBP245	TWD-26500	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	15,330	—	—	—	—	15/09/2020	—	03/10/2022	—
WBP246	TWD-24000	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	14,223	—	—	—	—	15/09/2020	—	—	—
WBP247	TWD-22900	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	13,771	—	—	—	—	15/09/2020	—	—	—
WBP248	TWD-22300	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	13,439	—	—	—	—	16/09/2020	—	27/07/2022	—
WBP249	TWD-18300	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,228	—	—	—	—	17/09/2020	—	—	—
WBP250	TWD-17300	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,783	—	—	—	—	17/09/2020	—	24/08/2022	—
WBP251	TWA-21500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,032	—	—	—	—	29/07/2020	—	—	—
WBP252	TWD-15700	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,360	—	—	—	—	1709/2020	—	24/08/2022	—
WBP253	TWD-15300	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,708	—	—	—	—	17/09/2020	—	—	—
WBP254	TWE-15600	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	29/09/2020	—	05/10/2022	—
WBP255	TWE-16400	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	—	05/03/2021	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBP236	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA JD	—	Dry	Dry	—	—	—	—	—	—	—	—	—	—
WBP239	21/06/2024	—	Multidisciplinary Walkover Survey	RA CB	4	Dry	0	—	—	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—
WBP240	21/06/2024	—	Multidisciplinary Walkover Survey	RA CB	1.5	0.3	—	Stagnant	—	—	—	—	—	—	—	Heavy (<75%)	—
WBP241	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA JD	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP242	24/06/2024	—	Multidisciplinary Walkover Survey	JS	2	1	10	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	—
WBP243	24/06/2024	—	Multidisciplinary Walkover Survey	JS	2	Dry	Dry	Dry	—	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	—
WBP244	08/08/2024	—	Multidisciplinary Walkover Survey	JF MB	0.05	10	—	—	—	—	—	—	—	—	Peat 100%	Heavy (<75%)	—
WBP245	09/08/2024	—	Multidisciplinary Walkover Survey	JF MB	4	2	—	Dry	—	—	—	—	—	—	—	Heavy (<75%)	1
WBP246	08/08/2024	—	Multidisciplinary Walkover Survey	JF MB	2	1	—	—	—	—	—	—	—	—	—	—	—
WBP247	07/08/2024	—	Multidisciplinary Walkover Survey	JF MB	3	1	—	Dry	—	—	—	—	—	—	—	—	—
WBP248	07/08/2024	—	Multidisciplinary Walkover Survey	JF MB	1 to 4	1 to 4	unknown	Stagnant	—	—	—	—	—	—	Peat 100%	None (0%)	—
WBP249	18/10/2024	10/06/2025	Multidisciplinary Walkover Survey	JS EP MW	1.5	NA	Dry	No flow	No flow	—	—	—	—	—	—	Medium (<50%)	10
WBP250	17/10/2024	11/06/2025	Multidisciplinary Walkover Survey	JS EP MW	3	0	0	No flow	No flow	—	—	—	—	—	—	Heavy (<75%)	0
WBP251	—	22/05/2025	Multidisciplinary Walkover Survey	SOR AS	1.5	1	15	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	95
WBP252	17/10/2024	—	Multidisciplinary Walkover Survey	SN UB	2	0	NA	—	—	—	—	—	—	—	—	Heavy (<75%)	0
WBP253	17/10/2024	—	Multidisciplinary Walkover Survey	SN UB	3	0	—	NA	—	—	—	—	—	—	—	Heavy (<75%)	0
WBP254	02/09/2024	—	Multidisciplinary Walkover Survey	AS, JM	2	1.5	7	Stagnant	No flow	—	—	—	—	—	—	Full (>75%)	—
WBP255	02/09/2024	—	Multidisciplinary Walkover Survey	AS, JM	1.5	1	—	Moderate	Moderate flow	—	—	Cobble 20%, Mud/Silt 20%	—	Boulder 60%	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP236	Watercress	—	elder, blackthorn	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP239	—	—	Yorkshire fog, willowherb, bracken, nettle ,oak, rose, nettle	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP240	NA	—	Horsetail , willowherb, bramble, herb robert, watermint	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP241	Yorkshire fog	—	Yorkshire fog, annual meadow grass, soft rush	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP242	—	—	Willow, bramble, watercress, willowherb	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP243	—	—	Reed canary grass, meadowsweet, watermint, hemlock, willowherb	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP244	Sphagnum cuspidatum , molinia	—	Moor grass, Ling heather, bracken, willow	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP245	Bullrush	—	Willow, bramble, bracken, birch, ivy, gorse	Not assessed — drain	Not assessed	Not Assessed	Agriculture and road runoff	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP246	Fools watercress yellow iris	—	Wet grassland and scrub	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP247	—	—	Bog woodland	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP248	—	—	Bog grass, downy birch, Ling, bell heather	Not assessed — drain	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP249	Fools watercress	—	Ivy, heath, ash, blackthorn, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP250	—	0	Ivy, bracken, nettle, ash, ivy, grey willow	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP251	Watercress	0	Greater willowherb, hogweed, common reed, willow, bramble, meadowsweet, watercress, herb robert, ash	Not assessed — drain	Not assessed	Not Assessed	Enrichment, encroachment	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP252	NA	0	Bramble, elder, hogweed, herb Robert, nettle, ivy	Not assessed — drain	Not assessed	Not Assessed	Agriculture, vegetation encroaching	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP253	NA	—	Ivy, ash, hawthorn, blackthorn, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP254	NA	—	Hawthorn, ash, bramble, ivy	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP255	willowherb	—	Bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Environmental Impact Assessment Report (EIAR) Volume 6 of 6: Environmental Assessment (Appendix A8.14) Watercourse Crossing Data

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP236	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP239	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry, choked with vegetation. no aquatic life or potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP240	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated drainage ditch, some water.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP241	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Heavily vegetated up and downstream	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP242	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Wet stagnant drainage ditch	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP243	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP244	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP245	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated dry drainage ditch. Poor quality. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP246	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drainage channel with stagnant water runs along base of hedgerow. Gorse and willow scrub to the south. Calcareous grassland species rich and of good quality.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP247	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drain in densely vegetated woodland	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP248	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Bog channel wide and deep in places	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP249	None recorded. No potential.	None recorded. No potential.	Amphibian potential	No	None recorded	Poor quality drain, parallel to treeline and road. Drain either side of narrow road, limited aquatic potential (amphibian)	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP250	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poor quality dry drain parallel to treeline. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP251	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	No fisheries potential	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP252	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry vegetated drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP253	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poor quality dry drain parallel to treeline. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP254	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, heavily overgrown	Low	Trenchless	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP255	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP256	TWA-27500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,574	—	—	—	—	29/07/2020	—	—	—
WBP257	TWA-27600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,556	—	—	—	—	29/07/2020	—	—	—
WBP258	TWA-27700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,542	—	—	—	—	29/07/2020	—	—	—
WBP259	TWA-27800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,611	—	—	—	—	29/07/2020	—	—	—
WBP260	TWB-1000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,947	—	—	—	—	29/07/2020	—	28/07/2022	—
WBP261	TWB-6700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	14,550	—	—	—	—	30/07/2020	—	—	—
WBP262	TWB-7100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	14,539	—	—	—	—	30/07/2020	—	—	—
WBP263	TWB-7400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	14,278	—	—	—	—	30/07/2020	—	—	—
WBP264	TW-4400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,593	—	—	—	—	01/07/2020	20/10/2021	—	—
WBP265	TW-4300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,595	—	—	—	—	01/07/2020	20/10/2021	—	—
WBP266	TWA-26500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,606	—	—	18/07/2018	—	29/07/2020	—	27/07/2022	—
WBP267	TWA-20100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,418	—	—	—	—	27/07/2020	—	25/07/2022	—
WBP268	TWE-9300	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	11/08/2018	—	03/10/2020	—	06/10/2022	—
WBP269	TWA-26700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,519	—	—	—	—	29/07/2020	—	27/07/2022	—
WBP271	TWD-30700	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	11,808	—	—	—	—	—	—	22/08/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WBP256	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA SC	3	1	NA	No flow	No flow	—	—	—	—	—	Silt	Heavy (<75%)	75
WBP257	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA SC	4	1	NA	Moderate	No flow	—	—	—	—	—	Silt	Full (>75%)	—
WBP258	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA SC	3	1	50	No flow	No flow	—	—	—	—	—	Silt	Medium (<50%)	90
WBP259	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA SC	3	1	50	No flow	No flow	—	—	—	—	—	Silt	Full (>75%)	90
WBP260	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JC JM CB	1.5	Dry	NA	No flow	No flow	—	—	—	—	—	Silt	None (0%)	95
WBP261	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA SC	2	0.5	NA	No flow	No flow	—	—	—	—	—	Silt	Light (<25%)	100
WBP262	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA SC	2	Dry	NA	No flow	No flow	—	—	—	—	—	Silt	Heavy (<75%)	100
WBP263	—	19/05/2025	Multidisciplinary Walkover Survey	SOR	3	0	0	Dry	No flow	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	—
WBP264	—	13/05/2025	Multidisciplinary Walkover Survey	JS JF MW	Unable to see due to vegetation	1	20	Moderate	—	—	—	—	—	—	—	Heavy (<75%)	—
WBP265	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS UB	Unable to see due to vegetation	—	—	Moderate	—	—	—	—	—	—	—	—	—
WBP266	17/07/2024	—	Multidisciplinary Walkover Survey	UB AS	1	Dry	0	Likely Stagnant	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBP267	15/07/2024	—	Multidisciplinary Walkover Survey	AS, UB	2	1.5	10	Stagnant	No flow	—	—	—	—	—	Mud/Silt 100%	None (0%)	20
WBP268	22/10/2024	—	Multidisciplinary Walkover Survey	JF SW	3	1	5	Stagnant	No Flow	—	—	—	—	—	—	Light (<25%)	Unknown
WBP269	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JC JM CB	1.2	Dry	Dry	No flow	No flow	—	—	—	—	—	Silt	Heavy (<75%)	75
WBP271	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	CB SOR	1	—	Dry	—	—	—	—	—	—	—	Silt	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP256	duckweed, fools watercress, flag iris, common reed, meadow sweet	—	Willow, bramble, meadowsweet, willowherb, thistle, marsh valerian	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP257	—	—	Alder, willow, bramble, soft rush	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP258	Flag iris, Sparganium, duckweed, willowherb, soft rush, bullrush, marsh valerian, meadowsweet, bittercress	—	Willow, bramble, soft rush	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP259	Flag iris, Sparganium, duckweed, willowherb, soft rush, bullrush	—	Willow, bramble, soft rush	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP260	Bittercress, Yorkshire fog, reed, nettle, doc	—	Soft rush and perennial ryegrass	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP261	Meadowsweet, soft rush, vetch, Yorkshire fog	—	Yorkshire fog, ryegrass, marsh thistle, willow, bramble, nettles, Cocksfoot, hawthorn, meadowsweet, soft rush, creeping buttercup	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP262	Willowherb, watermint, fools watercress, cleavers, yorkshire fog, bittercress, bent	—	Yorkshire fog, ryegrass, marsh thistle, willow, bramble, nettles, Cocksfoot, bush vetch, birdsfoot trefoil, hawthorn	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP263	—	0	Yorkshire fog, ryegrass, marsh thistle, willow, bramble, nettles, Cocksfoot, bush vetch, birdsfoot trefoil, hawthorn	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP264	—	—	Gorse	Not Assessed	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP265	Watercress, juncus spp, willowherb	—	Hawthorn, willow, gorse, blackthorn, bramble	Not Assessed	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP266	—	—	Hawthorn, eared willow, spear thistle, willowherb, meadowsweet	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP267	watercress, duckweed, mint,	80	Hard rush, mint, willow herb	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP268	Watercress, reed canary grass, greater pondsedge, water mint	0	Holly, ivy, Willowherb, blackthorn, meadowsweet, hawthorn	Not assessed — not suitable	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP269	Willow herb, fools watercress, meadowsweet, herb robert, nettle	—	Alder, willow, bramble ash, holly, nettle, hawthorn, Pasture	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP271	NA	—	Nettle, bramble, herb Robert, hawthorn, ivy	Not assessed	Not assessed	Not assessed	Agriculture	—	No potential	No potential

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP256	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	No flow with standing water	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP257	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Difficult to see water, heavily vegetated and running parallel with river.	Low	Trenchless	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP258	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Trenchless	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP259	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Trenchless	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP260	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Completely dry vegetated ditch in field	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP261	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry in places. Bank height 1m	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP262	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Mainly dry but wet in places. Crown closure varies along crossing.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP263	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Bank height 2m. Water pools, mainly dry but damp in areas. 2025: Dry, deep steep sloping, no fisheries potential	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP264	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Wet drain with some flow	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP265	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP266	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry vegetated drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP267	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Cows walking in drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP268	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Wet drainage ditch. Heavy instream vegetation. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP269	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch covered in terrestrial vegetation, mostly ivy	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP271	No potential	No potential	—	No	None recorded	Dry drainage ditch, heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP272	TW-14400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	5,184	—	—	—	—	—	—	02/08/2022	—
WBP273	TW-19300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	3,983	—	—	—	—	—	—	03/08/2022	—
WBP274	TW-12900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	6,174	—	—	—	—	—	—	17/06/2022	—
WBP275	TWB-6100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	DRAIN	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	13,952	—	—	—	—	—	—	05/08/2022	—
WBP276	TWB-6200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	14069	—	—	—	—	—	—	28/07/2022	—
WBP277	TWB-6300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	14,303	—	—	—	—	—	—	05/08/2022	—
WBP278	TWA-23000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,690	—	—	—	—	29/07/2020	19/10/2021	26/07/2022	—
WBP279	TWD-31600	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	10,875	—	—	—	—	29/07/2020	19/10/2021	—	—
WBP280	TWD-29000	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	13,527	—	—	—	—	29/07/2020	19/10/2021	—	—
WBP281	TWA-23300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,813	—	—	—	—	29/07/2020	19/10/2021	—	—
WBP282	TW-4200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,589	—	—	—	—	—	—	16/06/2022	20/06/2023
WBP283	TWA-24300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	8,276	—	—	—	—	—	—	26/07/2022	—
WBP284	TWA-19200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,811	—	—	—	—	—	20/10/2021	—	—
WBP285	TWD-30600	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	11,930	—	—	—	—	—	—	22/08/2022	—
WBP286	TWA-19200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,920	—	—	—	—	—	20/10/2021	25/07/2022	—
WBP287	TW-12100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	7,306	—	—	—	—	—	21/10/2021	17/06/2022	—
WBP288	TW-12400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	7,322	—	—	—	—	—	21/10/2021	17/06/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WBP272	21/06/2024	—	Multidisciplinary Walkover Survey	RA CB	4	dry	NA	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	0
WBP273	09/09/2024	10/06/2025	Multidisciplinary Walkover Survey	UB CB	2	0.5	0	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	0
WBP274	—	14/05/2025	Multidisciplinary Walkover Survey	JS JF MW	1	20	5	Slow	No flow	—	Sand 5% Gravel 5%	—	—	—	Mud/Silt 90%	Light (<25%)	—
WBP275	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JC CB	2	0	0	—	—	—	—	—	—	—	Silt	Heavy (<75%)	70
WBP276	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JC CB	1	0	0	Dry	—	—	—	—	—	—	—	—	—
WBP277	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JC CB	1	0	3	Stagnant	No flow	Boulder 10%	Cobble 20%, Gravel 20%	—	Sand 50%	—	—	Heavy (<75%)	75
WBP278	16/07/2024	—	Multidisciplinary Walkover Survey	UB AS	3	NA	NA	NA	—	—	—	—	—	—	—	—	75
WBP279	20/08/2024	—	Multidisciplinary Walkover Survey	SN UB	1	—	NA	—	—	—	—	—	—	—	—	Medium (<50%)	75
WBP280	—	10/06/2025	Multidisciplinary Walkover Survey	JS EP MW	2.5	NA	NA	Dry	No flow	—	—	—	—	—	Silt	Full (>75%)	—
WBP281	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA SC	2	Dry	Dry	No flow	No flow	—	—	—	—	—	Silt	Heavy (<75%)	75
WBP282	—	—	Multidisciplinary Walkover Survey	SN, RA	1	1	—	Dry	—	—	—	—	—	—	Silt	Heavy (<75%)	—
WBP283	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JC JM CB	1.5	0	Unable to determine due to vegetation	NA	—	—	Gravel 30%, Sand 30%	Silt 40%	—	—	—	—	—
WBP284	15/07/2024	—	Multidisciplinary Walkover Survey	AS, UB	2	Dry	NA	NA	—	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	0
WBP285	Verification Survey (June to October	—	Watercourse Crossing Survey	CB SOR	1	—	Dry	—	—	—	—	—	—	—	Silt	None (0%)	0
WBP286	15/07/2024	—	Multidisciplinary Walkover Survey	AS, UB	1.2	Dry	Dry	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	0
WBP287	21/06/2024	—	Multidisciplinary Walkover Survey	JF UB	2.5	Dry	Dry	—	—	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	—
WBP288	21/06/2024	—	Multidisciplinary Walkover Survey	JF UB	4	1	3	Very Slow	Glide 90%, Riffle 10%	Boulder 5%	—	Cobble 20% Mud/Silt 15%	—	Gravel 60%	—	Full (>75%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP272	—	—	Yorkshire fog, nettle , oak, thistle, rush, meadowsweet	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP273	—	0	Treeline	Not Assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP274	—	—	Hedgerows	Not Assessed	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP275	bramble, ivy	—	Woodland, arable	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP276	None	—	arable, woodland	Not Assessed	Not assessed	Not assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP277	Willow herb, fools watercress, meadowsweet, herb robert, nettle	—	Treeline, Woodland	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP278	—	—	Hawthorn, eared willow	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP279	—	—	Nettle, bramble, herb Robert, hawthorn, Willowherb	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP280	—	—	Bramble, soft rush, perennial ryegrass, hawthorn, alder, will, birch, silverweed	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP281	Willow herb, fools watercress, meadowsweet, herb robert, nettle	—	Bramble, nettle, ivy, harts tongue fern, hawthorn, dogrose	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP282	—	—	Hawthorn, blackthorn, bramble, willow, thistle	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP283	—	—	Gorse, Blackthorn, Bramble, Willowherb, Soft Rush.	Not assessed	Not assessed	Not Assessed	Agricultural pressures	No potential	No potential	No potential
WBP284	NA	0	Hazel, ivy	Not suitable for kick sample	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP285	NA	10	Nettle, bramble, herb Robert, hawthorn, ivy	Not Assessed	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP286	NA	0	Hazel, ivy	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP287	—	0	Hedgerows	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP288	Wild celery, duckweed, hemlock water dropwort	—	Willowherb, meadowsweet and hedgerows	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP272	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry, choked with vegetation. No aquatic life or potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP273	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP274	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2025: Flowing drain along north side of road. Difficult to see due to dense vegetation	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP275	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Drainage ditch along edge of road underneath hedge and treeline, heavily vegetated with some water	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP276	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Deep dry drainage ditch at edge of woodland and field, some areas bare ground, some willow scrub	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP277	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Partially dry drainage ditch at base of Treeline, some areas of shallow stagnant water, some areas bare ground, some vegetation encroaching from bank, some shallow pools of stagnant water	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP278	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry bare drainage ditch with some leaf litter present	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP279	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBP280	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch in 2025	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP281	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP282	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch. Heavily vegetated with grass species and thistle. No aquatic potential. May provide habitat for amphibians.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP283	No potential	No potential	No potential	No	None recorded	Dry vegetated drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP284	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drain	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP285	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP286	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drain	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP287	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2022:Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP288	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2022:Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP289	TW-11900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	6,980	—	—	—	—	—	21/10/2021	—	—
WBP290	TW-11900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	7,138	—	—	—	—	—	21/10/2021	17/06/2022	—
WBP291	TW-11500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	6,704	—	—	—	—	—	21/10/2021	17/06/2022	—
WBP292	TWD-21500	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	13,875	—	—	—	—	—	—	25/08/2022	—
WBP293	TWD-29300	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	16820	—	—	—	—	—	—	—	—
WBP294	TWC-23600	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,351	—	—	—	—	30/09/2020	—	—	29/06/2023
WBP296	TWD-22200	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	13,437	—	—	—	—	—	—	26/08/2022	—
WBP297	TWD-22200	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	13,450	—	—	—	—	—	—	26/08/2022	—
WBP298	TWB-23600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	4,049	—	—	—	—	—	—	09/09/2022	—
WBP299	TWC-14800	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	13,167	—	—	—	—	17/08/2020	—	15/08/2022	—
WBP300	TWC-14800	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	13,189	—	—	—	—	17/08/2020	—	—	—
WBP301	TWC-15100	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	13,131	—	—	—	—	17/08/2020	—	—	—
WBP302	TWD-7700	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,532	—	—	—	—	—	—	14/09/2022	—
WBP303	TWD-7500	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,473	—	—	—	—	—	—	14/09/2022	—
WBP304	TWD-8600	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,677	—	—	—	—	—	—	14/09/2022	—
WBP305	TWD-6300	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	14,766	—	—	—	—	—	—	14/09/2022	—
WBP306	TWD-8500	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	14,668	—	—	—	—	—	—	14/09/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WBP289	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS, UB	—	Dry	Dry	Moderate	—	—	—	—	—	—	—	—	—
WBP290	21/06/2024	—	Multidisciplinary Walkover Survey	JF UB	3	Dry	Dry	—	—	—	—	—	—	—	Mud/Silt 100%	None (0%)	1
WBP291	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS CB	1.5	—	Dry	Moderate	—	—	—	—	—	—	—	—	—
WBP292	07/08/2024	—	Multidisciplinary Walkover Survey	JF MB	2.5	0	NA	Dry	—	—	—	—	—	—	—	Heavy (<75%)	—
WBP293	—	10/06/2025	Multidisciplinary Walkover Survey	JS EP MW	2	1	15	No flow	—	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	90
WBP294	08/08/2024	28/05/2025	Multidisciplinary Walkover Survey	LH UB	2	1.5	30	No flow	No flow	—	—	—	—	—	Peat 100%	Medium (<50%)	20
WBP296	07/08/2024	—	Multidisciplinary Walkover Survey	JC UB	0.2	0.2	—	Stagnant	—	—	—	—	—	—	Peat 100%	None (0%)	—
WBP297	07/08/2024	—	Watercourse Crossing Survey	JC UB	0.2	0.2	—	Stagnant	—	—	—	—	—	—	Peat 100%	None (0%)	—
WBP298	26/07/2024	—	Watercourse Crossing Survey	SOR KI	3	NA	NA	No flow	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBP299	06/08/2024	—	Multidisciplinary Walkover Survey	AS, CB	10	3	Unknown	Stagnant	—	—	—	—	—	—	—	Light (<25%)	—
WBP300	06/08/2024	—	Multidisciplinary Walkover Survey	JS JM	4	0.5	0.75	No flow	No flow	—	—	—	—	—	Peat 100%	—	20
WBP301	06/08/2024	—	Multidisciplinary Walkover Survey	JS JM	2	—	0.75	No flow	No flow	—	—	—	—	—	Peat 100%	—	20
WBP302	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS, SN	5	0	Dry	No flow	No flow	—	—	—	—	—	Peat	Heavy (<75%)	20
WBP303	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS, SN	5	0	Dry	No flow	No flow	—	—	—	—	—	Silt	Full (>75%)	90
WBP304	06/08/2024	—	Multidisciplinary Walkover Survey	JF MB	6	2	20	Stagnant	No flow	—	—	—	—	—	Peat 100%	Medium (<50%)	—
WBP305	—	29/05/2025	Multidisciplinary Walkover Survey	UB LH	7	3	20	Stagnant	No flow	—	—	—	—	—	Peat 100%	Light (<25%)	10
WBP306	06/08/2024	—	Multidisciplinary Walkover Survey	MB JF	7	5	NA	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP289	—	—	Vegetation all cleared	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP290	Wild celery	—	Pasture with wetland plants and immature scrub, hawthorn, bramble, meadowsweet, willowherb	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP291	—	—	Rose—hip Willow, Bramble, Ash, Sitka Spruce	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP292	Bog pondweed, water forgetmenot	—	Birch, bramble, hogweed, bindweed, bracken,gorse	Not assessed	Not assessed	Not assessed	Forestry, peat run off	—	None recorded. No potential.	None recorded. No potential.
WBP293	Watercress	—	Willow, birch, bramble, brown cress	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
WBP294	Bog cotton	—	Willow, purple moor grass, meadow grass	Not assessed — drain	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP296	Sphagnum moss	50	Purple moor grass, downy birch, ling, bell heather	Not assessed — drain	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP297	Sphagnum moss	50	Purple moor grass, downy birch, ling, bell heather	Not assessed — no flow	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP298	None	0	Hawthorn willow, Willowherb, bramble, bindweed, meadowsweet, blackthorn	Not assessed — no flow	Not assessed	Not Assessed	Enrichment, tunnelling in places	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP299	Soft rush, water plaintain	Unknown	Willow, downy birch, bramble, butter burr, willowherb, reeds	Not assessed — drain	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP300	Soft rush, willowherb	10	Soft rush, yarrow, knapweed, clover, willow, willowherb	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP301	Soft rush, willowherb	10	Soft rush, yarrow, knapweed, clover, willow, willowherb	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP302	None	—	Scrub, gorse, downy birch, soft rush, bracken, willow, bulrush	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP303	None	—	Scrub, gorse, downy birch, soft rush, bracken, willow, bulrush	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP304	Bur-reed and duckweed	—	Scrub and bracken	Not assessed — drain	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP305	Common reed grass, bull rush	—	Bracken, willowherb, arrow grass, bramble, horsetail	Not assessed — drain	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP306	NA	—	Willow, birch, Juncus, ling heather, rowan	Not assessed — drain	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP289	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch recently cleared	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP290	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2022:Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP291	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, heavy vegetation cover	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP292	None recorded. No potential.	None recorded. No potential.	None recorded	No	—	Dry vegetated drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP293	No potential	—	—	No	—	Wet drainage ditch, heavily vegetated under Treeline. Standing water	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	IFI GIS database adjacent channel D/S contains BT
WBP294	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP296	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2022: Not suitable to carry out kick sampling, very boggy with lots of algae, no fishery value. Stagnant water. No potential to support protected aquatic species.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP297	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2022:Not suitable to carry out kick sampling, very boggy with lots of algae, highly vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP298	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2022:Under hedgerow, and also open in places, not maintained. Dry at survey, no fisheries value. Straight and no gradient	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP299	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Steep uniform drainage ditch. Culverted for some long sections to east of shapefile	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP300	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated wet drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP301	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated wet drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP302	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Steep, deep dry drainage ditch, Peat extraction	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP303	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Steep, deep dry drainage ditch, Peat extraction	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP304	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2022:Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP305	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Wet drainage ditch, discolouration from bog. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP306	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Wet drainage ditch in bog, no aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP307	TWE-16200	FW4 — Drainage Ditch	DRAIN	Liffey	DRAIN	—	—	No	No	—	—	—	—	—	—	—	05/10/2022	—
WBP308	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	310	—	—	—	—	12/10/2020	—	—	—
WBP309	TWC-700	FW1 — Eroding/Upland River	CLODIAGH (TULLAMORE)_030 (IE_SH_25C060340)	Lower Shannon	NA	25_2886	—	Yes (SAC: 000571)	Yes	3,201	—	—	—	—	—	—	16/08/2022	—
WBP310	TWE-5800	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	7,162	—	—	—	—	—	—	05/10/2022	—
WBP311	TWE-6300	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	7,391	—	—	—	—	—	—	05/10/2022	—
WBP312	TW-3900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,608	—	—	—	—	—	—	—	—
WBP314	TWB-25200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	3,383	—	—	—	—	29/09/2020	—	21/07/2022	—
WBP316	TWD-14300	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	16,528	—	—	—	—	—	—	—	—
WBP317	TWD-23400	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	13,832	—	—	01/08/2018	—	—	—	25/08/2022	—
WBP318	TW-12500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	7,487	—	—	—	—	—	—	17/06/2022	—
WBP319	TWA-20700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,357	—	—	—	—	—	—	17/06/2022	—
WBP320	RW-1300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	555	—	—	—	—	—	—	—	19/06/2023
WBP321	TW-200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	687	—	—	—	—	—	—	—	20/06/2023
WBP322	TW-600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	660	—	—	—	—	—	—	—	20/06/2023
WBP323	TW-17400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	3,656	—	—	—	—	—	—	—	21/06/2023
WBP324	TW-17400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	3,668	—	—	—	—	—	—	—	21/06/2023
WBP325	TW-17500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	3,625	—	—	—	—	—	—	—	21/06/2023
WBP326	TWC-17400	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,222	—	—	—	—	—	—	—	28/06/2023
WBP327	TWC-17300	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,188	—	—	—	—	—	—	—	28/06/2023

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WBP307	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JC UB	2	1	15	Very Slow	—	—	—	—	—	—	Silt	None (0%)	—
WBP308	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA SOR	3	0.5	4	Moderate	—	—	—	—	—	—	—	—	—
WBP309	23/07/2024	—	Multidisciplinary Walkover Survey	SN CB	1.5	NA	NA	No flow	No flow	—	—	—	—	—	—	Full (>75%)	—
WBP310	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SN	1	Dry	Dry	—	—	—	—	—	—	—	—	—	—
WBP311	22/08/2024	—	Multidisciplinary Walkover Survey	SN UB	2	NA	NA	No flow	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBP312	20/06/2024	—	Multidisciplinary Walkover Survey	JS MB	2.5	0.05	2	Very slow	Riffle 100%	Gravel 5% Sand 5%	—	—	—	—	Mud/Silt 90%	Full (>75%)	—
WBP314	26/07/2024	—	Watercourse Crossing Survey	MB JS	0.5	NA	NA	Dry	—	—	—	—	—	—	—	Heavy (<75%)	None
WBP316	06/08/2024	—	Multidisciplinary Walkover Survey	JF MB	3	2.5	NA	Stagnant	No flow	—	—	—	—	—	—	Full (>75%)	—
WBP317	07/08/2024	—	Multidisciplinary Walkover Survey	JF MB	2	0.5	—	Stagnant	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBP318	21/06/2024	—	Multidisciplinary Walkover Survey	JF, UB	5	2	3	Stagnant	No flow	—	—	—	—	—	—	Light (<25%)	95
WBP319	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JC JM CB	1	0	0	Stagnant	—	—	—	—	—	—	Sand	—	—
WBP320	18/06/2024	—	Multidisciplinary Walkover Survey	JS MB	2	Dry	Dry	Dry	—	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	0
WBP321	—	—	Multidisciplinary Walkover Survey	SN RA	1.5	Dry	Dry	Dry	—	—	—	—	—	—	Silt	Full (>75%)	—
WBP322	—	—	Multidisciplinary Walkover Survey	SN RA	1	Dry	Dry	Dry	—	—	—	—	—	—	Silt	Heavy (<75%)	—
WBP323	—	—	Multidisciplinary Walkover Survey	SN RA	3	2	NA	NA	—	—	—	—	—	—	Silt	Full (>75%)	75
WBP324	—	—	Multidisciplinary Walkover Survey	SN RA	3	2	NA	NA	—	—	—	—	—	—	Silt	Full (>75%)	70
WBP325	24/06/2024	—	Multidisciplinary Walkover Survey	JS	2	Dry	NA	NA	—	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	10
WBP326	06/08/2024	—	Multidisciplinary Walkover Survey	JS JMT	2.5	Dry	NA	NA	—	—	—	—	—	—	Peat 100%	None (0%)	—
WBP327	06/08/2024	13/06/2025	Multidisciplinary Walkover Survey	JS EP MW	1	Dry	NA	NA	No flow	—	—	—	—	—	Peat 100%	None (0%)	None

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP307	—	—	Hawthorn, willow, bramble, dog rose	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP308	NA	—	Hawthorn, ash, gorse, bramble, elder, softrush, nettle, thistle, watercress, meadow sweet, ivy, fern, harts tongue, fox glove, moss, buttercup	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP309	NA	—	Hawthorn, ivy, bramble, elder, ash	Not assessed — Low flow	Not assessed	Not Assessed	None	Low to Moderate potential — trout potential	None recorded. No potential.	None recorded. No potential.
WBP310	—	0	Thistle, Dock, perennial ryegrass, Juncus,	Not assessed — dry	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP311	—	—	Hawthorn, bramble, ivy, elder	Not suitable — no flow	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP312	—	0	Nettle, herb Robert, fox glove, hawthorn	Not assessed	Not assessed	Not assessed	Past evidence of cattle access. Heavily shaded and difficult to access due to vegetation	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP314	—	0	Meadowsweet, bramble, ragwort, hawthorn, willow, cow parsley, alder, hogweed, ash, hazel	Not assessed — dry	Not assessed	Not Assessed	None	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP316	—	—	Bull rush, willow, willow herb, meadow sweet bindweed	Not assessed — drain	Not assessed	Not Assessed	Horses have access	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP317	Duckweed and fools watercress in stagnant pools	—	Bracken, alder, gorse, nettle, birch, purple loosestrife, ragwort	Not assessed — drain	Not assessed	Not Assessed	Turf cutting, forestry, dumping	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP318	Wild celery, duckweed	0	Willowherb, meadowsweet and hedgerows	Not assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP319	—	—	GA1	Not assessed — drain	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBP320	NA	0	Bramble, gorse, ash, blackthorn, willow, ivy, marsh thistle, Yorkshire fog, herb robert	Not suitable — no flow	Not assessed	Not Assessed	Cattle access	No potential	None recorded. No potential.	None recorded. No potential.
WBP321	—	—	Hawthorn, gorse, dog rose, willow, bramble, honeysuckle	Not suitable — no flow	Not assessed	Not Assessed	Agricultural pressures	No potential	None recorded. No potential.	None recorded. No potential.
WBP322	—	—	Bracken, willow, horsetail, bramble	Not suitable — dry	Not assessed	Not Assessed	Agricultural pressures	No potential	None recorded. No potential.	None recorded. No potential.
WBP323	Flag iris	—	Alder, ryegrass, bramble, nettle, cocksfoot, Willow	Not assessed — not suitable	Not assessed	Not Assessed	Agricultural pressures	No potential	None recorded. No potential.	None recorded. No potential.
WBP324	Flag iris, meadowsweet, willowherb	—	Alder, ryegrass, bramble, nettle, cocksfoot	Not assessed — not suitable	Not assessed	Not Assessed	Agricultural pressures	No potential	None recorded. No potential.	None recorded. No potential.
WBP325	Flag iris, meadowsweet, willowherb	—	Willow, bramble, watercress, willowherb	Not assessed — not suitable	Not assessed	Not Assessed	Agriculture	No potential	None recorded. No potential.	None recorded. No potential.
WBP326	NA	—	Gorse, hawthorn, quaking oat grass, tormentil	Not assessed — not suitable	Not assessed	Not Assessed	Peat extraction	No potential	None recorded. No potential.	None recorded. No potential.
WBP327	None	—	Gorse, willow, bracken	Not assessed — not suitable	Not assessed	Not Assessed	Peat extraction	No potential	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP307	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Stagnant shallow water, heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP308	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Hedge on lhb and fencing on rhb with no obvious pressures, No potential for salmon or crayfish or lamprey. Good potential for macroinvertebrates	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WBP309	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated and fully covered ditch with hedgerow completely covering	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP310	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.	No	None recorded	Wet drainage ditch in GA1 field. Narrow trench dug as part of drainage network. Poor quality. No aquatic potential.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP311	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated with perrenial rye grass, dry ditch. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP312	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated on banks with pools of standing water. Difficult to see in.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP314	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry heavily vegetated drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP316	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Seems to be two drains joining together. Very low water here.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP317	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Deep drainage ditch, heavily vegetated, some stagnant pools of water, mostly dry	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP318	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Earth bank poached in places	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP319	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP320	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP321	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch. Heavily vegetated and shaded, No aquatic potential. May provide habitat for amphibian in winter/wetter periods.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP322	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch. Heavily vegetated. No aquatic potential. May be suitable for frogs.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP323	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Too steep and vegetated to assess water depth and flow	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP324	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Too steep and vegetated to assess water depth and flow	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP325	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP326	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2023:Dry bog drain, evidence of wet base but no water. Limited aquatic potential.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP327	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2023:Dry bog drain, evidence of wet base but no water. Limited aquatic potential. Heavily vegetated with gorse and willow	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP328	TW-11600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	DRAIN	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	6,873	—	—	—	—	—	—	17/06/2022	—
WBP329	TW-17900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	3,441	—	—	—	—	—	—	—	—
WBP330	TW-20300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	4,590	—	—	—	—	—	—	—	—
WBP331	TW-22700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	4,940	—	—	—	—	—	—	—	—
WBP332	TW—33300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002241 and SPA: 004058)	Yes	11,000	—	—	—	—	—	—	—	—
WBP333	TW—33400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002241 and SPA: 004058)	Yes	11,000	—	—	—	—	—	—	—	—
WBP334	TWA-5500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000585)	Yes	3,218	—	—	—	—	—	—	—	—
WBP335	TWA-5800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000585)	Yes	2,911	—	—	—	—	—	—	—	—
WBP336	TWA-7600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000585)	Yes	1,663	—	—	—	—	—	—	—	—
WBP337	TWB-6500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	14,360	—	—	—	—	—	—	—	—
WBP338	TWB-9600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	12,198	—	—	—	—	—	—	—	—
WBP339	TWB-21200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	4,963	—	—	—	—	—	—	—	—
WBP340	TWB-23800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	3,926	—	—	—	—	—	—	—	—
WBP341	TWC-6700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	7,225	—	—	—	—	—	—	17/08/2022	—
WBP342	TWC-13500	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	12,953	—	—	—	—	—	—	—	—
WBP343	TWC-17300	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,222	—	—	—	—	—	—	—	—
WBP344	TWC-17500	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,224	—	—	—	—	—	—	—	—
WBP345	TWC-19500	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,188	—	—	—	—	—	—	—	—
WBP346	TWC-21100	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,875	—	—	—	—	—	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBP328	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS, CB	1	Dry	Dry	Stagnant	—	—	—	—	—	—	—	—	—
WBP329	24/06/2024	—	Multidisciplinary Walkover Survey	JS	2	1	10	Stagnant	Pool 100%	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	0
WBP330	10/09/2024	—	Multidisciplinary Walkover Survey	JF UB	2	—	0	—	—	—	—	—	—	—	—	Full (>75%)	0
WBP331	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JF UB	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP332	13/09/2024	—	Multidisciplinary Walkover Survey	JF UB	—	0.5	—	—	—	—	—	—	—	—	—	Light (<25%)	0
WBP333	13/09/2024	—	Multidisciplinary Walkover Survey	JF UB	—	0.5	Dry	—	—	—	—	—	—	—	—	None (0%)	20
WBP334	09/07/2024	—	Multidisciplinary Walkover Survey	JS MB	1	0.5	10	Stagnant	Glide 100%	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	—
WBP335	10/07/2024	—	Multidisciplinary Walkover Survey	JS MB	1	0.5	20	Stagnant	Glide 100%	—	—	—	—	—	Mud/Silt 100%	None (0%)	—
WBP336	10/07/2024	—	Multidisciplinary Walkover Survey	JS MB	1	Dry	Dry	—	—	—	—	—	—	—	Mud/Silt 100%	None (0%)	—
WBP337	12/09/2024	—	Multidisciplinary Walkover Survey	UB AS	2	—	Dry	Dry	—	—	—	—	—	—	—	—	—
WBP338	23/07/2024	—	Multidisciplinary Walkover Survey	JMT	—	—	0	—	—	—	—	—	—	—	—	Medium (<50%)	—
WBP339	25/07/2024	12/06/2025	Multidisciplinary Walkover Survey	JS EP MW	5	0	0	Dry	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBP340	26/07/2024	—	Multidisciplinary Walkover Survey	JS MB	3	—	NA	No flow	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBP341	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SN CB	1	—	—	—	—	—	—	—	—	—	—	Heavy (<75%)	None
WBP342	26/07/2024	—	Multidisciplinary Walkover Survey	SN CB	7	4	—	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	—
WBP343	06/08/2024	13/06/2025	Multidisciplinary Walkover Survey	JS EP MW	2.5	Dry	Dry	No flow	—	—	—	—	—	—	Peat 100%	None (0%)	—
WBP344	07/08/2024	11/06/2025	Multidisciplinary Walkover Survey	JS EP MW	2	Dry	Dry	No flow	No flow	—	—	—	—	—	Peat 100%	Medium (<50%)	None
WBP345	07/08/2024	—	Multidisciplinary Walkover Survey	RA	5	Dry	NA	—	—	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	None
WBP346	07/08/2024	—	Multidisciplinary Walkover Survey	JS	5	1	—	—	—	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP328	—	—	Treeline	Not assessed	Not assessed	Not assessed	—	—	None recorded. No potential.	None recorded. No potential.
WBP329	—	0	Reed canary grass, meadowsweet, watermint, hemlock, willowherb	Not assessed — not suitable	Not assessed	Not assessed	—	No potential	None recorded. No potential.	None recorded. No potential.
WBP330	—	0	Treeline, pasture	Not assessed — not suitable	Not assessed	Not assessed	Agriculture	No potential	None recorded. No potential.	None recorded. No potential.
WBP331	—	—	—	Not assessed — not suitable	Not assessed	Not assessed	—	No potential	None recorded. No potential.	None recorded. No potential.
WBP332	—	—	GA1	Not assessed — not suitable	Not assessed	Not assessed	Agriculture	No potential	None recorded. No potential.	None recorded. No potential.
WBP333	Watercress	—	GA1	Not assessed — not suitable	Not assessed	Not assessed	Agriculture	No potential	None recorded. No potential.	None recorded. No potential.
WBP334	—	—	Reed canary grass, burr reed, meadowsweet , willow, bullrush	Not assessed — not suitable	Not assessed	Not assessed	—	No potential	None recorded. No potential.	None recorded. No potential.
WBP335	—	—	Reed canary grass, burr reed, meadowsweet	Not assessed — not suitable	Not assessed	Not assessed	—	No potential	None recorded. No potential.	None recorded. No potential.
WBP336	—	—	Hawthorn, bramble	Not assessed — not suitable	Not assessed	Not assessed	—	No potential	None recorded. No potential.	None recorded. No potential.
WBP337	—	—	Birch, willowherb, bracken	Not assessed — not suitable	Not assessed	Not assessed	—	No potential	None recorded. No potential.	None recorded. No potential.
WBP338	—	—	Ash,hazel,hawthorn,ivy,brambles,cleaver,beech,nettle,dog rose,sycamore,willow	Not assessed — not suitable	Not assessed	Not assessed	Management	No potential	None recorded. No potential.	None recorded. No potential.
WBP339	meadowsweet, Willowherb, watermint, bog rush, horsetail	—	Hawthorn, bramble, thistle, nettle, Yorkshire fog, willow	Not assessed — not suitable	Not assessed	Not assessed	Enrichment, bank instability	No potential	None recorded. No potential.	None recorded. No potential.
WBP340	None	0	Perennial ryegrass, nettle, thistle	Not assessed — not suitable	Not assessed	Not assessed	Enrichment , tunnelled in sections	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP341	NA	—	Willow, hazel, willowherb,elder, bramble	Not assessed	Not assessed	Not assessed	—	None	None recorded. No potential.	None recorded. No potential.
WBP342	Pondweed, green algae mint	20	Willow, bracken, knapweed, soft rush	Not assessed	Not assessed	Not assessed	Peat extraction	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP343	NA	—	Gorse, hawthorn, quaking oat grass, tormentil	Not assessed	Not assessed	Not assessed	Peat extraction	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP344	—	0	Willow, bramble, bracken, gorse, heather, soft rush	Not assessed	Not assessed	Not assessed	Peat cutting	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP345	—	0	Ash, hawthorn, bramble, bracken	Not assessed	Not assessed	Not assessed	Agriculture	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP346	—	—	Willow, soft rush, bramble, pondweed	Not assessed — not suitable	Not assessed	Not assessed	Peat extraction	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP328	—	—	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	
WBP329	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Vegetated wet drainage ditch	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP330	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry tunnelled drainage ditch, no macrophytes present	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP331	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	No access ditch observed through dense hedge	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP332	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP333	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP334	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP335	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP336	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drain under hedge	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP337	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2m high 1m wide banks dry, vegetated drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP338	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP339	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated drainage ditch, no water visible, treeline running alongside covering ditch , frog potential, cattle have access	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP340	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch under.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP341	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry heavily vegetated drain parallell to hedge and road	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP342	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Bog drain heavily vegetated with pond weed	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP343	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry bog drain, evidence of wet base but no water. Limited aquatic potential.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP344	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry bog drain no aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP345	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP346	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP347	TWC-22400	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,047	—	—	—	—	—	—	—	—
WBP348	TWC-23600	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,351	—	—	—	—	—	—	—	—
WBP349	TWD-300	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,984	—	—	—	—	—	—	—	—
WBP350	TWD—2200	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,667	—	—	—	—	—	—	—	—
WBP351	TWD-4200	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,451	—	—	—	—	—	—	—	—
WBP352	TWD-4600	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,329	—	—	—	—	—	—	—	—
WBP353	TWD-4900	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,317	—	—	—	—	—	—	—	—
WBP354	TWD-8100	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	15,213	—	—	—	—	—	—	—	—
WBP355	TWD-9400	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	14,962	—	—	—	—	—	—	—	—
WBP356	TWD-13100	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	16,877	—	—	—	—	—	—	—	—
WBP357	TWD-14400	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	16,220	—	—	—	—	—	—	—	—
WBP359	TWD—18300	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,235	—	—	—	—	—	—	—	—
WBP360	TWD-20100	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	13,099	—	—	—	—	—	—	—	—
WBP361	TWD—24700	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	14,375	—	—	—	—	—	—	—	—
WBP362	TWD-26200	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	15,127	—	—	—	—	—	—	—	—
WBP363	TWE-3900	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	7,319	—	—	—	—	—	—	—	—
WBP364	TWE-3900	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	7,319	—	—	—	—	—	—	—	—
WBP365	TWD-6500	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	14,654	—	—	—	—	—	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBP347	07/08/2024	—	Multidisciplinary Walkover Survey	RA	3	Dry	NA	—	—	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	None
WBP348	08/08/2024	—	Multidisciplinary Walkover Survey	JS RA JMT	2	0.5	30	No flow	No flow	—	—	—	—	—	Peat 100%	Medium (<50%)	20
WBP349	08/08/2024	30/05/2025	Multidisciplinary Walkover Survey	UB LH	2.5	—	Dry	No flow	No flow	—	Gravel 10%	—	—	—	Mud/Silt 90%	Medium (<50%)	None
WBP350	16/08/2024	—	Multidisciplinary Walkover Survey	SN UB	2.5	NA	NA	—	—	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	None
WBP351	09/08/2024	29/05/2025	Multidisciplinary Walkover Survey	UB LH	4	0.3	5	Stagnant	No flow	—	—	—	—	—	Peat 100%	Full (>75%)	5
WBP352	09/08/2024	29/05/2025	Multidisciplinary Walkover Survey	UB LH	3	0.3	10	Stagnant	No flow	—	—	—	—	—	Peat 100%	Light (<25%)	30
WBP353	09/08/2024	29/05/2025	Multidisciplinary Walkover Survey	UB LH	6	Unknown	Unknown	Stagnant	Pool 100%	—	—	—	—	—	Peat 100%	Medium (<50%)	70
WBP354	09/08/2024	—	Multidisciplinary Walkover Survey	JF MB	2	1	—	—	—	—	—	—	—	—	Mud/Silt 90%	Light (<25%)	—
WBP355	06/08/2024	—	Multidisciplinary Walkover Survey	JF MB	—	—	—	—	—	—	—	—	—	—	—	Full (>75%)	—
WBP356	06/08/2024	—	Multidisciplinary Walkover Survey	JF, MB	3	3	—	Stagnant	—	—	—	—	—	—	Mud/Silt 90%	None (0%)	—
WBP357	08/08/2024	—	Multidisciplinary Walkover Survey	MB JF	3.5	3	NA, no safe access to depth	Stagnant	—	—	—	—	—	—	—	Heavy (<75%)	30
WBP359	18/10/2024	10/06/2025	Multidisciplinary Walkover Survey	JS EP MW	1	NA	NA	Dry	No flow	—	—	—	—	—	—	Light (<25%)	40
WBP360	07/08/2024	—	Multidisciplinary Walkover Survey	JF MB	1	0.5	10	Stagnant	—	—	—	—	—	—	Med/Silt 100%	Heavy (<75%)	—
WBP361	18/10/2024	—	Multidisciplinary Walkover Survey	SN UB	1	NA	NA	—	—	—	—	—	—	—	—	Light (<25%)	—
WBP362	24/10/2024	—	Multidisciplinary Walkover Survey	JF SW	4	0.5	NA	—	—	—	—	—	—	—	—	Medium (<50%)	Unknown
WBP363	22/08/2024	10/06/2025	Multidisciplinary Walkover Survey	JS EP MW	3	NA	NA	Dry	No flow	—	—	—	—	—	—	Light (<25%)	None
WBP364	22/08/2024	10/06/2025	Multidisciplinary Walkover Survey	JS EP MW	3	NA	NA	Dry	No flow	—	—	—	—	—	—	Light (<25%)	None
WBP365	09/08/2024	—	Multidisciplinary Walkover Survey	RA	5	NA	NA	Dry	—	—	—	—	—	—	Peat 100%	Medium (<50%)	30

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP347	—	0	Ash, hawthorn, willow, willowherb, nettle, bramble	Not assessed	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP348	Bog cotton	—	Willow, purple moor grass, meadow grass	Not assessed	Not assessed	Not assessed	Peat extraction	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP349	None	0	Hawthorn, ash, bramble, dog rose, nettle, cocksfoot, thistle, grass spp	Not assessed	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP350	—	0	Rowan, elder, bracken, ivy, hawthorn, ash	Not assessed	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP351	Reed grass	0	Birch, cocksfoot, bindweed, Yorkshire fog, willowherb, willow, bramble, bracken	Not assessed — not suitable	Not assessed	Not assessed	Peat extraction	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP352	Lemna	0	Horsetail, cocks foot, willowherb, horsetail, hawks it	Not assessed	Not assessed	Not assessed	Construction currently ongoing	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP353	Canary reed, waterlily, bullrush	0	Canary reed, soft rush, bulrush, willowherb,willow	Not assessed — not suitable	Not assessed	Not assessed	Construction	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP354	None	0	Bog	Not assessed — not suitable	Not assessed	Not assessed	Peat extraction, wind farm construction	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP355	reed canary grass	—	Bindweed, nettle	Not assessed — not suitable	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP356	Bull rush	—	Bog	Not assessed — not suitable	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP357	Pondweed	—	Hawthorn, willow, bindweed, bramble, purple loosestrife, willowherb	Not assessed	Not assessed	Not assessed	Agriculture, encroaching vegetation	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP359	Fools watercress	—	Hawthorn, blackthorn, bramble, elm,	Not assessed — not suitable	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP360	—	—	Heather	Not assessed — not suitable	Not assessed	Not assessed	Machinery, deer	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP361	—	—	Hawthorn, blackthorn, bramble, bindweed, ivy	Not assessed — not suitable	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP362	Reed Canary Grass	—	Nettle, willowherb	Not Assessed	Not assessed	Not assessed	Agriculture and road runoff	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP363	—	—	Ash, hawthorn, bramble, dog rose	Not assessed — not suitable	Not assessed	Not assessed	Road runoff	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP364	—	—	Ash, hawthorn, bramble, dog rose	Not assessed — not suitable	Not assessed	Not assessed	Road runoff	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP365	Reed	0	Willow, willowherb, bracken	Not assessed — not suitable	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.

Environmental Impact Assessment Report (EIAR) Volume 6 of 6: Environmental Assessment (Appendix A8.14) Watercourse Crossing Data

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP347	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP348	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP349	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch under treeline	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBP350	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP351	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP352	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Newly dug	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP353	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP354	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP355	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP356	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP357	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated drainage ditch with steep banks, likely heavy pollution, dries up at one end	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP359	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poor quality drain parallel to treeline and road, drains either side of road. Limited aquatic potential (amphibian)	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP360	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP361	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poor quality drain parallel to treeline and field No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP362	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP363	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Deep drain on roadside parallel to treeline. Poor quality, dry and completely vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP364	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Deep drain on roadside parallel to treeline. Poor quality, dry and completely vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP365	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP366	TWE-6300	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	7,393	—	—	—	—	—	—	—	—
WBP367	TWE-14900	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	—	—	—	—
WBP368	TWE-15100	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	—	—	—	—	—
WBP369	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	DRAIN	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,283	—	—	—	—	—	—	—	—
WBP373	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	DRAIN	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	8,156	—	—	—	—	—	—	—	—
WBP374	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	DRAIN	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	8,144	—	—	—	—	—	—	—	—
WBP375	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	DRAIN	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	8,183	—	—	—	—	—	—	—	—
WBP376	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	DRAIN	—	—	Yes (SAC: 000571)	Yes	5,016	—	—	—	—	—	—	—	—
WBP377	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	DRAIN	—	—	Yes (SAC: 000571)	Yes	5,045	—	—	—	—	—	—	—	—
WBP378	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	13210	—	—	—	—	—	—	44817	—
WBP380	TWC-17500	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14280	—	—	—	—	44061	—	—	—
WBP382	TWC-17500	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,119	—	—	—	—	—	—	—	—
WBP385	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	14,910	—	—	—	—	—	—	—	—
WBP386	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	14,936	—	—	—	—	—	—	17/08/2022	—
WBP387	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	14,807	—	—	—	—	—	—	—	—
WBP388	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	16,097	—	—	—	—	—	—	—	—
WBP389	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	12,428	—	—	—	—	—	25/08/2021	—	—
WBP390	TW-11200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	DRAIN	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	6,490	—	—	—	—	09/07/2020	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBP366	22/08/2024	—	Multidisciplinary Walkover Survey	SN UB	1	NA	NA	—	—	—	—	—	—	—	—	Light (<25%)	None
WBP367	03/09/2024	—	Multidisciplinary Walkover Survey	AS, JM	1.5	NA	NA	Dry	—	—	—	—	—	—	—	Heavy (<75%)	—
WBP368	03/09/2024	—	Multidisciplinary Walkover Survey	AS, JM	1	NA	NA	Dry	—	—	—	—	—	—	—	Full (>75%)	—
WBP369	—	13/05/2025	Multidisciplinary Walkover Survey	JF JS MW	5	2	3	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	—	—
WBP373	24/07/2024	—	Multidisciplinary Walkover Survey	JS MB	2	1.5	6	—	—	—	—	—	Cobble 50% Peat 50%	—	—	None (0%)	—
WBP374	24/07/2024	19/05/2025	Multidisciplinary Walkover Survey	SOR	5	Dry	Dry	Dry	No flow	—	—	—	—	—	Mud/Silt 100%	None (0%)	—
WBP375	24/07/2024	—	Multidisciplinary Walkover Survey	JS MB	3	0.5	5	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	None (0%)	—
WBP376	25/07/2024	12/06/2025	Multidisciplinary Walkover Survey	JS EP MW	5	0	0	Stagnant	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBP377	25/07/2024	12/06/2025	Multidisciplinary Walkover Survey	JS EP MW	5	0	0	Stagnant	No flow	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	—
WBP378	Verification Survey (June to October	45890	Multidisciplinary Walkover Survey	JS EP	1	0	0	No flow	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBP380	Verification Survey (June to October	45890	Multidisciplinary Walkover Survey	JS EP	6	1	—	No flow	No flow	—	—	25% Sand	—	—	75% Silt	Medium (<50%)	70
WBP382	09/09/2024	—	Multidisciplinary Walkover Survey	JS JM	—	Dry	NA	No flow	No flow	—	—	—	—	—	—	—	—
WBP385	17/08/2024	—	Multidisciplinary Walkover Survey	RA	1	Dry	NA	No flow	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBP386	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SN AS CB	1	0	—	No flow	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBP387	15/10/2024	—	Multidisciplinary Walkover Survey	SN UB	2	1	NA	No flow	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBP388	16/10/2024	—	Multidisciplinary Walkover Survey	SN UB	15	10	30	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	None (0%)	0
WBP389	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SOR	2	0	—	Very Slow	—	—	Boulder 10%	15% Gravel, 15% Cobble	—	60% Silt	—	None (0%)	—
WBP390	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP366	—	—	Ash, hawthorn, bramble, dog rose	Not assessed — not suitable	Not assessed	Not assessed	Road runoff	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP367	—	—	—	Not assessed — not suitable	Not assessed	Not assessed	Agricultural	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP368	—	—	Ash ivy	Not assessed — not suitable	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP369	Water mint, yellow iris, horsetail, Juncus sp.	5	Patches of scrub and agricultual grassland	Not assessed	Not assessed	Not assessed	Poaching, cattle	—	None recorded. No potential.	None recorded. No potential.
WBP373	Horsetail, soft rush	—	Willow, meadowsweet, hawthorn	Not assessed	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP374	—	—	Soft rush, willowherb, nettle, meadowsweet, bramble	Not suitable for kick sample	Not assessed	Not assessed	Weed killer	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP375	—	—	Soft rush, willowherb, nettle, meadowsweet, bramble	Not suitable for kick sample	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP376	meadowsweet, Willowherb, watermint, bog rush, horsetail	0	Hawthorn, bramble, thistle, nettle, Yorkshire fog, willow	Not assessed	Not assessed	Not assessed	Enrichment, bank instability	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP377	—	—	Hawthorn, bramble, thistle, nettle, ash, ivy	Not assessed	Not assessed	Not assessed	Enrichment, bank instability	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP378	—	—	Birch, gorse, bramble, bracken, willow, common reed grass	Not assessed	Not assessed	Not assessed	Intensive agriculture	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP380	Willowherb and meadowsweet	0	Bindweed, bracken, reed grass, willow	Not assessed	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP382	—	—	Bracken, willow, knapweed, gorse, meadowsweet, willowherb, loosestrife	Not assessed	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP385	NA	—	Aspen, ash, blackthorn, hawthorn, willow	Not assessed	Not assessed	Not assessed	Agriculture	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP386	—	—	Canary grass, hawthorn, ash	Not assessed	Not assessed	Not assessed	Agriculture	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP387	NA	—	Birch, elder, bramble	Not assessed	Not assessed	Not assessed	Agriculture	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP388	—	0	Common reed, ling, bracken, downy birch, purple moore grass	Not assessed — not suitable	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP389	Watercress and *Spargarium spp*	0	—	Not assessed	Not assessed	Not assessed	Nutrient runoff from bog	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP390	Watercress	—	Salix, hazel, bramble, nettles	Not assessed	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP366	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry ditch, heavily vegetated with perrenial rye grass, no aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP367	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drainage ditch along the treeline	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP368	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP369	None recorded. No potential.	—	—	No	None recorded	Outflow heavily poached by cattle	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBP373	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP374	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Recently clear over winter of vegetation and deepened 2025: Dry channel, recently sprayed. No fisheries potential. Suitable for amphibian in winter	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP375	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Recently clear over winter of vegetation and deepened	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP376	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Surveyed from edge of field due to bullocks present inside	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP377	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated drainage ditch, no water visible, treeline running alongside covering ditch , frog potential, cattle have access	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP378	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry ditch, heavily overgrown, no aquatic potential	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP380	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drainage ditch along hardcore trackway	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP382	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP385	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP386	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry ditch, no evidence of water. Heavily vegetated.	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP387	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch. No evidence of water.	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP388	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poor quality dug bog drain	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP389	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Cuverted at sections across the bog	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP390	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Wet ditch, overgrown with vegetation.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBP391	TWC-23600	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,298	—	—	—	—	—	—	—	—
WBP392	TWD-24700	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	14,448	—	—	—	—	—	—	—	—
WBP393	TWC-15500	FW4 — Drainage Ditch	DRAIN	Barrow	DRAIN	—	—	Yes (SAC: 002162)	Yes	13,097	—	—	—	—	—	—	—	—
WBP394	TWE-12100	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	7,137	—	—	—	—	—	—	—	—
WBP395	TWE-12100	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	7,130	—	—	—	—	—	—	—	—
WBP396	RW-500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	280	—	—	—	—	—	—	—	—
WBP397	TW-33900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	DRAIN	—	—	Yes (SAC: 002241 and SPA: 004058)	Yes	11,702	—	—	—	—	19/12/2020	—	—	—
WBP398	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	17580	—	—	—	—	—	—	—	—
WBP399	TWA-20900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7271	—	—	—	—	—	—	—	—
WBP400	TWA-20200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7510	—	—	—	—	—	—	—	—
WBP401	TW-13500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	5700	—	—	—	—	—	—	—	—
WBP402	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	1019	—	—	—	—	—	—	—	—
WBP403	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	250	—	—	—	—	—	—	—	—
WBP404	Off Pipeline	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	17550	—	—	—	—	—	—	—	—
WBP405	TWE-4600	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	7716	—	—	—	—	—	—	—	—
WBP406	TWB-20700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	5884	—	—	—	—	—	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WBP391	08/08/2024	28/05/2025	Multidisciplinary Walkover Survey	UB LH	1	0.3	25 approx.	No flow	No flow	—	—	—	—	—	Peat 100%	Medium (<50%)	—
WBP392	18/10/2024	—	Multidisciplinary Walkover Survey	SN UB	0.5	NA	—	No flow	—	—	—	—	—	—	—	Light (<25%)	—
WBP393	06/08/2024	—	Multidisciplinary Walkover Survey	JS JMT	3	50	0.1	No flow	—	—	—	—	—	—	Peat 100%	None (0%)	—
WBP394	23/08/2024	—	Multidisciplinary Walkover Survey	SN UB	2	0.5	NA	No flow	—	—	—	—	—	—	—	Light (<25%)	—
WBP395	23/08/2024	27/05/2025	Multidisciplinary Walkover Survey	JS EP MW	2	Dry	NA	No flow	No flow	—	—	—	—	—	—	Light (<25%)	100
WBP396	17/06/2024	07/05/2025	Multidisciplinary Walkover Survey	CB	2	0.3	10	Low	Glide 100%	Gravel 5%	—	Sand 15%	—	—	Mud/Silt 80%	Heavy (<75%)	0
WBP397	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JG	1	Dry	Dry	Stagnant	—	—	—	—	—	—	—	—	—
WBP398	—	19/05/2025	Multidisciplinary Walkover Survey	SOR	—	—	—	Stagnant	—	—	—	—	—	—	—	—	Yes
WBP399	—	20/05/2025	Multidisciplinary Walkover Survey	AS SOR	1	Dry	Dry	—	—	—	—	—	—	—	Mud/Silt 100%	—	None
WBP400	—	20/05/2025	Multidisciplinary Walkover Survey	AS SOR	1	Dry	Dry	—	—	—	—	—	—	—	Mud/Silt 100%	—	None
WBP401	—	09/06/2025	Multidisciplinary Walkover Survey	UB CB	0.5	0.3	3.1	Slow	Slow	Gravel 5%	—	—	—	Mud/Silt 95%	—	—	90
WBP402	—	07/05/2025	Multidisciplinary Walkover Survey	SN CB JM	1	0.5	Low	Moderate	—	—	—	Gravel 20%	Cobble 30%	Boulder 50%	—	—	—
WBP403	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA	—	—	—	—	—	—	—	—	—	—	—	—	—
WBP404	—	19/05/2025	Multidisciplinary Walkover Survey	AS SOR	2	Dry	Dry	—	—	—	—	—	—	—	—	Light (<25%)	None
WBP405	—	11/06/2025	Multidisciplinary Walkover Survey	JS EP MW	3	Dry	Dry	Stagnant	—	—	—	—	—	—	—	Light (<25%)	—
WBP406	—	12/06/2025	Multidisciplinary Walkover Survey	JS EP MW	3	0	0	Dry	—	—	—	—	—	—	—	Light (<25%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBP391	Pondweed	0	Eared willow, ling heather, gorse, soft rush	Not assessed	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP392	NA	—	Perennial rye grass, soft rush, Yorkshire fog, nettle, thistle	Not assessed	Not assessed	Not assessed	Intensive agriculture	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP393	Sphagnum	—	Soft rush, yarrow, knapweed, clover, willow, ling heather, gorse	Not assessed	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP394	Watercress, watermint	—	Ash, Willowherb, nettle, dog rose, blackthorn, sycamore, hogweed	Not assessed	Not assessed	Not assessed	Agriculture	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP395	—	—	Ash, bramble, ivy, elm, dog rose, hawthorn, blackthorn, alder	Not assessed	Not assessed	Not assessed	Agriculture	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP396	—	0	Ivy, hazel, soft shield fern	Not assessed	Not assessed	Not assessed	Agriculture, cattle access in places	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBP397	—	—	Perrenial ryegrass, yorkshire fog, nettle, willowherb, buttercup, bindweed, nettle bent	Not assessed	Not assessed	Not assessed	—	—	None recorded. No potential.	None recorded. No potential.
WBP398	Bittercress	—	Grass species, nettle, bush vetch, willowherb. hawthorn, willow, bramble, cleavers, meadowsweet, buttercup, yorkshire fog	Not assessed	Not assessed	Not assessed	Agriculture	—	No potential	No potential
WBP399	—	—	Hawthorn, dog rose, ash, hogweed, nettle, cleavers, willowherb	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
WBP400	—	—	Soft rush, watercress	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
WBP401	fools' watercress, duckweed	30	Bramble, ash, oak, willow	Not assessed	Not assessed	Not assessed	Poor drainage, flowing over land on farm track. Heavily polluted with cattle dung	—	No potential	No potential
WBP402	—	—	Hawthorn, laurel	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
WBP403	Watercress, algae	—	Ryegrass, bracken, nettle, bramble	Not assessed	Not assessed	Not assessed	Agriculture	—	No potential	No potential
WBP404	—	—	Nettles, bramble	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
WBP405	—	—	Hawthorn, bramble, nettle	Not assessed	Not assessed	Not assessed	Livestock access	—	No potential	No potential
WBP406	Water mint, meadowsweet, Willowherb, fools watercress	0	Willow, thistle, Yorkshire fog, hawthorn, bramble, meadow sweet	Not assessed	Not assessed	Not assessed	Enrichment	—	No potential	No potential

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBP391	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Bog drain. Abundance of dragonfly and damselflies using this habitat. Likely good amphibian habitat also	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP392	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated dry drain, no aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBP393	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Deep wet drainage ditch with sphagnum spp carpet on bed	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP394	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Poor quality, no aquatic potential	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP395	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry. Very poor quality. No aquatic potential	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBP396	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP397	—	—	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBP398	No potential	—	—	No	—	Steep ditch with standing water	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database adjacent channel D/S contains Sal and BT
WBP399	No potential	—	—	No	—	Drain along roadside. No fisheries potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S contains Sal and BT
WBP400	No potential	—	—	No	—		Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S contains Sal and BT
WBP401	No potential	—	—	No	—	This drain diverts from EPA river, runs along road and rejoins. The farmer has done drainage management	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WBP402	No potential	—	—	No	—	Culverted under road, flowing water	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, no "SAL" river located nearby.	No fish stock survey nearby
WBP403	No potential	—	—	No	—	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S and U/S does not contain Sal or BT
WBP404	No potential	—	—	No	—	—	Low	Overhead Line (Power to Line Valves)	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S contains Sal and BT
WBP405	No potential	—	—	No	—	Dry drain under treeline	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	No fish stock survey nearby
WBP406	No potential	—	—	No	—	Straight uniform drain, maintained. No kick sample, no fisheries value. Areas heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBX001	RW-300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	259	—	—	03/09/2018	17/09/2019	—	26/10/2021	14/06/2022	—
WBX002	RW-400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	274	—	—	03/09/2018	17/09/2019	—	—	—	—
WBX003	RW-1100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	612	—	—	—	17/09/2019	—	18/10/2021	—	19/06/2023
WBX004	TW-100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	444	—	23/03/2017	—	—	06/07/2020	—	—	—
WBX005	TW-2800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,769	01/06/2016	—	—	—	—	—	—	—
WBX006	TW-2900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,818	—	—	—	—	21/09/2020	—	—	—
WBX007	TW-3100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	2,963	—	—	—	—	—	—	—	—
WBX008	TW-3500	FW1 — Eroding/Upland River	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,421	—	—	13/08/2018	17/09/2019	07/07/2020	—	—	—
WBX009	TW-3900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,624	—	—	—	—	07/07/2020	—	16/06/2022	—
WBX010	TW-4000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,590	—	—	—	17/09/2019	07/07/2020	—	—	—
WBX011	TW-4400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,511	—	—	—	—	07/07/2020	—	—	—
WBX012	TW-4900	FW1 — Eroding/Upland River	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,264	—	—	27/06/2018	17/09/2019	07/07/2020	20/10/2021	—	—
WBX013	TW-11200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	6,491	—	—	27/06/2018	18/09/2019	09/07/2020	—	17/06/2022	—
WBX014	TW-12400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	7,432	—	—	04/09/2018	—	—	—	17/06/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WBX001	—	08/05/2025	Multidisciplinary Walkover Survey	SN CB JM	1	1	20	Slow	Pool	—	—	—	—	—	Silt 100%	Medium (<50%)	0
WBX002	17/06/2024	08/05/2025	Watercourse Crossing Survey	SN CB JM	4	1.5	20	Low	Glide 80% Riffle 20%	Boulder 5% Cobble 5%	Gravel 10%	—	Sand 40% Mud/Silt 40%	—	—	Heavy (<75%)	0
WBX003	18/06/2024	—	Watercourse Crossing Survey	JS MB	2	0.1	2	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	0
WBX004	19/06/2024	—	Multidisciplinary Walkover Survey	JS MB	2	1	10	Stagnant	Pool 100%	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	0
WBX005	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	BA	—	—	—	—	—	—	—	—	—	—	—	—	—
WBX006	Verification Survey (June to October	—	Watercourse Crossing Survey	PM SC	3	Dry	Dry	No flow	No flow	—	—	—	—	—	—	Full (>75%)	—
WBX007	Verification Survey (June to October	—	Archaeology Team	Arch	—	—	—	—	—	—	—	—	—	—	—	—	—
WBX008	28/08/2024	—	Watercourse Crossing Survey	SOR CB	3.5	2	7	Very Slow	Pool 60%, Riffle 30%, Glide 10%	Sand 5%, Silt 5%	Cobble 10%	—	Boulder 50%, Gravel 30%	—	—	Heavy (<75%)	0
WBX009	20/06/2024	—	Multidisciplinary Walkover Survey	JS MB	2.5	50	2	Very Slow	Riffle 100%	Sand 5% Gravel 5%	—	—	—	—	Mud/Silt 90%	Full (>75%)	0
WBX010	28/08/2024	—	Multidisciplinary Walkover Survey	SOR CB	1.5	1.5	N/A	Very slow	Glide 80% Riffle 20%	—	Mud/Silt10%	—	Boulder 30% Cobble 30% Gravel 30%	—	—	Heavy (<75%)	0
WBX011	28/08/2024	13/05/2025	Multidisciplinary Walkover Survey	JF MW JS	3	1	3	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—
WBX012	28/08/2024	13/05/2025	Multidisciplinary Walkover Survey	JF JS MW	5	1.2	4	Slow	Riffle 50%, Glide 50%	—	Boulder 10%	Cobble 25%, Sand 15%, Silt 15%	Gravel 35%	—	—	Heavy (<75%)	0
WBX013	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS CB	1.5	Dry	Dry	No flow	No flow	—	—	—	—	—	Silt	Full (>75%)	0
WBX014	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS, CB	1	—	Dry	—	—	—	—	—	—	—	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBX001	None	0	Woodland, holly, ivy, bracken, hazel, harts tongue	Yes (2021)	2021: *Gammarus, aesellu, baetiis rhodani.* River/brook lamprey and stickleback	Q2—Q3	Agricultural pressures	Good — Lamprey potential	None recorded. No potential.	River/brook lamprey recorded in 2021 Lamprey potential
WBX002	None	0	Ivy, hazel, soft shield fern	Yes (2019)	2019: *Gammarus, aesellu, baetiis rhodani.* River/brook lamprey and stickleback	Q2—Q3	Agriculture, cattle access in places	Good — Lamprey potential	None recorded. No potential.	River/brook lamprey recorded. Lamprey potential
WBX003	None	0	Bracken, ivy, bramble, hawthorn, ash and elder	Not assessed — No flow, dry in places. Milky appearance from agricultural pollution	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX004	None	0	willow, sitka spruce, ivy, buckler fern, soft shield fern	Not assessed — drain	Not assessed	Not Assessed	Forestry	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX005	—	—	Gorse, mature 15m ash, mixed thorn, holly, bramble	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX006	—	—	—	Not assessed — Dry	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX007	—	—	—	Not assessed	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX008	None	0	Bracken, hawthorn, blackthorn, harts tongue, elder, nettle, ash, bramble	Yes (2020 and 2024)	2020:*Gammarus* 2024: *Gammarus* 20, caseless caddis 1, water louse 1, stonefly 10	Q3 (2020) Q3-Q4 (2024)	Agricultural pressures	Low to Moderate potential — trout potential	None recorded. Potential	No potential
WBX009	Watercress	—	Nettle, herb robert, fox glove, hawthorn	Not assessed	Not assessed	Not Assessed	Past evidence of cattle access	No potential — no suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX010	None	0	Bracken, hawthorn, blackthorn, hearts tongue , nettle and bramble	Yes	*Gammarus* 40	Q3	Pasture	Low to Moderate potential	None recorded. Low to moderate potential.	None recorded. No potential.
WBX011	Fools watercress, watercress, Callitriche stagnalis, ivy-leaved crowfoot	—	Soft rush, Bracken,bramble, gorse, willow	Not assessed — no fisheries value	Not assessed	Not Assessed	Agriculture, poaching	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX012	None	0	Bramble, gorse, holly, bracken, sycamore, hawthorn	Yes (2020 and 2024)	2020: *Gammarus, baetis rhodani, simulidae* 2024: *Gammarus,* 75, great diving beetle 1, aesellus 3	Q3 (2020) Q3 (2024)	Agricultural pressures	Low potential — suitable substrate for salmonids but all riffle habitat with no spawning pools. Not suitable for lamprey spawning although may migrate along channel. No crayfish potential.	None recorded. No potential	None recorded. No potential
WBX013	None	0	Hawthorn, willow, gorse, ash, bramble, bracken, ivy, sycamore	Not assessed — Too much silt in the bottom with little flow	Not assessed	Not Assessed	Agricultural and conifer	No potential — No gravel present with little flow.	None recorded. No potential.	None recorded. No potential.
WBX014	—	—	Scrub	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBX001	None recorded. No potential.	None recorded. No potential.	None recorded	Yes	None recorded	2018: Slow moving water with a lot of fallen debris on surface. Riffle around obstacles. Water polluted. Milky colour in spots.	Medium	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX002	None recorded. No potential.	None recorded. No potential.	None recorded	Yes	None recorded	2019: Slow moving water with a lot of fallen debris on surface. Riffle around obstacles. Water polluted. Milky colour in spots. 2025: stagnant water, limited aquatic potential (amphibian only) more flow as move further into forestry (possibly unmapped stream)	Medium	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX003	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated drainage ditch	Low	Trenchless	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX004	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drainage ditch with low stagnant water. Iron fungus present	Low	Clear Span Bridge	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX005	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Gorse with mature 15m ash mixed thorn, holly, bramble along steep, deep cut ditch (running water).	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBX006	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX007	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX008	No potential	None recorded. Foraging potential	2018: Badger scatt and trail beside waterbody.	Yes	None recorded	Badger scatt and trail beside watercourse. No otter signs. 2m wide stream at base with boulder and gravel bed. Shallow water runs into river. No kingfisher potential. Clean water.	Medium	Trenchless	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S contains Sal and BT
WBX009	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Trenchless	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX010	None recorded. No potential.	None recorded. No potential.	None recorded	Yes	None recorded	Deer access, salmon spawning and nursery potential. Eroding banks causing sedimentation. Unmanaged. No kingfisher or otter potential. Heavily vegetated banks. Flows down into main river .lacks species diversity	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX011	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	No fisheries value. Cattle access. No otter or kingfisher potential. Potential for frogs in winter	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S contains Sal and BT
WBX012	None recorded. No potential	None recorded. No potential	None recorded	No	None recorded	Lacks species diversity. Features of a stream but not down as EPA river. Narrow natural river. Banks heavily vegetated. No kingfisher or otter potential.	Low	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX013	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Wet in places. Heavily vegetated.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX014	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBX015	TW-15300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	4,585	—	—	06/09/2018	18/09/2019	10/09/2020	—	—	—
WBX016	TW-16900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	3,796	—	—	14/08/2018	30/09/2019	—	—	—	—
WBX017	TW-19200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	3,924	—	19/07/2017	14/08/2018	18/09/2019	17/07/2020	—	03/08/2022	—
WBX018	TW-20400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004058)	Yes	4,590	—	—	14/08/2018	18/09/2019	14/07/2020	—	03/08/2022	—
WBX019	TW-31600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002241 and SPA: 004058)	Yes	8,306	—	—	—	19/09/2019	16/07/2020	—	—	—
WBX020	TW-34200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002241 and SPA: 004058)	Yes	10,718	—	—	—	19/09/2019	17/07/2020	—	—	—
WBX021	TWA-4300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000585)	Yes	3,927	—	—	—	19/09/2019	—	—	—	—
WBX022	TWA-5700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000585)	Yes	3,017	—	—	10/07/2018	19/09/2019	—	—	—	—
WBX023	TWA-7800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000585)	Yes	1,659	—	—	16/08/2018	19/09/2019	—	—	—	—
WBX024	TWA-8700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000585)	Yes	1,430	—	—	—	19/09/2019	23/07/2020	20/10/2021	—	—
WBX025	TWA-12100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000585)	Yes	1,856	29/06/2016	01/08/2017	17/08/2018	20/09/2019	22/09/2020	—	18/07/2022	—
WBX026	TWA-13200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000585)	Yes	2,757	—	—	12/07/2018	—	—	—	25/07/2022	—
WBX027	TWA-14800	FW1 — Eroding/Upland River	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000585)	Yes	2,748	—	—	13/07/2018	20/09/2019	—	—	25/07/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBX015	—	19/05/2025	Multidisciplinary Walkover Survey	SN CB	2	0.5	—	Stagnant	No flow	—	—	—	—	—	Mud/Silt 100%	—	—
WBX016	29/08/2024	—	Watercourse Crossing Survey	SOR JS	3	Dry	Dry	No flow	No flow	—	—	—	—	—	—	Full (>75%)	—
WBX017	29/08/2024	—	Watercourse Crossing Survey	SOR JS	3	2.5	10	Stagnant	—	—	—	—	—	—	—	Light (<25%)	—
WBX018	10/09/2024	—	Multidisciplinary Walkover Survey	JF UB	2	0	0	—	—	—	—	—	—	—	—	Full (>75%)	0
WBX019	12/10/2024	—	Multidisciplinary Walkover Survey	JF UB	3	0	N/A damp ditch	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	90
WBX020	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA JG	1	1	0	No flow	No flow	—	—	—	—	—	Silt	Light (<25%)	10
WBX021	16/09/2024	—	Multidisciplinary Walkover Survey	SOR JS	4	0	—	Dry	—	—	—	—	—	—	—	Medium (<50%)	—
WBX022	16/09/2024	—	Multidisciplinary Walkover Survey	SOR JS	1	0	N/A	Dry	—	—	—	—	—	—	—	Light (<25%)	—
WBX023	16/09/2024	—	Multidisciplinary Walkover Survey	SOR JS	3.5	1.5	7	Slow	Riffle 20% Pool 20% Glide 20&	Boulder 5%	—	Cobble 20%	—	Gravel 65%	Mud/Silt 10%	Heavy (<75%)	5
WBX024	10/07/2024	—	Multidisciplinary Walkover Survey	JS MB	1	50	10	Very Slow	Glide 100%	Cobble 5%	—	Gravel 15% Sand 20%	—	Mud/Silt 60%	—	Heavy (<75%)	0
WBX025	17/09/2024	23/05/2025	Watercourse Crossing Survey	SN CB	2.5	1	Low	Moderate	—	Sand 5%	Boulder 10%	Gravel 15%	—	Cobble 60%	—	Medium (<50%)	95
WBX026	17/09/2024	—	Multidisciplinary Walkover Survey	SOR JS	4	2	10	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	100
WBX027	17/09/2024	—	Multidisciplinary Walkover Survey	SOR JS	8	1	—	Stagnant	Riffle 5% Pool 5% Glide 90%	Boulder 5%	Sand 10%	Cobble 25% Gravel 25%	Mud/Silt 35%	—	—	Heavy (<75%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBX015	Yellow iris	0	Bramble, watercress, nettle, thistle, Yorkshire fog	Not assessed — heavily vegetated damp ditch	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX016	Canary reed grass, bulbrush, flag iris,	—	Nettle, ash, bramble, dogrose, ivy	Not assessed	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential
WBX017	watermint, fools watercress, water plantain, common pondweed	0	Grass spp, watermint, fools watercress, water plantain, common pondweed	Not assessed	Not assessed	Not Assessed	Agriculture, cattle access	No potential — No suitable habitat	None recorded. No potential.	None recorded. Limited potential.
WBX018	—	0	Treeline, pasture	Not assessed	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX019	Fools watercress, bittercress, willowherb, reed canary grass	0	Ash, gorse, hawthorn, ryegrass, bramble, nettle	Not assessed — not suitable	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX020	Nettle, bramble, Yorkshire fog, bindweed	0	Elder, dog rose, blackthorn, hawthorn, bramble, cocksfoot, yorkshire fog	Not assessed — Dry	Not assessed	Not Assessed	Silage pits and bales, slurry tank and cattle beside ditch	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX021	Bullrush 10%, fools watercress 70%,	—	Hawthorn, alder, nettle, willow herb, ivy, cocksfoot, dogrose, hogweed, watermint	Not assessed	Not assessed	Not Assessed	Active modification, has been deepened and widened and straight.	No potential — No suitable habitat. Insufficient depth. No riffle of pool habitat and quite a lot of silt.	None recorded. No potential.	None recorded. No potential.
WBX022	None	—	Ash, oak peduncle, hawthorn, bramble, nettle, Phragmites.	Not assessed	Not assessed	Not Assessed	—	No potential — No flow and heavy silt with excessive macrophyte growth.	None recorded. No potential.	None recorded. No potential.
WBX023	Liverwort species	—	Sycamore, hawthorn, holly, hazel, nettle, bramble	Yes	*Gammarus* x35, *Beraeidae* x4, beetle larva x1, *chironomid* x2, water louse x1	Q2-Q3	Drainage discharge	No potential — No suitable habitat due to heavy vegetation	None recorded. No potential.	None recorded. Limited potential.
WBX024	None	—	Meadowsweet, bramble	Not assessed	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX025	Watermint, fools water cress	0	Hawthorn, willowherb, dogrose, nettles, bramble, ivy, yorkshire fog, ash, blackthorn, watermint, holly,	Yes (2020)	2020: *Gammarus* dominant, *simulidae and oligochaetes*	Q3—Q4 (2020)	Agricultural pressures and cattle access	None	None recorded. Moderate potential.	None recorded. No potential.
WBX026	Fools watercress 90%, lemna 5%, iris 5%	0	Canary grass, meadow sweet, purple loosestrife, watermint	Not assessed — not suitable	Not assessed	Not Assessed	Modification and deepening, heavy enrichment	No potential — No suitable habitat	None recorded. No potential.	None recorded. Low - moderate potential.
WBX027	Flag iris and fools watercress downstream	—	Bramble, ash, dogrose, nettle, dock, hawthorn, water mint, hazel, willow, purple loosestrife,	Yes (2019)	2019:Stickleback, *Gammarus* , *baetis rhodani, chironomid* , leech	Q3	Agricultural pressures	Low to Moderate potential — Some suitable gravels present	2019: None recorded 2018: B.Trout recorded	None recorded. Low potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBX015	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBX016	None recorded. No potential	None recorded. No potential.	None recorded	No	None recorded	Dry drain underneath managed treeline	Medium	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX017	None recorded. No potential.	None recorded. No potential.	2018: Stickleback	Yes	None recorded	Began survey of ditch but had to abort survey due to wild aggressive cattle.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX018	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry tunnelled drainage ditch, no macrophytes present	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX019	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated, difficult to survey due to steep banks and bramble	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX020	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Heavily polluted with farm manure.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX021	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Not kicked, dry drain. No fisheries potential. No spawning or nursery habitat. No lamprey habitat. Suitable for amphibians	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBX022	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, no salmon, crayfish, lamprey or kingfisher potential. No spawning or nursery hab. Potential for amphibians in winter. No otter habitat	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBX023	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	No evidence or suitable, spawn or nursery habitat for otter, salmonids, crayfish or lamprey. Bed very calcified with tufa. No fishery potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX024	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2020: Low value, cattle have access. 2021: Flowing drainage ditch under Treeline, heavily silted. Little to no in stream vegetation. Cattle access to water.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBX025	None recorded. No potential.	None recorded. No potential.	2017: Minnow or stickleback potential. 2018: Pine Marten observed 2020: Fisheries value minnow	Yes	None recorded	Didn't kicksample due to extremely shallow patches of water. Has no spawning potential for salmonids due to lack of gravel. No enough silt for lamprey. Very dry stream, completely choked in vegetation. Very straight channel, possibly modified. Not maintained. No potential for lamprey, kingfisher, crayfish or otter due to no suitable habitat. Hard to fully access due to dense instream vegetation 2025: Good flow present, culverted under track. In stream vegetation- fools watercress	Medium	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX026	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	No suitable spawning or nursery for salmonid, no spawning habitat for lamprey. No resting for otter and kingfisher, potential commuting though	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S and U/S contains BT
WBX027	None recorded. Low potential.	None recorded. Low potential.	None recorded	Yes	None recorded	Limited visual due to dense riparian vegetation and fencing. Not kick sampled. Otter community only. Kingfisher potential.Stickleback present downstream in open pool at bridge, potential for brown trout and lamprey there.	Low	Open Trench	Y	Not on IFI GIS database, no "SAL" river located nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBX028	TWA-19400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,696	—	—	—	20/09/2019	—	20/10/2021	—	—
WBX029	TWA-19500	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,602	—	—	—	20/09/2019	—	—	—	—
WBX030	TWA-21100	FW2 — Depositing/Lowland River	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,130	—	—	17/08/2018	20/09/2019	—	—	—	—
WBX031	TWA-21200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,054	—	08/08/2017	17/08/2018	20/09/2019	—	—	—	—
WBX032	TWA-21300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	6,992	—	08/08/2017	17/08/2018	20/09/2019	—	—	—	—
WBX033	TWA-21300	FW2 — Depositing/Lowland River	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	7,081	—	—	17/08/2018	02/10/2019	—	—	20/07/2022	—
WBX034	TWA-27200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,480	—	05/09/2017	17/07/2018	19/11/2019	21/09/2020	—	20/07/2022	—
WBX035	TWA-27900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,631	—	—	06/09/2018	—	29/07/2020	—	—	—
WBX036	TWA-27800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,619	08/06/2016	—	—	—	29/07/2020	—	—	—
WBX037	TWB-300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SPA: 004137)	Yes	9,598	08/06/2016	—	—	—	29/07/2020	—	—	—
WBX038	TWB-4600	FW1 — Eroding/Upland River	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	12,479	—	—	19/07/2018	17/09/2019	30/07/2020	—	28/07/2022	—
WBX039	TWB-4800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	12,741	—	—	—	17/09/2019	30/07/2020	—	28/07/2022	—
WBX040	TWB-9100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	12,724	—	—	—	17/09/2019	—	—	27/07/2022	—
WBX041	TWB-9600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	12,311	—	—	—	17/09/2019	04/08/2020	—	27/07/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WBX028	15/07/2024	—	Multidisciplinary Walkover Survey	AS, UB	2	50	Unable to determine due to vegetation	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	None
WBX029	Verification Survey (June to October	—	Watercourse Crossing Survey	JS MB	2	1	0	No flow	No flow	—	—	—	—	—	Silt	Light (<25%)	100
WBX030	17/09/2024	20/05/2025	Watercourse Crossing Survey	AS SOR	2.5	1.3	5cm	Moderate	—	—	Boulder 10% Gravel 10%	—	—	Cobble 80%	—	Full (>75%)	0
WBX031	17/09/2024	20/05/2025	Multidisciplinary Walkover Survey	SOR AS	2	0.2	3	Stagnant	No flow	—	—	—	—	—	—	—	60
WBX032	17/09/2024	20/05/2025	Multidisciplinary Walkover Survey	SOR AS	2	0.2	3	Stagnant	No flow	—	—	—	—	—	Mud/Silt 100%	0	60
WBX033	17/09/2024	20/05/2025	Multidisciplinary Walkover Survey	AS SOR	4	2	26	Slow	Glide 100%	—	Cobble 10%	—	—	—	Mud/Silt 100%	Heavy (<75%)	2
WBX034	18/09/2024	—	Watercourse Crossing Survey	SOR JS	3	2.5	100	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—
WBX035	18/09/2024	—	Multidisciplinary Walkover Survey	SOR JS	1	Dry	NA	Dry	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBX036	18/09/2024	—	Multidisciplinary Walkover Survey	SOR JS	3	2	10	Very slow	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	100
WBX037	18/09/2024	—	Watercourse Crossing Survey	SOR JS	2.5	Dry	—	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	—
WBX038	Verification Survey (June to October	—	Watercourse Crossing Survey	CB JC JM	3	2	20	Slow	Riffle	Pebbles	—	—	—	—	Silt	Heavy (<75%)	90
WBX039	Verification Survey (June to October	—	Watercourse Crossing Survey	JC JM CB	1	0.7	6	Very Slow	Riffle	—	—	—	Sand and Silt	—	—	Heavy (<75%)	0
WBX040	22/07/2024	21/05/2025	Multidisciplinary Walkover Survey	AS SOR	2	1	Too vegetated, unable to determine depth	Stagnant	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBX041	22/07/2024	—	Multidisciplinary Walkover Survey	JM	7	NA	Dry	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBX028	None	0	Willow, meadowsweet, willow herb,	Not suitable for kick sample	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX029	Yorkshire fog, soft rush, canary reed gress	0	Holly, ash. Hawthorn, willow	Not assessed — Dry ditch heavily vegetated	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX030	None	0	Hawthorn, gorse, dog rose, ivy	Not assessed	Not assessed	Not Assessed	—	Possible spawning habitat	None recorded. Potential.	None recorded. Potential.
WBX031	Watermint	0	Cocksfoot, fescue grass, meadowsweet, gorse, ash, hogweed	Not assessed	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX032	Phragmites, water mint	0	Hawthorn, meadowsweet Phragmites	Not assessed —not suitable	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX033	Fools watercress	0	WL1 hawthorn, bramble, nettle	Not assessed — not suitable	Not assessed	Not Assessed	Sedimentation	No potential	None recorded. No potential.	None recorded. Low potential.
WBX034	Fools water cress	0	Sycamore, willow, meadowsweet willow herb nettle	Yes (2020)	2020: *Gammarus* , caddis case, cased caddis, cornomid beetle: *haliplus varius* . Mud snail	Q3	Siltation, tunnelling, modification to channel, no gradient	Good — potential downstream with suitable gravels and silt	2017: Brown trout present	Limited potential 2020: Positive scoop test for lamprey: 7 juvenile river/brook in three scoops.
WBX035	—	—	Elder, hawthorn, dogrose, ash, ivy,	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX036	*Sparganium erectum*	—	Willow, ash, bramble, valerian, field thistle, meadowsweet	Not assessed — drain	Not assessed	Not Assessed	Enrichment	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX037	Fools watercress	—	Bramble, thistle, nettle, Yorkshire fog, meadowsweet, sycamore, hazel, ash, field Scabious, bindweed	Not assessed	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential
WBX038	Watercress, meadowsweet, willowherb, watermint	—	Ivy, hazel, ryegrass, Yorkshire fog, bramble, ash, water mint, nettle, honeysuckle	Not assessed — Low flow	Not assessed	Not Assessed	Agricultural pressures	—	None recorded. Low potential.	None recorded. Low potential.
WBX039	—	20	Hawthorn, nettle, brown cress, blackthorn, greater willowherb, Whitebeam, willow, yorkshire fog, thistle, soft rush, bramble, ivy, hazel, ash, water mint, honeysuckle	Not assessed — No suitable habitat	Not assessed	Not Assessed	Agricultural pressures	Low potential — lack of gravel/cover and appropriate flow	None recorded. Low potential.	None recorded. Low potential.
WBX040	—	—	Willow, bramble, willowherb, duckweed, watercress, soft rush, sharp flowered rush, spear thistle	Not assessed	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX041	—	—	Ash, ivy, bramble, horsetail,meadowsweet,birch,cleavers	Not assessed	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBX028	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2021:Heavily vegetated wet drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX029	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX030	None recorded. Potential.	None recorded.	Amphibians potential	No	None recorded	Fast flow with good aquatic habitat and possible spawning habitat	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBX031	None recorded. No potential.	None recorded. No potential.	Amphibians potential	No	None recorded	Unable to kick but some gamerus and water louse in net dip. Unmanaged drain, no fisheries potential. Potential for amphibians. No fisheries, crayfish, otter, kingfisher or lamprey	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBX032	None recorded. No potential.	None recorded. No potential.	Amphibians potential	No	None recorded	Unable to kick but some gamerus and water louse in net dip.Unmanaged drain, no fisheries potential. Potential for amphibians. No fisheries, crayfish, otter, kingfisher or lamprey habitat	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBX033	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	No fisheries or crayfish, but sediment habitat for lamprey. 45cm depth of silt. Potential otter commuting but no resting or breeding. Lamprey scoop negative.	Medium	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WBX034	None recorded. No potential	2019: Potential slides	2017: Kingfisher commuting.	Yes	None recorded	Currently stagnant, heavy silted bottom, potential for lamprey, no potential for crayfish or salmonids due to stagnant water, not kick sampled due to water depth, no potential for otter or kingfisher, straight channel, modified.Porter for small fish like stickleback upstream	Medium	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBX035	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Steep bank down at base of hedgerow from roadside no access due to this. No fisheries potential	Low	Trenchless	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX036	None recorded. No potential.	None recorded. No potential.	Amphibian potential Kingfisher recorded	Yes	None recorded	Unmanaged drain, no fisheries potential. Potential for amphibians. No fisheries, crayfish, otter or lamprey habitat. Kingfisher recorded commuting	Low	Trenchless	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WBX037	None recorded. No potential	2016: Otter signs (tracks and scat) approximately 5m outside Wayleave along bank. 2018: Otter tracks within Wayleave.	2016: Mink (scat and prints)	Yes	None recorded	2018: Otter prints on mud along drainage ditch going to the north. Mink scat also recorded with mink prints observed along bank of drainage ditch. 2020: Dry deep ditch	Medium	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX038	None recorded. Low potential.	None recorded. Low potential.	None recorded	Yes	None recorded	Cattle access, wet drainage ditch	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	No fish stock survey nearby
WBX039	None recorded. Low potential.	None recorded. Low potential.	None recorded	Yes	None recorded	Shallow slow flowing drainage channel, cattle have access	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBX040	None recorded. No potential.	None recorded. No potential.	None recorded	Yes	None recorded	Heavily vegetated wet drainage ditch.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX041	None recorded. No potential.	None recorded. No potential.	None recorded	Yes	None recorded	Dry drainage ditch under treeline	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBX042	TWB-10000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	11,905	—	—	—	17/09/2019	04/08/2020	—	27/07/2022	—
WBX043	TWB-10900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	11,258	—	—	—	—	05/08/2020	—	27/07/2022	—
WBX045	TWB-19800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	5,357	—	09/08/2017	21/08/2018	16/09/2019	07/08/2020	—	07/09/2022	—
WBX046	TWB-19000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	5,633	—	—	21/08/2018	18/09/2019	06/08/2020	—	07/09/2022	—
WBX047	TWB-21000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	5,038	—	—	—	16/09/2019	07/08/2020	—	08/09/2022	—
WBX048	TWB-21200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	4,860	—	—	—	18/09/2019	07/08/2020	—	08/09/2022	—
WBX049	TWB-21800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	4,443	01/06/2016	—	—	16/09/2019	07/08/2020	—	08/09/2022	—
WBX050	TWB-22100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	4,281	—	—	—	16/09/2019	07/08/2020	—	08/09/2022	—
WBX051	TWB-23300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	4,071	02/06/2016	—	26/07/2018	18/09/2019	—	—	09/09/2022	—
WBX052	TWB-23900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	3,926	—	—	—	18/09/2019	—	—	—	—
WBX053	TWC-1200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	3,299	—	—	—	18/09/2019	11/08/2020	—	16/08/2022	—
WBX054	TWC-3800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	4,827	—	—	22/08/2018	19/09/2019	—	—	16/08/2022	—
WBX055	TWC-4000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	5,188	—	—	—	19/09/2019	—	24/08/2021	—	—
WBX056	TWC-4700	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	5,730	—	—	—	19/09/2019	12/08/2020	24/08/2021	—	—
WBX057	TWC-6900	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	7,394	—	—	—	19/09/2019	12/08/2020	—	17/08/2022	—
WBX058	TWC-10000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	10,095	—	—	—	19/09/2019	13/08/2020	25/08/2021	19/08/2022	—
WBX059	TWC-10200	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	10,316	—	—	—	19/09/2019	13/08/2020	25/08/2021	—	—
WBX060	TWC-10300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	10,329	—	—	24/07/2018	19/09/2019	13/08/2020	—	19/08/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WBX042	23/07/2024	—	Multidisciplinary Walkover Survey	MB JM	2	NA	Dry	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—
WBX043	23/07/2024	—	Multidisciplinary Walkover Survey	MB JM	2	NA	NA	NA	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—
WBX045	25/07/2024	12/06/2025	Multidisciplinary Walkover Survey	JS EP MW	5	0.5	5	Stagnant	No flow	—	Sand 10%	Gravel 20%	—	Mud/Silt 70%	—	Light (<25%)	—
WBX046	25/07/2024	—	Multidisciplinary Walkover Survey	JS MB	3	0	0	Stagnant	No flow	—	—	—	—	—	—	Light (<25%)	—
WBX047	25/07/2024	12/06/2025	Multidisciplinary Walkover Survey	JS EP MW	5	0	0	Dry	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBX048	25/07/2024	12/06/2025	Multidisciplinary Walkover Survey	JS EP MW	5	0	0	Stagnant	No flow	—	—	—	—	—	—	Full (>75%)	—
WBX049	26/07/2024	—	Multidisciplinary Walkover Survey	JS MB	3	0	0	Stagnant	No flow	—	Pebble and cobble	—	—	—	—	None (0%)	—
WBX050	26/07/2024	—	Multidisciplinary Walkover Survey	JS MB	2	0	0	Stagnant	No flow	—	—	—	—	—	—	None (0%)	—
WBX051	26/07/2024	—	Watercourse Crossing Survey	JS MB	2	0	0	Stagnant	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBX052	26/07/2024	—	Watercourse Crossing Survey	JS MB	3	NA	NA	No flow	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBX053	23/07/2024	—	Multidisciplinary Walkover Survey	CB SN	2	NA	NA	No flow	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBX054	24/07/2024	—	Watercourse Crossing Survey	SN CB	5	0.5	0	Stagnant	No flow	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	—
WBX055	23/07/2024	—	Watercourse Crossing Survey	SN CB	—	—	—	Very Slow	No flow	—	—	—	—	—	—	Light (<25%)	—
WBX056	19/09/2024	—	Multidisciplinary Walkover Survey	SOR JS	1.2	—	—	—	—	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	—
WBX057	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	UB KL	3	NA	NA	No flow	No flow	—	—	—	—	—	Silt	Light (<25%)	85
WBX058	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	UB, JM, KL	4	NA	NA	No flow	No flow	—	—	—	—	—	Silt	Light (<25%)	—
WBX059	25/07/2024	—	Multidisciplinary Walkover Survey	SN CB	3	0.5	—	Stagnant	—	—	—	—	—	—	—	Medium (<50%)	—
WBX060	25/07/2024	—	Multidisciplinary Walkover Survey	SN CB	6	1	NA	Stagnant	—	—	—	—	—	—	—	Heavy (<75%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBX042	—	—	Willow, bramble, willowherb, duckweed, watercress, soft rush, sharp flowered rush, spear thistle, holly, hawthorn	Not assessed	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX043	—	—	Willow, bramble, willowherb,hawthorn	Not assessed	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX045	Water mint, meadowsweet, willowherb, fools watercress, soft rush	—	willow, thistle, Yorkshire fog,beech, ash, scot's pine	Not assessed	Not assessed	Not Assessed	Enrichment	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX046	Water mint, meadowsweet, willowherb, fools watercress	—	Gorse, willow, thistle, tufted vetch , silverweed,	Not assessed	Not assessed	Not Assessed	Enrichment	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX047	meadowsweet, willowherb	—	willow, thistle, Yorkshire fog, hawthorn, bramble, holly, ash, beech, hogweed, elder, oak	Not assessed	Not assessed	Not Assessed	Enrichment	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX048	meadowsweet, willowherb	—	willow, thistle, hawthorn, bramble, holly, ash, beech,	Not assessed	Not assessed	Not Assessed	Enrichment	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX049	bullrush, meadowsweet, willowherb, watermint, bog rush	—	Willow, gorse, thistle, bramble, dog rose, hawthorn	Not assessed	Not assessed	Not Assessed	Enrichment, bank instability	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX050	Perennial ryegrass, bullrush, meadowsweet, willowherb, watermint, bog rush	—	Willow, thistle, bramble, gorse	Not assessed	Not assessed	Not Assessed	Enrichment, bank instability	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX051	Willowherb	—	Willow, ivy, hawthorn, dog rose, thistle, bramble, ash	Not assessed	Not assessed	Not Assessed	Enrichment	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX052	None	0	Perennial ryegrass, nettle, thistle	Not assessed	Not assessed	Not Assessed	Enrichment , tunnelled in sections	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX053	None	—	Hawthorn, ash, bramble, willowherb	Not assessed	Not assessed	Not Assessed	None	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX054	—	—	Hawthorn, nettles, hazel, ash	Not assessed	Not assessed	Not Assessed	Enrichment	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX055	—	—	Beech, ash, willowherb, thistle	Not assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX056	—	—	Holly, hawthorn, dogrose, watermint, thistle,	Not assessed	Not assessed	Not Assessed	Cattle access, enrichment	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX057	Watercress, watermint, pondweed , canary grass	20	Bramble, elder, hawthorn, ash, gorse	Not assessed — No flow	Not assessed	Not Assessed	Agricultural pressures	Low potential	None recorded. Low potential.	None recorded. Low potential.
WBX058	—	0	Bramble, willow, blackthorn, dog rose , holly	Not assessed — Low flow and no access to water	Not assessed	Not Assessed	Agricultural pressures	Low potential	None recorded. Low potential.	None recorded. Low potential.
WBX059	Bull rush	—	Hawthorn, willow, meadowsweet	Not assessed	Not assessed	Not Assessed	Agricultural pressures	No potential— No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX060	Fools watercress	0	Bramble, meadowsweet, willow, creeping thistle , purple loosestrife	Not assessed	Not assessed	Not Assessed	None	Low potential	None recorded. No potential.	None recorded. No potential.

Environmental Impact Assessment Report (EIAR) Volume 6 of 6: Environmental Assessment (Appendix A8.14) Watercourse Crossing Data

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBX042	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated dry drainage ditch.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX043	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated dry drainage ditch although wet in places. No access onto land with drain viewed from adjacent field	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX045	None recorded. No potential.	None recorded. No potential.	Amphibian potential	No	None recorded	2022:Heavily vegetated drainage ditch, no water present, frog potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX046	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	2022:Heavily vegetated drainage ditch, unable to see whether any water is present,	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX047	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch no flow heavily vegetated with steep banks either side	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX048	None recorded. No potential.	None recorded. No potential.	Amphibian potential	No	None recorded	2022:Heavily vegetated drainage ditch, no water present along most of the ditch, small puddles present in ditch at northern end , frog potential,	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX049	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Cattle have access to ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX050	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Sheep and cattle have access to ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX051	None recorded. No potential.	None recorded. No potential.	Amphibian potential	No	None recorded	Dry drainage ditch heavily vegetated, frog potential, cattle have access, Treeline causing tunnelling	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX052	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch under treeline.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX053	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, shallow and wide. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX054	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Deep dug drainage ditch, very steep banks. Heavy vegetation instream and banks	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX055	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dug drain, poor quality	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX056	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drain along hedge, no fisheries value. Slopes down into small river that also has no fisheries potential.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX057	None recorded. Low potential.	None recorded. Low potential.	None recorded	Yes	None recorded	Heavily covered in vegetation, very low water levels.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX058	None recorded. Low potential.	None recorded. Low potential.	None recorded	Yes	None recorded	Dry drainage ditch, base completely covered in plant litter and debris. New aquatic layer	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBX059	None recorded. No potential.	None recorded.	None recorded	No	None recorded	Heavily vegetated drain, dominated with meadowsweet. No aquatic potential, poor quality	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBX060	None recorded. No potential.	None recorded.	None recorded	No	None recorded	Wide dug drain in centre of field, heavily vegetated, dominated by willowherb. Poor quality	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBX061	TWC-10400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	10,421	—	—	24/07/2018	19/09/2019	13/08/2020	—	19/08/2022	—
WBX062	TWC-11100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	11,088	—	—	24/07/2018	20/09/2019	14/08/2020	—	19/08/2022	—
WBX063	TWC-11900	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	11,780	—	—	—	20/09/2019	14/08/2020	—	19/08/2022	—
WBX064	TWC-18900	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,022	—	15/08/2017	23/08/2018	—	18/08/2020	—	22/07/2022	—
WBX066	TWC-19600	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,213	—	—	30/07/2018	20/09/2019	19/08/2020	—	—	—
WBX067	TWC-22400	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,128	—	—	—	20/09/2019	21/08/2020	—	17/08/2022	—
WBX068	TWC-23900	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,432	—	—	30/07/2018	24/09/2019; 10/10/2019	30/09/2020	—	17/08/2022	—
WBX069	TWC-23900	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,709	—	—	30/07/2018	24/09/2019	—	—	17/08/2022	—
WBX071	TWC-24100	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,655	—	—	30/07/2018	24/09/2019	—	—	—	—
WBX072	TWC-24300	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,622	—	—	30/07/2018	20/09/2019	—	—	17/08/2022	—
WBX073	TWC-24500	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,876	—	—	30/07/2018	20/09/2019	01/10/2020	—	17/08/2022	—
WBX074	TWD-500	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,895	—	—	—	23/09/2019	01/10/2020	—	18/08/2022	—
WBX075	TWD-1700	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,724	—	—	31/07/2018	26/09/2019	01/10/2020	—	18/08/2022	—
WBX076	TWD-1800	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,820	—	—	31/07/2018	26/09/2019	01/10/2020	—	—	—
WBX077	TWD-1900	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,728	—	—	—	23/09/2019	01/10/2020	—	18/08/2022	—
WBX078	TWD-15100	FW3 — Canals	CANAL	Barrow	Grand Canal	—	—	Yes (SAC: 002162)	Yes	15,901	26/09/2016	17/08/2017	—	09/10/2019	31/08/2020	—	26/07/2022	—

Environmental Impact Assessment Report (EIAR) Volume 6 of 6: Environmental Assessment (Appendix A8.14) Watercourse Crossing Data

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBX061	25/07/2024	—	Multidisciplinary Walkover Survey	SN CB	5	NA	NA	No flow	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBX062	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	UB, JM, KL	Unable to see due to heavy vegetation	NA	NA	No flow	No flow	—	—	—	—	—	Silt	Full (>75%)	70
WBX063	26/07/2024	—	Multidisciplinary Walkover Survey	SN CB	5	NA	NA	No flow	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBX064	07/08/2024	—	Watercourse Crossing Survey	RA	3	1	13	Stagnant	No flow	—	—	—	—	—	—	Heavy (<75%)	100
WBX066	07/08/2024	—	Multidisciplinary Walkover Survey	RA	3	Dry	None	—	—	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	None
WBX067	07/08/2024	—	Multidisciplinary Walkover Survey	RA	2	NA	NA	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	None
WBX068	08/08/2024	—	Multidisciplinary Walkover Survey	RA	5	Likely damp, difficult to see bed	Damp, difficult to see bottom	No flow	No flow	—	—	—	—	—	Peat 100%	Heavy (<75%)	—
WBX069	08/08/2024	—	Multidisciplinary Walkover Survey	JS RA JMT	2	50	10	—	—	—	—	—	—	—	—	Light (<25%)	—
WBX071	16/10/2024	—	Watercourse Crossing Survey	SN UB	3	NA	—	No flow	No flow	—	—	—	—	—	—	Medium (<50%)	None
WBX072	16/10/2024	—	Multidisciplinary Walkover Survey	SN UB	3	Dry	Dry	No flow	No flow	—	—	—	—	—	—	Light (<25%)	None
WBX073	08/08/2024	—	Multidisciplinary Walkover Survey	JS RA JMT	1	Dry	Dry	—	—	—	—	—	—	—	—	Light (<25%)	—
WBX074	08/08/2024	30/05/2025	Multidisciplinary Walkover Survey	UB LH	4	NA	NA	No flow	No flow	—	—	—	—	—	—	Heavy (<75%)	—
WBX075	16/10/2024	—	Multidisciplinary Walkover Survey	SN UB	2	NA	NA	No flow	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBX076	16/10/2024	—	Multidisciplinary Walkover Survey	SN UB	2	Dry	NA	NA	—	—	—	—	—	—	—	Heavy (<75%)	—
WBX077	16/10/2024	—	Multidisciplinary Walkover Survey	SN UB	2	NA	NA	No flow	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBX078	24/09/2024	—	Watercourse Crossing Survey	SOR cb	12	11	NA	Slow	—	—	—	—	—	—	—	Light (<25%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBX061	Fools watercress, flag iris	—	Bramble, willow , meadow, willowherb, bindweed	Not assessed	Not assessed	Not Assessed	None	Low potential	None recorded. No potential.	None recorded. No potential.
WBX062	—	0	Bramble, meadowsweet, willow, Willowherb, vetch	Not assessed — Dry	Not assessed	Not Assessed	Agricultural pressures	Low potential	None recorded. Low potential.	None recorded. Low potential.
WBX063	NA	—	Hawthorn, gorse, elder, ash, bramble, holly,	Not assessed	Not assessed	Not Assessed	None	No potential — No suitable habitat	None recorded. No potential	None recorded. No potential
WBX064	Fools watercress, pondweed, watermit	0	Bindweed, bramble, cocksfoot, cleavers, meadowsweet.	Not assessed	Not assessed	Not Assessed	Agricultural runoff causing excess vegetation growth choking watercourse	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential
WBX066	None	0	Ash, ivy, hawthorn, bracken, bramble, nettle	Not assessed	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX067	Bramble, herb Robert , bracken, ivy	0	Ash, beech, hawthorn, blackthorn, holly, bramble	Not assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX068	2019: *Callitriche* , common pond weed, soft rush 2020: None	0	Bramble, bracken, hawthorn, birch, willow, willowherb,coltsfoot, bind weed	Not assessed — not suitable	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX069	bur-reed, watermint, soft rush, Yorkshire fog, willowherb, nettle	0	Bramble	Not assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX071	—	—	Blackthorn, bramble, ash, grey willow	Not assessed — not suitable	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX072	—	0	Bramble, hazel, ash, willowherb	Not assessed — not suitable	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX073	—	—	Bramble	Not assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX074	NA	—	Willowherb, Canary grass, nettle, bramble, ash, ferns, harts tongue	Not assessed — not suitable	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX075	NA	—	Bramble, ash, thistle, oak, beech, ivy, hawthorn	Not assessed — not suitable	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX076	—	0	Nettle, ryegrass, Yorkshire fog, ash, ivy, bramble	Not assessed — not suitable	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX077	NA	—	Bramble, holly, ash, herb Robert, ivy, elder,	Not assessed — not suitable	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX078	Clasping leaf pondweed, Club rush, yellow water lily, pondweed, common water plantain, bladderwort, crassulu helmsii / New Zealand pygmyweed dominant	0	Knapweed, purple loosestrife, yellow flag Irish, meadowsweet, willow, lady's bedstraw	Not assessed	Not assessed	Not Assessed	None	No potential — no suitable gravels and low flow. Substrate heavily vegetated and silty. No suitable habitat for juvenile lamprey.	None recorded. Salmonid potential.	None recorded. No potential.

Environmental Impact Assessment Report (EIAR) Volume 6 of 6: Environmental Assessment (Appendix A8.14) Watercourse Crossing Data

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBX061	None recorded. No potential.	None recorded.	None recorded	No	None recorded	Stagnant water, heavily vegetated, willow growing, poor quality	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBX062	None recorded. Low potential.	None recorded. Low potential.	None recorded	Yes	None recorded	Most likely a dry drainage ditch, new aquatic data entry, heavily vegetated.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBX063	None recorded. No potential	None recorded. No potential	None recorded	No	None recorded	Large drain running through Treeline/wooded area. Unable to see base from 2024 access point. Cattle access.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBX064	None recorded. No potential	None recorded. No potential.	2017: Stickleback recorded.	No	None recorded	2022: Not suitable for kick sample or lamprey scoop, overgrown with vegetation possibly due to agricultural runoff and high nutrient levels, no suitability for kingfisher or otter.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX066	None recorded. No potential.	None recorded. No potential.	None recorded	Yes	None recorded	2020: Dry ditch with little vegetation. Ground cover mostly bare soil and detritus	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX067	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Two drainage ditches on either side of woodland	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX068	None recorded. No potential.	2019: Prints and potentially used entrance through hedgerow to watercourse	None recorded	Yes	None recorded	Damp ditch, densely vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX069	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated Wet drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX071	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX072	None recorded. No potential.	None recorded. No potential.	None recorded	Yes	None recorded	Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX073	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX074	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX075	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch no aquatic potential heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX076	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry poor quality drain, heavily vegetable shaded, parallel to treeline. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX077	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch no aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX078	None recorded. No potential — likely too acidic	2019: Slide	2017: Kingfisher	Yes	None recorded	Unable to categorise river bed substrate as difficult to see. River bed is covered with vegetation growing on base. No kick sample as too deep and unsuitable. Clear water, nice flow, good quality. Numerous roach of various age/maturity, minnow, 1 pike. No evidence of otter but suitable habitat. Unsuitable for kingfisher.	High	Trenchless	N	Not on IFI GIS database, no "SAL" river located nearby.	No fish stock survey nearby

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBX079	TWD-16000	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,289	—	—	—	24/09/2019	—	—	24/08/2022	—
WBX080	TWD-26000	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	15,009	—	—	—	24/09/2019	—	—	03/10/2022	—
WBX081	TWD-28800	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	13,603	—	—	28/08/2018	25/09/2019	24/08/2020	—	—	—
WBX082	TWD-31200	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	11,304	—	—	—	25/09/2019	25/08/2020	—	24/08/2022	—
WBX083	TWD-31700	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	10,767	—	—	—	—	25/08/2020	—	22/08/2022	—
WBX084	TWE-4400	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	7,312	—	—	—	25/09/2019	28/08/2020	—	04/10/2022	—
WBX085	TWE-5200	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	Yes (SAC: 001398)	Yes	7,329	—	—	—	25/09/2019	28/08/2020	—	05/10/2022	—
WBX086	TWE-7300	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	—	—	—	25/09/2019	02/10/2020	—	05/10/2022	—
WBX087	TWE-11100	FW4 — Drainage Ditch	DRAIN	Liffey	Drain	—	—	No	No	—	15/10/2016	—	—	25/09/2019	01/10/2020	—	07/10/2022	—
WBX088	TWE-14200	FW3 — Canals	CANAL	Liffey	Grand Canal	—	—	No	No	—	—	22/08/2017	—	10/10/2019	02/09/2020	—	29/07/2022	—
WBX090	TW-100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	669	—	—	04/09/2018	—	06/07/2020	—	15/06/2022	—
WBX091	TW-300	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	673	—	—	2018	17/09/2019	06/07/2020	—	—	20/06/2023
WBX092	TWB-13600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	9,574	—	—	2018	17/09/2019	05/08/2020	—	28/07/2022	—
WBX093	TWB-14800	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	8,491	23/09/2016	09/08/2017	21/08/2018	19/11/2019	—	23/08/2021	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBX079	17/10/2024	—	Multidisciplinary Walkover Survey	SN UB	1.5	0	0	None	No flow	—	—	—	—	—	—	Heavy (<75%)	0
WBX080	08/08/2024	—	Multidisciplinary Walkover Survey	JF MB	1	NA		No flow	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBX081	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JG	2	1	10	No flow	No flow	—	—	—	—	—	Silt	Full (>75%)	90
WBX082	20/08/2024	—	Multidisciplinary Walkover Survey	SN UB	1.5	NA	NA	Na	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBX083	20/08/2024	—	Multidisciplinary Walkover Survey	SN UB	1	NA	NA	—	—	—	—	—	—	—	—	Medium (<50%)	—
WBX084	23/10/2024	11/06/2025	Multidisciplinary Walkover Survey	JS EP MW	3	1	NA	Stagnant	No flow	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	Unknown
WBX085	22/08/2024	09/06/2025	Multidisciplinary Walkover Survey	JS EP MW	5	1	10	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	—
WBX086	23/10/2024	—	Multidisciplinary Walkover Survey	JF SW	2	1	NA	Slow	No flow	—	—	—	—	—	—	Medium (<50%)	—
WBX087	23/08/2024	—	Multidisciplinary Walkover Survey	SN UB	5	0.5	NA	Stagnant	No flow	—	—	—	—	—	—	Light (<25%)	—
WBX088	25/09/2024	—	Watercourse Crossing Survey	CB SOR	20	18	NA	—	—	—	—	—	—	—	—	Full (>75%)	15
WBX090	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS, CB	1	Dry	Dry	—	—	—	—	—	—	—	—	—	—
WBX091	—	—	Multidisciplinary Walkover Survey	SN RA	1.5	0.5	Unknown	Stagnant	No flow	—	—	—	—	—	Silt	Heavy (<75%)	45
WBX092	24/07/2024	—	Multidisciplinary Walkover Survey	JS MB	2	Dry	Dry	No flow	No flow	—	—	—	—	—	—	None (0%)	20
WBX093	24/07/2024	—	Multidisciplinary Walkover Survey	JS MB	3	1	—	Low	—	—	—	—	—	—	—	Heavy (<75%)	0

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBX079	—	0	Oak, alder, ash, willow, hawthorn, willow herb, herb Robert, Holly, nettle, bramble	Not assessed — not suitable	Not assessed	Not Assessed	Encroaching vegetation	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX080	NA	—	Blackthorn, hawthorn, willow	Not assessed	Not assessed	Not Assessed	Intensive agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX081	Nettle, common bindweed, bramble, meadowsweet, willowherb, willow	0	Hawthorn, blackthorn, ash, birch, hazel, oak, bramble, Willow, alder, meadowsweet, purple loosestrife	Not assessed — Dry	Not assessed	Not Assessed	Runoff	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX082	None	0	Harts tongue, ivy, willow, hawthorn, hazel	Not assessed	Not assessed	Not Assessed	Agriculture, cattle access	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX083	Fools watercress	0	Nettle, bramble, herb robert, hawthorn, willowherb	Not assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX084	Watercress	—	Hawthorn, ivy, elm, bramble, nettle	Not assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX085	NA	—	Hawthorn, ivy, ash, blackthorn, bramble	Not assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX086	NA	—	Hawthorn, bramble, ivy,	Not assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX087	Watercress, reed canary grass, duckweed, water forget me not	—	Bramble, meadowsweet, alder, scot's pine, ash,	Not assessed	Not assessed	Not Assessed	Agriculture	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX088	Sparganium, lily pad	2	Ash, willow, grass spp, Yorkshire fog, ribwort plantain, hazel, bramble, wild cherry, dog rose, sycamore, oak beech	Not assessed — too deep, steep banks (2—3m high)	Q value estimated	Q3 (2017)	Modification and boat's pollution	No potential — no spawning gravels, organic substrate and lots of instream vegetation. No riffle habitats. Not suitable for juvenile lamprey.	None recorded. No potential.	None recorded. Low potential.
WBX090	—	—	GA1/GS4	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX091	duckweed minor	0	Bramble, Birdsfoot Trefoil, Willowherb, Rush, Gorse, Hawthorn, Dogrose	Not assessed — Low flow	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX092	—	—	Soft rush, willowherb, nettle	Not assessed — No flow	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. Low potential.	None recorded. Low potential.
WBX093	Rushes, watercress, flag iris	—	WL2 Hawthorn, poplar trees, blackthorn, willowherb, grass sp.	Not assessed	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. Low potential

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBX079	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry heavily vegetated drainage ditch at base of treeline	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX080	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch along treeline. Poor quality. No aquatic potential.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBX081	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drainage ditch, fully vegetated. 2020: Serious of connected Drainage ditches adjacent to GA1 fields. All heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBX082	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry, no vegetation in ditch only on banks. No fish potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX083	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, heavily ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBX084	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Wet drainage ditch in GA1 field. Poor quality. No aquatic potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBX085	None recorded. No potential.	None recorded. No potential.	Amphibian potential	No	None recorded	Dry drain, steep banks, some water likely as watercress present, aquatic potential limited to amphibian	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBX086	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Very deep ditch, audible flowing water but no visual on ditch bed	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	—
WBX087	None recorded. No potential.	None recorded. No potential.	None recorded	No	Himalayan balsam in ditch (2018) None observed (2019) Some Himalayan balsam in ditch closer to river (2020)	Very little water. 100% mud/silt base. High steep banks. No aquatic	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBX088	None recorded. Low potential — instream vegetation with low flow. No overhanging vegetation.	2019: Otter slide and potential otter slide	None recorded	No	None recorded	2022:Couldn't undertake kick sampling as too deep. A lot of algae present. A lot of moored boats, can't see substrate, potential to support protected aquatic species but unlikely to have good spawning nursery sites. Like to support otter. Heavily vegetated.	High	Trenchless	N	Not on IFI GIS database, no "SAL" river located nearby.	No fish stock survey nearby
WBX090	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX091	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Very low water levels. No flow. Heavily vegetated with grass species and thistle dominating. No aquatic potential but may be suitable for amphibian.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX092	None recorded. Low potential.	None recorded. Otter potential.	None recorded	Yes	None recorded	Dry and heavily vegetated.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX093	None recorded. No potential	None recorded. Low potential.	2017: Several minnow recorded.	Yes	None recorded	2019: No otter signs. Bank 3m high. Mature ash tree at centreline where two drains meet. Outfall pipe on western edge of redline boundary. Drainage from field with some duckweed in immediate vicinity 2021: Dry drainage ditch	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WBX094	TWB-19100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	5,704	—	—	2018	18/09/2019	—	—	07/09/2022	—
WBX095	TWB-19600	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	5,359	—	—	2018	16/09/2019	06/08/2020	—	07/09/2022	—
WBX096	TWC-100	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002162)	Yes	3,031	—	—	2018	18/09/2019	—	—	—	—
WBX097	TWC-11000	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000571)	Yes	10,999	—	—	2018	20/09/2019	14/08/2020	—	—	—
WBX098	TWC-17600	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,275	—	14/08/2017	—	20/09/2019	19/08/2020	—	—	—
WBX099	TWD-2300	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,629	—	—	01/08/2018	23/09/2019	—	—	28/07/2022	—
WBX100	TWD-4600	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	15,388	—	—	27/08/2018	23/09/2019	—	—	19/08/2022	—
WBX103	TWD-7900	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	14,455	—	—	2018	23/09/2019	27/10/2020	—	14/09/2022	—
WBX104	TWD-9800	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	16,110	—	—	28/08/2018	23/09/2019	—	—	22/08/2022	—
WBX105	TWD-12700	FW4 — Drainage Ditch	DRAIN	Barrow	Drain	—	—	Yes (SAC: 002162)	Yes	17,075	—	—	28/08/2018	23/09/2019	—	—	22/08/2022	—
WBX106	TWD-21000	FW4 — Drainage Ditch	DRAIN	Boyne	Drain	—	—	Yes (SAC: 002299 and SPA: 004232)	Yes	13,307	—	—	29/08/2018	24/09/2019	—	—	25/08/2022	—
WBX107	TWB-4700	FW1 — Eroding/Upland River	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 000216 and SPA: 004096)	Yes	12,616	—	—	—	—	30/07/2020	—	—	—
WBX108	TW-4400	FW4 — Drainage Ditch	DRAIN	Lower Shannon	Drain	—	—	Yes (SAC: 002165 and SPA: 004077)	Yes	3,529	—	—	—	—	07/07/2020	—	—	—
WBX109	Off Pipeline	FW3 — Canals	CANAL	Barrow	CANAL	—	—	Yes (SAC: 002162)	Yes	16,122	—	—	—	—	—	—	—	—
WBX110	Off Pipeline	FW2 — Depositing/Lowland River	NA	Lower Shannon	NA	—	—	Yes (SPA: 004137)	Yes	6,349	—	—	—	—	—	—	—	—
WBX111	Off Pipeline	FW2 — Depositing/Lowland River	DRAIN	Lower Shannon	DRAIN	—	—	Yes (SPA: 004137)	Yes	6,331	—	—	—	—	—	—	—	—
WBX112	Off Pipeline	FW2 — Depositing/Lowland River	DRAIN	Lower Shannon	DRAIN	—	—	Yes (SPA: 004137)	Yes	7,836	—	—	—	—	—	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WBX094	Verification Survey (June to October	—	Watercourse Crossing Survey	KL SOR	3	0	0	No flow	No flow	—	—	—	—	—	Silt	10 (field) to 95 (woodland)	Dry, not applicable
WBX095	25/07/2024	—	Multidisciplinary Walkover Survey	JS MB	3	0	0	Stagnant	No flow	—	—	—	—	—	—	Light (<25%)	0
WBX096	24/07/2024	—	Multidisciplinary Walkover Survey	SN CB	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
WBX097	Verification Survey (June to October	—	Watercourse Crossing Survey	JG JM	1.5	1	NA	No flow	No flow	—	—	—	—	—	Silt	Light (<25%)	95
WBX098	07/08/2024	—	Multidisciplinary Walkover Survey	RA	6	Dry	—	No flow	No flow	—	—	—	—	—	Peat 100%	Full (>75%)	None
WBX099	Verification Survey (June to October	—	Watercourse Crossing Survey	UB, AS	4	NA	NA	No flow	No flow	—	—	—	—	—	Silt	Full (>75%)	30
WBX100	09/08/2024	29/05/2025	Multidisciplinary Walkover Survey	UB LH	2	Dry	NA	No flow	No flow	—	—	—	—	—	Peat 100%	Light (<25%)	None
WBX103	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	AS, SN	5	Dry	Dry	No flow	No flow	—	—	—	—	—	Silt	Light (<25%)	50
WBX104	06/08/2024	—	Multidisciplinary Walkover Survey	JF MB	4	3	Unknown due to steep banks, unable to gain access	Stagnant	No flow	—	—	—	—	—	—	None (0%)	0
WBX105	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	UB, JC	4	3	Unknown due to steep banks, unable to gain access	Stagnant	No flow	—	—	—	—	—	Silt	Light (<25%)	0
WBX106	07/08/2024	—	Multidisciplinary Walkover Survey	JF MB	7	2.5	—	—	—	—	—	—	—	—	—	Heavy (<75%)	0
WBX107	Verification Survey (June to October	—	Watercourse Crossing Survey	SC RA	4	1	12	Slow	—	Pebbles	—	—	—	—	Silt	Heavy (<75%)	90
WBX108	28/08/2024	13/05/2025	Multidisciplinary Walkover Survey	JF JS MW	3	0.5	—	Very Slow	—	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	—
WBX109	08/08/2024	—	Multidisciplinary Walkover Survey	JF MB	12	12	100	Very Slow	—	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	—
WBX110	16/10/2024	—	Multidisciplinary Walkover Survey	Jacobs	4	2.5	15	Very slow	Glide 85% Pool 10% Riffle 5%	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	0
WBX111	04/09/2024	21/05/2025	Multidisciplinary Walkover Survey	AS, SOR	1.5	1.5	10 to 15	Very slow	—	—	—	—	—	—	Mud/Silt 100%	Full (>75%)	—
WBX112	05/09/2024	21/05/2025	Multidisciplinary Walkover Survey	AS, SOR	4	2m	50cm	Very slow	—	—	—	—	Sand 30%	Mud/Silt 70%	—	Full (>75%)	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WBX094	Water mint, meadowsweet, Willowherb, canary grass, fools watercress	0 (Dry)	Gorse, willow, thistle, tufted vetch , silverweed, devils bit scabious	Not assessed — Dry	Not assessed	Not Assessed	Agricultural pressures	Low potential	None recorded. Low potential.	None recorded. Low potential.
WBX095	Water mint, meadowsweet, willowherb, horsetail	0	Gorse, willow, bramble	Not assessed	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX096	NA	—	—	Not assessed	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX097	None	0	Nettle, bramble, ash, hazel, dog rose, Yorkshire fog, thistle, hawthorn, blackthorn, holly, ivy, bramble, herb Robert, nettle	Not assessed — Dry	Not assessed	Not Assessed	Agricultural pressures	Low potential	None recorded. Low potential.	None recorded. Low potential.
WBX098	NA	0	Greater willowherb, gorse, bindweed, birch, holly, bracken, willow	Not assessed	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX099	Fools watercress	0	Gorse, bracken, cleaver, hawthorn, bramble, sweet vernal grass, honeysuckle, downy birch.	Not assessed — drain	Not assessed	Not Assessed	None	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX100	—	0	Grass sp., thistle, bindweed, willowherb, willow, bramble, purple moor grass	Not assessed — no flow	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX103	None	0	Scrub, gorse, downy birch, soft rush, bracken, willow	Not assessed	Not assessed	Not Assessed	Runoff from agriculture and peat	No potential — High TSS	None recorded. No potential.	None recorded. No potential.
WBX104	NA	0	Ling heather, birch, willow, rowan, sitka spruce, bog cotton	Not assessed — No flow	Not assessed	Not Assessed	Erosion of banks potentially	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX105	NA	0	Ling heather, birch, willow, Rowan, Sitka spruce, bog cotton	Not assessed — No flow	Not assessed	Not Assessed	Erosion of banks potentially	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX106	None	—	Birch, hawthorn, ivy, bramble, bracken	Not assessed — banks too steep, low flow	Not assessed	Not Assessed	Forestry	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX107	Watercress, meadowsweet, willowherb, watermint	—	Ivy, hazel, ryegrass, Yorkshire fog, bramble, ash, water mint, nettle, honeysuckle	Not assessed — Low flow	Not assessed	Not Assessed	Agricultural pressures	—	None recorded. Low potential.	None recorded. Low potential.
WBX108	Watercress	—	Watercess, nettle, bramble	Not assessed	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX109	New Zealand Pigmyweed, pondweed (strappy leaves), waterlilly, common reed, flag iris, bull rush, Bur-reed	70	Common reed, alder, willow, meadowsweet	Not assessed	Not assessed	Not Assessed	none	No potential — No suitable habitat	none recorded. Low potential	None recorded. No potential.
WBX110	NA	0	Woodland, bramble and hawthorn	Not assessed	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WBX111	—	—	—	Not assessed	Not assessed	Not assessed	—	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.
WBX112	Duckweed and watercress	—	—	Not assessed	Not assessed	Not assessed	Agriculture	None recorded. No potential.	None recorded. Potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WBX094	None recorded. Low potential.	None recorded. Low potential.	None recorded	Yes	None recorded	Heavily vegetated drainage ditch, unable to see whether any water is present, devils bit scabious present along bank	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX095	None recorded. No potential.	None recorded. No potential.	Amphibian potential	No	None recorded	Heavily vegetated drainage ditch, unable to see whether any water is present, has frog potential	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX096	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Drain running along treeline (2018)	Low	Trenchless	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	—
WBX097	None recorded. Low potential.	None recorded. Low potential.	None recorded	Yes	None recorded	—	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBX098	None recorded. No potential.	None recorded. No potential.	None recorded	Yes	None recorded	No aquatic potential. Dry ditch, heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX099	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry drainage ditch, no water, no kicksample, heavily vegetated, no fishery, nursery, spawnin potential, no otter or kingfisher potential.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX100	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	No aquatic potential, bog drain	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBX103	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Steep, deep dry drainage ditch, Peat extraction	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	—
WBX104	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Bog drain	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX105	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Large drainage channel ca 2.5m deep.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	—
WBX106	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Dry, deep drainage ditch with encroaching vegetation and leaf litter on bottom	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	No fish stock survey nearby
WBX107	None recorded. Low potential.	None recorded. Low potential.	None recorded	Yes	None recorded	Crosses a track. Cattle have access to drink	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	—
WBX108	None recorded. No potential.	None recorded. No potential.	Amphibians potential	No	None recorded	No fisheries value. Cattle access. No otter or kingfisher potential. Potential for frogs in winter	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S contains Sal and BT
WBX109	None recorded. No potential.	None recorded. No potential.	None recorded	Yes	None recorded	High level of algae	High	Existing Bridge	N	Not on IFI GIS database, no "SAL" river located nearby.	No fish stock survey nearby
WBX110	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Turbid running through woodland	Low	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database adjacent channel U/S contains Sal and BT
WBX111	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Slow moving and heavily shaded	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—
WBX112	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Small stream, flowing under road. Very silty bottom, some in stream vegetation.	Low	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WCX001	Off Pipeline	FW2 — Depositing/Lowland River	KILMASTULLA_050 (IE_SH_25K041000)	Lower Shannon	Kilmastulla	25_1970	Moderate	Yes (SAC: 002165 and SPA: 004077)	Yes	0	—	—	—	—	21/09/2020	20/10/2021	—	—
WCX002	Off Pipeline	FW1 — Eroding/Upland River	KILMASTULLA_050 (IE_SH_25K041000)	Lower Shannon	Knockadromin	25_783	Moderate	Yes (SAC: 002165 and SPA: 004077)	Yes	332	—	—	—	—	21/09/2020	19/10/2021	12/07/2022	—
WCX003	TW-700	FW1 — Eroding/Upland River	KILMASTULLA_050 (IE_SH_25K041000)	Lower Shannon	Incha_Beg	25_1506	Moderate	Yes (SAC: 002165 and SPA: 004077)	Yes	795	—	31/07/2017	13/08/2018	16/09/2019	06/07/2020	—	—	—
WCX004	TW-1000	FW1 — Eroding/Upland River	KILMASTULLA_050 (IE_SH_25K041000)	Lower Shannon	Knockadromin	25_124	Moderate	Yes (SAC: 002165 and SPA: 004077)	Yes	1,304	20/09/2016	31/07/2017	13/08/2018	30/09/2019	21/09/2020	—	—	—
WCX005	TW-7500	FW1 — Eroding/Upland River	KILMASTULLA_030 (IE_SH_25K040800)	Lower Shannon	BURGESBEG	25_3631	Poor	Yes (SAC: 002165 and SPA: 004077)	Yes	4,096	04/08/2016	31/07/2017	13/08/2018	30/09/2019	21/09/2020 (surveyed downstream)	—	—	—
WCX006	TW-8500	FW1 — Eroding/Upland River	KILMASTULLA_020 (IE_SH_25K040300)	Lower Shannon	GORTMORE 25	25_2608	Moderate	Yes (SAC: 002165 and SPA: 004077)	Yes	4,728	20/09/2016	03/08/2017	13/08/2018	16/09/2019	21/09/2020 (surveyed upstream)	—	13/07/2022	—
WCX007	TW-9000	FW4 — Drainage Ditch	KILMASTULLA_020 (IE_SH_25K040300)	Lower Shannon	CARRIGGAL	25_2499	Moderate	Yes (SAC: 002165 and SPA: 004077)	Yes	5,059	—	18/07/2017	28/06/2018	17/09/2019	13/10/2020 (downstream)	—	16/06/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WCX001	27/08/2024	—	Watercourse Crossing Survey	SOR, CB	9	7	NA	Fast	—	Mud/Silt 5%	—	Sand 25%	Cobble 35% Gravel 35%	—	—	Light (<25%)	None
WCX002	07/08/2024	—	Watercourse Crossing Survey	SOR CB	5	5	17	Moderate	—	Mud/Silt 5%	—	Boulder 20% Sand 20% Mud/Silt 20%	Cobble 35%	—	—	Light (<25%)	3
WCX003	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	RA	1.8	1.5	0.25 to 0.5	Very Slow	Glide	—	Gravel	Silt	Cobble	—	—	Medium (<50%)	0
WCX004	Verification Survey (June to October	—	Watercourse Crossing Survey	PM SC	4	3	12	Moderate	Riffle glide sequence	—	Boulder	Gravel	Cobble	—	—	Heavy (<75%)	0
WCX005	21/06/2024	—	Multidisciplinary Walkover Survey	JS MB	5	4	25	Moderate	Riffle 70%, Glide 20%, Pool 10%	Boulder 5%, Cobble 5%	—	Silt 20%	Gravel 30%, Sand 40%	—	—	Heavy (<75%)	0
WCX006	21/06/2024	—	Watercourse Crossing Survey	JS MB	2	1.5	NA	Slow	Riffle 70% Glide 20% Pool 10%	Boulder 5% Cobble 5%	—	Mud/Silt 20%	Sand 40% Gravel 30%	—	—	Light (<25%)	0
WCX007	—	13/05/2025	Multidisciplinary Walkover Survey	JF JS MW	3	1.5	5	Moderate	Riffle	—	—	Boulder 10% Cobble 20% Sand 10%	—	Gravel 60%	—	Medium (<50%)	0

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WCX001	—	0	Willow, bramble. blackthorn, ash, sycamore, male fern, ivy, cow parsley, hogweed,	Yes (2020)	2020: *Gammarus, baetis rhodani, echdyonuris*	Q4 (2020)	Surface water runoff	Yes high. Good spawning and nursery habitat	Yes high. Good spawning and nursery habitat	Potential for crayfish and lamprey
WCX002	Marsh marigold, brooklime	0	Treeline — sycamore, hawthorn, silver birch, willowherb elder, ivy, fern, hogweed, cow parsley, ash	Yes (2020, 2022, 2024)	2020: *Gammarus, Baetis rhodani, oligochaete*s, *echdynonuris*, other flattened mayflies, uncased caddis 2022: *Gammarus*— 1. *Ecdyonurus sp* — 7. Riffle beetle *Haliplus varius* — 1. *Amphinemura sulcicollis* — 1. *Baetis* — 7. *Serratella ignita* — 3. *Rhyacophilidae rhyacophila dorsalis* — 1. Cased caddis — 2 2024: *Serratella* —1, *Ecdyonurus sp* —10, *Baetis sp.* —30, brown needle stonefly —35	Q4	Agriculture cattle access & litter (silage wrap, plastic), road runoff	Potential for spawning and nursery habitat	Potential for salmonids: potential but steeply sloping weir with apron at confluence of river downstream.	2024: Scoop test negative but good lamprey habitat 2022:Lamprey recorded— One positive lamprey scoop test, 11 lamprey, ammocetes and adults.
WCX003	None	5	Willow, sycamore	Yes (2018)	2018: Stickleback, *Aescellus,* uncased and cased caddis, *Gammarus,* riffle beetles	Q3	Agricultural pressures	Good	None recorded. Trout potential	None recorded. Lamprey potential.
WCX004	Soft Rush, marginal watercress and veronica	Abundant	Soft rush, Yorkshire fog, bramble, bracken, willow, nettle hawthorn, pine, thistle, gorse	Yes (2017, 2018, 2019, 2020)	2017: *Heptigenidae, Baetis rhodani, leuctridae, and* caseless caddis. 2018: *Ecdyonurus, Perla, Gammarus*, *Hydropsyche.* 2019: Mayfly, stonefly, *Gammarus, Coleoptera sp.* 2020: *Baetis rhodani (*200), beetles abundant, *ologochaet,*	Q3 (2017,2018, 2019) Q3—4 (2020)	Agricultural pressures	Low to Moderate — riffles, flow and glide present for Salmonids but weir (80cm high) prevents fish pass.	Moderate potential — weir (80cm high) prevents fish pass. 2018: Potential brown trout observed. 2019: None recorded. 2020: No due to weir downstream	2016: B.Lamprey u/s crossing 2019: Undercut banks with silty banks and pools suitable for lampreys 2020: None recorded
WCX005	None	10	Hawthorn, ash, bramble, holly, willow, sycamore	Yes (2017, 2018, 2019, 2020)	2017: *Leuctra, Goeridae* 2018: Gammarus dominant 2019: *Oligochaete sp. Coleoptera, stonefly, mayfly, Gammarus* 2020: *Leuctra, gammarus,* uncased caddis, *echdynurus, simulid,* beetle larvae, *oligochaete,* mollusc (all recorded downstream)	Q3—Q4 (2017 and 2018) Q3 (2019) Q4 (2020, downstream)	Agricultural pressures	Moderate	2017: Trout recorded	2019: Undercut bank with nice glide suitable for lamprey. 2020: Suitable for brook lamprey downstream
WCX006	Marginal Watercress	0	Hemlock, soft rush, watercress	Yes (2020)	Upstream (2020): *Gammarus, beetle*	Q3—Q4 (2017) Q3 (2020 upstream)	Cattle access to water	Low to Moderate — heavy siltation	None recorded. Salmonid potential.	None recorded. Lamprey potential — Undercut banks, silt banks suitable for lampreys.
WCX007	None	0	Bracken, bramble, gorse, honeysuckle, hawthorn, rose	Not assessed — No access due to steep banks and vegetation	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WCX001	Potential for crayfish and lamprey	Commuting, resting and forgaing otter habitat	Kingfisher potential	Yes	None recorded	Commuting, resting and foraging otter and kingfisher habitat. Holding pool, spawning and nursery for salmonids. Bank to steep to get in and kick.	High	Trenchless	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel U/S contains Sal and BT
WCX002	potential— Good refuge for crayfish but no instream veg or suitable bank for burrows	2024:Otter prints along bank	—	Yes	Himalayan balsam	Scoop test negative. Otter prints along bank. Fish seen. Undercutting on right bank. Good spawning and nursery habitat for salmon, deep pools. Good lamprey and crayfish habitat	High	Clear Span Bridge	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database adjacent tributary contains Sal and BT
WCX003	None recorded. Crayfish potential.	None recorded. Otter potential.	2017: Stone loach, three—spined stickleback.	Yes	Amber snowberry	—	High	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database adjacent tributary contains Sal and BT
WCX004	None recorded. Crayfish potential.	2016: Otter (glide and potential holt within Wayleave) 2019: Potential slides	2016: Kingfisher (seen). 2018: Minnow recorded.	Yes	2019: Japanese knotweed	2020: Cattle access	High	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database adjacent tributary contains Sal and BT
WCX005	None recorded. Crayfish potential. 2020: downstream not suitable for crayfish	None recorded. Otter potential.	None recorded	Yes	None recorded	2020: Cattle access for drinking downstream	High	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S contains Sal and BT
WCX006	None recorded. Crayfish potential.	None recorded. Otter potential.	2017: eel potential	Yes	None recorded	2024:No access only limited view from road. 2020:Looks like gravel dominant. Very limited access, completely overgrown and can't stand in river or get good view. Not suitable for otter or kingfisher. Narrow second order river, no instream veg due to shading. Unclear if suitable for protected sp. Can't access within redline. Went upstream.	Medium	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database adjacent tributary contains Sal and BT
WCX007	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily vegetated. Cannot observe water due to dense bank side vegetation. 2019:Field downstream on RHB recently ploughed, siltation 2020 (downstream): Potential for macroinvertebrates. Potential pressure from agriculture run—off.	Low	Open Trench	Y	On IFI GIS database as being a "NSS" watercourse.	No fish stock survey nearby

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WCX008	TW-10200	FW1 — Eroding/Upland River	KILMASTULLA_020 (IE_SH_25K040300)	Lower Shannon	MOUNTSACK	25_3542	Moderate	Yes (SAC: 002165 and SPA: 004077)	Yes	5,825	—	31/07/2017	13/08/2018	21/09/2019	13/08/2020 (upstream)	—	12/07/2022	—
WCX009	TW-10500	FW1 — Eroding/Upland River	KILMASTULLA_020 (IE_SH_25K040300)	Lower Shannon	CLOGHLEIGH	25_3652	Moderate	Yes (SAC: 002165 and SPA: 004077)	Yes	6,098	—	03/08/2017	14/08/2018	30/09/2019	21/09/2020 (upstream)	—	12/07/2022	—
WCX010	TW-11200	FW4 — Drainage Ditch	KILMASTULLA_020 (IE_SH_25K040300)	Lower Shannon	PATRICKSWELL 25	25_969	Moderate	Yes (SAC: 002165 and SPA: 004077)	Yes	6,626	—	03/08/2017	—	18/09/2019	—	21/10/2021	17/06/2022	—
WCX011	TW-13500	FW1 — Eroding/Upland River	ARDGREGANE STREAM_010 (IE_SH_25A040100)	Lower Shannon	Ardgregane Stream	25_3462	Poor	Yes (SPA: 004058)	Yes	5,648	—	03/08/2017	14/08/2018	18/09/2019	13/10/2020 (surveyed upstream)	—	02/08/2022	—
WCX012	TW-15000	FW2 — Depositing/Lowland River	ARDGREGANE STREAM_020 (IE_SH_25A040400)	Lower Shannon	FATTHEN	25_1336	Moderate	Yes (SPA: 004058)	Yes	4,890	21/09/2016	—	—	30/09/2019	—	20/10/2021	14/07/2022	—
WCX013	TW-16500	FW2 — Depositing/Lowland River	ARDGREGANE STREAM_020 (IE_SH_25A040400)	Lower Shannon	Ardgregane Stream	25_1029	Moderate	Yes (SPA: 004058)	Yes	4,023	21/09/2016	31/07/2017	02/07/2018	01/10/2019	21/09/2020	—	13/07/2022	—
WCX014	TW-17200	FW1 — Eroding/Upland River	ARDGREGANE STREAM_020 (IE_SH_25A040400)	Lower Shannon	Monsea 25	25_3773	Moderate	Yes (SPA: 004058)	Yes	3,712	31/05/2016	—	14/08/2018	30/09/2019	21/09/2020	—	13/07/2022	—
WCX015	TW-17900	FW1 — Eroding/Upland River	NENAGH_070 (IE_SH_25N010800)	Lower Shannon	Monsea 25	25_1842	Moderate	Yes (SPA: 004058)	Yes	3,365	—	31/07/2017	14/08/2018	01/10/2019	21/09/2020	—	03/08/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Field Survey		Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025							<5	<10	<25	<50	<75	75-100		
WCX008	Verification Survey (June to October	—	Watercourse Crossing Survey	SOR SN CB	1	1	9	Slow	0	—	Sand 15%	Gravel 25%	Cobble 60%	—	—	Full (>75%)	50
WCX009	29/08/2024	—	Watercourse Crossing Survey	SOR JS	—	1	5	Stagnant	—	—	—	—	Gravel 50% Mud/Silt 50%	Silt	—	Heavy (<75%)	70
WCX010	29/08/2024	—	Multidisciplinary Walkover Survey	SOR JS	1.2	1	18	slow	Glide 70% Riffle 30&	—	—	—	Mud/silt 100%	—	—	Heavy (<75%)	—
WCX011	29/08/2024	09/06/2025	Multidisciplinary Walkover Survey	UB CB	0.5	0.3	3	Slow	—	Gravel 5%	—	—	Mud/Silt 95%	—	—	Light (<25%)	90
WCX012	—	19/05/2025	Watercourse Crossing Survey	SN CB	4	2	11	moderate	—	Gravel 10%	—	Boulder 40%	Cobble 50%	—	—	—	3
WCX013	29/08/2024	—	Watercourse Crossing Survey	SOR JS	8	4	7	Slow	Riffle 40%, Pool 10%, Glide 50%	—	Boulder 10%	Cobble 25%, Gravle 25%	Silt 40%	—	—	Heavy (<75%)	1
WCX014	29/08/2024	—	Watercourse Crossing Survey	SOR JS	3	NA	1	Very slow	Very slow	—	—	Silt 15%	Cobble 50%, Gravel 40%	Boulder 55%	—	Heavy (<75%)	95
WCX015	01/09/2024	—	Watercourse Crossing Survey	SOR JS	5	0.6	5	Stagnant	No flow	—	—	—	—	—	Silt and detritus 100%	Heavy (<75%)	0

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WCX008	Fools water cress, Brooklime, watermint	0	Cow parsley, Yorkshire fog, willow, nettle, willowherb, Hogweed,	Yes (2017, 2018, 2020, 2022) 2020: sampled upstream	2017: *Baetis,gammarus,rhyacophila sp.,elmidae,naididae.* 2018: *Gammarus* dominated. 2020 (upstream): *Gammarus, baetis rhodani, oligochaete, simulid,* 2022: *Gammarus* x 60, mayfly *baetis* x 30, *seratalla ignita* x 10, *riffle beetle* x 1 caddis case *family leptoceridae* x 1, *lumbricidae* x 1, *eiseniella tetraedae* x 3	Q3	Agriculture runoff and Cattle access	Low potential	None recorded. Low potential.	Moderate potential.
WCX009	Fools watercrest	—	Willow, gorse, bramble, nettle, redshank	Yes (2024)	Gammarus x30	Q3	Enrichment	No potential — No suitable habitat	None recorded. No potential.	None recorded. Low potential.
WCX010	—	0	Willow, willowherb, bush vetch, hog weed, meadowsweet	Yes (2024)	*Gammarus* x3	Q3	Enrichment and blockage downstream	No potential — No suitable habitat	None recorded. No potential.	Scoop test positive for Lamprey ammoceotes. Potential
WCX011	Fools watercress, duckweed	30	Bramble, ash, oak, willow	Yes (2017 [estimated]; 2024)	2017: Q value estimated (*gammarus* common) 2024: *Gammarus* x100, chironomid x 4	Q3 (2017) Q2 (2024)	Poor drainage, flowing over land on farm track. Heavily polluted with cattle dung	No potential — cattle access has fouled and silted water	None recorded. No potential.	None recorded. No potential.
WCX012	Fool's watercress	20	Blackthorn, ash, nettles, bindweed, ivy, elder, sycamore	Yes (2016, 2022)	2016: *Baetis, gammarus, tubificid, simulidae, elmis, goera* 2022: *Gammarus*— 30. *Mayfly baetis* — 4. Lesser water boatman *Corixidae* — 1. Riffle beetle — 1.	Q3	Cattle access (sedimentation and erosion present) and Agri runoff. Pollution/domestic dumping.	Low potential	Potential Brown trout sighting.	No potential
WCX013	Fools water cress	0	Nettle, bramble, oak, hazel, ash, male fern, ivy, hogweed, willow, sycamore	Yes (2016, 2019, 2020, 2022, 2024)	2016: *Hydropsyche, gammarus, heptagenia, leuctra, and baetis.* 2019: Not assessed. Too deep as river was flooded 2020: *Gammarus, baetis rhodani, beetle larvae,* uncased caddis, *simulidae, oligochaetes* 2022: *Gammarus— 50. FW hog louse — 6. Lumbriculidae worm — 25. Chironomid— 3.* 2024: *Gammarus x5*	Q2—Q3	Agriculture cattle access, runoff from Agri land	Moderate — good habitat for lamprey with lots of cover from vegetation, good flow and depth, silty banks for eggs.	2017: B.Trout recorded Good potential — Salmonids recorded (Ranked a Salomid watercourse based field data)	2017: B. lamprey recorded. Potential — Lamprey ammoceotes recorded (6—8cm)
WCX014	Flag Iris, fool's watercress	0	Figwort, bramble, ivy, willow, gelder rose, flag iris, bindweed, nettles, poplar, dog rose, gorse hawthorn, willow herb	Yes (2024)	2024: Fresh water louse x25, diving beetle x1	Q2	Cattle access to river, enrichment, heavily modified channel	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WCX015	—	0	Willow, gorse, ash, bramble, hawthorn, ryegrass, Woodland	Not assessed — not suitable	Not assessed	Not Assessed	Agricultural and forestry	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WCX008	No Potential	None recorded. Otter potential.	None recorded	Yes	None recorded	Potential Salmonid nursery, and lamprey habitat, shading heavy due to hedge and over hanging vegetation. Small stream, high cover of overhanging/bankside vegetation,clear water. Likely to be channelled. No otter habitat or signs.	Medium	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	IFI GIS database adjacent tributary contains Sal and BT
WCX009	None recorded. No potential.	2019: Couch in gorse cover with slide into water	Amphibian potential	Yes	None recorded	Culverted upstream, low fishery potential, some potential for frog spawn. Scoop test for lamprey negative. No foraging potential or resting for otter, no potential for kingfisher	Medium	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database adjacent tributary contains Sal and BT
WCX010	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.	Yes	None recorded	No foraging potential for resting or foraging for otter, no potential for kingfisher, salmonid or crayfish. Scoop test positive for lamprey ammocete	Medium	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WCX011	None recorded. No potential.	None recorded. No potential.	2017: Minnow and stickleback recorded 2018: Stickleback potentially observed.	No	None recorded	No fishery potential. Scoop test for lamprey negative. No foraging potential or resting for otter, no potential for kingfisher, salmonids, crayfish or lamprey. Heavily polluted with cow manure.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WCX012	No potential	No Potential	None recorded	Yes	None recorded	Brown trout sighting. A reference site for upstream as no access within crossing section No otter potential or kingfisher potential. Clear water, cattle access, nice flow, natural. No spawning or nursery habitats for salmonids. No scoop test for lamprey as no silt/mud or suitable habitat present.	Medium	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WCX013	2017: Crayfish recorded. Potential	Potential	three spine stickle back recorded	Yes	None recorded	Suitable otter, salmonids, crayfish, lamprey potential. However heavily silted and woody debris,with some undercutting of banks. Barriers instream both natural (branches) and pollution/dumping (old feeder for cattle). Low light. Silt present on rocks with dead leaf matter in water. Heavily covered by overhanging trees/vegetation so little light.	High	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WCX014	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Extremely low water level, trampling by cattle, heavily vegetated. No crayfish, lamprey, salmonids or otter potential. No habitat for kingfisher.	Medium	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WCX015	None recorded. No potential.	2019: Habitat — good habitat found in riparian woodland/scrub. Adjacent to river and good area for foraging and nesting. Flooded at time of survey so no field signs recorded.	None recorded	Yes	None recorded	Dry river bed with some small pools of shallow stagnant water. No suitable habitat for Salmonids, crayfish, lamprey, otter, kingfish.This stream drys out during summer. No gravels for spawning or nursery. Heavy shading present.	Low	Open Trench	N	Not on IFI GIS database, no "SAL" river located nearby.	IFI GIS database adjacent channel U/S contains Sal and BT

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WCX016	TW-19500	FW2 — Depositing/Lowland River	NENAGH_070 (IE_SH_25N010800)	Lower Shannon	Nenagh	25_359	Moderate	Yes (SPA: 004058)	Yes	4,152	21/09/2016	—	14/08/2018	01/10/2019	—	21/10/2021	14/07/2022	—
WCX017	TW-20700	FW4 — Drainage Ditch	NENAGH TRIBUTARY_010 (IE_SH_25N120710)	Lower Shannon	Upper Ballyanny	25_1265	Moderate	Yes (SPA: 004058)	Yes	4,682	—	31/07/2017	—	18/09/2019	—	—	—	—
WCX018	TW-26500	FW1 — Eroding/Upland River	ARDCRONY STREAM_010 (IE_SH_25A060500)	Lower Shannon	Ardcrony Stream	25_1159	Moderate	Yes (SAC: 002241 and SPA: 004058)	Yes	4,339	—	—	15/08/2018	19/09/2019	—	—	—	20/06/2023
WCX019	TW-30800	FW2 — Depositing/Lowland River	ARDCRONY STREAM_010 (IE_SH_25A060500)	Lower Shannon	SHESHERAGHMORE	25_3507	Moderate	Yes (SAC: 002241 and SPA: 004058)	Yes	7,888	23/09/2016	—	15/08/2018	19/09/2019	—	—	14/07/2022	27/06/2023
WCX020	TW-34800	FW4 — Drainage Ditch	BALLYFINBOY_040 (IE_SH_25B020550)	Lower Shannon	Ballyfinboy	25_13169	Moderate	Yes (SAC: 002241 and SPA: 004058)	Yes	11,257	—	—	15/08/2018	19/09/2019	17/07/2020	—	13/06/2022	—
WCX021	TW-35000	FW2 — Depositing/Lowland River	BALLYFINBOY_040 (IE_SH_25B020550)	Lower Shannon	Ballyfinboy	25_13169	Moderate	Yes (SAC: 002241 and SPA: 004058)	Yes	11,472	—	03/08/2017	15/08/2018	19/09/2019	17/07/2020	—	—	—
WCX022	TWA-4800	FW1 — Eroding/Upland River	KILCOMIN STREAM_030 (IE_SH_25K150085)	Lower Shannon	Derrinclare	25_2707	Moderate	Yes (SAC: 000585)	Yes	3,692	—	—	15/08/2018	19/09/2019	—	—	—	—
WCX023	TWA-5600	FW2 — Depositing/Lowland River	KILCOMIN STREAM_030 (IE_SH_25K150085)	Lower Shannon	Derrinclare	25_2707	Moderate	Yes (SAC: 000585)	Yes	3,123	23/09/2016	01/08/2017	16/08/2018	01/10/2019	22/09/2020	—	18/07/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WCX016	29/08/2024	10/06/2025	Multidisciplinary Walkover Survey	CB	12	8	34	Fast	Glide 90%, Riffle 5%, Pool 5%	Mud/Silt 5%, Sand 5%	—	Gravel 20%	Boulder 35%, Cobble 35%	—	—	Light (<25%)	20
WCX017	10/09/2024	—	Multidisciplinary Walkover Survey	JF UB	3	Dry	Dry	No flow	No flow	—	—	—	—	—	Silt	Medium (<50%)	100
WCX018	—	—	Multidisciplinary Walkover Survey	SN RA	6	dry	Dry	No flow	No flow	Gravel	Boulder	—	—	—	Silt	Full (>75%)	20
WCX019	12/09/2024	—	Multidisciplinary Walkover Survey	JF, UB	5	1	Unknown	Dry	Dry	—	—	—	—	—	Silt/mud 100%	Medium (<50%)	100
WCX020	30/08/2024	—	Watercourse Crossing Survey	SOR JS	3	0.5	8	No flow	No flow	—	—	—	—	—	Silt	Light (<25%)	100
WCX021	30/08/2024	20/05/2025	Watercourse Crossing Survey	CB SN	6	3	75	Slow	Glide	—	—	—	Gravel 33%, Cobble 33%, Silt 33%	—	—	Heavy (<75%)	15
WCX022	16/09/2024	—	Multidisciplinary Walkover Survey	SOR JS	1.2	0.7	19	Very Slow	Pool 100%	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	60
WCX023	16/09/2024	—	Watercourse Crossing Survey	SOR JS	3.5	3	120	Stagnant	0	—	—	—	—	—	Silt 100%	Medium (<50%)	95

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WCX016	Ranunculus, bur-reed, fools water cress, canary grass, watermilfoil	0	Adler, willow, cow parsley, dock, willow herb, bramble, ash	Yes (2018, 2022, 2024)	2018: *Gammarus, Ecdyonurus, Gastropoda.* 2022:Caddis case x 100, caddis larvae x 40, Mayfly *beatis* x 7, *Gammarus* x 20, *Neritidae* x 25, leech x2, mayfly *serratella ignita* x 6 2024: Mayfly b*eatis* x 75, *Gammarus x* 15, mayfly *serratella ignita* x1. Minnow x1	Q3	Bank erosion due to flooding, agri run off, cattle access causing sedimentation	Good	2016: B.Trout recorded Potential	None recorded. Potential
WCX017	Hairy willowherb	0	Ash, hawthorn, elder, holly, nettle	Not assessed — dry bottom choked with vegetation	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WCX018	Nettle, bramble	0	Ash trees, bramble, hawthorn, blackthorn, ivy	Not assessed — Dry	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WCX019	Canary grass/reed grass, green bull rush, flag iris. Watermint and common horsetail	20	Willow, birch, ash, meadowsweet, purple vetch	Not assessed — not suitable	Not assessed	Not Assessed	Land run off and agricultural	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WCX020	Flag iris	0	Perennial Ryegrass, soft rush, hard rush, meadowsweet, horsetail, nettle	Yes (subsample 2024)	2024: *Asellus* x30	Q2 (2024)	Enrichment and modification	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WCX021	Common reed, fools watercress	0	Ash, willow, reed, willowherb, hawthorn, elder, sycamore, bramble, ivy,	Yes (2018) Not assessed (2020) Yes (2024)	2018: Uncased caddis, Gammarus, riffle beetles, baetis rhodani, oligochaetes, simulidae, ephemerelidae 2024: Gammarus x15, brown needle stonefly x3, Serratella x3, chironomid x1, fresh water louse x10, damsel fly nymph	Q3—Q4	Agricultural pressures and enrichment	Good	2018: Potential brown trout observed. Potential	Lamprey amocoetes recorded in 2024 Potential
WCX022	Fool watercress	0	Greater willowherb, willow, hawthorn, meadowsweet bramble, mares tail, watermint	Yes	*Gammarus* x2	Q3	—	No potential	No potential	No potential
WCX023	bur-reed, fools water cress, duckweed	55	Common reed, bindweed, cleavers, nettles, bramble, willow herb, hawthorn, willow, silver weed, watermint	Not assessed — deep pool and 100% vegetation around it	Not assessed	Not Assessed	Enrichment from agricultural lands. River heavily vegetated both sides of bridge.	Low potential	Potential	Potential

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WCX016	Potential	2016: Otter (spraint) at edge of Wayleave. 2018: Potential otter tracks approximately 30m U/S of Wayleave. High Potential	2018: Badger scat	No	None recorded	All moss in river dead. Lamprey scoop test negative. High potential for salmonids, good spawning habitat. No nursery habitat. High potential for kingfisher, crayfish & otter, none observed. Minnow present. Clean river. No holding pools in survey area. No pollution evident . Spate river.	High	Trenchless	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel U/S contains Sal and BT
WCX017	None recorded. No potential.	None recorded. No potential.	None recorded. No potential.	No	None recorded	1.5m high banks. Heavily vegetated	Low	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	No fish stock survey nearby
WCX018	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Ditch to southern end is choked with vegetation. Dry drainage ditch. No water and evidence of any water. Dead leaf litter. Mapped as EPA river so likely barrier upstream. Culvert under road.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S contains Sal and BT
WCX019	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Heavily impacted by agriculture. Evidence of poor water quality—discolouration. Stagnant snd likely impeded by heavy instream vegetation of rushes. Amphibian potential only. Stickleback present poor aquatic potential. Leaf litter. Heavily silted. Not managed. No meandering features or gradient.	Low	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S contains Sal and BT
WCX020	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Small kick sample taken too vegetated to kick. No potential for, salmonids, crayfish, lamprey or otter, poor quality , potential for amphibians in winter.	Low	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse immediately nearby of this crossing.	IFI GIS database channel D/S contains BT
WCX021	None recorded. Crayfish potential.	None recorded. Otter potential.	2017: Stickleback & stone loach recorded. 2024: Brown Trout recorded (15cm) x100	Yes — Kingfisher potential	None recorded	Heavily calcified, tufa. and shaded. Large holding pool present containing brown trout. Limited silt for lamprey. Steep banks and some undercutting on banks. Limited spawning habitat.Modified drainage ditch. Quality of waterbody improves upstream beyond corridor. Waterbody incorrectly mapped by EPA. Heavy siltation. Section of the river bed near the crossing has been cemented.	High	Open Trench	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel D/S contains Sal and BT
WCX022	No potential	No potential	2018: Badger scatt recorded.	No	None recorded	Scoop negative for lamprey, but has potential. No evidence of fish, no spawning or nursery habitat for salmonids, suitable for otter commuting, no resting or foraging habitat. No potential for kingfisher. Modified channel. Some tufa on bed	Low	Open Trench	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel D/S contains Sal and BT
WCX023	No potential	No potential	2018: Stickleback fish observed. Suitable for minnow and eel.	Yes	None recorded	Potential for lamprey, modified channel. Deep 2x2m open pool upstream of bridge, heavily vegetated. Flow very slow if not stagnant. Not suitable for crayfish as no substrate present.Trout maybe present upstream or d/s if vegetation clears.Two dead fish on bottom, possibly stickleback or minnow	Medium	Open Trench	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel D/S contains BT

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WCX024	TWA-8000	FW2 — Depositing/Lowland River	SHINRONE STREAM_010 (IE_SH_25S110100)	Lower Shannon	Shinrone Stream	25_1069	Poor	Yes (SAC: 000585)	Yes	1,619	—	01/08/2017	16/08/2018	01/10/2019	22/09/2020	—	18/07/2022	—
WCX025	TWA-9400	FW1 — Eroding/Upland River	SHINRONE STREAM_010 (IE_SH_25S110100)	Lower Shannon	Quakerstown	25_2665	Poor	Yes (SAC: 000585)	Yes	1,183	—	—	16/08/2018	20/09/2019	—	—	18/07/2022	—
WCX026	TWA-13000	FW2 — Depositing/Lowland River	LITTLE BROSNA_030 (IE_SH_25L020600)	Lower Shannon	Little Brosna	25_3572	Good	Yes (SAC: 000585)	Yes	2,586	28/09/2016	01/08/2017	17/08/2018	02/10/2019	22/09/2020	—	19/07/2022	—
WCX027	TWA-17500	FW1 — Eroding/Upland River	ROCK (BIRR)_010 (IE_SH_25R020050)	Lower Shannon	Rock [Birr]	25_3343	Poor	Yes (SAC: 002147)	Yes	1,123	—	08/08/2017	17/08/2018	18/11/2019	22/09/2020 (surveyed downstream)	—	19/07/2022	—
WCX028	TWA-23800	FW2 — Depositing/Lowland River	CLAREEN STREAM/FUARAWN_020 (IE_SH_25C130600)	Lower Shannon	Kilmaine 25	25_4	Moderate	Yes (SPA: 004137)	Yes	8,106	26/09/2016	—	22/08/2018	02/10/2019	21/09/2020	—	19/07/2022	—
WCX029	TWA-24800	FW1 — Eroding/Upland River	CLAREEN STREAM/FUARAWN_020 (IE_SH_25C130600)	Lower Shannon	Clareen Stream	25_627	Moderate	Yes (SPA: 004137)	Yes	8,594	—	08/08/2017	—	18/11/2019	22/09/2020	—	20/07/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WCX024	16/09/2024	—	Watercourse Crossing Survey	SOR JS	6	0	0	NA	—	Boulder 2%	Gravel 10%	Silt	Cobble	—	—	Heavy (<75%)	None
WCX025	17/09/2024	—	Watercourse Crossing Survey	SOR JS	4	1	4	Slow	Riffle 50% Glide 50%	Boulder 5% Mud/Silt 5%	Sand 10%	—	Gravel 45% Cobble 35%	—	—	Medium (<50%)	0
WCX026	17/09/2024	—	Watercourse Crossing Survey	SOR UB	9	6	NA	Slow	Glide	—	—	—	—	—	Silt	Light (<25%)	30
WCX027	17/09/2024	—	Watercourse Crossing Survey	UB, SOR	3	2.5	10	Slow	Glide	boulder 2%	Sand 20%	Cobble 28%	Gravel 50%	—	—	Heavy (<75%)	100
WCX028	17/09/2024	—	Watercourse Crossing Survey	SOR JS	4.5	2.5	19	Slow	Pool/Glide	—	—	Silt 20%	Sand 50%, Gravel 30%	—	—	Light (<25%)	3
WCX029	18/09/2024	—	Watercourse Crossing Survey	SOR JS	2.5	1.5	25	Slow	Riffle/Pool	Cobble 5%	—	Sand 25%	Gravel 35%, Silt 35%	—	—	Light (<25%)	15

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WCX024	—	0	Bramble, ivy, hazel, sycamore, ash, nettle, holly, dogrose	Yes (2019, 2022)	2019: *Coleoptera, oligochaete, Gammarus* 2022: 10 *Chironomid* , 15 freshwater hog louse, low diversity, low species richness.	Q2	Agricultural pressures	2019: Good — spawning gravels with moderate flow and good depth. 2020: None	No potential	No potential
WCX025	—	5	Nettle, willowherb, bramble, hawthorn, dog rose, ivy, willow	Yes (2019, 2022,2024)	2019: *Gammarus, oligochaetes, simulidae,baetis rhodani* 2022: *Gammarus* 20+, mayfly *baetis 4, serratella ignita* 3, freshwater leech 1 (unknown sp.), riffle beetle 1, cased caddis larvae 2 (unknown sp.) *2024: Gammarus x50, Beraeidae x10, green olive caseless caddis x1, riffle beetle x1*	Q3 (2019, 2022,2024)	Heavily modified and deepened	Low potential — good riffle habitat but too much silt to be deemed good potential for spawning. No undercut banks or sufficient depth in silt for lamprey.	Potential	No potential
WCX026	Sparganium, fools watercress , *Phragmites sp*	0	Willow herb, bindweed, nettles, canary grass, willow, meadow sweet watermint	Not assessed — too deep with steep vertical banks (1—2m high)	Q value estimated	Q4 (2017) Q3—Q4 (2020)	—	Moderate	Trout and coarse fish potential	Potential
WCX027	Foolswatercress, flag iris	0	Bramble, gorse, willow Holly, hawthorn, buckthorn, alder, watermint,	Yes (2017, 2020, 2022, 2024)	2017: Mayfly, stonefly, *gammarus,* water beatle, *simulidae, oligochaete.* 2020: *Gammarus, simulidae, baetis rhodani,* 2022: G*ammarus* 15, cased caddis (unknown sp.) x3, freshwater hog louse x1, mayfly *Serratella* x1 2024: *Gammarus* x75, *baetis mayfly* x30, beetle larvae x1, *simulidae* x10, riffle beetle x5, *Serratella* x1	Q3	Cattle access	Moderate — suitable for lamprey and salmonids	Potential	Potential Lamprey recorded in 2024
WCX028	Water speedwell, brook lime, flag iris, duckweed	0	Meadowsweet, bindweed, bramble, elder, Yorkshire fog, marsh valerian, hawthorn, willow	Yes (2017, 2018, 2020, 2022, 2024)	2017: *Baetis, gammarus, trichoptera sp.* cased and uncased, and *oligochaetes* 2018: Mayfly and *Gammarus* present. 2020: Non biting midget: *orthocladius,* caseless caddis: *ryacophila dorsalis,* cased caddis, *Gammarus, asellus aquaticus,* stickleback, Mayfly: *Alainites muticus* . Margined ramshorn snail. 2022: 50 *Gammarus* ,m20 cased caddis too calcified to identify. 2024: 50 *Gammarus,* riffle beetle x1, *Baetis* x3	Q3	Agricultural runoff	Low to Moderate potential — Some suitable gravels present	2016: Trout present No potential	No potential
WCX029	Brooklime, flag iris, watermint	20	Willow herb, hogweed, alder, hawthorn, meadowsweet, beech, bramble	2017: Yes 2019: Not assessed 2020: Yes	*2017: Mayfly (baetis) dominant, gammarus, and trichoptera* *2020: Leeches, gammarus, uncased caddis, simulidae, riffle beetle,* *2022: Gammarus x 30, cased caddis x 15 unidentified due to calcification. 1x three spine stickleback, 35 x Hygrotus versicolor beetle, 1 x lamprey, 1 x riffle beetle* *2024: Brown needle stonefly x1, cased caddis x1, beetle larva x1, green olive mayfly x1, riffle beetle x1, Gammarus x5, baetis x10, damselfly x2*	Q3	Cattle have access, enrichment	Low potential — Insufficient gravels	Salmonid potential. Brown trout seen present (n=15. 2—3yrs old)	Lamprey potential, silt on edges, scoop test positive.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WCX024	No potential	No potential	None recorded	Yes	None recorded	Stagnant dry in areas, no flow, slight pressure from shading, no instream vegetation as a result. No habitat suitable for lamprey, low diversity, low species richness. No kingfisher potential as overhanging treeline blocking passsage, salmonids potential during winter to spawn, not currently suitable for fish due to low levels, no otter potential, crayfish potential present.	Medium	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S contains BT
WCX025	No potential	No potential	None recorded	Yes	None recorded	No holdingnpools, spawning or nursery, no sediment for lamprey. No fish recorded, but potential for brown trout. some otter commuting potential but no resting.No potential for kingfisher	Medium	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S contains BT
WCX026	Potential.	Good potential for otter	Kingfisher recorded	Yes	None recorded	King fisher spotted flying downstream, potential for otter but poor access to survey for them. Unmodified River. Too deep to sample. High potential for trout and coarse fish. Potential for lamprey but can't see substrate in river. Clean natural meandering flow, good quality.	High	Trenchless	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel D/S contains Sal and BT
WCX027	Potential Crayfish recorded in 2024	2019: Tracks, slide and potential couch	None recorded	Yes	None recorded	Not suitable for otter due to lack of fish, not suitable for kingfisher due to overgrowth of vegetation. Clean water. Spawning gravels present, but channel is not suitable. Encroaching riparian vegetation, difficult to gain access, limited light due to tunnelling, straight modified channel non meandering calcified river.	Medium	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S contains BT
WCX028	No potential.	2019: Track from river, potential couches on river bank. More tracks from river to field.	2016: Stickleback fish 2018: Stickleback fish	Yes	None recorded	River is too calcified for lampreys, kick sample poor diversity, no fisheries value. Heavily vegetated, large amount of filamentuos algae , no otter potential, no kingfisher potent, slope of a bank of 45 degrees, no holding pools, no spawning habitat, enrichment present, stickleback present, heavily calcificied, very poor quality	Medium	Open Trench	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database adjacent tributary contains BT
WCX029	Limited crayfish potential due to substrate present and calification.	Otter potential. Otter foraging potential, no resting potential	None recorded	Yes	None recorded	Lamprey potential, silt on edges, scoop test positive. Straight modified channel, water clean, steady flow. No kingfisher potential, otter foraging potential, no resting potential. Limited crayfish potential due to substrate present and calification. Steep slope, heavily vegetated. Some undercutting and erosion.	Medium	Open Trench	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel U/S contains BT

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WCX030	TWA-25700	FW2 — Depositing/Lowland River	CAMCOR_040 (IE_SH_25C020600)	Lower Shannon	Breaghmore West	25_2089	Good	Yes (SPA: 004137)	Yes	9,294	07/06/2016	—	—	—	21/09/2020	—	20/07/2022	—
WCX031	TWA-26000	FW2 — Depositing/Lowland River	CAMCOR_030 (IE_SH_25C020500)	Lower Shannon	Breaghmore	25_13128	Good	Yes (SPA: 004137)	Yes	9,451	26/09/2016	—	—	19/11/2019	29/07/2020	—	20/07/2022	—
WCX032	TWA-27600	FW2 — Depositing/Lowland River	CAMCOR_030 (IE_SH_25C020500)	Lower Shannon	Camcor	25_2084	Good	Yes (SPA: 004137)	Yes	9,558	—	08/08/2017	—	18/11/2019	22/08/2020	—	—	—
WCX033	TWB-1400	FW2 — Depositing/Lowland River	CAMCOR_030 (IE_SH_25C020500)	Lower Shannon	Upper Coagh	25_705	Good	Yes (SPA: 004137)	Yes	10,175	06/06/2016	—	22/08/2018	16/09/2019	29/07/2020	—	20/07/2022	28/06/2023
WCX034	TWB-6600	FW4 — Drainage Ditch	KYLEBOHER_010 (IE_SH_25J270990)	Lower Shannon	Kyleboher	25_881	Moderate	Yes (SAC: 000216 and SPA: 004096)	Yes	14,403	—	09/08/2017	19/07/2018	16/09/2019	30/07/2020 (surveyed downstream)	—	—	—
WCX035	TWB-7800	FW4 — Drainage Ditch	SILVER (KILCORMAC)_030 (IE_SH_25S020400)	Lower Shannon	Kilgolan Lower	25_846	Moderate	Yes (SAC: 000216 and SPA: 004096)	Yes	14,022	—	—	21/08/2018	16/09/2019	30/07/2020	—	—	—
WCX036	TWB-12600	FW2 — Depositing/Lowland River	SILVER (KILCORMAC)_020 (IE_SH_25S020200)	Lower Shannon	Silver [Kilcormac]	25_2974	Good	Yes (SAC: 000216 and SPA: 004096)	Yes	10,439	08/06/2016	—	21/08/2018	16/09/2019	05/08/2020	—	20/07/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WCX030	18/09/2024	—	Watercourse Crossing Survey	SOR JS	4	3	NA	Stagnant	—	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	100
WCX031	18/09/2024	—	Watercourse Crossing Survey	SOR JS	9	6	—	Moderate	Riffle 50% Glide 45% Pool 5%	—	Sand 10% Boulder 10%	—	Cobble 35% Gravel 40%	—	—	Medium (<50%)	0
WCX032	18/09/2024	—	Watercourse Crossing Survey	SOR JS	7	7	15	Moderate	Pool	Boulder 5%	Sand 10%	Silt 15%	Gravel 35%, Cobble 35%	—	—	Medium (<50%)	0
WCX033	18/09/2024	21/05/2025	Watercourse Crossing Survey	SOR	1	1	Unknown- Low	Very slow	—	—	—	—	—	—	—	Heavy (<75%)	—
WCX034	Verification Survey (June to October	—	Watercourse Crossing Survey	KM JS	2.5	1.5	30	NA	—	—	—	—	—	—	Silt	Light (<25%)	70
WCX035	—	19/05/2025	Multidisciplinary Walkover Survey	AS UB	2	1	5 to 15	No flow	No flow	—	—	—	—	—	Mud/Silt 100%	Medium (<50%)	50
WCX036	19/09/2024	—	Watercourse Crossing Survey	JS SOR	9	5	13	Moderate	Pool	Sand 5%	Silt 10%	Boulder 20%	Cobble 30%, Gravel 35%	—	—	Light (<25%)	0

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WCX030	Flag Iris, sparganium	—	Hawthorn, bramble, elder, meadowsweet, willowherb	Not assessed	Not assessed	Not Assessed	Enrichment and encroachment of vegetation	No potential — No suitable habitat	None recorded. No potential.	No potential
WCX031	None	0	Alder, hawthorn,sycamore, bramble,hazel, ash	Yes (2016, 2022,2024)	2016: *Baetis, Perlidae, Heptageniidae, Leuctra, Simulidae, elmis, and Trichoptera* 2022:Stonefly Needle fly *Leuctra hippopus* x 8, mayfly — *Serratella* x 3, *baetis* x 4, Riffle beetle x 3, *Gammarus* x 1, Great diving beetle x 1, false march brown *Ecdyonurus venosus* x4 2024:*Plecoptera* x2, *baetis* x200, *Gammarus* x5, *riffle beetle* x2, *ecdyonurus* x2, *chironomid* x3, *beetle larva* x2	2016-2022: Q4_Q5 2024:Q3-Q4	Cattle access, bank erosion due to tramping, causing sedimentation and unstable bank.	Good — High quality, mixed sediments and undercut banks with high quality gravels and mix of riffle and pool throughout survey area. Good Lamprey spawning habitat.	Trout jumping under trees, very good salmonid spawning and nursery habitat	Scoop test positive for 0+ (3cm) juv lamprey. Potential
WCX032	None	0	Alder, bramble, mares tail, ash, dogrose, hawthorn	Yes (2017, 2024)	2017: Stonefly and mayfly dominated, *gammarus, uncased caddis, oligochaeta,* shell of freshwater limpet. 2024: *Baetis* x 100, *Gammarus* x10, *Plecoptera* x1, brown needle stone fly x8 riffle beetle x2, *ecdyonurus* x5, midge larva x5, black fly larva x2	Q4—Q5 (2017) Q3—Q4 (2024)	Agricultural pressures	Good potential — moderate potential for lamprey, good potential for salmonids with suitable spawning habitats however low silt content. Good salmonid spawning and nursery habitat present.	2017: Juvenile salmon recorded 2024: Salmonids recorded Potential	2017: Lamprey ammocoetes present 2020: Lamprey recorded upstream Potential
WCX033	Fools watercress	0	Willowherb, hawthorn, nettle, bramble, willow, blackthorn, hazel, gorse	Not assessed — no access	Not assessed	Not Assessed	Encroachment of vegetation due to enrichment	Low potential	Salmonid potential.	Lamprey potential.
WCX034	Pondweed, duckweed, soft rush, water mint	10	Gorse, ling heather, water mint, water mint, Hemsworth, soft rush, bracken, birch, willow	Not assessed — No flow	Not assessed	Not Assessed	Peat extraction, agriculture	Low potential — No flow, heavily silted substrate	None recorded. Low potential.	None recorded. Low potential.
WCX035	Bull rush, silver weed, water mint, Yorkshire fog, willow, Timothy, marsh thistle, soft rush, duckweed, reed, fools watercress, herb Robert, willowherb, horsetail, grasses spp, bittercress	In some parts with stagnant water	Ryegrass, marsh thistle, willow, bramble,purple loosestrife, meadowsweet	Not assessed — No flow	Not assessed	Not Assessed	Agricultural pressures	Low potential	None recorded. Low potential.	None recorded. Low potential.
WCX036	None	0	Bramble, holly, ivy, hearts tongue, alder, ash, willow	Yes (2017, 2018, 2019, 2020, 2022, 2024)	2017: *Gammarus, baetic, simulidae,* uncased *trichoptera, hirudinae* 2018: *Gammarus, Baetis, simulidae, oligo, heptagenidae,* cased caddisfly 2019:Mayfly, caddisfly, leech, *gammarus, Coleoptera sp, oligochaeta sp,* midge larva 2020 (downstream): *Ecdyonurus dispar, Baetis rhodani.* Crayfish 2022:Mayfly *baetis* x 40, *Serratella ignita* x20, *Gammarus* x6, riffle beetle x1, cased caddis x 1 2024: *Serratella* x1, *baetis* x40, *caseless caddis* x1, *Gammarus* x5, *Perlidae spp* x1, brown needle stone fly x1	Q3 (2017) Q3 (2018) Q3-Q4 (2019) Q4(2022) Q3—4 (2024)	Cattle have access, tree blockage in one area.	Moderate — moderate flow, sufficient gravel, mixed with silt and sand. Salmonid holding, Spawning & nursery habitat present. Spawning habitat for lamprey in fine gravels.	Salmonid potential.	Lamprey potential. 2020 (downstream): Juvenile river/brook lamprey recorded in scoop test

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WCX030	No potential	No potential	No potential	No	None recorded	No access, too silted. Potential lamprey in silt. No fisheries, crayfish, otter or kingfisher habitat. No spawning or nursery habitat. Upstream of epa river	Medium	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S contains Sal and BT
WCX031	Crayfish potential.	2019: Otter holt. Slides, couches and tracks present 2016: Otter tracks recorded approximately 650m U/S of Wayleave. 2022: Otter prints found on bank. No couch identified.	2016: dipper nest under bridge	Yes	None recorded	Very good quality, clean meandering river. Trout jumping under trees, very good salmonid spawning and nursery habitat. High potential for kingfish. No evidence of crayfish. Otter prints found on bank. No couch identified.	High	Trenchless	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel U/S contains Sal and BT
WCX032	Crayfish potential.	2019: Potential holt with slide and couch beside river 2024: Otter slide and spraint recorded nearby.	2017: Kingfisher nest 2024: Kingfisher recorded	Yes	None recorded	2020 (upstream): Very clean river with evidence of bank trampling from cattle. Scoop testing for lamprey carried out with 10+ ammocetes uncovered.	High	Trenchless	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel D/S contains Sal and BT
WCX033	No potential	No potential	2016: Suitable habitat for grey wagtail, dipper and kingfisher. Three swallows recorded flying over the river.	No	None recorded	Possibly suitable for lamprey. River could be walked to see it there is a place to sample.Tried to sample downstream of red boundary due to restricted access, No access due to overgrowth of bramble, not suitable for kick sample, possibly stagnant with no flow, no otter, kingfisher potential.	Medium	Open Trench	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database adjacent tributary contains Sal and BT
WCX034	None recorded. Low potential.	None recorded. Low potential.	None recorded	Yes	None recorded	Bank 80 cm high. 2020: Bank height 2.5m	Low	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S contains Sal and BT
WCX035	None recorded. Low potential.	None recorded. Low potential.	None recorded	No	None recorded	Heavily vegetated — encroaching grass and willowherb. Bank height 1.2 m high. 2020: Stagnant water pooling in some areas. Bank height 2m	Low	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WCX036	2017: Crayfish recorded. 2020: Crayfish recorded downstream	Potential 2018: Otter holt, tracks, slide, spraint on edge of Wayleave. 2020 (downstream): crayfish shells recorded on bank.	None recorded	Yes — Kingfisher potential	None recorded	Salmonid holding, Spawning & nursery habitat present. Spawning habitat for lamprey in fine gravels. Lamprey ammocetes 0—1 yrs old located in sediment at cattle access point. Some Three spine stickleback presnt. Trout present. Very clean river. Potential for otter, no evidence found. Potential for crayfish however river is slightly calcified. Badger Latrine present and foraging along bank. Kingfisher nests found along bank.	High	Trenchless	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel D/S contains Sal and BT

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WCX038	TWB-14800	FW4 — Drainage Ditch	SILVER (KILCORMAC)_020 (IE_SH_25S020200)	Lower Shannon	House Derries	25_3148	Good	Yes (SAC: 000216 and SPA: 004096)	Yes	8,517	23/09/2016	09/08/2017	24/07/2018	19/11/2019	22/09/2020	—	21/07/2022	—
WCX039	TWB-24900	FW2 — Depositing/Lowland River	CLODIAGH (TULLAMORE)_020 (IE_SH_25C060300)	Lower Shannon	Clodiagh [Tullamore]	25_585	Good	Yes (SAC: 000571)	Yes	3,663	05/10/2016	10/08/2017	22/08/2018	07/10/2019	22/09/2020	—	21/07/2022	—
WCX040	TWC-1000	FW4 — Drainage Ditch	CLODIAGH (TULLAMORE)_030 (IE_SH_25C060340)	Lower Shannon	Killeigh Stream	25_2886	Moderate	Yes (SAC: 002162)	Yes	3,346	—	—	26/07/2018	18/09/2019	11/08/2020	—	—	—
WCX041	TWC-3300	FW1 — Eroding/Upland River	MEELAGHANS_010 (IE_SH_25M520760)	Lower Shannon	Finter	25_1062	Moderate	Yes (SAC: 000571)	Yes	4,772	—	—	22/08/2018	19/09/2019	11/08/2020	—	16/08/2022	—
WCX042	TWC-5000	FW2 — Depositing/Lowland River	MEELAGHANS_010 (IE_SH_25M520760)	Lower Shannon	Meelaghans	25_3091	Moderate	Yes (SAC: 000571)	Yes	5,928	05/10/2016	—	22/08/2018	07/10/2019	23/09/2020	—	22/07/2022	—
WCX043	TWC-5600	FW2 — Depositing/Lowland River	TULLAMORE_020 (IE_SH_25T030100)	Lower Shannon	Annagharvey 25	25_1136	Poor	Yes (SAC: 000571)	Yes	6,306	—	—	22/08/2018	19/09/2019	12/08/2020	—	17/08/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WCX038	19/09/2024	—	Watercourse Crossing Survey	SOR JS	3	Dry	Dry	Slow	Slow	—	—	Gravel	—	—	Silt	Light (<25%)	0
WCX039	19/09/2024	—	Watercourse Crossing Survey	SOR JS	15	8	15	Slow	Pool/Glide	Boulder 5%	Sand 20%	Cobble 30%, Gravel 45%	—	—	—	Light (<25%)	50
WCX040	23/07/2024	—	Multidisciplinary Walkover Survey	SN CB	1.5	0.75	5	Slow	No flow	—	—	—	—	—	Silt 100%	Medium (<50%)	100
WCX041	19/09/2024	—	Watercourse Crossing Survey	SOR JS	3	NA	NA	No flow	Dry	Cobble	—	—	Gravel	Silt	—	Heavy (<75%)	0
WCX042	19/09/2024	—	Watercourse Crossing Survey	SOR JS	2	1	2	Very Slow	Glide/Riffle/Pool	Gravel 5%, Cobble 3%, Boulder 1%	—	—	—	—	Silt 90%	Light (<25%)	70
WCX043	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	UB KL	4	1	3	Very Slow	Glide/Riffle	Boulder, Silt, Sand	Cobble	—	Gravel	—	—	Full (>75%)	0

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WCX038	Crows foot, Brookline, watermint	0	Willowherb, meadowsweet, nettle, perennial rye grass, hawthorn, soft rush, hearts tongue, watermint, ash, ivy	2020: Yes 2022: No kick sampling conducted. Dry ditch.	2020: Freshwater snail, bloodworm, freshwater louse. Stickleback	Q2 (2020)	Agricultural runoff	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WCX039	Watercress	0	Bramble, alder, ash, gorse, hogweed, bracken, willow, bindweed, sycamore	Yes (2017, 2018, 2020, 2022)	2017: *Baetis, heptageniidae, gammarus, tricoptera* cased and uncased caddis 2018: Riffle beetle, *baetidae,* cased and uncashed caddis. 2020: minnow, stone loach, great diving beetle, lamprey, stonefly: *Leuctra spp. Gammarus.* Beetle: *Haliplus varius* 2022: 2x *Gammarus,* Mayfly—*Ecdyonurus* x 5, mayfly *Serratella ignita* x 10, 5x *haliplus* beetle, 5x riffle beetle,mayfly— *baetis* x15, 3x *chironomid,* 1x cased caddis *phryganeidae,* 2x caddis larvae, 1x stonefly.	Q3	Agricultural pressures (dead cow in waterbody in 2016) Modified for angling.	Moderate — river in flood. Too deep to safely wade or see substrate to identify spawning gravels. Overhanging vegetation and uncut bank exist within wayleave. Same conditions up to 400m d/s.	Brown trout present Moderate potential	Potential 2017: Lamprey recorded 2019: None recorded. Back eddies and slow flowing side channels visible for juv. Lamprey. Too deep to safely wade to do a hand search. Hand search 150m d/s of centreline — none recorded.
WCX040	Foolswatercress, watermint, *juncus sp* , meadowsweet	0	Hawthorn, elder, meadowsweet	Not assessed — Low flow	Not assessed	Not Assessed	Agricultural pressures	Low to Moderate potential — trout potential	No potential	No potential
WCX041	None	0	Hawthorn, hazel, spindle, ivy, bramble, ash, willow, dogrose, hogweed, nettle	Not assessed — Low flow, shallow water	Not assessed	Q1—Q2 (2018)	Agricultural pressures	Low potential	No potential	No potential
WCX042	Watercress, watermint	0	Bramble, Scot's pine,dog rose, hazel, hawthorn	Yes (2016, 2020)	2016: *Baetis rhodani, simuliidae, gammarus,* and *oligochaeta.* 2020: Non biting midget, great diving beetle, mayfly: *alainites muticus, baetis rhodani.* Cases caddis: *limnephilus spp.* Beetle: *haliplus varius.* Snail: margined ramshorn. *Gammarus.* 3 spine stickleback. Bloodworm. Coronomid	Q3 (2016 and 2020)	Cattle access showing high nutrients causing algal growth. Agricultural runoff.	Low potential — Mainly silt substrate and vegetation with some gravels. Some fine gravels over riffle on edge of wayleave, just d/s and 80m u/s of rail crossing. Uncut bank and overhanging veg recorded. Poor potential within wayleave—heavily veg. Less vegetated and more gravels 150m u/s of wayleave at woodland.	Low potential.	Low potential — checked approximately 10m section of potential suitable habitat 120m d/s of wayleave. Silt substrate checked with hand search and net — no juvenile lamprey recorded. No suitable habitat within wayleave. Soft sediments 150m us of wayleave but no juv lam. (2016)
WCX043	None	5	Bramble, willow, willowherb, holly, hazel	Not assessed — low flow	Not assessed	Not Assessed	Tunneling, enrichment from forestry	No potential — No suitable habitat	None recorded. No potential.	None recorded. Low potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WCX038	No potential.	No potential.	No potential.	No	None recorded	Appears dry with no flow, heavily vegetated. Mapped as EPA river, modified channel.	Medium	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WCX039	Potential 2017: Crayfish recorded. 2019: None observed. Potential for crayfish during lower flows	Otter present	2017: Kingfisher nest, eel. 2019:Cattle access. Muddy banks with kingfisher potential 120m d/s of centre line. Potential kingfisher nest on RB 380m d/s of centreline. High banks approx. 1.5m on average.	No	Crocosmia 100m south of crossing point.	Kingfisher foraging potential, salmonid nursery and spawning potential. Suitable banks for crayfish burrowing but limiting vegetation or boulders. No scoop for lamprey carried out, suitable for lamprey. Wide channel, natural flow, clean water. Too deep to survey in redline boundary, surveyed upstream. juvenile trout with larger trout rising in pool area. Two young otters spotted emerging from underneath scrub at right hand bank, one went upstream, one went downstream.	High	Trenchless	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel D/S contains BT
WCX040	No potential	No potential	None recorded	Yes	None recorded	2019:Gammarus and mayfly larva seen in suspension Dry in 2018 after prolonged hot weather. Bank height 0.5m, very shallow and heavily vegetated in 2017 with some flow present. Stream located in a different location to WFD shapefile.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WCX041	No potential	No potential	None recorded	Yes	None recorded	River dried out due to recent heatwave, however it has fisheries potential if water was present during winter months. Mapped as Finter river but is completely dry.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WCX042	Kick net sweep d/s of wayleave and within wayleave — none recorded. Good potential — well oxygenated, calcareous, and vegetated watercourse.	2019: Potential otter scat	Buzzard recorded flying over field adjacent to woodland. Three spined stickleback caught in kick net with wayleave.	Yes	None recorded	Not suitable for otter, kingfisher. Negative lamprey scoop test. Stickleback near small field bridge crossing. Cattle eroding banks and riparian habitat. No salmonid spawning or nursery habitat present, heavily silted. Trout may be present at high water. Mapped as EPA river but very low water due to heatwave.Stickleback in one area where significant water present. Overall very low water with predominantly mud substrate, poor flow, dry in areas, high instream vegetation.	Medium	Open Trench	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel D/S contains BT
WCX043	None recorded. No potential.	None recorded. No potential.	2019:Stickleback/silverfish present in watercourse	No	None recorded	Potential for lamprey in sediment however very low water levels in summer may reduce survival. Potential for otter if high water present. Channel straigh, modified. Water levels would be much higher in winter and have salmonid potential for spawning	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S or U/S does not contain Sal or BT

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WCX044	TWC-8900	FW2 — Depositing/Lowland River	TULLAMORE_010 (IE_SH_25T030030)	Lower Shannon	Tullamore	25_902	—	Yes (SAC: 000571)	Yes	9,057	26/10/2016	—	23/07/2018	07/10/2019	23/09/2020	—	21/07/2022	—
WCX045	TWC-9700	FW2 — Depositing/Lowland River	TULLAMORE_010 (IE_SH_25T030030)	Lower Shannon	Tullamore 25	25_902	Poor	Yes (SAC: 000571)	Yes	9,808	—	15/08/2017	23/08/2018	07/10/2019	23/09/2020	—	21/07/2022	—
WCX047	TWC-17700	FW4 — Drainage Ditch	DAINGEAN_030 (IE_SE_14D060400)	Barrow	Esker_Beg	14_1234	Poor	Yes (SAC: 002162)	Yes	14,404	—	—	23/08/2018	—	19/08/2020	—	—	—
WCX048	TWC-18900	FW2 — Depositing/Lowland River	DAINGEAN_030 (IE_SE_14D060400)	Barrow	Daingean	14_1562	Poor	Yes (SAC: 002162)	Yes	14,949	—	15/08/2017	23/08/2018	07/10/2019	23/09/2020	—	22/07/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID			Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
	2024	2025								<5	<10	<25	<50	<75	75-100		
WCX044	20/09/2024	—	Watercourse Crossing Survey	JS SOR	2	1.5	27	Very Slow	No flow	—	Sand 10%	Gravel 20%	—	Silt 70%	—	Heavy (<75%)	80
WCX045	20/09/2024	—	Watercourse Crossing Survey	JS SOR	3	2.5	4	Slow	Glide/Pool	—	—	Boulder 15%, Cobble 20%,	Gravel 40%	—	Silt 25%	Medium (<50%)	90
WCX047	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	JS JG	6	2	—	No flow	No flow	—	—	Sand	—	—	Silt	Light (<25%)	90
WCX048	23/09/2024	—	Watercourse Crossing Survey	SOR CB	7	6	55	Very slow	Glide/Pool	Cobble 5%	Silt 10%	Boulder 15%	Gravel 30%, Sand 40%	—	—	Light (<25%)	35

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WCX044	Duckweed, fools watercress	0	Meadowsweet, willow, hawthorn, hazel, bramble, ash, soft rush	Yes (2020, 2022, 2024)	2020: *Gammarus*, coronomid 2022: *Gammarus* x10. Caddis case *limnephilidae* x1. Pond snail *lymnaeidae* x1. 2024: *Gammarus* x15, fresh water louse x3	Q3 (2020,2022) Q2—3 (2024)	Pollution (potential discharge grey water)	No potential — no spawning habitat recorded within wayleave or 60m u/s or d/s. Watercourse choked with vegetation.	No potential.	Potential habitat for juvenile lamprey in undercut banks.
WCX045	Fools watercress, *Sparganium sp*, duckweed	0	Hazel, hawthorn, ivy, gorse, herb robert, dog rose, willowherb, holly, blackthorn	Yes (2020 and 2024)	2020: *Gammarus.* Mayfly: *Baetis rhodani.* Cased caddis. Caseless caddis. Non biting midget. River limpet *ancylus fluviatilis* 2024: *Gammarus sp*. 25, green olive mayfly, *Baetis*, watermite	Q3—Q4 (2020) Q3(2024)	Cattle access	Low potential — watercourse in flood but potential spawning gravels within wayleave visible and potentially good riffle when less flooded. Uncut banks. River enclosed with vegetation.	Low potential.	Low potential
WCX047	reater willowherb, watermint, bindweed , knapweed, soft rush	—	Holly and willow hedge, ash, greater willowherb, gorse, bindweed, water mint, birch, sycamore, ivy, soft rush, knapweed, gorse	Not assessed — drain	Not assessed	Not Assessed	—	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WCX048	Fools watercress, *Sparganium sp*, pondweed	0	Bindweed,canary grass, willowherb, nettle, cleavers, thistle, alder, hawthorn	Yes (2017, 2018, 2020, 2022) No (2024) too deep.	2017: *Asellus* and *gammarus* dominant in kick sample. *Leuctra, baetis* and *diptera common. Coleoptera,oligoc* and *hirudinea* also present. 2018: *Gammarus* and pond snail dominant. 2020: *Gammarus. L*eech. Mayfly: *baetis rhodani. R*iver limpet. *Coronomid.* Fish leech: *piscicola geometra.* Roach. Cased caddis. Freshwater woodlouse. Keeled ramshorn: *planorbis carinatus.* 2022: Water hog louse x 100, *Gammarus x* 30, leech x10, non biting midge x 2, *Phrygianeidae* caddis case x1, caddis case *limnephilidae* x10, ramshorn snail x2, pondsnail x5, mayfly *Serratella ignita* x1	Q3	Agricultural pressures and modification	Low potential — too deep to see any potential spawning gravels.	Potential. 2019: None recorded. 2018: Brown Trout recorded.	Low potential — vertical rather than undercut banks.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WCX044	No potential	No potential.	None recorded	Yes	None recorded	No suitable otter or crayfish habitat. Heavily vegetated within RLB. Kick sample very murky water (suspended sed), poor quality, little macroinvertebrates. Negative lamprey scoop test. Ballinagar gp water scheme adjacent to site. Water appears murky/slightly polluted (grey colour). Heavily vegetated, choked upstream with riparian vegetation,. Very slow flow, potential blockage — sound of flowing water upstream.	Medium	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WCX045	No potential	2019: Track visible in cow pat	2017: Not suitable for trout but stickleback recorded. 2018: Stickleback recorded. 2019:Suitable muddy bank for kingfisher in woodland 170m d/s of wayleave and 40m u/s of wayleave — no nest observed. Potential kingfisher burrow in RB 30m u/s of wayleave. Dipper droppings recorded within wayleave	Yes	None recorded	Too sandy for lamprey scoop. Suitable for salmonid spawning or nursery, barriers to migration upstream, no variation in the river channel. Silt present for lamprey. No suitable habitat for crayfish, (no boulders , vegetation or suitable bank). No otter or kingfisher potential. Slow flowing water, low, culvert to the NE, heavy overhanging coverage upstream and downstream.	Medium	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	No fish stock survey nearby
WCX047	None recorded. No potential.	None recorded. No potential.	Common frog	No	None recorded	Channelized, 0.25m high bank. 2020: Dry ditch, heavily vegetated	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	IFI GIS database channel D/S or U/S does not contain Sal or BT
WCX048	Low potential — fast flow and no vegetation.	2019: Potential inactive holt in right bankside, overgrown with vegetation. Run from fields into wet ditch, numerous other runs visible along ditch heading west. 2024: Good foraging habitat	2019:Dying buzzard found on the bank approximately 300m us of wayleave. Appears to have broken wing. No visible nest in tree above. Grey wagtail observed c. 220m ds of wayleave 2018: Stickleback fish 2020: Roach 2024: Brown Trout (50)	Yes — Kingfisher potential	2018: Elodea within 50m corridor. Clumps 1m squared. 2020: Roach	Salmonids potential however dense vegetation may cause barriers to migration. No lampreys found in scoop but habitat present and suitable.Wide channel, murky water, choked with vegetation at points due to enrichment, also causing large amount of algae. No otter or kingfisher potential	Medium	Open Trench	N	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel D/S and U/S does not contain Sal or BT

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WCX049	TWC-20300	FW2 — Depositing/Lowland River	ESKER STREAM_010 (IE_SE_14E010100)	Barrow	Esker (Stream) [Offaly]	14_538	Moderate	Yes (SAC: 002162)	Yes	15,210	—	—	24/08/2018	20/09/2019	19/08/2020	—	25/07/2022	—
WCX050	TWC-20300	FW4 — Drainage Ditch	ESKER STREAM_020 (IE_SE_14E010200)	Barrow	RATHCOBICAN	14_1849	Moderate	Yes (SAC: 002162)	Yes	15,084	—	—	24/08/2018	08/10/2019	02/09/2020	—	13/09/2022	—
WCX051	TWC-21100	FW4 — Drainage Ditch	ESKER STREAM_020 (IE_SE_14E010200)	Barrow	NA	14_849	Moderate	Yes (SAC: 002162)	Yes	14,843	—	16/08/2017	24/08/2018	—	20/08/2020	—	16/08/2022	—
WCX053	TWC-21300	FW4 — Drainage Ditch	ESKER STREAM_020 (IE_SE_14E010200)	Barrow	NA	14_1800	Moderate	Yes (SAC: 002162)	Yes	14,971	—	16/08/2017	24/08/2018	20/09/2019	—	—	—	—
WCX054	TWC-22800	FW2 — Depositing/Lowland River	ESKER STREAM_020 (IE_SE_14E010200)	Barrow	LEITRIM 14	14_583	Moderate	Yes (SAC: 002162)	Yes	15,072	—	17/08/2017	—	—	31/08/2020	—	17/08/2022	—
WCX055	TWD-3500	FW2 — Depositing/Lowland River	FIGILE_030 (IE_SE_14F010200)	Barrow	BALLYKILLEEN	14_1356	Moderate	Yes (SAC: 002162)	Yes	15,498	—	15/08/2017	01/08/2018	08/10/2019	31/08/2020	—	25/07/2022	—
WCX056	TWD-4200	FW2 — Depositing/Lowland River	FIGILE_030 (IE_SE_14F010200)	Barrow	Figile	14_553	Moderate	Yes (SAC: 002162)	Yes	15,431	—	15/08/2017	24/08/2018	08/10/2019	31/08/2020	—	25/07/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WCX049	07/08/2024	—	Multidisciplinary Walkover Survey	RA	6	6	Unknown	Slow	Glide	—	—	Boulder 20%, Gravel 20%	—	Silt 60%	—	Light (<25%)	10
WCX050	23/09/2024	—	Watercourse Crossing Survey	SOR CB	6	6	Unknown	Slow	Glide	—	—	—	—	—	Silt/Peat 60%	Light (<25%)	90
WCX051	07/08/2024	—	Multidisciplinary Walkover Survey	JS	5	1	NA	No flow	No flow	—	—	—	—	—	Organic/Peat	None (0%)	0
WCX053	15/10/2024	—	Watercourse Crossing Survey	SN UB	1.5	Dry	Dry	No flow	No flow	—	—	—	—	—	Silt	—	—
WCX054	24/09/2024	—	Watercourse Crossing Survey	SOR CB	4	3	60	Slow	Glide	Boulder 5%	—	Cobble 20%, Gravel 20%	—	Silt/Mud 55%	—	Heavy (<75%)	35
WCX055	24/09/2024	—	Watercourse Crossing Survey	SOR CB	3	Dry	Dry	No flow	No flow	—	—	—	—	—	Silt	Heavy (<75%)	50
WCX056	24/09/2024	29/05/2025	Watercourse Crossing Survey	LH UB	6	5	22	Very Slow	Glide	Boulder 5%, Sand 5%	—	Cobble 15%, Silt 15%	—	Gravel 60%	—	Light (<25%)	25

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WCX049	Canary grass, burr reed, pondweed	30	Canary grass, meadow sweet, bindweed, yorkshire fog, alder, common valerian	Not assessed — Low flow	Q value estimated (2017)	Q2 (2017)	Forestry and livestock. Peat extraction	Low potential	No potential	Low potential.
WCX050	Canadian pondweed, duck weed, reed, fools water cress	30	Grass sp. canary grass, thistle, nettle, bindweed, willowherb, bracken	Not assessed	Q value estimated	Q2 (2017)	—	No potential — deep bog drain with no flow and peat substrate. No spawning gravels observed. No suitable habitat for juvenile lamprey.	No potential.	No potential.
WCX051	None	—	Willow, soft rush, bramble, pondweed	Not assessed — steep banks and peat substrate	Not assessed	Not Assessed	Peat extraction	No potential — No suitable habitat	No potential.	No potential.
WCX053	NA	—	Willow, gorse	Not assessed	Not assessed	Not Assessed	Agricultural pressures	No potential — No suitable habitat	No potential.	No potential.
WCX054	Duckweed, fools watercress	—	Willow, ash, bramble, ryegrass, bindweed, alder	Yes (2017, 2020, 2024)	2017: *Glycera sp.* (dominant) in kick sample 2020: Mayfly, *gamarous,* isopods, stickleback 2024: Great diving beetle x2	Q2—Q3 (2017) Q3 (2020) Q3 (2024)	Cattle access with evidence of poaching.	Low potential	No potential.	Potential
WCX055	Watercress	—	Silver birch, willow herb, bindweed, willow, yellow flag iris, meadow sweet,	2017: No 2019: Not assessed — low collapsing banks 2020: Yes 2024: No	Q value estimated in 2017 2020: Minnow, *gamarous,* isopods, mayfly, worm,	Q2 (2017) Q3 (2020)	Agricultural pressures. Cattle access. High TSS.	No potential — watercourse heavily vegetated and peat substrate.	No potential.	No potential.
WCX056	Yellow water lily, reed	30	Willowherb, nettle, bindweed, willow, bramble	2017: Yes 2020: No — water level too high 2024: Yes	2017: Class C and D organisms in kick sample. 2024: *Gammarus* x10, great diving beetle larvae x1	Q3 (2017) Q3 (2024)	Modification, pollution and dumping.	Moderate — river in flood, couldn't see the substrate, but nearby peatland habitat so spawning gravels unlikely. Suitable spawning and holding for salmonids at upstream bridge.	2017: Potential trout recorded (fishing evident) Potential	None recorded. Lamprey potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WCX049	Low potential.	2019: Run alongside river at fence with slide entering water. Additional run and slide along rivers edge.	2018: Roach/bream recorded.	Yes	None recorded	River was too deep to carry out kick sample, no evidence of otter, no scoop test for lamprey, water peat stained. Steep banks. No suitable spawning and nursery habitat for salmonid. Holding and feeding habitat for Trout and coarse fish, possible habitat in sediment along banks, unable to sample	Medium	Open Trench	N	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel D/S does not contain Sal or BT
WCX050	No potential — acidic pH due to surrounding peatlands and no vegetation in main channel, although instream vegetation present northwest, outside of the Wayleave.	No potential.	2017: Pike and Stickleback recorded	No	Elodea (serveral clumps) approx. 150m SE of crossing.	No visable substrate. Also no shading present. Would be good for amphibians. It is modified at this section with slow flow. There is also no visable substrate and would not be suitable for salmonids, crays, lamprey, or spawning. Slow flowing drain, bog drains directly into it. Water peat stained.	Medium	Open Trench	N	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel D/S does not contain Sal or BT
WCX051	No potential.	No potential.	None recorded	No	None recorded	2019: Steep vertical banks 3m high. Drain has been channelised. Straight run. No undercut bank. High TSS from peat. No/poor fish potential. Little aquatic vegetation. 2020: Large drainage ditch with no flow and little vegetation.	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	IFI GIS database channel D/S or U/S does not contain Sal or BT
WCX053	No potential.	No potential.	None recorded	No	None recorded	Heavily vegetated dry drain. Wet plant species present – likely to occasional flood. Poor quality	Low	Open Trench	N	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	IFI GIS database channel D/S contains BT
WCX054	No potential	None recorded. Otter potential.	2017: Minnow caught in kick sample	Yes	None recorded	Appears stagnant. Unable to see riverbed substrate. Limited fisheries potential. Poor species diversity and poor water quality. very silty. Modified channel that's been straightened. Potential to hold brown trout in winter months. No kingfisher potential and limited foraging for otter.	Medium	Open Trench	N	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel D/S does not contain Sal or BT
WCX055	No potential — acidic pH due to surrounding peatlands.	2019: Slide going into water, numerous runs in field	Stickleback potential	Yes	None recorded	Potential in winter months for Salmonids, not suitable for lamprey, otter or crayfish. No water present, completely dry due heat wave and heavily overgrown. No kick sampling carried out. Heavy overhanging vegetation	Medium	Open Trench	N	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S does not contain Sal or BT
WCX056	None recorded. Low potential — likely too acidic.	2019: Slide into river, run along edge of river	None recorded	Yes	None recorded	Potential for coarse fish. Suitable for King fisher. Unable to access very steep banks. Signage post for Anglian association. algae on riverbed and stems of lilies. Minnow seen.	High	Trenchless	Y	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel U/S contains BT

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WCX057	TWD-6400	FW2 — Depositing/Lowland River	FIGILE_030 (IE_SE_14F010200)	Barrow	Figile	14_238	Moderate	Yes (SAC: 002162)	Yes	14,598	—	16/08/2017	02/08/2018	08/10/2019	31/08/2020	—	26/07/2022	—
WCX058	TWD-8900	FW2 — Depositing/Lowland River	FIGILE_020 (IE_SE_14F010100)	Barrow	Figile	14_987	Moderate	Yes (SAC: 002162)	Yes	14,771	—	16/08/2017	No access (24/08/2018)	09/10/2019	31/08/2020	—	26/07/2022	—
WCX059	TWD-14400	FW2 — Depositing/Lowland River	ABBEYLOUGH_010 (IE_SE_14A010840)	Barrow	Abbeylough	14_10489	Moderate	Yes (SAC: 002162)	Yes	16,560	—	16/08/2017	—	24/09/2019	—	—	23/08/2022	—
WCX060	TWD-18100	FW2 — Depositing/Lowland River	FIGILE_010 (IE_SE_14F010061)	Barrow	Figile	14_352	Poor	Yes (SAC: 002162)	Yes	14,366	27/10/2016	16/08/2017	27/08/2018	24/09/2019	—	—	24/08/2022	—
WCX061	TWD-24300	FW2 — Depositing/Lowland River	BLACKWATER (LONGWOOD)_010 (IE_EA_07B020060)	Boyne	Mulgeeth	07_1747	Poor	Yes (SAC: 002299 and SPA: 004232)	Yes	14,296	—	21/08/2017	27/08/2018	09/10/2019	—	—	26/07/2022	—
WCX062	TWD-26400	FW2 — Depositing/Lowland River	BLACKWATER (LONGWOOD)_010 (IE_EA_07B020060)	Boyne	Mulgeeth	07_1720	Poor	Yes (SAC: 002299 and SPA: 004232)	Yes	15,088	15/11/2016	21/08/2017	27/08/2018	09/10/2019	01/09/2020	27/08/2021	26/07/2022	—
WCX063	TWD-28100	FW2 — Depositing/Lowland River	BLACKWATER (LONGWOOD)_010 (IE_EA_07B020060)	Boyne	DERRYVARROGE	07_308	Poor	Yes (SAC: 002299 and SPA: 004232)	Yes	14,206	—	21/08/2017	06/08/2018	25/09/2019	—	—	23/08/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WCX057	24/09/2024	—	Watercourse Crossing Survey	SOR CB	5	4	Unknown	Slow	Glide	—	—	—	—	—	—	Light (<25%)	25
WCX058	24/09/2024	—	Watercourse Crossing Survey	SOR CB	5	3	NA	Stagnant	Glide 100%	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	—
WCX059	06/08/2024	—	Multidisciplinary Walkover Survey	JF MB	3	2.5	NA, no safe access to depth	Slow	No flow	—	—	—	—	—	Peat and silt	Heavy (<75%)	0
WCX060	24/09/2024	10/06/2025	Multidisciplinary Walkover Survey	JS EP MW	7	2	30	Very slow	Glide 95% Riffle 5%	Cobble 5%	Boulder 10% Mud/Silt 10%	Sand 15%	Gravel 60%	—	—	Heavy (<75%)	—
WCX061	25/09/2024	—	Watercourse Crossing Survey	SOR CB	3	2	5	Slow	Glide	Boulder 1%	Cobble 10%	Silt 25%, Sand 14%	Gravel 50%	—	—	Light (<25%)	15
WCX062	25/09/2024	—	Watercourse Crossing Survey	SOR CB	7	6	NA	Stagnant	No flow	—	—	—	—	—	Silt and peat	Light (<25%)	50
WCX063	19/08/2024	—	Watercourse Crossing Survey	SN UB	5	1	NA	Stagnant	No flow	—	—	—	—	—	Silt	Heavy (<75%)	0

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WCX057	Yellow water lily, pondweed, reed, fools watercress	—	Yorkshire fog, meadow sweet, bindweed, bramble, purple loosestrife, willow, dock, nettle	Not assessed — no suitable substrate and river too high	Q value estimated	Q2—Q3 (2017)	Peat extraction.	No potential — no suitable habitat. Could not view substrate due to high water levels. Surrounding peat habitat makes spawning gravels unlikely.	Potential	Potential
WCX058	Duckweed, fools watercress, sparganium	—	Canary reed grass, dock, silverweed, nettle	Not assessed — no flow	Q value estimated	Q2 (2017)	Agricultural and peat run off	No potential — No flow. Water too deep to view any spawning gravels. Peat surroundings so spawning gravels unlikely.	Potential	Potential
WCX059	—	90	Blackthorn, hawthorn, bindweed, bramble, thistle, hogweed, purple loosestrife, willow herb, willow	Not assessed — no flow, inaccessible from banks and water depth	Not assessed	Q2 (2017)	Agriculture, peat runoff, encroaching vegetation	No potential — No suitable habitat	None recorded. Salmonid potential	Potential
WCX060	Watercress, yellow iris, pondweed	0	Hawthorn, elder, dogrose, ivy, nettle	Not assessed — Low flow with high levels of silt	Q value estimated (2017)	Q2 (2017)	Heavily modified	Limited spawning or nursery habitat for salmonid or lamprey.	None recorded. Low potential.	No potential.
WCX061	Fools watercress, duckweed	1	Silverweed, meadowsweet, yorkshire fog, bramble, purple looseworth, water mint, dock, hawthorn, bracken	Yes (2017, 2018, 2020, 2022, 2024)	2017: Three minnow fish, *Gammarus, asellus* in kick sample. 2018: *Gammarus,* mayfly, *oligochetes, cholioptera* larva. 2020: *Gammarus* (50%) and waterbeetle 2022: *Gammarus* x300, water hog louse x20, great diving beetle x10, bivalve x10, beetle larvae x2, stickleback x10, non biting midge x3 2024: *Gammarus* x100, water hog louse x 1 stickleback x1, case caddis limnephilidae x1	Q3	Modification and trenching by landowners. Siltation and peat staining	No potential — water quality very poor, no flow, stagnant, anoxic odour and oil sleek. Fuel drum in water u/s of wayleave. No gravels. Peat and silt substrate. Bog upstream.	Salmonid potential	Potential
WCX062	Canary grass, duckweed, bistort, fools watercress.	5	Blackthorn, bindweed, willow, nettles, willowherb, meadowsweet, yorkshire fog, alder	Not assessed — too deep	Q value estimated	Q2 (2017)	Horse and cattle access to water	No potential — too dark and deep to see substrate but likely no gravels. Low flow/ stagnant water. No suitable juvenile lamprey habitat.	Salmonid potential.	Lamprey potential
WCX063	Watermint, bullrush, fools water cress, duckweed, canary reed grass	0	Willow, bindweed, meadowsweet, bramble, Bracken, Hogweed, nettles, hawthorn, willow herb	Not assessed — choked with vegetation. No flow, very shallow	Not assessed	Not Assessed	Bog leeching, bank trampling due to horses.	No potential — No suitable habitat	No potential.	No potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WCX057	Potential	None recorded. No potential.	2017: Potential for coarse fish 2019: River and surrounded lands in flood. 8WS and 1GJ present on flooded bog c.1km to the northeast	Yes — Kinfisher recorded (2024)	None recorded	Couldn't undertake kick sampling as unsafe, bank too steep. Water heavily peat stained. No evidence of otter. Sections heavily vegetated. No scoop test for lamprey. Suitable for Kingfisher to feed.	High	Trenchless	Y	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel U/S contains BT
WCX058	No potential — acidic pH due to surrounding peatlands.	None recorded. No potential.	2017: Coarse fish potential	No	None recorded	No kicked, unknown depth, peat substrate base. No resting habitat for kingfisher& otter, just commuting and foraging. Potential for brown trout only. No spawning or nursery habitat for salmonid. Potential for lamprey but can't confirm if adequate silt present	Medium	Open Trench	Y	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel D/S and U/S contains BT
WCX059	Potential	Potential	None recorded	No	None recorded	Dirty turbid water, likely high levels of sedimentation. Potentail for salmonids. Modified channel, unknown substrate to comment on spawning potential or lamprey potential.	Medium	Open Trench	Y	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	IFI GIS database channel D/S contains BT
WCX060	No potential.	No potential.	None recorded	No	None recorded	Very slow straight channel, low flow, heavily vegetated, commuting habitat for otter and kingfisher. Not kicked, too steep to access. Limited spawning or nursery habitat for salmonid or lamprey. Not suitable for salmon, potential for brown trout.	Medium	Open Trench	Y	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	IFI GIS database channel D/S contains BT
WCX061	Potential	2019: Potential slide Potential	2017: Minnow fish 2018: Three—spined stickleback	Yes — Kingfisher potential	None recorded	2024: Suitable habitat for lamprey and crayfish. Suitable commuting and foraging otter and kingfisher. Spawning and nursery for brown trout. No evidence of pollution. Some bank erosion as horses have access to water. Bank at 90% angle, no undercutting.	Medium	Open Trench	Y	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel D/S contains BT
WCX062	Potential	Otter potential.	—	Yes — Kingfisher potential	None recorded	Potential to hold salmonids and lamprey, as silt possible due to low gradient.Stagnant water no visible flow. Very deep! Not possible to access. Otter potential but no evidence. Not possible to see substrate at base poor visibility, murky/brownish coloured water.	Medium	Open Trench	Y	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel D/S contains BT
WCX063	No potential.	No potential.	None recorded	No	None recorded	No habitat potential for fish, otter, kingfisher, lamprey or crayfish. Potential for frogs. Owner has dug out area for horses to drink causing pool, and making water stagnant and preventing flow downstream.	Low	Open Trench	Y	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	IFI GIS database adjacent tributary contains BT

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WCX064	TWD-28500	FW2 — Depositing/Lowland River	BLACKWATER (LONGWOOD)_010 (IE_EA_07B020060)	Boyne	DERRYCRIB	07_443	Poor	Yes (SAC: 002299 and SPA: 004232)	Yes	13,845	—	21/08/2017	28/08/2018	25/09/2019	24/08/2020	—	23/08/2022	—
WCX065	TWD-29100	FW2 — Depositing/Lowland River	BLACKWATER (LONGWOOD)_010 (IE_EA_07B020060)	Boyne	Blackwater [Longwood]	07_1485	Poor	Yes (SAC: 002299 and SPA: 004232)	Yes	13,299	15/11/2016	21/08/2017	28/08/2018	09/10/2019	01/09/2020	—	26/07/2022	—
WCX066	TWD-32700	FW2 — Depositing/Lowland River	CLONSHANBO_010 (IE_EA_09C030300)	Liffey	AGHAFULLIM	09_1122	Poor	Yes (SAC: 001398)	Yes	9,748	—	21/08/2017	30/08/2018	25/09/2019	26/08/2020	—	25/08/2022	—
WCX067	TWE-700	FW2 — Depositing/Lowland River	LYREEN_010 (IE_EA_09L020035)	Liffey	BALTRACY TRIB LYREEN	09_1309	Poor	Yes (SAC: 001398)	Yes	8,122	16/11/2016	25/09/2017	30/08/2018	09/10/2019	02/09/2020	—	26/08/2022	—
WCX068	TWE-1800	FW2 — Depositing/Lowland River	LYREEN_010 (IE_EA_09L020035)	Liffey	BALTRACY TRIB LYREEN	09_1309	Poor	Yes (SAC: 001398)	Yes	7,691	16/11/2016	20/08/2017	—	10/10/2019	02/09/2020	—	—	—
WCX069	TWE-2400	FW1 — Eroding/Upland River	CLONSHANBO_020 (IE_EA_09C030600)	Liffey	Clonshanbo 09	09_1129	Poor	Yes (SAC: 001398)	Yes	7,346	11/10/2016	—	—	10/10/2019	01/09/2020	—	—	—
WCX070	TWE-3600	FW2 — Depositing/Lowland River	LYREEN_010 (IE_EA_09L020035)	Liffey	Lyreen 09	09_1657	Poor	Yes (SAC: 001398)	Yes	7,306	—	25/05/2017	—	—	—	—	26/08/2022	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WCX064	25/09/2024	—	Multidisciplinary Walkover Survey	CB SOR	3.5	2	NA	Very Slow	Glide 100%	—	Gravel 10% Sand 10%	—	—	—	Mud/Silt 80%	Light (<25%)	100
WCX065	25/09/2024	10/06/2025	Multidisciplinary Walkover Survey	JS EP MW	4	3	60	Very Slow	Glide	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	1
WCX066	25/09/2024	—	Multidisciplinary Walkover Survey	SOR CB	4	1	25	Stagnant	Glide 100%	—	—	—	—	—	Mud/Silt 100%	Heavy (<75%)	50
WCX067	25/09/2024	—	Watercourse Crossing Survey	SOR CB	5	3	NA	Stagnant	Glide/Pool	Cobble 5%	Gravel 10%, Sand 10%	—	—	Organics	Silt 75%	Light (<25%)	10
WCX068	25/09/2024	—	Watercourse Crossing Survey	SOR CB	6	4	15	Stagnant	Glide	Cobble 5%, gravel 5%	Boulder 10%	—	—	—	Silt 80%	Heavy (<75%)	30
WCX069	Verification Survey (June to October	—	Watercourse Crossing Survey	SC RA	8	3	NA	High	Glide/Riffle	—	—	—	—	—	—	—	—
WCX070	Verification Survey (June to October	—	Multidisciplinary Walkover Survey	SOR CB	5	NA	10	Stagnant	—	—	—	—	—	—	Silt	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WCX064	water mint, duckweed, sparganium, fools watercrest	0	canary grass,willow, nettle, thistle, birch, willowherb,	Yes	Q value estimated (2017) 2024: *gammarus* 50 great diving beetle larvae 1 fresh water louse 20 three spine stickleback 1	Q2 (2017) Q2-Q3 (2024)	cattle access, modification, bank trampling.	No potential — No suitable habitat. No flow, and peaty substrate. Not suitable for crayfish	None recorded. No potential.	None recorded. Limited potential.
WCX065	Reed canary grass, fools watercress, duckweed,	0	Alder, canary grass, beech, willow, meadowsweet nettle, bramble hawthorn,	Not assessed	Q value estimated	Q2 (2017)	Agricultural and rubbish	Low potential — Potential for juvenile lamprey due to silt beds. No potential for salmonids — no spawning gravels observed, silt and organic substrate, low flow, poor quality.	None recorded. Low potential — no spawning potential but suitable salmonids habitat — pool and riffles, undercut banks, instream vegetation.	None recorded. Low potential — silt beds
WCX066	Fools water cress	0	Sycamore, hawthorn, nettle, ivy, bramble, thistle, ash	Not assessed	Not assessed	Not Assessed	Historical modification, no gradient for flow, heavily silted	No potential — No suitable habitat	Potential	Low Potential
WCX067	Bur-reed, flag iris, duckweed, watercress	0	Ash, hawthorn, bramble, blackthorn , nettle, hogweed, meadowsweet, thistle, dogrose	2020: Yes	2020: Isopods, worm, flatworm, gamarous, snail	Q2	Agriculture and siltation	No potential — low flow, silt substrate, no suitable gravels or riffle.	No potential.	No potential.
WCX068	Watercress, reed, willowherb, phragmites	0	Hawthorn, ash, ivy, bramble, willow	Yes (2017, 2020) 2024: No access to channel	2017: *Asellus* (dominant), *baetis, tubifex, coleopteran,* and *hirudinea* 2020: Isopods, worm, flatworm, gamarous, snail	Q3 (2017) Q2 (2020)	Cattle access on LB	Good — suitable spawning gravels approx. 200m us of wayleave. Riffle flow. Undercut banks. Overhanging vegetation. No suitable silt beds for juvenile lamprey.	None recorded. Good potential.	None recorded. Moderate potential — suitable spawning gravels approx. 200m us of wayleave. No suitable silt beds for juvenile lamprey. None recorded during kick net sweep and hand search along length of otter transect.
WCX069	—	—	Leylandii, ash, hazel, hawthorn	Not assessed — No access	Not assessed	Not Assessed	Cattle access	Moderate — some spawning gravels and riffle within wayleave. Undercut banks and overhanging vegetation. Silt beds with potential for juvenile lamprey	None recorded. Moderate potential.	None recorded. Moderate potential — Silt beds with potential for juvenile lamprey.
WCX070	—	—	—	Not assessed — No access	Not assessed	Not Assessed	Cattle access	Low potential	None recorded. Low potential.	None recorded. Low potential.

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WCX064	None recorded. No potential.	None recorded. No potential.	None recorded	Yes	Yes	No spawning or nursery habitat for salmon. Three scoop tests negative for lamprey although it's ideal habitat. Otter and kingfisher commuting and foraging habitat. Enrichment at cattle access. poor water quality. No cobble present.	Medium	Open Trench	Y	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel D/S contains BT
WCX065	No potential	2019: Run and slides from edge of field into water	None recorded	Yes	None recorded	Couldn't undertake kick sampling as heavily sedimented and overgrown. Lots of rubbish and debris. King fisher recorded perched on branch hanging over the stream. Flying along the stream. No evidence of otter. Poor watercourse for salmonids but holds potential. Unknown substrate to comment on spawning habitat. Sediment there for lamprey.	Medium	Open Trench	Y	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel D/S contains BT
WCX066	No potential.	No potential.	None recorded	No	None recorded	No access down, too steep and heavily silted. No substrate visible, only silt. Potential for lamprey, may hold brown trout in winter. Commuting habitat only for kingfisher and otter. Poor water quality. Modified channel, very steep and heavily silted. No salmonid spawning or nursery habitat. Very limited potential for fish. No suitable habitat for crays.	Low	Open Trench	Y	Not on IFI GIS database, but IFI recorded a "Complete" barrier d/s river, located nearby.	IFI GIS database channel U/S contains Sal and BT
WCX067	Potential	None recorded. No potential.	None recorded	No	None recorded	Stagnant modifed channel. No spawning or nursery habitat. no fish potential.Amphibian spawning potential.Fenced off. from grassland. Previously recorded as wet.	Medium	Open Trench	Y	On IFI GIS database as being "Complete" barrier.	IFI GIS database channel D/S contains BT
WCX068	None recorded. No potential — lack of in—stream vegetation.	None recorded. Otter potential.	2019: Three spined stickleback recorded 2020: Kick sample dominated by worms	Yes	None recorded	Very limited salmonid potential, stagnant culverted channel. Limited potential for lamprey. No spawning or nursery habitat. No crayfish habitat. Water poor quality. No access to channel, viewed from gap in hedge.	Medium	Open Trench	Y	On IFI GIS database as being "Complete" barrier.	IFI GIS database channel D/S contains BT
WCX069	None recorded. Low potential — Undercut banks and overhanging vegetation but no instream vegetation.	None recorded. No potential.	None recorded	Yes	None recorded	20cm bank height. High TSS 2019 and 2020: Limited land access — accessed wayleave from public road. Watercourse runs through woodland as drawn and not along WFD route	Medium	Open Trench	Y	On IFI GIS database as being "Complete" barrier.	IFI GIS database channel D/S and U/S contains BT
WCX070	None recorded. Low potential.	None recorded. Low potential.	None recorded	Yes	None recorded	Unmanaged, enrichment and sedimentation present. Can't be kick sampled due to poor access and vegetation. Not suitable to kicksample or to enter, completely overgrown with vegetation, no spawning or nursery habitat present, no fishery value, no otter potential. No lamprey potential	Medium	Open Trench	Y	On IFI GIS database as being "Complete" barrier.	IFI GIS database channel D/S contains BT

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WCX071	TWE-9000	FW2 — Depositing/Lowland River	LIFFEY_140 (IE_EA_09L011700)	Liffey	POSSECKSTOWN 09	09_1644	Good	No	No	—	—	22/08/2017	29/08/2018	10/10/2019	01/09/2020	—	27/07/2022	—
WCX072	TWE-9100	FW2 — Depositing/Lowland River	LIFFEY_140 (IE_EA_09L011700)	Liffey	ARDRASS_LOWER	09_726	Good	No	No	—	—	22/08/2017	29/08/2018	10/10/2019	01/09/2020	—	06/10/2022	—
WCX073	TWE-9800	FW2 — Depositing/Lowland River	LIFFEY_140 (IE_EA_09L011700)	Liffey	Liffey	09_291	Good	No	No	—	03/11/2016	22/08/2017	29/08/2018	10/10/2019	07/09/2020	—	28/07/2022	—
WCX074	TWE-11400	FW2 — Depositing/Lowland River	REEVES_010 (IE_EA_09R140550)	Liffey	REEVES	09_2200	Good	No	No	—	16/11/2016	22/08/2017	31/08/2018	26/09/2019	01/10/2020	—	07/10/2022	—
WCX075	TWE-10100	FW4 — Drainage Ditch	LIFFEY_140 (IE_EA_09L011700)	Liffey	FRIARSTOWN 09	09_532	Good	No	No	—	—	—	12/09/2018	25/09/2019	01/10/2020	—	—	—
WCX076	TWE-9700	FW2 — Depositing/Lowland River	LIFFEY_140 (IE_EA_09L011700)	Liffey	ARDRASS_UPPER	09_992	Good	No	No	—	—	—	—	—	—	—	06/10/2022	—
WCX077	Off Pipeline	FW2 — Depositing/Lowland River	KILMASTULLA_050 (IE_SH_25K041000)	Lower Shannon	Kilmastulla	25_3881	Moderate	Yes (SAC: 002165 and SPA: 004077)	Yes	0	—	—	—	—	—	22/04/2021 (JACOBS)	12/07/2022	—
WCX078	Off Pipeline	FW1 — Eroding/Upland River	CAMCOR_050 (IE_SH_25C020700)	Lower Shannon	Camcor	25_13234	Good	Yes (SPA: 004137)	Yes	3,723	—	—	—	—	—	—	—	—
WCX079	Off Pipeline	FW2 — Depositing/Lowland River	FIGILE_030 (IE_SE_14F010200)	Barrow	CLONCANT	14_991	Moderate	Yes (SAC: 002162)	Yes	16,182	—	—	—	—	—	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WCX071	25/09/2024	—	Watercourse Crossing Survey	SOR CB	4	NA	NA	Stagnant	Glide	—	Cobble	Gravel	—	—	Silt	Heavy (<75%)	5
WCX072	25/09/2024	—	Watercourse Crossing Survey	SOR CB	3	Dry	Dry	Dry	Glide	—	Clay and cobble	—	—	—	Silt	Light (<25%)	None
WCX073	25/09/2024	—	Watercourse Crossing Survey	SOR CB	45	35	2	Moderate	Glide 100%	—	—	—	—	—	—	Light (<25%)	3
WCX074	23/08/2024	—	Multidisciplinary Walkover Survey	SN UB	5	2.5	50	Very slow	Glide	—	—	—	Boulder 33%, Cobble 33%, Silt 33%	—	—	Light (<25%)	40
WCX075	Verification Survey (June to October	—	Watercourse Crossing Survey	JS JG	4	1	10	No flow	No flow	—	—	—	—	—	Silt	Full (>75%)	80
WCX076	22/10/2024	—	Multidisciplinary Walkover Survey	JF MB	8	7	NA	Stagnant	—	—	—	—	—	—	—	Heavy (<75%)	None
WCX077	27/08/2024	—	Watercourse Crossing Survey	SOR CB	7	—	—	—	—	—	—	—	—	—	—	Light (<25%)	—
WCX078	04/09/2024	21/05/2025	Multidisciplinary Walkover Survey	AS SOR	15	15	50	Moderate	Glide 70%, Riffle 20%, Pool 10%	—	—	Silt and Mud 25%, Sand 25%	Boulder 50%	—	—	Heavy (<75%)	<1
WCX079	24/09/2024	—	Multidisciplinary Walkover Survey	SOR	7	4	—	Very Slow	Stagnant	—	—	—	—	—	Peat and Silt 100%	Light (<25%)	None

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WCX071	Fools watercress	—	Willowherb, bramble, mint hawthorn, hogweed, willow, alder, dock, buttercup.	2017 : Not assessed — no flow, heavily vegetated 2020: Yes 2024: Not assessed	2020: *Gammarus,* mayfly, flatworm	Q1—Q2; Q2 (2017;estimated) Q3 (2020)	—	No potential — some gravels approx. 150m ds of wayleave. Mainly silt substrate and heavily vegetated. Low flow.	No potential.	No potential.
WCX072	None	0	Ash, ivy, bramble, hogweed, blackthorn, guelder rose, meadowsweet, willowherb	Not assessed — no flow	Q value estimated	Q2 (2017)	—	No potential — no gravels or riffle habitat. Watercourse was heavily vegetated with silt substrates and no flow.	No potential.	No potential — silt substrates not suitable for juvenile lamprey, no spawning gravels in close proximity.
WCX073	Spargarium and flag iris	—	Canary grass, willow, willow herb, nettle, silver weed, dock	Not assessed — too deep	Not assessed	Not Assessed	Cattle access to section of river causngf sedimentation and bank erosion	Good — River in flood so unable to assess substrate. Likely to be high potential for spawning gravels. Also likely to be suitable silt beds during low flow conditions for juvenile lamprey.	2017: Salmon, trout recorded Potential	None recorded. Lamprey potential.
WCX074	Watercress, reed canary grass, bur reeed	0	Ash, ivy, bramble, willowherb, meadowsweet, hogweed, dandelion, nettle, ash	2016: Yes 2018: Visual	2016: *Gammarus,* water louse, stonefly, cased caddis, simulidae, riffle beetle	Q2—Q3 (2016) Q1—Q2 (2018)	Agricultural Pressures, sediment run—offs	No potential — High siltation and no flow. Sediment also not suitable	None recorded. No potential.	None recorded. No potential.
WCX075	duckweed, watercress, bur-reed, common reed, bramble	0	Willow, hawthorn, bramble, nettle	Not assessed — No flow	Not assessed	Not Assessed	Agricultural runoff	No potential — No suitable habitat	None recorded. No potential.	None recorded. No potential.
WCX076	—	—	Hawthorn, ash, bramble, ivy, dog rose, nettle	Not assessed	Not assessed	Not assessed	Agriculture, tunneling	No Potential	None recorded No Potential	None recorded No Potential
WCX077	—	—	Bramble, bracken, willow, sycamore, willowherb, Himalayan balsam, canary grass	Yes	Stonefly 10 *Gammarus* 5 *choronomid* 2 hungerfords crawling beetle 1 *baetis* 30 caseless caddis 1 *Serratella* mayfly 1	Q3-Q4	Surface water runoff and pollution from construction	Spawning and nursery habitat present	Salmon and brown trout recorded in 2024 Potential	Lamprey scoop test carried out - positive- 5 lamprey 0-2+ years old. Potential
WCX078	watercress	<1	Riparian woodland	Not assessed	Not assessed	Not assessed	Agriculture	—	Potential	Potential
WCX079	—	0	Ash, hawthorn, willow, bramble, bracken, nettle, bindweed	Not assessed	Not assessed	Not assessed	Peat extraction	None	Potential	Potential

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WCX071	Low potential — silt substrate, heavily vegetated and low flow.	No potential.	None recorded	Yes	None recorded	Modified channel. Not suitable for kicksample as watercourse is dry and heavily vegetated, steep overgrown banks, couldn't gain access, no otter potential, no fishery value, no spawning or nursery habitat.Limited holding area for salmonid. Channel dry in summer months. Poor quality channel no spawning or nursery habitat for salmonid.	Medium	Open Trench	Y	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	IFI GIS database channel U/S contains Sal and BT
WCX072	Low potential — silt substrate, heavily vegetated and no flow.	No potential.	Potential	Yes	None recorded	Runs parallel to Ardrass lower stream. Modified channel, dry and heavily vegetated. Stagnant. No aquatic potential	Medium	Open Trench	Y	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	IFI GIS database channel U/S contains Sal and BT
WCX073	2017: Crayfish recorded. Potential	2016: Otter holt recorded 160m south of Wayleave. 2017: Otter (trails) recorded within Wayleave.	2017: Kingfisher, daubentons's bat recorded.	Yes	2019: Himalayan balsalm. One stand of balsam on bank of Liffey amongst willow, surrounded by floodwaters at present. 2020, 2022, 2024: Himalayan balsam on banks of Liffey,upstream and downstream.	Good salmonid river,for sea trout, salmon and brown trout good habitat for spawning and nursery potential contain lamprey. Foraging, commuting and resting habitat for otter and KF.	High	Trenchless	Y	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel U/S contains Sal and BT
WCX074	2016: Crayfish caught.	None recorded. No potential.	2016: Stickleback caught. 2018: Small fish seen minnow or stickleback.	No	2024 — Himalayan balsam	Slow flow. Heavy instream vegetation. Choked with watercress and reeds in places. Little to no aquatic potential.	Medium	Open Trench	Y	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database adjacent tributary contains Sal and BT
WCX075	None recorded. No potential.	None recorded. No potential.	None recorded	No	None recorded	Nutrient input from agriculture process leading to excess duckweed growth. Inactive badger sett in middle if pipeline route. 2020: Eutrophic FW4, very turbid water. Large covering of duckweed.	Low	Open Trench	Y	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	IFI GIS database channel U/S contains Sal and BT
WCX076	None recorded No Potential	None recorded No Potential	None Recorded	No	—	Heavily tunneled, Very slow to stagnant water. Heavily shaded by adjacent hedge. No aquatic potential	Low	Trenchless	Y	Not on IFI GIS database, but IFI recorded a "SAL" river located immediately nearby.	IFI GIS database channel D/S or U/S contain Sal or BT
WCX077	Potential	Potential	None recorded	Yes	Himalayan balsam	Otter potential. Salmon and brown trout present. Good natural river. Cormorant and heron seen along stream.Currently active construction due to new road and bride - silt curtains in place - some vegetation removed	High	Trenchless	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel U/S contains Sal and BT
WCX078	Potential	—	—	No	None recorded	—	Medium	Open Trench	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel D/S contains Sal and BT
WCX079	No Potential	Potential	—	No	None recorded	Modified straight uniform channel, glide profile. Potential for brown trout not salmon. Not suitable for crayfish. No nursery or spawning habitat. Peat stained water, visibility limited. Foraging and commuting for kingfisher and otter, can't access down, dense and steep slope.	Medium	Overhead Line (Power to Line Valves)	Y	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	IFI GIS database channel U/S contains BT

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Chainage	Fossitt Category	WFD Waterbody and EU Code	Catchment	EPA Name	EPA Segment Code	WFD Status (2019-2024)	Links to European Site	European Site with Aquatic Feature of Interest?	Direct Distance to Closest European Site (m)	Survey Dates							
											2016	2017	2018	2019	2020	2021	2022	2023
WCX080	Off Pipeline	FW2 — Depositing/Lowland River	FIGILE_030 (IE_SE_14F010200)	Barrow	CODD	14_1459	Moderate	Yes (SAC: 002162)	Yes	16,219	—	—	—	—	—	—	—	—
WCX081	TWA-4900	FW1 — Eroding/Upland River	KILCOMIN STREAM_030 (IE_SH_25K150085)	Lower Shannon	DERRINCLARE	25_2707	Moderate	Yes (SAC: 000585)	Yes	3,692	—	—	—	—	—	—	—	—
WCX082	TWC-22900	FW2 — Depositing/Lowland River	ESKER STREAM_020 (IE_SE_14E010200)	Lower Shannon	RATHLUMBER	14_1001	Moderate	Yes (SAC: 002162)	Yes	14,526	—	—	—	—	—	—	—	—
WCX083	Off Pipeline	FW2 — Depositing/Lowland River	FIGILE_020 (IE_SE_14F010100)	Barrow	Figile	14_988	Moderate	Yes (SAC: 002162)	Yes	16,509	—	—	—	—	—	—	—	—
WCX084	Off Pipeline	FW4 — Drainage Ditch	CAMCOR_040 (IE_SH_25C020600)	Lower Shannon	Island Long	25_2424	Good	Yes (SPA: 004137)	Yes	5,599	—	—	—	—	—	—	—	—
WCX085	Off Pipeline	FW2 — Depositing/Lowland River	DAINGEAN_030 (IE_SE_14D060400)	Barrow	Daingean	14_1554	Poor	Yes (SAC: 002162)	Yes	14780	—	—	—	—	44061	—	—	—

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	2024	2025	Field Survey	Surveyor	Bank Width (m)	Wetted Width (m)	Average Water Depth (cm)	Velocity	Flow	Substrate % Cover						Crown Closure (%)	Macrophyte % Cover
										<5	<10	<25	<50	<75	75-100		
WCX080	16/10/2024	—	Multidisciplinary Walkover Survey	SN UB	—	1	Unknown	Stagnant	Glide 90%, Riffle 10%	—	—	—	—	—	Silt and Mud 100%	Light (<25%)	—
WCX081	09/07/2024	—	Multidisciplinary Walkover Survey	JS MB	2.5	0.5	20	Slow	—	—	Gravel 10%	—	—	—	Silt and Mud 80%	Heavy (<75%)	—
WCX082	15/10/2024	—	Multidisciplinary Walkover Survey	SN UB	4	2	Unknown	Slow	—	—	—	—	Silt and Mud 40% Gravel 30%, Cobble 30%	—	—	Light (<25%)	—
WCX083	06/08/2024	—	Multidisciplinary Walkover Survey	JF MB	5	2	Unknown	Slow	—	—	—	—	—	—	—	Medium (<50%)	—
WCX084	04/09/2024	21/05/2025	Multidisciplinary Walkover Survey	AS SOR	8	Dry	Dry	Dry	No flow	—	—	—	—	—	—	Full (>75%)	—
WCX085	Verification Survey (June to October	45890	Multidisciplinary Walkover Survey	JS EP	12	9	1.5	Very slow	Very slow	—	—	—	—	—	Mud/Silt 100%	Light (<25%)	30

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Type of Macrophyte	Filamentous Algae (%)	Type of Riparian	Kick Sample	Kick Sample Results	Q Value	Pressures	Spawning Habitat		
									Salmonid	Lamprey
WCX080	duckweed minor	—	Ash, birch, hawthorn, elder	Not assessed	Not assessed	Not assessed	Modification	—	No potential	No potential
WCX081	—	—	Hawthorn, blackthorn, ivy, greater willowherb	Not assessed	Not assessed	Not assessed	—	—	No potential	No potential
WCX082	Fools watercress, duckweed minor	20% brown algae	Hawthorn, ash, canary grass, grey willow, white willow, nettle	Not assessed	Not assessed	Not assessed	—	—	Potential	No potential
WCX083	Fools watercress, duckweed minor, Potamogeton natans	—	Alder, bramble, hogweed, nettle, hawthorn, thistle, willowherb, bindweed, meadowsweet	Not assessed	Not assessed	Not assessed	Vegetation encroaching	—	Potential	No potential
WCX084	—	—	Scrub	Not assessed	Not assessed	Not assessed	Agricultural	—	No potential	No potential
WCX085	Fools watercress,water plantain, pondweed species	30	Fools watercress, ash, hawthorn, nettle, lily, horsetail, cow parsley	Not assessed	Not assessed	Not assessed	Algae on surface and possibly oil	Yes	Potential	Potential

Table 3: Watercourse Crossing Data

Waterbody Crossing ID	Protected Species			Potential for QI Species	Invasive Species	Comments	Rank	Crossing Methodology	Salmonid Watercourse (Y/N)	Salmonid Watercourse Notes	IFI WFD Rivers Fish Ecological status Data 2008-2022
	Crayfish	Otter	Other								
WCX080	No potential	—	—	No	—	—	Medium	Overhead Line (Power to Line Valves)	Y	Not on IFI GIS database, but IFI recorded a "SAL" river located d/s or nearby.	IFI GIS database channel U/S contains BT
WCX081	No potential	—	—	Some aparent tufa substrate recorded in places	—	Heavily modified channel, recently cleared and dug deeper. Culverted. Stagnant water.	Medium	Overhead Line (Power to Line Valves)	Y	On IFI GIS database as being a "NSS" watercourse.	IFI GIS database channel D/S contains BT
WCX082	No potential	—	—	No	—	Very overgrown with lots of shade from overhanging trees. Field drainage pipes discharging at a number of locations.	Medium	Overhead Line (Power to Line Valves)	N	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel D/S and U/S does not contain Sal or BT
WCX083	No potential	—	—	No	—	Slow flowing shallow watercourse, sediment and algae present. Stagnant water upstream of bridge heavily shaded with few macrophytes.	Medium	Overhead Line (Power to Line Valves)	Y	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel D/S and U/S contains BT
WCX084	No potential	—	—	No	—	Completely dry drain/stream but recorded as an EPA river	Low	Open Trench	Y	Not on IFI GIS database, but IFI recorded an "NSS" watercourse d/s or nearby this crossing.	IFI GIS database channel D/S or U/S does not contain Sal or BT
WCX085	Potential	Potential	—	Yes	—	—	Medium	Overhead Line (Power to Line Valves)	Y	On IFI GIS database as Sal/ST River "SAL"	IFI GIS database channel D/S and U/S does not contain Sal or BT