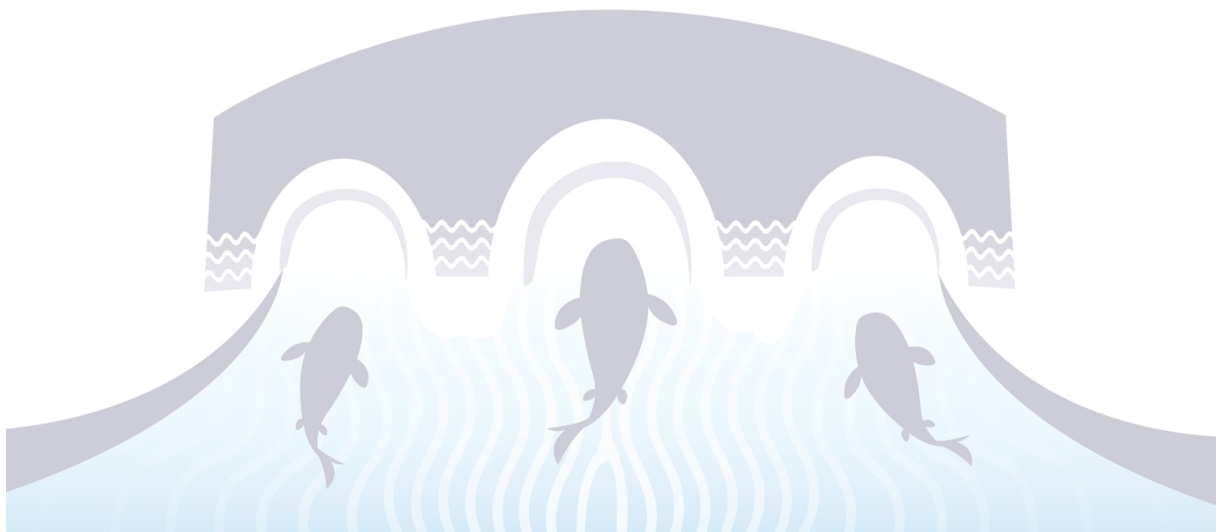




National Barrier Mitigation Programme

Ballyragget Weir Barrier Mitigation Project

Civil/Structural Consultancy Services



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1 General Project Details

Inland Fisheries Ireland (the Client) is seeking to appoint a Consultant to provide Civil/structural Engineering Consultancy Services to assist the Client in undertaking phase 1, 2 and 3 of the IFI project lifecycle by conducting a feasibility and options selection process which will then inform a preliminary design for barrier mitigation. Further details are set out in section 2 of this document. IFI Project Phases are detailed in Figure 1 IFI Phases aligned with CWMF key life cycle Stages i-v below:

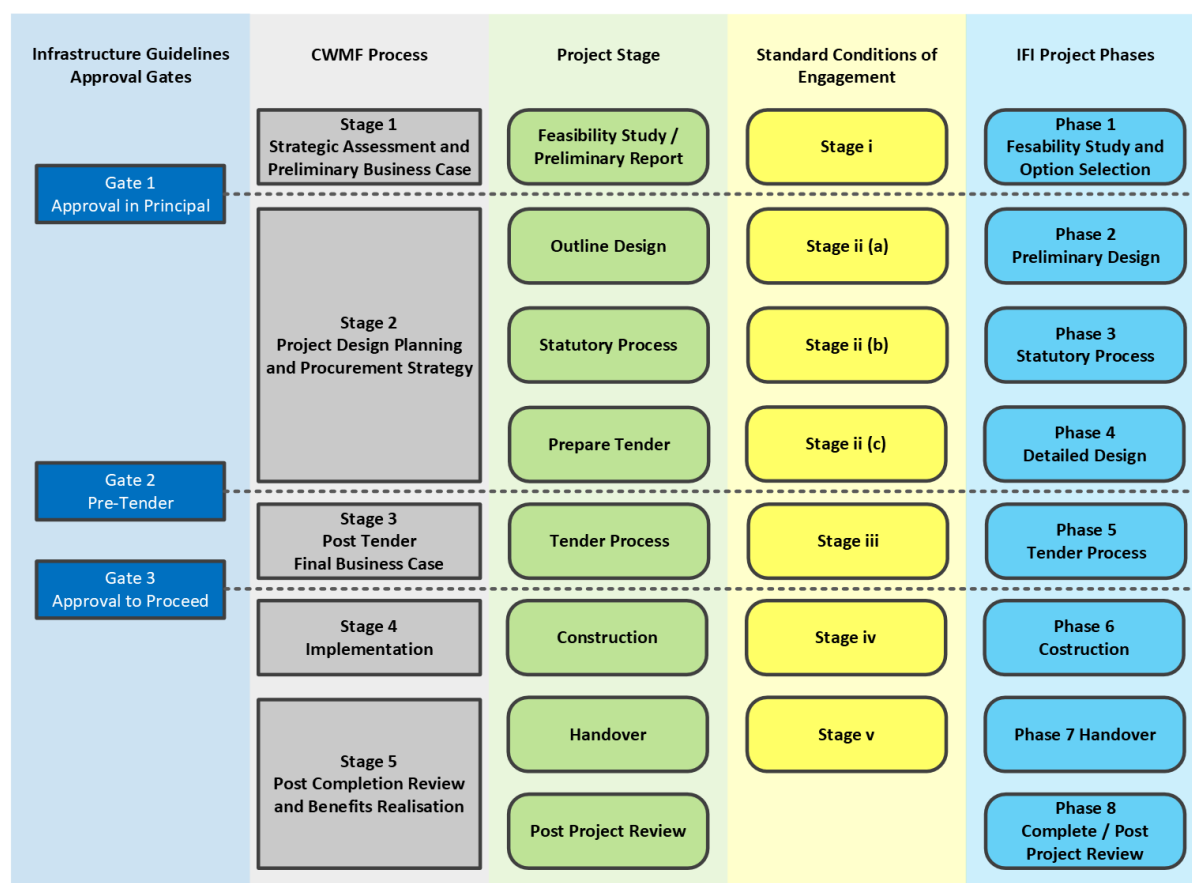


Figure 1 IFI Phases aligned with CWMF key life cycle Stages i-v

The successful consultant shall be initially appointed to undertake Phase 1-3. Following the completion of each Phase, there may be a break in the Consultant's appointment. IFI reserve the right to subsequently reappoint the successful Consultant to undertake the next Phase in the project or to terminate the appointment at that point.

1.1 National Barrier Mitigation Programme

Over the past three decades, there has been growing global recognition of the need to maintain and restore free movement of migratory and non-migratory fish within rivers to allow them to complete their life cycles. In Europe, this principle is now well established. Since 1992, three key pieces of European Union legislation have expanded the focus of fisheries management and fish protection beyond commercially important salmonids to encompass all fish species:

- the Habitats Directive (92/43/EEC),
- the Water Framework Directive (2000/60/EC), and
- the Eel Regulation (EC/1100/2007).

In addition, the EU Biodiversity Strategy for 2030 – “Bringing nature back into our lives” (building on the earlier 2020 Strategy) commits to restoring river ecosystems by removing or adapting barriers to fish passage, re-establishing connectivity, and restoring spawning and nursery habitats in Europe’s rivers.

A central concept across these legislative frameworks is river continuity, which is especially emphasised under the WFD. River continuity is a core environmental objective and a key indicator in assessing whether a water body achieves Good Ecological Status (GES) or Good Ecological Potential (GEP). To reach this standard, a river must be able to support populations of all naturally occurring migratory and non-migratory fish that were present prior to the construction of man-made barriers. This requires sufficient longitudinal connectivity to permit free movement of all migratory fish species. Where water bodies fail to meet GES/GEP, the WFD obliges Member States to implement measures to improve their ecological condition.

1.2 Project Objectives

The Barrier Mitigation Project (detailed in Section 2) aims to mitigate the impacts of the identified barrier on fish passage and restore more natural river processes along the associated river. The project objectives are as follows:

1.2.1 Restore Longitudinal Connectivity

- a. Remove/mitigate identified barriers to restore longitudinal connectivity
- b. Re-establish or improve upstream access for key migratory species including Atlantic salmon (*Salmo salar*), sea trout (*Salmo trutta trutta*), Sea Lamprey (*Petromyzon marinus*), River lamprey (*Lampetra fluviatilis*), and European eel (*Anguilla anguilla*), as well as improving connectivity for resident fish populations which are known to include Three-spined stickleback (*Gasterosteus aculeatus*), Stone loach (*Barbatula barbatula*), Minnow (*Phoxinus phoxinus*), Brook lamprey (*Lampetra planeri*), and Brown trout (*Salmo trutta*).

1.2.2 Reinstatement of Sediment and Hydromorphological Processes

- a. Reduce sediment trapping by weirs, fords and culverts and restore natural sediment transport processes, contributing to improved channel function downstream.
- b. Implement riverbank stabilisation, regrading, and re-vegetation measures to support channel recovery and habitat diversity if and where deemed necessary.

1.2.3 Promote Environmental and Ecological Enhancement

- a. Enhance spawning and nursery habitat for salmonids and other native fish species.

- b. Contribute to the delivery of Water Framework Directive (2000/60/EC) objectives by supporting “High Ecological Status” classification.

1.2.4 Enable Circular Economy Outcomes

- a. Maximise opportunities for the reuse of demolition arisings (e.g. use of suitable stone or concrete in other local works).
- b. Investigate sustainable management and reuse of sediments in landscaping, restoration, or local authority projects, subject to testing and regulatory compliance.

1.2.5 Support Policy and Regulatory Compliance

- a. Ensure compliance with all relevant environmental and planning legislation, including the Habitats Directive (92/43/EEC), Water Framework Directive, and EU Eel Regulation (1100/2007).
- b. Align with national and EU climate, biodiversity, and water management strategies, including the Nature Restoration Law and Ireland’s River Basin Management Plan.

1.2.6 Deliver Value for Money and Public Benefit

- a. Deliver the project in accordance with the Capital Works Management Framework (CWMF) and Infrastructure Guidelines 2023.
- b. Optimise project outcomes in terms of cost-effectiveness, sustainability, and long-term ecological and social benefit.

2 Project Description

This commission includes one Barrier Mitigation Project as detailed in Table 1 below. Details of the specific location of the project is provided in section 2.1.

Project Code	Project Barrier	County	U28 ID	GPS Co-ordinates
0814010	Ballyragget Weir	Kilkenny	15_140_286	52°47'19.8"N 7°20'35.7"W

Table 1 Barrier Mitigation Project

2.1 Ballyragget Weir

The Ballyragget Weir is a masonry cut stone structure, located on the River Nore in Ballyragget, Co. Kilkenny, the weir is located adjacent to the N77 National secondary road, refer to Figure 2. The weir was likely built to impound water for a corn/flour mill and on examination of the first edition Ordnance Survey maps (1837-1842) shows the weir, a corn mill and associated millrace. It appears that the millrace has since been infilled. There are three private landowners in addition to Kilkenny County Council, who have holdings adjacent to the weir.

Ballyragget weir is within the River Barrow and River Nore SAC 002162, the River Nore SPA 004233 and the River Nore/Abbeyleix Wood Complex pNHA 002076. From a fisheries and ecological perspective, the River Nore is designated as moderate ecological status under the WFD and its Risk Status is at risk. Ballyragget weir is within the River Barrow and River Nore SAC 002162, the River Nore SPA 004233 and the River Nore/Abbeyleix Wood Complex pNHA 002076. Mitigation of the barrier has the potential to support fish migration and open further upstream habitats within the River Nore. The River Nore is the last known habitat of the Nore pearl mussel, it is listed and reported on as a separate species (EU species code 1990) on the Annexes to the Habitats Directive.

The River Nore at this site is classified as a sixth-order stream, draining an upstream area of approximately 1,057km². The EPA have a water monitoring gauge (station number 15012) approximately 550m upstream of Ballyragget weir. This water rating is noted as subject to change due to the disintegrating weir downstream of the station that acts as the control. The catchment area is predominately used for intensive agriculture, with upland areas of forestry. The underlying geology in the immediate vicinity of the weir is Shaly fossiliferous & oolitic limestone of the Durrow Formation.

A photo of Ballyragget weir is shown in Plate 1 and detailed location maps are contained in Appendix A Location Maps

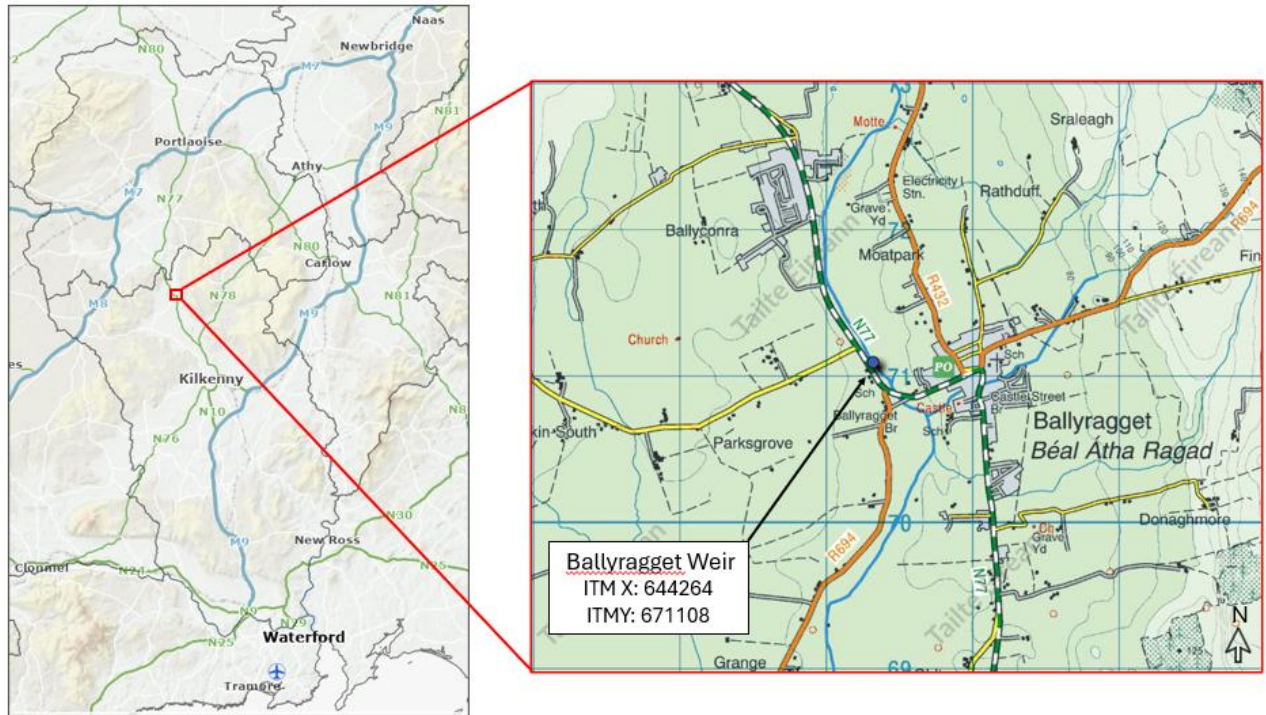


Figure 2 Location Map of Ballyragget Weir



Plate 1 Ballyragget Weir from upstream right bank during high flow conditions

2.1.1 Barrier Impact

The Ballyragget Weir represents a barrier to several fish species migrating upstream, disrupting the aquatic ecosystem and reducing biodiversity. This project has the potential to improve river connectivity and restore free passage along the River Nore and its tributaries. The barrier impact on fish species identified in the IBAST assessment can be seen in Table 2.

Species	Barrier Impact
Adult Salmon	High Risk
Salmon Smolt Downstream	Impassable
Adult Eel Downstream	None
Eel Elver	None
Shad	None
Sea Lamprey	Impassable
River Lamprey	Impassable
Brown Trout	High Risk
Pike	Impassable
Cyprinids	Impassable

Table 2 Barrier Impact

3 Project Constraints

There are a number of principal constraints on the identified project, a non-exhaustive list of which is outlined below.

3.1 Programme

For the purposes of tendering the project commencement date shall be assumed to be 10 working days after the letter of acceptance has issued.

The Project Phases used in this brief are those of Inland Fisheries Ireland's National Barrier Mitigation Programme's bespoke Project Management Process. These are shown in Figure 1 IFI Phases aligned with CWMF key life cycle Stages i-v.

For the successful delivery of Phases 1-3 it is the responsibility of the Consultant to generate, resource and price their own realistic and achievable programme to meet the timelines as detailed in Table 3 Timeframe for Phase Delivery, and to submit this as part of their tender.

The timeframes shown below in Table 3 Timeframe for Phase Delivery align with the Performance Periods in Schedule B to the Form of Tender.

Phase No.	Phase Description	Start Date	Length of Phase (weeks)	Deadline for Completion
1	Feasibility Study & Option Selection	12/10/2026	8	04/12/2026
(2)	(Ecological Studies - By others)	(26/04/2027)	(8)	(30/04/2027)
2	Preliminary Design	01/05/2027	12	11/07/2027
3	Statuary Process	12/07/2027	8	05/09/2027

Table 3 Timeframe for Phase Delivery

3.2 Instream Works Window

The instream construction works associated with the barrier removal/mitigations are limited to a 3-month window of 1st July to 30th September, unless a derogation is given by IFI. Works may be permitted outside of this window providing all temporary works and any necessary mitigation measures are in place prior to the close of the instream works window. However, if the works area gets flooded out then works shall cease and not recommence until the next instream works window. This condition shall be incorporated into the works requirements by the consultant.

3.3 Construction Works During Changing Weather & Flow Conditions

No construction works shall be undertaken when the river is in flood or close to flood conditions. This condition shall be incorporated into the design, phasing of construction and any works requirements prepared by the consultant.

Prior to and during the course of the construction works, accurate short- and long-term rainfall forecast for the locations shall be obtained from Met Eireann. If a heavy rainfall event is forecasted by Met Eireann within the catchment area, that may result in a flood event at the site of the proposed development, the works should be postponed or interrupted.

It is necessary to include the effects of flood management constraints in the design and construction programme and it should also be noted on the project risk register.

An EPA water monitoring gauge (station number 15012) is located on the River Nore 550m upstream of the Ballyragget Weir.

3.4 Site Access

IFI shall carry out the initial contact with landowners in relation to access. It shall be the responsibility of the Consultant to make appropriate access provisions as directed by the Client following their initial contacts with landowners (and any arrangements put in place).

All Consultant's staff or their Contractor's staff entering on landowner's property must be properly authorised by IFI in accordance with their procedures. The costs associated with complying with this and any measures required to comply with the "Code of Practice for the Prevention of the Spread of Animal Disease" shall be included in the Fee.

The Consultant shall include in their Design potential site access and compounds for the construction phase. Works may require crossing privately owned land, where temporary access routes shall need to be constructed. The temporary access routes shall be constructed upon the consultation and agreement from the landowners in consultation with IFI. IFI shall be responsible for seeking legal agreement with the relevant landowners. The land shall be reinstated to its original state following completion of works.

There shall be a requirement for access to the sites from local, regional and national roads lands. The consultant and/or any contractor appointed shall ensure that all access road and public roads on approaches to the site are kept free of debris that may have been caused as a result of the works, obtain any necessary consents from the appropriate authority, erect appropriate signage and liaise where appropriate with An Garda Síochána and the Local Authority Roads Engineer.

3.5 Client Provided Data

The Client shall endeavour to make available to the Consultant a range of existing information and datasets relevant to the project(s). The Consultant shall be responsible for reviewing the data, the Client gives no guarantees to the accuracy, sufficiency, or completeness of any information provided. Information to be made available may include (but is not limited to):

- SNIFFER/IBAST survey reports.
- IFI WFD Fish Research Team datasets and electrofishing records (accessible via IFI Open Data Portal).
- Topographical and bathymetric surveys commissioned by IFI
- Add details of any other info i.e fish data

- IFI shall appoint the necessary ecological site surveys and assessments separately, the consultant shall be required to liaise with and provide design data as required for these assessments.

The Consultant shall verify the suitability of all information for its intended use and identify any gaps that require additional survey or investigation. Where additional topographical, condition or geotechnical survey information is required, and subject to agreement, IFI shall cover the direct costs of the specialists employed in accordance with Section 4.11 Procurement. However, the appointed consultant (under this commission) shall include in their scope of works for managing the procurement of any additional survey work. All procurements shall comply with IFI and public procurement rules.

4 General Scope of Services

4.1 Overview

Inland Fisheries Ireland (the Client) is seeking to appoint a Consultant to provide Civil/Structural Engineering Consultancy Services to assist the Client in undertaking phase 1,2 and 3 of the IFI project lifecycle by conducting a feasibility and options selection process which will then inform a preliminary design for barrier mitigation followed by lodgement of the application through statutory process.

Further to the general duties outlined below, additional tasks shall be required at Phases 1-3 as detailed in this Scope of Services.

The Consultant shall co-ordinate with any other specialist as appointed by the client in relation to the project i.e. Environmental Specialist. The Consultant shall provide in a timely manner any necessary designs, drawings, reports and/or information relating to the project to enable the specialist to complete their aspect of the project.

Further to statutory approval, the consultant may be appointed to develop the design and manage the construction process. The Consultant will act as the Designer, Project Supervisor Design Process and Employer's Representative during all appointed project phases and carry out all related necessary duties.

4.2 Clients Approval to Proceed

The successful Consultant shall be initially appointed to undertake Phases 1-3 Following the completion of each Phase, there may be a break in the Consultant's appointment. IFI reserve the right to subsequently reappoint the successful Consultant to undertake the next Phase in the project or to terminate the appointment. In this circumstance, the Consultant would be paid all fees relating to the Phases they have completed. The Consultant shall therefore provide separate pricing for each of the requested phases.

4.3 General Services to be Delivered

The following should be read in conjunction with the 'Tender and Schedule' using the Standard Conditions of Engagement for Consultancy Services (Technical)' under the [Capital Works Management Framework](#).

The Client wishes to engage a suitably qualified and experienced Integrated Consultancy Team for the feasibility study and preliminary design of the identified Barrier Mitigation project. The Consultant shall be expected to draw on national and international best practice, show initiative and consider all factors in the fulfilment of their role. The Consultant shall propose measures that shall enable a cost efficient and timely delivery of the project. Given the source of funding is public funding for the project, it is essential that the consultant and any specialists/sub-consultants provide a service/product that is within any cost parameters outlined by the public spending code. This may eliminate the need for revisions at a later date, and thus speed up the development process. Designing within budget is part of the services.

In addition to the above all Consultants shall comply with the service requirements as detailed below in Table 4, Table 5, Table 6, Table 7, and Table 8. This is a non-exhaustive list.

General Duties of all Consultants	
GDA.1	Act in a professional manner and put their duty to Inland Fisheries Ireland first.
GDA.2	Avoid acts or omissions that could be deemed corrupt or fraudulent.
GDA.3	Establish office procedures for drawings and document files, etc.
GDA.4	Work closely with Inland Fisheries Ireland and formally report to the Civil Engineer/Lead Consultant.
GDA.5	In consultation with the Civil Engineer/Lead Consultant interpret to Inland Fisheries Ireland's staff, as necessary, drawing details and specification clauses. Survey and prepare records of parts of the works where specialist or other details may be required for the use of Inland Fisheries Ireland.
GDA.6	Maintain correspondence files including letters, emails, minutes of meetings, telephone notes, SMS messages etc and make available to Inland Fisheries Ireland on request.
GDA.7	Duties are to include the preparation and submission of reports detailing any incidents, unusual circumstances, information required as necessary to Civil Engineer/Lead Consultant and Authority.
GDA.8	Record the details of any occurrence or situation thought likely to cause delay or of any delays which do occur in relation to the contract and inform the Civil Engineer/Lead Consultant and Authority.
GDA.9	Provide practical advice as necessary to Inland Fisheries Ireland in relation to the project.
GDA.10	Fully comply with Irish Language requirements in accordance with the Official Languages (Amendment) Act (2021) as necessary through the course of the project.
GDA.11	Provide all services and resources necessary to deliver services for each Phase as listed under Section 5 Phase Specific Requirements.
GDA.12	Fully comply with General Data Protection Regulations (GDPR) .

Table 4 General Duties of All Consultants

Health & Safety of all Consultants	
HSA.1	Complies with the requirements of the Safety, Health and Welfare at Work Act 2005, as may be amended or supplemented from time to time; and the Safety Health and Welfare at Work (Construction) Regulations 2013.
HSA.2	Where appointed fulfil the role of Designer in compliance with Safety, Health and Welfare at Work (Construction) Regulations 2013 for all elements of the contract as appropriate. Comply with all the requirements of a Designer as set out in the Health and Safety Authority's Guidelines on the Procurement, Design and Management

	<u>Requirements of the Safety Health and Welfare at Work (Construction) Regulations 2013'</u>
HSA.3	Manage the health and safety requirements of any works/surveys/assessments to be carried out under your commission.
HSA.4	Cooperate with and provide information as requested to the PSDP.
HSA.5	The Consultant(s) shall immediately advise the Client verbally, and afterwards in writing of any accidents or dangerous occurrences, loss or damage to any personnel, third parties or property arising during the execution of their duties in relation to this project. Such accident reporting to the Client shall not relieve the Consultant of his statutory responsibilities for accident reporting to the relevant statutory authorities and/or insurers.

Table 5 Health & Safety Duties of All Consultants

	General Duties of Lead Consultant
GDL.1	The Consultant shall provide and manage a team of suitably qualified and experienced professionals for the efficient, effective delivery of this service. They shall coordinate the production of deliverables from the team members in accordance with the project programme agreed with the Client.
GDL.2	Provide a detailed Project Execution Plan for the relevant Phases of the project brief, defining how the project shall be developed and actions implemented, outlining roles and responsibilities, setting out project milestones and costs and identifying project risks.
GDL.3	The Consultant shall ensure that the design team undertakes appropriately timed and sufficient site visits to ensure an optimum design of the various elements of the project.
GDL.4	Develop a detailed programme for meeting the consultant's delivery timeframe and submit for Client approval.
GDL.5	Attend all project and health and safety meetings (allow a minimum of 2no. per month) as required by the client including the preparation of agendas, progress reports, meeting minutes, technical notes, risk registers etc. Prepare draft minutes for all meetings attended and issue to the client within one week after the meeting. All project meetings and technical meetings shall be attended by the relevant members of the design team as required.
GDL.6	Develop a Risk Management System for the project. A Project Risk Register shall be established at the start of the project and maintained throughout the project lifecycle. Assess and mitigate project risks and health and safety risks in consultation with the PSDP and other team members. Furthermore, Consultant to pay special attention to highlight and include environmental risks in the register.
GDL.7	Develop a Cost Management System to identify and mitigate, where feasible, all risks to quality, cost, and delivery of the project to designated completion date. Update as required and inform the Client as appropriate throughout the duration of the contract (allow minimum of 1no. risk update with Client per month).

GDL.8	Implement appropriate document management strategy between all parties.
GDL.9	Develop a Stakeholder Communications Plan for the project, including the identification of all relevant stakeholders and statutory bodies, a detailed schedule for engagement and details of how the engagements shall be managed and monitored. Landowners and the Local Authority(s) shall be the primary Stakeholders. Submit to Client for approval. IFI shall assist with identifying landowners and in all landowner engagements.
GDL.10	Prepare all works or other service tender documents as required under the contract in draft format initially, providing 2nr. full digital copies to the Client; first copy in word or pdf format showing tracked-changes; second copy in word or pdf format without tracked-changes.
GDL.11	Develop operational and maintenance plans for the daily management of the relevant elements of the scope of works – (e.g. the fish pass maintenance plan and methodology must be developed and agreed with IFI, prior to the award of the construction contract).

Table 6 General Duties of Lead Consultant

	Health & Safety of Lead Consultant
HSA.1	Complies with the requirements of the Safety, Health and Welfare at Work Act 2005, as may be amended or supplemented from time to time; and the Safety Health and Welfare at Work (Construction) Regulations 2013.
HSA.2	Advise the Client on health and safety matters.
HSA.3	The Consultant shall be responsible for the management (regarding health and safety) of all works/surveys/assessments/investigations to be carried out during each Phase of the project. In addition, the Consultant shall assess the competencies of any (sub)contractors/surveyors/designers to carry out the works safely and make recommendations to the Client on the competencies of all Project Supervisor Construction Stage (PSCS) appointments.
HSA.4	Fulfil the role of Designer in compliance with Safety, Health and Welfare at Work (Construction) Regulations 2013 for all elements of the contract as appropriate. Comply with all the requirements of a Designer as set out in the Health and Safety Authority's 'Guidelines on the Procurement, Design and Management Requirements of the Safety Health and Welfare at Work (Construction) Regulations 2013'
HSA.5	Manage the health and safety requirements of any works/surveys/assessments to be carried out and assess the competency of those appointed to carry out the works safely.
HSA.6	The consultant shall review the Construction Stage Safety and Health Plan provided by the PSCS to ensure compliance with legal obligations and coordinate health and safety during the construction works.

Table 7 Health & Safety Duties of Lead Consultants

PSDP Duties	
HSP.1	Complies with the requirements of the Safety, Health and Welfare at Work Act 2005, as may be amended or supplemented from time to time; and the Safety Health and Welfare at Work (Construction) Regulations 2013.
HSP.2	Advise the Client on health and safety matters.
HSP.3	Undertake and fulfil the role of Project Supervisor Design Process (PSDP) in compliance with Safety, Health and Welfare at Work (Construction) Regulations 2013 for all contracts associated with this commission.
HSP.4	PSDP to develop the Preliminary Safety and Health Plan, as outlined in current Health and Safety legislation.
	The Consultant shall submit a Preliminary Safety and Health Plan, compliant with legislative requirement. The Preliminary Safety and Health Plan shall outline key safety issues and site hazards and identify safety measures. The plan shall be issued with the tender documents to potential contractors and shall form the basis of the Construction Stage Safety and Health Plan prepared by the PSCS.
HSP.5	Comply with all the requirements of the PSDP as set out in the Health and Safety Authority's 'Guidelines on the Procurement, Design and Management Requirements of the Safety Health and Welfare at Work (Construction) Regulations 2013'
HSP.6	Attend all project health and safety meetings (allow a minimum of 1no. per month) as required by the client including the preparation of agendas, progress reports, meeting minutes, technical notes, risk registers etc.
HSP.7	Assist the client in identifying, obtaining and collating the pre-construction information and provide pre-construction information to designers.
HSP.8	Ensure that all designers including that of temporary work designers and permanent work designers comply with their duties and co-operate with each other.
	Maintain a register of all designers involved in the project.
HSP.9	Identify hazards arising from the design or from the technical, organisational, planning or time related aspects of the project. Maintain a register of all hazards and mitigations. Issue to all designers and maintain record of information and directions issued by the PSDP to any designer.

Table 8 PSDP Duties

4.4 GDPR and Data Processor Management

IFI retains overall responsibility for the protection of personal data under its control. Any data processor with whom IFI engages has an important role to play to enable IFI to comply with its regulatory obligations, which includes personal data breach notifications, where they may occur. IFI shall ensure that processing by a processor is governed by a contract. Included in this contract shall be a stipulation that the processor shall assist IFI in ensuring compliance with its obligations to implement appropriate security and to assist IFI in handling personal data breach notifications, where required. This contract shall include specifying how the requirements of “Documenting and reporting a Breach” (Art. 33.2) should be met.

Any processor which becomes aware of a breach of personal data it is processing on behalf of IFI must notify IFI without undue delay. This obligation on the processor allows IFI to address the personal data breach in a timely manner, determine the severity of the breach and assess its requirement to notify the supervisory authority and possibly affected individuals in the case of a high-risk breach.

IFI shall provide if necessary during the commission any GDPR/Data Processor forms deemed necessary for completion by the Consultant.

4.5 Progress Reports

The Consultant shall prepare Progress reports for presentation at each monthly progress meeting. Progress reports shall be issued three working days prior to the applicable progress meeting. Progress reports shall include as a minimum detail on the progress/issues under the following headings as a minimum:

- Health & Safety Issues
- Progress update
- Finances
- Programme
- Stakeholder management
- Risk management
- Register of Issues and Actions

4.6 Meetings & Workshops

The Consultant shall attend monthly progress meetings with the Client. Meetings are to include the preparation and issue of progress reports, minutes and Action/Decision lists of meetings with financial updates. Meetings to be attended by Project Manager and other key personnel as required.

Monthly progress meetings shall be held online via MS Teams, unless stated otherwise.

4.7 Stakeholder Consultation & Landowner Engagement

The Consultant may be required to undertake consultation with landowners and other stakeholders during the development of the Feasibility and Options Selection. The

Consultant shall also allow for a minimum of three day or the equivalent hours of stakeholder meetings for the site, to include landowners or other relevant state agencies (OPW, Local Authority, NPWS etc). IFI shall assist in identification and consultations with landowners and other relevant stakeholders.

4.8 Programme

It is anticipated that the commission shall commence in Mid-October 2026

The Consultant shall prepare, provide and maintain a master programme, in co-ordination with any agreed programmes prepared by others. The Consultant shall submit to the Client within 10 working days from appointment a detailed master programme for the project that shall outline the various components of each phase at commencement. The master programme shall be in Microsoft Office Project or a format agreed with the Client.

The master programme shall be updated and reissued to the Client on the completion of each Phase or Sub-Phase and as when requested by the Client. The programme shall outline the critical path in the delivery of the project to completion, highlight risks to the programme and any milestone dates that have to be achieved, e.g. seasonal surveys, etc. and shall as a minimum (non-exhaustive list) show the following:

- The planned commencement date for each Phase of the Services.
- The planned date for completion of the Services within each Phase.
- The order and timing of any activities which the consultant plans to do in order to provide the Services and meet the Milestones.
- Other information which this Scope of Services requires to be shown in the programme.

The programme shall be actively monitored, it shall be the responsibility of the Consultant to ensure the programme is on track and where required provided additional project resources to bring the programme back on track, at no additional cost to the Client.

Changes to the initial agreed programme or revisions shall be agreed with the Client and the programme revised and submitted to the client within 5 working days.

As part of monthly progress reports and meetings, the Consultant shall submit to the client the most recent agreed programme with actual progress to date marked on it and report on performance, activity, programme and progress. Any slippages and risks to the programme shall be reported on corrective action to be taken by the consultant at each progress meeting.

4.9 Public and Media Relations

The Consultant shall report immediately to the Client and assist in providing information regarding public and media relations issues that arise throughout the project. All media releases shall be undertaken by IFI directly.

The Consultant shall seek prior approval from IFI before publishing any details of the project(s) on any platform even if it is for their own company promotion.

4.10 Cost and Risk Management

The Consultant shall undertake the management of cost, value, and risk throughout the commission and provide a report at progress meetings to the client. The Consultant shall prepare an outline cost plan in accordance with the Capital Works Management Framework (CWMF). Estimates shall be benchmarked against comparable recent projects, with allowances for risks, inflation, and optimism bias, as recommended in the Infrastructure Guidelines 2023 Strategic Assessment and Preliminary Business Case.

The Consultant shall where appointed include for the completion of the Clients standard Business Case template (Appendix C IFI Business Case Template

- Business Case – Preliminary (Phase 1 Feasibility Study & Option Selection)

4.11 Procurement

Where a service provider or contractor is to be directly contracted to the client, then the Consultant shall comply with and carry out the procurement process in accordance with the timelines as detailed in Table 9 IFI Procurement Timeframes and the financial thresholds as detailed in Table 10 IFI Procurement Thresholds, unless otherwise instructed by the client. Cost for this service provider or contractor or utility provider shall be paid separately by Client.

Choice of procedure and stage (all tendering through E-Tenders)	Standard timescale Below EU Threshold	Standard Timescale Above EU Threshold (OJEU)
OPEN		
Publish RFT to receipt of responses	Publish RFT to receipt of responses	30 days
Standstill	As stated in RFT (Min 7 days)	14 days
RESTRICTED		
Publish EOI to receipt of responses	21-30 days, dependent on complexity	30 days
RFT to receipt of bids	21-30 days, dependent on complexity	25 days
Standstill	As stated in RFT (Min 7 days)	14 days

Table 9 IFI Procurement Timeframes

Inland Fisheries Ireland Procurement Thresholds (Red, Amber, Green denoting relative risk classification)

Procedure	Goods & Services Supplier or IFI Terms & Conditions	Works Related Services CWMF Terms & Conditions	Works CWMF Terms & Conditions
No quotes	Less than €500 No quotes required Endeavour to ensure best value by appropriate market research.		
Verbal Quotes	€500 - €1,000 Needs analysis and seek 3 Verbal Quotes from interested and competent providers.		
Written Quotes	€1,001 - €5,000 Needs analysis and seek 3 Written Quotes from interested and competent providers		
Select Tenders (direct invitation)	€5,000 - €50,000 Business case, conflict of Interest and seek 3 Written Tenders from interested and competent providers. Use www.etenders.gov.ie Simplified Procedure for select tendering.	Up to €50,000 Business case, conflict of Interest and seek 5 Written Tenders from interested and competent providers. Use www.etenders.gov.ie Simplified Procedure for select tendering.	Up to €200,000 Business case, conflict of Interest. Use www.supplygov.ie or seek 5 Written Tenders from interested and competent contractors. Use www.etenders.gov.ie Simplified Procedure for select tendering.
Public Tender	€50,000 - €216,000 (EU Threshold) Business case, conflict of Interest and public tender with a Contract Notice published on www.etenders.gov.ie	€50,000 - €216,000 (EU Threshold) Business case, conflict of Interest and public tender with a Contract Notice published on www.etenders.gov.ie	€200,000 - €5,404,000 (EU Threshold) Business case and public tender with a Contract Notice published on www.supplygov.ie or www.etenders.gov.ie
Public Tender (OJEU)	Above €216,000 (EU Threshold) Business case, conflict of Interest and public tender (open or restricted) with a Contract Notice published on www.etenders.gov.ie and in the OJEU	Above €216,000 (EU Threshold) Business case, conflict of Interest and public tender (open or restricted) with a Contract Notice published on www.etenders.gov.ie and in the OJEU	Above €5,404,000 (EU Threshold) Business case, conflict of Interest and public tender (open or restricted) with a Contract Notice published on www.etenders.gov.ie and in the OJEU

Requisitioners **must** aggregate expenditure where possible to ensure effective use of resources and achieve best value for money outcomes.

The estimated value of a contract is based on the total amount payable including any proposed extensions or renewal options listed in the tendering documents.

Where the estimated contract value is within 10% of an upper threshold, then the upper threshold should be applied.

Table 10 IFI Procurement Thresholds

4.12 Statutory Consent (Planning Approval)

4.12.1 Planning General

The Consultant shall review existing and proposed plannings/zonings in a 10km area around the project. The Consultant shall provide the Client with full planning advice on other development/proposals and the impact they may have on the project or vice versa. The Consultant shall undertake the following as part of the planning process:

- The consultant shall devise the planning strategy and review and refine as matters progress to enable planning consent to be obtained in a timely fashion. The aim shall be to seek a planning exemption where possible.
- Visit the site.
- Review all previously prepared planning documentation relating to existing planning history, planning brief and planning policy.
- Attend the project/design team briefing and review meetings.
- Support and evaluate the design options arising from any options appraisal process for the development site.
- Support and evaluate the consultation strategy.
- Lead on the pre-planning application discussions and negotiations with the Planning Authority and where necessary and other key consultees.
- Advise on the need for other specialist consultants for the planning process, and provide briefing, co-ordination and liaison as required.

- Advise on the need for consultation prior to submission with amenity groups and other statutory bodies. Attend meetings as appropriate, including public exhibitions.
- Liaise with other consultants regarding other specialist reports and documents required for the planning submission.
- Advise on the need for any supplementary supporting information.
- Advise on the need for supplementary presentation material and other supporting information.
- Co-ordinate and prepare the planning application ensuring provision of supporting information to enable validation of the planning application at the first opportunity.
- Administer and monitor the planning application process; provide regular progress reports.
- Arrange and attend post-submission meetings with the relevant authorities and/or IFI and other interested parties.
- Act as the lead at any planning committee meetings and report upon the outcome, recommending a course of action, as necessary.
- Obtain and comment on any planning Notification of Decision and/or conditions and negotiate variations as necessary.
- Obtain final planning decisions and advise IFI regarding any consequential planning matters.

4.12.2 Planning Exemption

The consultant shall produce all project documentation as required to seek exemptions under Section 5 of the Planning and Development Regulations 2001, as detailed below:

CLASS 35 Development consisting of—

(a) the carrying out by or on behalf of a statutory undertaker of any works for the maintenance, improvement, reconstruction or restoration of any watercourse, canal, river, lake or other inland waterway, or any lock, quay, mooring, harbour, pier, dry-dock or other structure forming part of the inland waterway or associated therewith, and any development incidental thereto,

(b) the erection or construction by or on behalf of a statutory undertaker of facilities required in connection with the operation, use or management of a watercourse, canal, river, lake or other inland waterway.

The Consultant shall liaise with the relevant Authorities with regard to obtaining planning exemptions. A minimum of two in-person meetings, per project, shall be included for this.

Where a planning exemption is not granted, the Consultant shall review and advise on the appropriate course of action. The Client shall determine the course of action and issue any necessary instructions in accordance with the Conditions of Engagement.

Separate line items have been included in the pricing document for:

1. Preparation of a planning exemption
2. Preparation of a full planning application. (Extra over/additional costs associated with)

If a planning exemption is granted then the requirement for full planning preparation and submission shall be descoped from the scope of services, and no costs will be payable for preparing a full planning application.

4.13 Documents and Drawings

4.13.1 Format

The Consultant shall be required to submit documents and drawings to the Client in digital format and if requested all documents shall also be provided in a hard copy format.

- a) All drawings in both PDF and CAD format.
- b) All documents shall be submitted to the Employer digitally in a Microsoft Office programme (Word, Excel, Project etc.) and in PDF format.
- c) All documentation shall be in English and Irish where requested.
- d) S.I. units shall be used in all cases.

4.13.2 Mapping Information

The Client shall where available, to the Consultant, the Ordnance Survey Ireland (OSI) dataset for the project at the scales and formats for which the Employer holds a licence. The Consultant may avail of the sub-consultant licence for the dataset for use only on this Project. The Client does not accept any responsibility for errors and omissions in any information or map data provided to the Consultant

4.13.3 Licenses and Copyright

Royalty-free, perpetual, non-exclusive, irrevocable, assignable license to amend/reproduce and/or use all information, drawings and reports prepared by the Consultant and their sub-consultants/specialists during the course of the project without liability to the original Designer(s) is to be included in the cost of the commission.

5 Phase Specific Requirements

5.1 Phase 1 Feasibility and Options selection

The consultant shall undertake the feasibility and option selection design, including any preliminary design necessary to deliver a safe, practical and cost-effective barrier mitigation solution. The design shall comply with relevant Eurocodes and best practice for in river works.

- a) Conduct a full review of all past site history, any safety files, previous designs, planning documentation for the site and any other relevant data sets.
- b) Visiting the Site and carrying out an initial appraisal.
- c) Assisting in the development of the Initial Project Descriptions, (Section 2 Project Description) and incorporating into a final Feasibility and Options Selection Report including, but not limited to the consideration of:
 - Project Objectives

- Quality Objectives
 - Project Outcomes
 - Sustainability Aspirations
 - Project Budget
 - other parameters or constraints
- d) Undertaking development of Project Risk Register.
- e) Assisting assembly of project team including contributions to the Design Responsibility Matrix, Information Exchanges and the Project Execution Plan.
- f) Compiling, revising and editing the Initial Project Brief on behalf of the Client.
- g) Carrying out preliminary surveys and investigations necessary for development of the Feasibility and Option Selection Report.
- h) Preliminary Hydrology and Hydraulic Review
- Review existing hydrological and hydraulic information for the site and identify the principal hydraulic controls within the study reach.
 - The Consultant shall determine whether existing modelling and datasets, supplemented where necessary by current survey information and targeted hydraulic calculations, are sufficient to assess the potential hydraulic effects of the barrier mitigation options
 - The Consultant shall identify and justify the level of any further hydraulic assessment or modelling required during Phase 2.
- i) Development of proposed mitigation options for the barrier, to include a hierarchy of preferred mitigation measures:
- i) Full removal
 - ii) Partial Removal or Breach
 - iii) Rock Ramp or Pool and Boulder Pass
 - iv) Bypass Channels
 - v) Technical Fish Pass
- j) Scope the requirements for any necessary assessments and surveys for the development of the preferred option, i.e. Geotechnical, Environmental, Cultural heritage, Hydraulic, Sediment analysis etc. (Refer to sections 6 Civil and Structural Design, 7 Hydrology and Sediments, **Error! Reference source not found. Error! Reference source not found., Error! Reference source not found. Error! Reference source not found. and 8 Cultural Heritage)**
- k) Completion of the Business Case – Preliminary (Refer to Appendix C IFI Business Case Template)

5.2 Phase 2 Preliminary Design

The consultant shall undertake the preliminary design necessary to deliver a safe, practical and cost-effective barrier mitigation solution. The design shall comply with relevant Eurocodes and best practice for in river works.

- a) Gap analysis of existing assessments and documentation including topographical and bathymetric surveys, civil, structural, geotechnical, hydraulic and environmental surveys to identify any additional assessments/surveys that may be required to apply for planning exemptions.
- b) Provide preliminary civil, structural, hydraulic and any other necessary drawings, design notes and method statements for inclusion in the preliminary design report. (Refer to sections 6 Civil and Structural Design and 7 Hydrology and Sediments)
- c) Undertake a constructability assessment for the proposed mitigations solutions to confirm the proposed barrier mitigation can be delivered safely, efficiently and with minimal environmental impact. The assessment should consider required access, site logistics and the need for any temporary works.
- d) Preparation of an outline cost plan in accordance with the CWMF for each barrier mitigation option.
- e) Scope and prepare tender and contract documents to procure any additional surveys identified. Manage any consultant and/or contractor appointed.
- f) Develop the Preliminary Construction Environmental Management Plan (CEMP).
- g) Undertake an appropriate hydraulic assessment of the Preferred Option sufficient to quantify its effects on:
 - o river levels;
 - o flow velocities;
 - o fish passage conditions;
 - o upstream and downstream flood risk;
 - o sediment processes where relevant; and
 - o associated hydraulically significant structures.
 - o The Consultant shall first assess whether existing hydraulic models and datasets, including CFRAM information, supplemented by current survey and targeted analysis, are sufficient for the required assessment.
- h) Where existing information is insufficient, the Consultant shall develop an appropriate new 2D hydraulic model. (Refer to section 7 Hydrology and Sediments)
- i) If deemed necessary, scope, procure and manage an intrusive ground investigation to characterise subsurface and sediment conditions at the barrier location. The client shall pay the appointed contractor directly (as detailed in section 4.11 Procurement).
- j) Identify, assess and manage all utility services that may be affected by the barrier mitigation project and liaise with relevant utility providers.
- k) Assist IFI in identifying all land and structure ownership and directly engage with them to secure in-principle access agreements (refer to Section 3.4 Site Access).
- l) Undertake all necessary Archaeological, Architectural and Cultural Heritage surveys and assessments (Refer to section 8 Cultural Heritage)
- m) Coordinate with the Client's separately appointed Environmental Consultant throughout Phase 1. The Consultant shall:

- provide drawings, option descriptions, construction concepts, programme information and other technical information required to facilitate ecological and environmental assessment;
- notify the Environmental Consultant of material changes to the design or construction methodology;
- incorporate environmental constraints and recommendations into development and appraisal of the options; and
- attend environmental coordination meetings and workshops as reasonably required.

For clarity, the Engineering Consultant shall not be responsible under this commission for undertaking ecological field surveys, AA Screening, preparation of a Natura Impact Statement, Ecological Impact Assessment, EIA Screening or WFD Assessment unless specifically instructed otherwise by the Client.

n) OPW Consultation and Approvals

- Undertake consultation with the OPW and prepare and submit a report with all necessary information to achieve a section 47 approval.
- The Consultant shall respond to technical queries arising from the consent process.

5.3 Phase 3 Statutory Process

The consultant shall undertake all services necessary to seek exemptions from planning and/or planning approval from the relevant Local Authorities as detailed in Section 4.12 Statutory Consent:

- a) Prepare all planning documentation including application forms, maps, drawings and supporting technical and environmental reports as required to seek exemptions from planning.
- b) Where Planning exemption is not granted following approval by the Client, prepare all full planning documentation including application forms, maps, drawings and supporting technical and environmental reports as required to seek full planning.
- c) Attend meetings and workshops with local authorities and statutory consultees (may include but not be limited to NPWS, OPW, EPA, DHLGH) and respond to clarifications and further information requests as required.
- d) Review and report on the outcome of the exemption from statutory approval process and any conditions attached.

6 Civil and Structural Design

6.1 Design General

The Consultant shall undertake the civil and structural design necessary to deliver safe, practical, and cost-effective solutions for the removal, modification, or adaptation of the barrier identified. The design shall include condition assessments of the barrier and associated structures (i.e. sluices, aprons, abutments, river walls and millraces), develop a design to include for any demolition, modification or new structure. The design shall include methodologies as necessary, and consideration of sequencing, temporary works, and site access. Risks such as uncontrolled collapse, scour, or bank destabilisation shall be identified and mitigated, and ancillary works such as bank stabilisation, utility protection, and reinstatement shall be incorporated.

Where applicable the [Design Guidance for Fish Passage on Small Barriers](#), produced by OPW in conjunction with IFI shall be followed.

The design shall consider opportunities for reuse of suitable waste material arisings from the design in line with circular economy principles, and public safety improvements through removal of redundant hazards. All designs shall align with hydraulic, sediment, ecological, and heritage requirements and comply with relevant Eurocodes, Building codes, relevant standards and codes of practice for in-river works.

Reference: [EPA Best Practice Guidelines for the preparation of resource & waste management plans for construction & demolition project](#).

6.2 Design Checking

It shall be the Consultants responsibility to ensure that all permanent and temporary design works undergo a Category 1 check as per TII's standard DN-STR-03001. A Category 1 check is defined as:

'an independent check by another engineer who may be from the Design / Assessment Team.'

The proposed independent checker(s) shall meet the requirements set out in

Appendix B Minimum Requirements for Project Team Members

The checker(s) shall be required to sign a certificate to record that they have undertaken an independent check of the design elements. This certificate shall be submitted to the client with the Design Issue as identified below.

6.3 Utilities

The Consultant shall in co-ordination with the PSDP identify all potential services, within and on the approaches to the site(s). The Consultant shall also include for undertaking site(s) services search. The Consultant shall liaise and make arrangements for temporary or permanent relocation if deemed necessary for completion of the permanent works. Cost for utility provider(s) shall be paid separately by Client.

7 Hydrology and Sediments

7.1 Hydrology

The Consultant shall prepare a Hydrological Assessment for the barrier mitigation project to ensure that all hydrological impacts of the proposed barrier mitigation measure(s) are fully understood. The assessment shall establish baseline hydrology using OPW Flood Studies Update (FSU) methodologies, supplemented by gauged flow records, rainfall–runoff analysis, and any available data from the OPW, the client shall assist in sourcing any available data. Design flows and climate change allowances shall be determined in accordance with OPW and national guidance.

7.2 Flood Risk Assessment

A Flood Risk Assessment shall be undertaken in line with *The Planning System and Flood Risk Management Guidelines* (2009) to demonstrate compliance with policy and confirm that works shall not exacerbate flood risk. The study shall assess changes in upstream and downstream water levels, floodplain interaction, and local infrastructure impacts, while also identifying potential benefits such as improved conveyance or floodplain reconnection. The Consultant shall complete a Flood Risk Assessment Report.

7.3 OPW Section 50/47 Approvals

In accordance with the Arterial Drainage Act 1945, consent is required from OPW under Section 47 for the erection or alteration of a weir and Section 50 for any construction/alteration works on bridges and culverts. The design and construction of these structures should be such that flood risks up- and / or down-stream are not increased, or, where no other viable options exist, are restricted to acceptable levels, and should comply with any flood risk management objectives and plans established for the area.

The Consultant shall undertake all necessary assessments, prepare and submit [applications for Section 47/50](#) approvals to OPW. The Consultant shall include for all necessary consultation with OPW in relation to these approvals. Consultants shall refer to OPW document: [Construction, Replacement or Alteration of Bridges and Culverts – A Guide to Applying for Consent under Section 50 of the Arterial Drainage Act, 1945](#).

7.4 2D Hydraulic Modelling

7.4.1 General Modelling Objectives

The Consultant shall develop a 2D in-channel hydraulic baseline model for the specified watercourse and its associated floodplains, for the purposes of:

- Establishing the existing hydraulic conditions across a range of flows;
- Calibration and validation, of both the hydrological inputs and the hydraulic conditions;
- Mapping velocity and depth distributions across the proposed fish passage design for determining suitability for a range of species;

- Establishing attraction flows, resting places, and velocity controls across the fish passage structure;
- Identifying flood extents and hazards, such as depths and in-channel flow velocities, for current and potential future scenarios across a range of flows;
- Modelling a suitable channel bed design profile to accommodate fish in low flow scenario above and below the structure;
- For possible future adaptation as a flood forecasting model given climate change predictions;
- For completion of OPW Section 50/47 application.

The Consultant shall develop hydrodynamic model for the watercourse as required for the purposes specified herein. The 2D model shall take account of the potential for long duration or multiple flood events and low flows. The Consultant shall extend the models sufficient distances upstream and downstream, to eliminate the potential impact of any instabilities or other effects, such as downstream boundary effects or upstream overland flow path routes, from within the area of the scheme.

7.4.2 Software

The hydraulic models shall be developed using one of the following preferred modelling software packages:

- HEC-RAS 2D
- Flood Modeller 2D, TUFLOW
- Mike 21, Mike Flood
- Delft3D
- TELEMAC-2D

7.4.3 Model Runs

The Consultant shall run the fluvial models to determine flood levels, low flows, extents, flows and other parameters as necessary for IFI to evaluate the mitigation options.

The Consultant shall run the models for design events of the full range of probabilities for the current scenario, the MRFS (10%, 1% AEPs) and HEFS (0.1% AEP) for fluvial models or as otherwise specified.

Furthermore, the consultant shall provide results for water level and water velocity for Q1, Q5, Q30, Q50 and Q95. Consultants shall also include for the effects of climate change and provide results accordingly.

7.4.4 Hydraulic Model Boundary Conditions

The Consultant shall develop boundary conditions in the hydraulic models based on appropriate flow and/or water level values.

7.4.5 Hydraulic Model Parameters

The Consultant shall determine and input to the model appropriate values for all hydraulic model parameters, including roughness, loss parameters and structure coefficients, based on:

- Survey data;
- Expert modeller judgement;
- All other relevant data and information.

7.4.6 Representation of Buildings and Structures

The Consultant shall include in the models all hydraulically significant features/structures and existing flood defences, which they deem to be effective. The Consultant may employ various methods to represent buildings, basements and their perimeter walls, where appropriate within the hydraulic models as most appropriate to the local context and the model structure / parameters, but the Consultant shall choose an approach that is appropriate to the level of detail specified herein, and provide justification of their choice within the hydraulic reporting.

The model shall allow the assessment of flood risk to properties that are located within the floodplain. The Consultant shall include full details in the Hydraulics Report of overland flow paths, for the range of events analysed that result in flood risk to properties.

Buildings shall be shown as flooded on the flood maps only if their determined floor levels are less than the predicted flood level; similarly bridges are only to be shown as flooded if the deck level (obtained from the topographical survey or LiDAR) is below the predicted flood level.

8 Cultural Heritage

8.1 General

Watercourse corridors often have a long history of industrial and community use, reflected in the presence of historic mills, bridges, fords, and associated structures along their course. The barrier is directly linked to former industrial activity, and several recorded archaeological and architectural heritage sites are in the vicinity of the project area.

The Consultant shall undertake a programme of cultural heritage assessments to establish a clear baseline of archaeological and architectural features, evaluate their significance, and assess the potential impacts of proposed barrier mitigation and river restoration works.

8.2 Archaeological Assessment

The Consultant shall undertake an archaeological assessment to ensure that any potential archaeological constraints are identified at an early stage of the project. The assessment shall be undertaken by a suitably licensed Archaeologist in accordance with the National Monuments Acts 1930–2014, the Framework and Principles for the Protection of the Archaeological Heritage (1999), and current guidance from the National Monuments Service.

The assessment shall include:

- A desk-based review of the Record of Monuments and Places (RMP), National Inventory of Architectural Heritage (NIAH), and other relevant archives to establish whether recorded archaeological, architectural or cultural heritage sites are located within or adjacent to the project footprint.
- A site walkover survey to confirm the presence or absence of visible features of archaeological interest in the vicinity of the barrier, impoundment, and associated works areas.
- Preparation of a short Archaeological Assessment Report summarising baseline conditions, identifying any potential risks to archaeological heritage, and setting out recommendations for avoidance, mitigation, or further investigation if required. The report shall include where appropriate photographs and mapping.

The archaeological assessment shall be proportionate to the scale of the proposed works and sufficient to inform the planning process. Where necessary, the Consultant shall liaise with the National Monuments Service and County Council's Heritage Officer to ensure statutory requirements are addressed.

8.3 Architectural and Cultural Heritage Assessment

The Consultant shall undertake an Architectural and Cultural Heritage Assessment of the project area to identify, record, and evaluate built heritage features that may be affected by the proposed works. The assessment shall be undertaken by a suitably qualified architectural heritage specialist in accordance with the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999, the Planning and Development Acts 2000–2023, and DHLGH guidance. The assessment shall include:

- A review of relevant datasets including the RPS, NIAH, and local authority development plans.
- A field survey to verify existing data, assess the condition and setting of known assets, and identify additional unrecorded features of merit.
- Evaluate potential impacts of the proposed barrier mitigation works on the character and setting of any heritage structure(s) and recommend mitigation or enhancement measures such as design avoidance, sympathetic repair, recording prior to alteration, or heritage interpretation.
- Preparation of a short Architectural and Cultural Heritage report summarising baseline conditions, identifying any potential risks to architectural and cultural heritage, and setting out recommendations for avoidance, mitigation, or further investigation if required. The report shall include where appropriate photographs and mapping.

8.4 Preliminary Construction Environmental Management Plan (CEMP)

The Consultant shall prepare a Preliminary Construction Environmental Management Plan (CEMP) to support the planning and design development of the barrier mitigation project. IFI's Guidelines on [Protection of Fisheries During Construction Works in and Adjacent to Waters \(2016\)](#) shall be incorporated into the design of the works and CEMP where appropriate. The preliminary CEMP shall as a minimum consider the following areas:

- Roles, Responsibilities & Communication
- Environmental Risk Assessment
- Ecology & Biodiversity Protection Measures
- Water Management & Pollution Prevention Measures
- Sediment Management Measures
- Waste & Materials Management Measures
- Air Quality & Dust Control Measures
- Noise & Vibration Management
- Working hours and Seasonal Restrictions
- Traffic & Transport Management
- Monitoring, Inspections & Reporting

8.5 Waste Management & Circular Economy

The Consultant shall consider as part of the design and for inclusion as part of the preliminary CEMP a waste and circular economy plan for the project, setting out how construction and demolition arisings, retained sediments, and other materials shall be managed sustainably in accordance with the Waste Management Acts 1996–2023, the European Communities (Waste Directive) Regulations 2011, and relevant EPA guidance. The Consultant as part of their design prioritise waste prevention, reuse, and recycling in line

with Ireland's Circular Economy Act 2022 and the Waste Action Plan for a Circular Economy (2020–2025), ensuring that project delivery aligns with national sustainability and climate objectives.

The plan shall identify and quantify all waste streams likely to arise from the works, including masonry, concrete, metals, sediments, vegetation, soils, and potential hazardous materials such as asbestos or contaminated sediments. It shall assess opportunities for reuse and recycling, such as incorporating suitable demolition arisings into river restoration or fish-pass construction, or beneficial reuse of uncontaminated sediments in landscaping and floodplain enhancement and set out a materials management hierarchy identifying disposal routes only where reuse or recycling is not feasible. The Consultant shall ensure full compliance with waste permitting and licensing requirements (EPA, local authority, NPWS) and integrate pollution prevention and waste minimisation measures into the Preliminary CEMP.

Reference: [EPA Best Practice Guidelines for the preparation of resource & waste management plans for construction & demolition project.](#)

Appendix A Location Maps

Appendix B Minimum Requirements for Project Team Members

As per the Framework, the minimum qualifications and particular requirements for the personnel listed are detailed below.

Project Director shall:

- a) have Level 8 qualification in Civil Engineering recognised by Quality and Qualifications Ireland (QQI) or an equivalent qualification; and
- b) be a Chartered Member of Engineers Ireland or a Chartered member of an equivalent professional body; and
- c) have at least 120' months post-graduate experience (from Level 8 qualification gained above) in the delivery and management of civil engineering projects.

Project Manager shall:

- a) have a Level 8 qualification in Civil Engineering recognised by Quality and Qualifications Ireland (QQI) or an equivalent qualification; and
- b) be a Chartered Member of Engineers Ireland or a Chartered member of an equivalent professional body; and
- c) have at least 120' months post-graduate experience (from Level 8 qualification gained above) in the delivery and management of civil engineering projects.

Design Team Lead shall:

- a) have a Level 8 qualification in Civil Engineering recognised by Quality and Qualifications Ireland (QQI) or an equivalent qualification; and
- b) be a Chartered Member of Engineers Ireland or a Chartered member of an equivalent professional body; and
- c) have at least 84 months' post-graduate experience (i.e. from Level 8 qualification gained above) in the design of civil engineering projects.

Structures Team Lead shall:

- a) have a Level 8 qualification in Structural/Civil Engineering recognised by Quality and Qualifications Ireland (QQI) or an equivalent qualification; and
- b) be a Chartered Member of Engineers Ireland or a Chartered member of an equivalent professional body; and
- c) have at least 84' months post-graduate experience (from Level 8 qualification gained above) in the design of structures on civil engineering projects.

Hydraulics Team Lead shall:

- a) have a Level 8 qualification in Hydraulics/Civil Engineering recognised by Quality and Qualifications Ireland (QQI) or an equivalent qualification; and
- b) be a Chartered Member of Engineers Ireland or a Chartered member of an equivalent professional body; and

- c) have at least 84' months post-graduate experience (from Level 8 qualification gained above) in the hydraulic design of civil engineering projects.

Project Engineer shall:

- a) have a Level 8 qualification in Civil Engineering recognised by Quality and Qualifications Ireland (QQI) or an equivalent qualification; and
- b) have at least 36 months' combined post-graduate experience (from Level 8 qualification gained above) in the design or construction of civil engineering projects.

Graduate/Junior Engineer shall:

- a) have a level 8 qualification in Engineering or Construction Management recognised by Quality and Qualifications Ireland (QQI) or be a Chartered Engineer (CEng MIEI or equivalent) or have an equivalent qualification in Engineering or Construction Management; and
- b) have at least 12 months' experience of the design or construction of civil engineering projects.

Senior Technician shall:

- a) have a diploma in civil engineering or other level 7 qualification relevant to their role or demonstrable experience relevant to the role; and
- b) have at least 36 months' experience of the design or construction of civil engineering projects.

Junior Technician shall:

- a) have a diploma in civil engineering or other level 7 qualification relevant to their role or demonstrable experience relevant to the role; and
- b) have at least 6 months' experience of the design or construction of civil engineering Projects.

Project Supervisor Design Process shall:

- a) have a Level 8 qualification in Civil Engineering recognised by Quality and Qualifications Ireland (QQI) or an equivalent qualification; and
- b) be a Chartered Member of Engineers Ireland or a Chartered member of an equivalent professional body; and
- c) have at least 120' months post-graduate experience (from Level 8 qualification gained above) in the delivery and management of civil engineering projects.

Appendix C IFI Business Case Template

