

Lower Moss Fish Passage Project: RIBA Stage 4 Technical Design Brief

Brief for final, construction-ready designs for weir removal, partial removal and fish passage improvement works on the River Moss.



Client: Don Catchment Rivers Trust

Project: Lower Moss Fish Passage Project

Commission: RIBA Stage 4 Technical Design and Principal Designer services

Location: Lower Moss reach, Moss Brook

Procurement basis: Tender brief / request for quotation for professional design services

1. Purpose

The consultant shall develop the preferred recommendations from the Lower Moss Fish Passage Feasibility Report into coordinated, construction-ready technical designs equivalent to RIBA Stage 4. The commission is not to repeat the options appraisal unless new survey evidence, regulator feedback or constraints require it. The final package shall support tendering, construction, statutory approvals and environmental permitting, including bespoke Flood Risk Activity Permit requirements where applicable. The consultant shall also act as Principal Designer for the commission.

2. Project Background

The feasibility report identifies preferred interventions across six weirs on the Lower Moss. These recommendations form the basis of the Stage 4 design brief. Relevant pre-application correspondence and regulator feedback will be shared with the appointed consultant; this brief retains only the key implications needed for pricing, methodology and programme planning.

3. Feasibility Report Recommendations to be Taken Forward

Weir	X	Y	Feasibility recommendation	Stage 4 design requirement
Weir 1	443943	379961	Full removal of the weir and associated disused bridge is preferred.	Develop construction-ready removal, channel regrading, bank stabilisation, bridge/abutment treatment, utility protection and safe access details.
Weir 2	443899	379940	Monitor the natural obstruction or develop a limited baffle-based solution if needed for fish passage.	Confirm whether intervention is necessary and, if required, develop a proportionate naturalised solution that supports fish passage and can be justified through the relevant consent route.
Weir 3	443838	379929	Full removal of the concrete weir is preferred.	Develop construction-ready design information for Weir 3 on the basis that full removal remains the preferred option, while recognising current uncertainty over landowner

				acceptability, historic/current functionality and whether an alternative fish passage solution may ultimately be required. The design approach shall allow for removal, or a proportionate alternative such as an easement, low-cost baffles or other low-impact fish passage measure if full removal is not acceptable or appropriate.
Weir 4	443617	379856	Full removal of the blockstone weir is preferred.	Develop manual removal and local redistribution of suitable natural stone, including bank stabilisation and heritage input.
Weir 5	443452	379809	Partial removal/notching is preferred to protect neighbouring historic masonry walls.	Develop partial removal design, retained wall-supporting nibs, wall protection, access/scaffold requirements, gauge protection and traffic management assumptions.
Weir 6	441071	380263	Full removal of the ford/weir is preferred.	Develop full removal, channel reinstatement, bank remediation, footbridge/abutment interface treatment and LLFA consent information.

4. Design Objectives

- Provide passable, resilient and low-maintenance fish passage through the project reach.
- Remove or reduce artificial barriers while protecting flood risk, geomorphology, heritage assets, ecology and adjacent infrastructure.
- Use naturalised solutions and natural materials wherever practicable, particularly for habitat structures and reinstatement.
- Produce coordinated drawings, specifications, method requirements and risk information suitable for construction and permit submission.
- Allow for regulator and consultee requirements that may affect design, surveys, consents, programme, access and construction methodology.

5. Scope of Technical Design

The scope is to convert the feasibility recommendations into final design information, unless further evidence or regulator feedback requires a change. Designs shall cover permanent works, temporary works requirements, access, sequencing, environmental protection, reinstatement, monitoring and maintenance.

6. Surveys, Assessments and Consents

- **Consents and permitting:** after final design and landowner approval, prepare and submit all required permits and consents, including Flood Risk Activity Permit, ordinary watercourse / land drainage consent, temporary works consent where flows are obstructed, and any other statutory approvals needed for construction. DCRT will lead any landowner engagement required, supported by clear consultant drawings and technical information.
- **Consent support:** support the client and landowners with applications, regulator queries, drawings, method statements, risk assessments, programmes and environmental documents.
- **Weir 6 SSSI consent:** prepare the supporting information required for any SSSI consent affecting weir 6. The landowner will submit the application, supported by consultant drawings, method statements, assessments and Natural England coordination as required.
- **Flood risk:** review the existing flood risk assessment referenced in the feasibility report and update or supplement it as required to support final design, permitting and consent submissions.
- **WFD screening and assessment:** complete a Water Framework Directive screening assessment and, where screening identifies potential risk, prepare the proportionate assessment required to demonstrate that the final design supports the objectives of the relevant River Basin Management Plan and does not cause deterioration in water body status.
- **Ecology and PEA:** complete a Preliminary Ecological Appraisal covering habitats, protected species risk, impacts, mitigation, compensation, enhancement and any further surveys, licences or seasonal constraints, including otter considerations along the River Rother and The Moss corridor.
- **Heritage:** commission a suitable heritage professional to assess Weirs 4, 5 and 6 and advise how historic significance should be considered in the final design.
- **Utilities and constraints:** verify buried and overhead services and incorporate constraints into the detailed design and construction methodology.
- **Survey:** obtain any additional topographic, channel, structural, access or condition survey information required to complete the Stage 4 design.

- **Consultee engagement:** allow for targeted reconsultation where surveys, assessments or design changes materially affect the consent strategy, programme or construction methodology.

7. Consultee Requirements to be Addressed

Detailed pre-application correspondence will be provided separately. For tender pricing and approach, consultants shall allow for the following key consultee and technical implications.

- **WFD and geomorphology:** prepare a WFD screening assessment and provide the geomorphological justification for the selected intervention at each barrier.
- **Barrier 1:** allow for assessment and design of full bridge abutment removal where practicable, or justified retention with stabilisation and reinstatement where full removal is not feasible.
- **Barrier 2:** allow for assessment of whether intervention is required, recognising that the existing natural feature may provide useful flow and morphological variation.
- **Barrier 2 intervention:** if works are required, price for a proportionate naturalised solution using low-impact measures rather than hard-engineered pre-barrage weirs unless clearly justified.
- **Barrier 3:** allow for review of gabion removal or modification, bank naturalisation and any associated service, gauge or toe-protection constraints.
- **In-channel materials:** allow for reuse of suitable natural materials where appropriate and removal of unsuitable artificial material from the channel.

Weir 3 landowner and functionality uncertainty: Rotherham Council has been identified as the landowner for Weir 3, but DCRT is still engaging with the Council to understand what intervention it would realistically accept. It is also uncertain whether the structure remains functional; current understanding is that it may historically have supplied water to a downstream or adjacent use. Tenderers shall therefore allow for this uncertainty when pricing and programming their work, including review of available evidence, engagement support, and development of either the preferred removal option or an alternative fish passage solution if required.

Consultants shall allow for the PEA to inform survey requirements, mitigation, enhancement, seasonal constraints and any protected species licensing needs.

Additional surveys, licences or programme restrictions may be required depending on the PEA findings and regulator response.

8. Environmental and Construction Constraints

The consultant shall address key environmental and construction risks, including designated sites, protected and invasive species, vegetation clearance, sediment mobilisation, water quality, made ground, waste, bank instability and access. Particular attention is required at weir 6, where SSSI consent and woodland access constraints may apply, and at weirs 1, 3 and 5, where structures, utilities, made ground or masonry support may affect construction.

The Stage 4 design shall include proportionate mitigation for ecology, biosecurity, pollution prevention, sediment control, dewatering, vegetation clearance, reinstatement and erosion management, and identify any further approvals needed before construction.

9. Stage 4 Deliverables

- Technical design drawings for each weir, including plans, long sections, cross sections, demolition/removal extents, finished bed/bank profiles, access routes, temporary works zones and reinstatement. Drawings shall be clear enough to support DCRT landowner engagement before permitting and sufficiently detailed for FRAP submission and construction pricing.
- Pre-works and post-works drawings suitable for permit submission.
- Design calculations and technical notes covering fish passage hydraulics, bed stability, bank stability, flood risk, geomorphology and material sizing.
- Specification for construction materials, natural stone/wood habitat features, erosion protection, reinstatement, biosecurity, pollution prevention and ecological mitigation.
- Construction methodology and sequencing, including temporary works assumptions, dewatering needs, sediment control, traffic management, scaffold/access requirements and emergency access.
- Designer's risk register and residual risk information suitable for tender and construction.
- Permit and consent pack, including drawings, assessments, method statements and supporting information required for Flood Risk Activity Permit, land drainage / ordinary watercourse consent, temporary works consent where applicable, and SSSI consent support for weir 6. Drawings shall be suitable for FRAP submission and sufficiently construction-ready for a build contractor.
- Maintenance and monitoring plan, including post-construction inspection, fish passage performance checks, debris management and vegetation establishment.

- Updated cost estimate and programme for procurement, permitting, mobilisation, construction and monitoring, including an indicative construction cost estimate once final designs are complete.

10. Design Standards and Approach

The design shall follow current good practice for RIBA Stage 4 Technical Design, producing coordinated information suitable for tender, statutory approvals and construction. The consultant shall act as Principal Designer and apply relevant legislation, guidance and professional standards for flood risk, fish passage, river restoration, geomorphology, ecology, heritage, CDM duties and environmental permitting.

11. Key Decisions to Resolve Before Construction

- Whether Weir 1 bridge abutments can be fully removed or must be partially retained with justified stabilisation.
- Whether Weir 2 requires intervention and, if so, what proportionate naturalised solution should be taken forward.
- How the Weir 3 electrical service and gauge infrastructure will be protected, diverted or decommissioned.
- Whether Rotherham Council, as landowner for Weir 3, will accept full removal or require an alternative fish passage intervention such as an easement, low-cost baffles or another proportionate solution.
- The extent of gabion removal/naturalisation at Weir 3.
- The heritage significance and acceptable intervention strategy for Weirs 4, 5 and 6.
- The final access, traffic management and emergency arrangements for Weir 5.
- The consent route and site access requirements for weir 6, including Natural England SSSI consent support for the landowner where required.

12. Information to be Provided to Designers

The following information will be made available to the appointed designer to support the Stage 4 commission:

- Lower Moss Fish Passage Feasibility Report.
- Appendix A – Location and layout plans.
- Appendix B – Utilities and constraints plans.
- Appendix C – Early Contractor Involvement (ECI) report.
- Appendix D – Feasibility drawings.

- Appendix F – Low flow assessment.
- Flood Risk Assessment (GHY-DCRT-01-DOC-10), where available.

The following information will be made available to the successful consultant following appointment:

- Detailed pre-application correspondence with regulators.
- Landowner, access and utility correspondence.
- Ecological, heritage and consenting correspondence.
- Any other project information held by the Client relevant to the commission.

13. Tender Requirements and Procurement Basis

Tenderers are invited to deliver the RIBA Stage 4 Technical Design commission and act as Principal Designer. The appointment covers professional design and consultancy services only, including surveys, assessments, consent support, drawings, specifications, risk information, programme and cost information needed for later procurement and construction. Construction delivery is excluded from this appointment.

Tenderers shall confirm they understand the project context, constraints, deliverables, consent requirements and risks. Any exclusions, assumptions, qualifications or departures from this brief must be clearly stated.

14. Tender Submission Returns

Tenderers shall provide a complete submission covering the items below. The client may reject incomplete, materially qualified or non-compliant submissions.

Return item	Requirement
Tender submission letter	Confirm acceptance of the brief, validity period, lead organisation, key contact and any qualifications or exclusions.
Method statement	Describe the proposed approach to technical design, surveys, consenting, regulator engagement, risk management, buildability and production of tender/construction information.
Programme	Provide a task-by-task programme showing the inception meeting, any justified site visits or further surveys, design milestones, review points, landowner-engagement drawings, consent submissions, final issue dates and key client decisions.
Team structure and CVs	Identify the project director, project manager, lead designer, specialists and subconsultants, including relevant experience and responsibilities.

Relevant experience	Provide examples of comparable fish passage, weir removal, river restoration, flood risk, permitting and multi-disciplinary technical design commissions.
Fee proposal	Provide a fixed fee breakdown by task, discipline and deliverable, identifying expenses, subconsultant costs, optional items, exclusions and day rates for additional services. Include an allowance or separate line item for preparing an indicative construction cost estimate once final designs are complete.
Assumptions and risks	Set out key assumptions, dependencies, information requirements, client inputs, programme risks, proposed mitigation measures and whether site visits are required based on the information provided, with justification for any additional surveys or visits. For Weir 3, identify how the fee allows for the current uncertainty around Rotherham Council landowner acceptance, possible historic/current structure functionality, and the potential need to develop either a removal design or a lower-cost alternative fish passage solution such as an easement or baffles.
Insurances and compliance	Confirm professional indemnity, public liability and employer's liability insurance levels, health and safety arrangements, Principal Designer competence, CDM compliance and quality assurance procedures. Minimum insurance levels to be reviewed and confirmed by DCRT before issue.

15. Pricing Requirements

The tender price shall be a fixed lump sum for the Stage 4 commission, with a breakdown by discipline, task and deliverable. Tenderers shall identify provisional sums, optional services, exclusions, disbursements, survey allowances, third-party costs and day rates for additional services. Construction delivery is excluded, but tenderers shall include a costed allowance for preparing an indicative construction cost estimate once final designs are complete.

Fees shall include an inception meeting, design reviews, regulator discussions, specialist coordination, preparation of deliverables and reasonable responses to client comments. Tenderers shall state whether site visits are required based on the current information and justify any additional survey or visit requirements. VAT shall be stated separately where applicable.

Some budget is secured through EA WEIF funding; however, further funding may be required depending on cost submissions. Appointment will be made only once funding has been confirmed.

16. Tender Evaluation

Proposals will be evaluated based on:

- Technical understanding and approach
- Relevant experience and team capability
- Deliverability within programme
- Value for money

Tenders will be evaluated on a 60% cost / 40% quality basis. Quality assessment will include consideration of relevant experience, methodology and delivery confidence.

DCRT may seek clarification on submitted proposals and discuss delivery structure or scope refinement with preferred consultants before appointment.

17. Tender Programme and Communications

The client will confirm the tender programme before issue. Tenderers shall submit clarification questions by the stated deadline. Material clarifications will be shared with all tenderers where appropriate. Submission validity will be confirmed in the invitation to tender.

Milestone	Date / requirement
Tender issue	18.08.26
Clarification deadline	Noon on 01.09.26
Tender return deadline	9am on 15.09.26
Appointment target	Within two weeks of return deadline

Queries and submission

Please submit proposals electronically and direct any queries to:

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