

## 4. Issues Related to Water Quality

### Construction & Environmental Management Plan

#### Outline Construction Methodology

It will be the responsibility of the Main Contractor to prepare and submit a detailed construction and environmental management plan for approval from the Local Authority. The Construction Environmental Management Plan will be a live document that will be updated by the Main Contractor as required throughout the project lifecycle.

The timing of the works will be in accordance with the requirements of Inland Fisheries Ireland (IFI) for work in rivers as given in the IFI “*Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters*” and agreed with IFI in advance of commencement.

To undertake the rehabilitation works to the Bridge & riverbed, the following methodology is envisaged;

- Temporary Traffic Management will be installed on the Bridge and a site compound constructed.
- Vegetation control & repointing works will be undertaken by the Contractor per the Engineer’s specification.
- Risk Assessed Method Statements (RAMS) will be prepared by the Contractor in advance of the works for the review of the Engineer.
- RAMS will be provided for the proposed excavation works, installation of the concrete backing to Arch 1, installation of Micro Piles, Installation of Stitching Bars and Installation of Tie-Bars & Pattress Plates.
- On completion of the proposed works, the site will be cleaned, site compound removed and the Temporary Traffic Management removed from the Bridge.

#### Environmental Considerations

A Natura Impact Statement (NIS) was developed following the findings of the Appropriate Assessment Screening required for the Bridge Site. The Contractor will be required to develop a Construction Environmental Management Plan (CEMP) to ensure full compliance with measures outlined in the NIS.

A non-exhaustive list of such environmental measures would include for:

- The procurement of a contractor with extensive and demonstrable experience in instream works and bridge works.
- Liaison with both the National Parks & Wildlife Service (NPWS) and Inland Fisheries Ireland (IFI) to be undertaken prior to the commencement of the works, to ensure their requirements are satisfied under the Contractor’s construction methodology.
- When materials are been delivered to the site compound or works area, all material such chemical admixtures, oils and lubricants will be transported in sealed containers to negate the potential of river water contamination.
- Specification and use of inert materials such as hydraulic lime for the remedial works.
- The weather forecast will be monitored closely, and temporary water management measures will be removed if there is any indication that water levels will rise.
- Similarly, any temporary water management measures will be removed for the weekend while workers are not present.
- Either an independent ecological clerk of works, or else a Local Authority Ecologist, is to be appointed to monitor the works.

### **Disposal of Water, Wastewater and Sewage**

All site facilities during construction will be located entirely within the site. The facilities will include canteen, toilet block and drying room for all staff/workers. These facilities will be mobile and all arising waste material will be transported to a suitable waste disposal facility.

### **Control of Fuels & Lubricants**

In order to provide fuel to the relevant items of plant on site, a certified double skinned metal fuel tank with integrated pump, delivery hose, meter, filter and locking mechanism will be situated in a secure area on the construction site. It will be situated within a bund. This tank will be certified for lifting when full.

Sand piles and emergency clean up spill kits will be readily available in the event of a fuel spill. A hazardous bin will also be available to contain any spent sand or soak pads.

New metal gerry cans with proper pouring nozzles will be used to move fuel around the site for the purposes of refuelling items of small plant on site.

Drip trays will be used under items of small plant at all times. Any waste oils etc. contained in the drip trays or the bunded area will be emptied into a waste oil drum, which will be stored within the bund.

Metal gerry cans and any other items of fuel containers will be stored in certified metal bunded cabinets. Any gas bottles will be stored in a caged area at a secure location on the site. All will be properly secured at point of work.