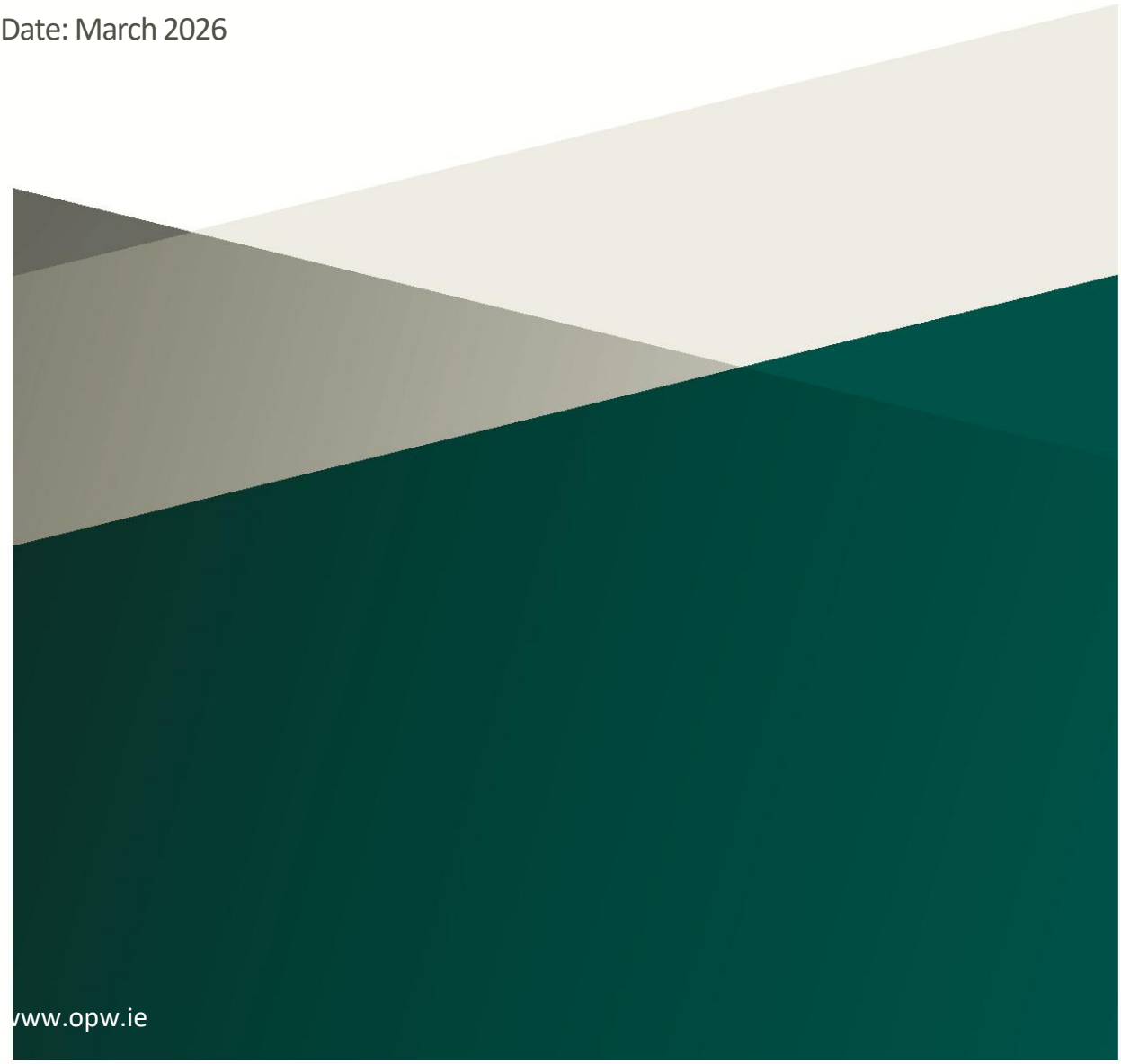
OPW
Oifig na nOibreacha Poiblí
Office of Public Works

Bridge Maintenance

Boyne Catchment

Date: March 2026



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Method Statement

OPW

Scheme:	**Boyne Arterial Drainage Scheme**
Project:	**B2346 Bridge Replacement Works**
Site Location:	**Drumcree, Co.Westmeath.**

Engineer	Channel/Emb No.	Chainage	Structure ID No.	Estimated Site Weeks	Link to Google Maps	Within SAC Yes/No?	Timing of Works
P.Rogers	C1/37	28050	B2346	4	53.6409,-7.1632	No	May 2026

1. Description of Proposed Works

2.

It has come to the attention of OPW that bridge B2346 on C1/37 ch. 28050 at Drumcree, Co. Westmeath is in a state of disrepair. The bridge has partially collapsed on the upstream side into the channel and needs to be replaced. The existing bridge will be demolished and the waste material will be re-used on site at the request of the landowner. Temporary dams will be installed upstream and downstream of the works which will consist of 1 ton sand bags. When the dams are securely in place overpumping will be utilised to divert water from the works area. A silt curtain will be placed downstream for the full duration of the works. The new bridge will be constructed using a total of 5no. 1m reinforced concrete box culvert sections. Before placement of the culvert sections a section of the river bed will be excavated and an in-situ reinforced concrete floor installed. The culvert sections will be placed onto the constructed floor and in-situ reinforced concrete wing walls will be constructed. When all in channel works are completed the temporary dams will be removed. In-situ concrete parapet walls will be added to the bridge deck and the site will be reinstated to its original condition on completion of the works.

Access to the site will be from the L-1629 which runs parallel to the proposed works. The site compound will be located in the field to the west of the proposed works. All welfare facilities will be contained within the site compound.

The photographs and maps provided in the following pages highlight the exact location of the proposed works along with access, site welfare facilities etc. A photograph is also provided of the bridge in it's current state.

Figure 1: Current condition of B2346.

Figure 2 – Site location Circled

Figure 3 – Aerial Photos of Site Location.

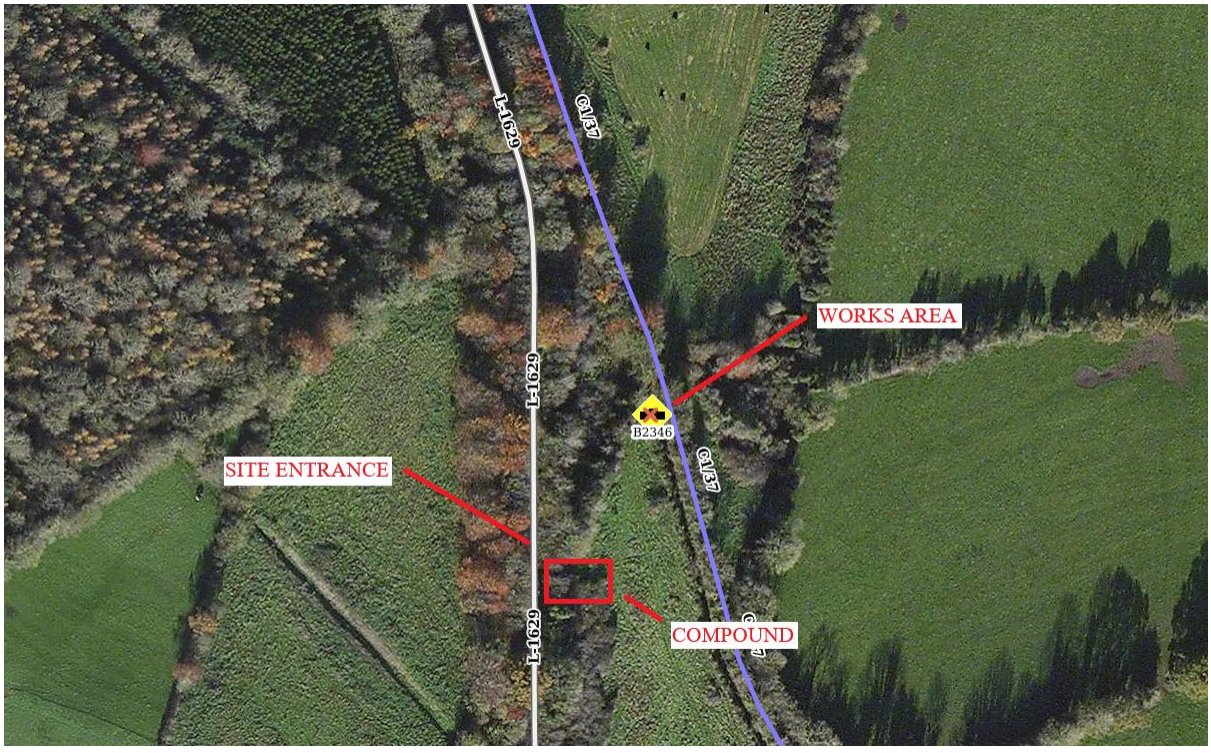

Figure 4 – Site Layout

2. Responsibility for Control on Site

Project Engineer:	Paddy Rogers	**Phone:**	[redacted]
Project Foreperson:	Cyril Dugdale	**Phone:**	[redacted]
Site Supervisor:	Michael Kenny	**Phone:**	[redacted]

	Description	Quantity	
		OPW	Hired
Major Plant	6t Dumper	1	
	14t Excavator	1	
	6T Mini-Digger	1	
	4" Water Pump	1	
	New Holland T7200 Tractor	1	
	Broughan 16t Dump Trailer	1	
Small Plant/Tools	**Description**	**Quantity**	
		OPW	**Hired**
	2-3" Water Pump	2	
	Milwaukee Battery Operated Tools	5	
	Laser Level	1	
Other Equipment	**Description**	**Quantity**	
		OPW	**Hired**

	Quantity	Description	Notes
Materials	TBC	Reinforcing Steel	
	TBC	Ready-Mix Concrete	
	TBC	Gravel	

3. Health & Safety

a. Working Adjacent to Water

The OPW "Working in or Adjacent to Water" Risk Assessment and SP32 "Working Adjacent to Water" Safety Procedure must be followed by all operatives. Guard rails shall be erected to secure banks above water.

Life-rings shall be erected at intervals not exceeding 50m along the proposed works areas.

Weather forecasts shall be consulted to ensure no potential large rainfall events are due to occur.

b. Personal Protective Equipment

In addition to the standard PPE, please advise of any additional PPE measures that may be required.

4. Environmental Protection & Mitigation

All works carried out during this project will be undertaken in accordance with OPW's Environmental Management Protocols & Standard Operating Procedures. (Refer to "OPW Environmental Guidance: Drainage Maintenance & Construction 2019"). Environmental Drainage Maintenance (EDM) Guidelines will be followed at all times. It should be noted these works are being carried out within or adjacent to an Environmentally sensitive area re: SAC, SPA or NHA.

Existing GIS habitat mapping will be analysed in advance of works to identify and flag any known sensitive areas. This information will be made available and briefed to the site team in advance of works.

a. Specific Environmental Management Procedures & Controls

Fuelling of machines will be carried out in accordance with OPW Protocols, machines will be kept away from the channel, not less than 50m and fuelled at a safe location with all machines provided with spill kits. The jeep delivering fuel is certified in accordance with regulations and double bunded. No fuels to be stored on site only in approved vented fuel store with spill trays incorporated.

Any other measures which are deemed necessary by the OPW Environmental Section will be carried out in a timely manner as is reasonably practicable.

b. Invasive Species

During the site inspection the presence of knotweed, giant hogweed etc was not observed. The site works area will be rechecked for invasive species before any works commence. Existing GIS maps will also be analysed and all pertinent information will be included in the project file.

In the event that any invasive species are encountered on site during the project, the OPW Environment Section, Invasive Species Ireland or the National Biodiversity Data Centre will be contacted immediately to advise on the procedures to be followed.

The OPW SOP for the management of invasive species will be adhered to and all procedures carried out will be recorded in the Safety File.

c. Biosecurity

All staff to refer to OPW Environmental Guidance: Drainage Maintenance and construction 2019 re: EP'S 18A and 18B.

5. Completion of Works

Following the completion of the construction works, the surrounding area shall be reinstated to a condition similar to, or better than the pre-works situation.

Boundaries shall be re-established to the landowner's satisfaction.

A photographic survey of the completed works shall be carried out by the Site Foreperson.

Records of any Environmental/Ecological Enhancements and their locations shall be maintained and filed appropriately.

A final inspection of the completed works shall be carried out by the Site Foreperson and OPW Engineer to ensure satisfaction with the quality of the works and allow sign-off on OPW Project Risk Assessment / Safety Plan.

Landowner to be asked to fill out Landowner Satisfaction Form.

5. Schedule of Appendices / Documents which may be attached

Main Documentation:

- Site Location Maps
- Photos
- Design Risk Assessment
- Project Risk Assessment
- Environmental Guidance: Drainage Maintenance & Construction

Project/Site	**B2346 Replacement, C1/37/6/2, Riverdale**	
Checked By	Cyril Dugdale	*Foreperson*
Approved By	Paddy Rogers	*Engineer(s)*
Read & Communicated By	Jamie Keogh	*Supervisor*

6. Operational Procedures

This is a live document and may change as the works progress.

This method statement should be read in parallel with the completed Project Risk Assessment/Safety Plan, all relevant project drawings and specifications etc.

The Project Risk Assessment/Safety Plan and method statement are live documents and subject to regular change. If there are any major changes in weather conditions the risks on site need to be reassessed prior to starting work.

All potential hazards should be identified and where possible removed or appropriate mitigation measures put in place.

All work to be carried out in accordance with safe working practices. (If any issue needs clarification contact your immediate supervisor)

If any changes are made to the agreed methods of works on site, the foreman must be contacted to ensure that the changes are risk assessed and that new risks are removed or controlled. These should be recorded on the Project risk assessment on an extra worksheet. If there are any changes in the weather, new risks may need to be considered and controls put in place.

Manual handling of equipment and materials should be kept to a minimum and machinery used where possible**, however at no point should a person enter the danger zone/swing zone**

of the machine without the driver being alerted and the controls of the machine being isolated unless an alternative safe system of work has been agreed.

All staff should have received adequate familiarisation with equipment or machinery which they are asked to use. If in doubt, check training database. **If they don`t have the familiarisation training they should not use the equipment.**

At all times the Driver is responsible for the safe operation of the machinery. (This includes dumpers and other plant as well as excavators) It is his responsibility to ensure that there is no one within the danger zone/ swing zone when the isolation lever/ Dead-man lever is engaged and/ or the machine is capable of being operated. **If due to the operation, being carried out this is not possible he needs to speak to the foreman and come up with an alternative safe system of work.** The machine should always be switched off when leaving the excavator.

Never walk under a load being lifted by machinery or carry out work in the vicinity of a load being lifted, unless you have discussed this with the foreman and adequate controls put in place to manage the risk. When lifting a load with machinery keep the load as close to the ground as possible. Never enter the trench or excavation prior to the load being lifted in. Use guide ropes if necessary to position the load.

1. A SSWP (Safe System of Work Plan) should be completed by the Foreman and communicated clearly to all personnel involved in the works along with the contents of this method statement.

2. Contact all relevant stakeholders and advise of proposed works, and about the need to make eye contact with the machine driver before approaching him so that the machine can be turned off and made safe.

3. Site to be inspected for services / ground conditions / access & egress etc.

4. Plant used on site is restricted to plant approved in advance by OPW engineering staff and will vary depending on requirements. Where the load to be lifted exceeds 1 ton in weight a weight watcher/prolec system is a legal requirement. Where lesser loads are being lifted it is very important that the safe load capacity of the machine is not exceeded. The driver should assess the load prior to lifting and if unsure of the weight he should seek advice from the Civil / Mechanical foreman or engineer. All plant including hired plant used for lifting should have load hold valves/check valves installed or should not be used for lifting. The machine should have a weight watcher/ prolec system for lifting purposes. (For example: Some of the large 6 inch pumps can weigh up to 2 tonnes)

5. Install / erect all H&S controls identified in Project Risk Assessment / Safety Plan: signage, fencing, access/egress route, secure access ladders, barriers etc.

6. Set up huts, welfare facilities and storage compound as required.

A summary of the work plan is provided below.

1) All grease, oils, lubricants and fuelling procedures to comply with OPW environmental procedures and criteria, as per "Environmental Guidance: Drainage Maintenance & Construction" handbook EP 17.

2) All machinery and plant must be thoroughly inspected for faults and leaks prior to entering the water at the start of each work day.

3) Biosecurity measures to disinfect mobile plant, equipment and clothing must be adhered to in order to prevent the spread of aquatic invasive species and diseases. Biosecurity will be required for all equipment and machinery entering the watercourse (and its margins) pre and post works.

    - All PPE, equipment and machines entering the water will be power-washed before entry to the site and sprayed with a 1% virion aquatic solution following the IFI method for disinfection of equipment.
    - Visually inspect all equipment that has come into contact with the water for evidence of attached plant or animal material, or adherent mud or debris. This should be done before leaving the site.
    - Remove any attached or adherent material (vegetation and debris) before leaving the site of operation.
    - Ensure that all water is drained from any live wells and other water retaining compartments, tanks and other equipment before transportation elsewhere.
    - Disinfectant will be applied to the undercarriage and wheels of the vehicle/machine prior to leaving the site.
    - High-pressure hot water cleaning, with water > 40 degrees C, will be carried out when machinery leaves the site

4) Due to the brevity of the works, refuelling may not be required. If refuelling is required this will be done at a distance of 50m from the river. A spill kit must be in place while refuelling to contain any minor spills or leaks.

5) All materials used to contain such minor spills and leaks will be removed from site and disposed of as hazardous waste.

6) Temporary dams consisting of 1 ton sandbags to be installed upstream and downstream of the works area to prevent any water entering the working area. Once the dams are in place the pump will be set up to pump water from upstream to the downstream side of the bridge.

7) River bed to be excavated with 14t excavator. A reinforced concrete floor to be placed on river bed prior to placing of the pipes.

8) Culvert Sections will be placed into position using the 14t tracked excavator. After the placing of pipes, shuttering will be installed at each end and reinforced concrete wing walls constructed.

9) Once all in channel works are completed the temporary dams will be removed. Reinforced concrete parapet walls will be constructed on each end of the bridge deck.

10) A silt curtain will be placed downstream of the works to alleviate against excessive siltation, as per "Environmental Guidance: Drainage Maintenance & Construction" handbook EP 15

11) At no point should a person enter the danger zone/swing zone of the machine while this work is taking place. Trained signaller to instruct machine operator when lifting loads where the machine operator does not have adequate sightlines. Inform mechanical section of lift and seek advice on lifting plan if required. If there is no prolec on the machine find out the safe working load with the machine at its maximum reach and operating across tracks ie perpendicular to the tracks (worst case) and make this safe working load known to the machine operator.

12) If material is being loaded onto a dumper, the dumper driver should make sure that the dumper is safely in position, switched off, and should get down off the dumper while it is being loaded. If excavated material is to be reused it should be placed away from the work area (not along a bank edge) so that it will not interfere with the on-going works. Hired dumpers may not be used on roads unless the insurance has been confirmed with the supplier.

13) Where the dumper is to be used, stop blocks should be placed back from the edge of the excavation/ work area/ to prevent the wheels of the machinery reaching the bank edge.

14) Reinstate roadways, paths and ground as required.

15) Remove fencing, huts, compound, signage etc.

16) Inspect completed works and signoff on Project Risk Assessment / Safety Plan.

7. Sign off

Attach to PRA.

Method Statement to be discussed with operational staff on site.

Approved by:

Date:

Signed by all staff working on site:

Signed:	Date

8. Appendices

EP 15 Construction Silt Management

Scope

This procedure relates to all construction works where silt mitigation is required.

Purpose

To ensure the reduction in artificial sources of silt from total silt load of waterbodies.

Responsibilities

The responsibility lies with the relevant staff.

Related Documentation

Guidelines on Protection of Fisheries IFI.

Procedure

Before Works Commence

1. Consider the key ecological receptors and water flow paths.
2. Consider options available (set back defences rather than dredging), remove risk of silt rather than mitigate, where possible.
3. Define contractually agreed thresholds from silt mitigation in CEMP where required.
4. Install turbidity monitoring where required.
5. Consult with IFI and NPWS regarding systems and timing of work.

During the Works

6. Use ecological assistance when dewatering behind cofferdams or temporary diversions, translocation of specific species maybe required.
7. Ensure works area within waterbody does not become dry in an unmanaged fashion, killing fish or other aquatic species.
8. Monitor the effectiveness of the installed silt control measure.
9. Minimise increased silt levels, when removing control measures.
10. Develop a maintenance and inspection schedule for silt control measures,
11. Manage site compound and works area runoff effectively including wheel washings of transport.
12. Minimise in-channel works and design haul roads and crossing points effectively, to allow fish transition at all times..
13. Manage excavated spoil or dredged material effectively.
14. Consider allowing river to return to background silt levels when required, use turbidity monitoring or other data to manage effectively.
15. Ensure reporting procedure in place in the event of a pollution incident.

Where deepening and widening of a natural watercourse is required, consider a full diversion as the first option. This will isolate the works area, reducing ecological impacts by limiting the ongoing generation of silt. Flow should be transferred to the bypass in a carefully managed way, translocating relevant species, ensuring the downstream watercourse does not run dry, while taking into account fish passage and appropriate design flow. The bypass can be open channel or pipe. An open channel requires erosion control and if constructed sufficiently in advance, this can re-vegetate naturally before the flow is diverted, reducing requirements for artificial erosion control.

EP 17 Water Pollution

Scope

This procedure relates to all works beside waterbodies.

Purpose

To ensure best practice for works beside waterbodies

Responsibilities

The responsibility lies with the relevant staff.

Related Documentation

Guidelines on the Protection of Fisheries, IFI.

Procedure

1. Monitor the weather forecasts during all works, develop a contingency plan to prevent damage or pollution during extreme weather and high flow events.
2. Isolate works area from aquatic environment where possible.
3. Ensure measures taken to prevent cement or concrete entering the waterbody.
   a) Use precast concrete where possible.
   b) Prevent old cured concrete when demolishing from entering waterbody.
   c) Deploy suitable sealed shuttering where required.
   d) Position scaffold above high water level where possible.
   e) Use youngman boards, toe boards, and netting as required.
   f) All concrete equipment should be washed out in designated/designed area.
   g) Concrete delivery trucks should return to batching plant for washout.
4. Ensure measures taken to prevent fuel or oil entering the waterbody.
   a) Refuelling should not be undertaken within 50m of a watercourse, or ensure no direct flowpath.
   b) Use biodegradable oils.
   c) Operators should check their vehicles on a daily basis before starting work.
   d) Emergency spill kits should be available on machines.
   e) Ensure no flowpath from parked overnight vehicles.
   f) Ensure on site fuel stored in bunded tanks.
   g) Use plant “nappies” on compressors and pumps as required.

5. Do not leave exposed soil from vehicle track marks, use bog mats and leave natural vegetation buffer strips where appropriate.
6. **Ensure good housekeeping of site waste and compound.**
7. **Store and remove wastewater from site.**
8. **Ensure good systems of work involving use of chemicals harmful to aquatic life.**

Pic 17.1 Plant nappy under a compressor.

Water quality can be degraded by nitrogen and phosphorus. Nitorogen is water soluble and could become concentrated within drains that are not working efficiently. Phosphorus is less soluble and can be entrained in silt, this can impact on water quality when it becomes mobile within the receiving waters. Accordingly, care should be taken when maintenance is occurring in lands where slurry has been recently spread, do not compromise natural buffers that may be in place.