



Environmental Report February 2024

Glashaboy Flood Relief Scheme

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Introduction

The following is the clients Ecological Clerk of Works (ECoW) monthly review of the Glashaboy River (Glanmire/Sallybrook) Drainage Scheme. It details observations made on site regarding environmental and ecological factors involved in the scheme. This formulates a monthly review to be submitted to the Environmental Monitoring Group (EMG).

The main work areas for February 2024 included:

- Pat O Donnell's (POD) – Surface water chamber and associated works.
- Funeral home – RC wall construction and associated works.
- Meadowbrook – Drainage line and pump station works.
- R639 – Drainage line works.
- Circus field – Wall building and temporary stockpiling.
- Sallybrook house – septic tank installation works.
- Sallybrook JKW Zone – embankment works.

General comments

The site's overall condition is positive, with satisfactory housekeeping standards maintained across most work sites. However, there are several areas that require improvement, notably Copper Valley Vue, Sallybrook House and industrial estate, as well as a section along the R639 near the Springmount culvert works. Sorensen has scheduled action for these areas in March 2024.

Two environmental tours took place this month (ET006 and ET007), with Sorcha Dale and Lisa Dolan in attendance for ET007 and Lisa only in attendance for ET006. The tours remain valuable, fostering collaboration between the contractors and the client's ecologists.

Contamination at Eurofins: Excavated material was removed for temporary storage at Sallybrook. It continues to be stored here with environmental protocols in place to contain run off.




The contractor's otter specialist, Ross Macklin, conducted surveys at the end of January, and the report was issued in February. Key findings from the report include the change in status of otter holt N6 at Circus field, which transitioned from active to non-active. It was determined that this otter holt had been filled in by flooding during the events of 2023. Consequently, a derogation for this area is no longer required, and the 20-meter buffer zone is no longer necessary to maintain. Additionally, new active holts have been identified in the vicinity of Meadowbrook housing estate. A new derogation license is currently in progress with the NPWS for works in the vicinity of otter holts for 2024.




Derogation license - DER – OTTER – 2024 – 47 – to be carried out in line with Ross Macklin's Glashaboy Flood Relief Scheme otter breeding and resting area activity report 2024, pgs.24-27 and NRA's 'Guidelines for the treatment of Otters prior to the construction of National Road Scheme.




Memo GFRS-23-012 was issued to the EMG this month in response to the contractor's request for the removal of extra trees. As a result, the request to remove additional trees at Sallybrook has been denied. However, approvals were granted for tree removal at Copper Valley and New Line locations.




Table 1. Outstanding items by the main contractor as raised in the ECOW's January 2024 environmental audit.





No.	Item	Main contractor's actions
1.	Updated biosecurity plan to be reissued by Lisa Dolan	Issued in February 2024.
2.	Ross Macklin latest report to be issued.	Issued in February 2024.
3.	Update on otter derogation license applications for 2024.	NPWS issued derogation license end of February 2024.
4.	Follow up on measures to prevent run off from works at funeral home – coir-mesh installed with pegs to hold firmly in place.	This was addressed in February 2024.
5.	Revert with plans to complete top soiling and grass seedling at Bleach hill.	Area has been top soiled. Grass seeding to be carried out following grass seed Material Approval Request 120.
6.	Revert with plans to plant replacement birch tree at Bleach hill.	The birch tree in addition to laurel hedging were planted in February 2024.




No.	Date	Comment	Image	ECow Action/Recommendation	Sorensens's Action response
1.	1/2/24	Good use of sediment control during pump station works at Meadowbrook with use of sump, settlement tank and manifold system that uses 8 silt bags simultaneously ensuring water pumped from works area into gully was clean when inspected.	 A photograph showing a construction site with several orange silt bags placed in a line to create a sediment control barrier. Red plastic safety barriers are visible in the background. A timestamp '01/02/2024 11:07' is visible in the bottom right corner of the image.	Continued to monitor daily to ensure sediment control measures are maintained and consistent.	Continued to check to ensure water pumped from the works area enters the gully is not sedimented. Carry out hand test of turbidity as required.
2.	1/2/24	Stock piling of excavation risings next to water course.	 A photograph of a yellow CAT excavator with 'SORENSEN' written on its side, parked on a large pile of excavated earth. In the background, there is a body of water and some residential buildings. A timestamp '01/02/2024 13:28' is visible in the bottom right corner of the image.	Discussed with site ecologist	Stockpile was removed that day.
3.	1/2/24	Septic tank installation works at Sallybrook house was carried out with the following sediment control measures: filtration drain, silt fencing and selective timing of works to allow sediment to travel through attenuation area.	 A photograph showing the installation of a septic tank. A large pile of dark soil is next to a gravel area where a pipe is being laid. A yellow excavator is partially visible on the left. A timestamp '01/02/2024 11:49' is visible in the bottom right corner of the image.	Continued to monitor to ensure sediment control measures are maintained and consistent.	Continued to follow sediment controls until works were complete.




No.	Date	Comment	Image	ECoW Action/Recommendation	Sorensens's Action response
4.	2/2/24	Partial wall collapse at POD into outlet that runs into Sallybrook stream. No blockage was caused.		Documented.	The wall was later braced for the construction works on the surface water chamber.
5.	7/2/24	Erosion mesh in use at Funeral homework area adjacent to the Glashaboy river.		Documented.	Continued maintenance of erosion mesh for the duration of the works here in February.
6.	7/2/24	Haul road installed into attenuation area to rear of Sallybrook house as part of enabling works to facilitate proposed permanent sheet piling works.		Documented. Reinstall silt fencing.	Reinstalled silt fences that collapsed during road construction.




No.	Date	Comment	Image	ECoW Action/Recommendation	Sorensens's Action response
7.	7/2/24	R639 drainage works throughout February pumps water from works area back into previously installed drainage line.		Documented.	No action required.
8.	7/2/24	Pumping of water from funeral home works area is satisfactory. Sumps in place, silt bags positioned at the end of lay flat. Vegetation on embankment also utilised for filtration.		Silt bag to be regular maintained to ensure optimal performance.	Silt bag regularly maintained by contractor's environmental champion with additional checks made by site ecologist.
9.	7/2/24	Otter couch (C2) monitored throughout the month to ensure works don't negatively impact upon it. Signage required to alert personnel working in the area yet to be installed.		Continued to monitor couch while works continue. Erect signage as per Ross Macklin's recommendations	Sorensen to establish signage as per otter expert Ross Macklin's recommendations.




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10.	7/2/24	Erosion mesh not deployed along this exposed section of the river embankment at the funeral home works area.		Discussed with site ecologist.	Erosion mesh was extended the following day.
11.	8/2/24	Fuel spill at cul-de-sac of the Meadowbrook drainage works area.		Site ecologist on site at the time of discovery.	Oil booms were immediately deployed around two gullies. Investigation into the incident revealed the cause to be the overfilling of diesel by the tractor driver of Powers Group. The area was subsequently treated with Bioversal.
12.	9/2/24	Insufficient effort was made to prevent minor damage to vegetation during works along the R639 at the junction with Hazelwood Rd. The crew mentioned the need to manoeuvre inside (within the vegetation) to avoid traffic.		Discussed with site ecologist and personnel. Requested tree branches be avoided or if not possible to avoid, be delimbed with a chain saw.	Efforts were then made by the excavation driver to avoid vegetation which was successful.




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13.	9/2/24	Improper storage of empty containers poses a risk of them being blown into the main channel, potentially contributing to pollution.		Discussed with site ecologist.	The container was immediately relocated to a more appropriate storage location.
14.	9/2/24	Oil residue in works area being pumped out. Investigations revealed it was shutter oil (Forstrike). No spill kit on hand. No sump in place. However, the outlet to the lay flat was fitted with an oil and sediment filter.		Discussed with site ecologist.	Pumping was stopped. Oil boom installed. Investigation into cause was undertaken. A spill kit was later installed in this area.
15.	9/2/24	Drainage works were carried out at the north end of Sallybrook in the JKW zone, with biosecurity protocols being adhered to. The mulch material generated from tree felling works in 2003 were moved to one side prior to excavations.		Discussed with JKW expert details concerning separation of mulched material.	Sorensen to revert with plans to deal with mulched material.
16.	12/2/24	Following drainage works in northern end of JKW zone, the excavator was cleaned down before being deployed elsewhere on site.		Documented.	No further action required.




No.	Date	Comment	Image	ECoW Action/Recommendation	Sorensens's Action response
17.	12/2/24	Two access roads were installed at the Sallybrook JKW zone to enable embankment works. Terram and compacted stone were used to prevent ground disturbance from plant and personnel into the area.		Documented	Maintain biosecurity measures for the duration of works in this area.
18.	12/2/24	Trees removed at POD. Tree clearance was undertaken independent of works.	 	Documented.	No action required.



No.	Date	Comment	Image	ECoW Action/Recommendation	Sorensens's Action response
19.	13/2/24	Vegetation removal in front of main compound. Low ecological value. Clearance required to build wall as part of works.		Documented.	No action required.
20.	15/2/24	Housekeeping at Copper Valley Vue. Miscellaneous waste from emergency temporary works.		Discussed with site ecologist.	Housing keeping to be addressed.
21.	15/2/24	Sallybrook stream/drain sedimented from works in chamber works in POD. However, the outlet into the main channel, into which this stream/drain is connected via the attenuation channel, was clean.		Discussed with site ecologist.	IFI was consulted regarding these works, and no objections were raised concerning this low-value watercourse. Agreements were made not to dry out the stream during works, which was achieved during work here in February.



No.	Date	Comment	Image	ECow Action/Recommendation	Sorensens's Action response
22.	15/2/24	Pumping continued from the funeral home works area. Sump and silt bag in operation.		Discussed permit to pump with site ecologist.	Silt bag regularly maintained by environmental champion.
23.	15/2/24	Changes to otter holt buffer zone in Circus field where otter holt N6 is no longer active following a survey by otter expert Ross Macklin. Fence line moved back to vegetation along river.		Documented and discussed with site ecologist.	Ross Macklin's report confirmed that the otter holt was flooded and no longer active. Consequently, the conditions of the derogation license, which required maintaining a 20-meter buffer, are no longer applicable.
24.	16/2/24	Vegetation removal at Meadowbrook. No trees were removed by the excavator.		Documented and discussed with site ecologist.	No action required.




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25.	16/2/24	Pump station works area at Meadowbrook used for filtration to control sediment from adjacent drainage line works.		Discussed with site ecologist.	Pump station was pumped out into manifold system before entering gully.
26.	16/2/24	Ivy covered trees at Copper Valley Vue required removal to facilitate enabling works – trees left in situ after cutting for bats.		Documented.	No action required.
27.	16/2/24	The works along the R639 posed a potential threat to trees adjacent to the roadside due to the swinging motion of the excavator.		Discussed with site ecologist.	Additional banks person was put in position to guide driver of excavator as it manoeuvred the vehicles arm over an active roadway. The following day, trees were delimbed along the remainder of the route.




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28.	19/2/24	Trees were removed as part of the design at Meadowbrook along Springmount stream to accommodate the proposed permanent sheet piling works.		Discussed with site ecologist.	Sub-contractors received toolbox talk regarding ivy covered trees and JKW.
29.	19/2/24	At the Funeral home works area, there was excessive storage of materials on the river embankment and inappropriate stockpiling of excavation risings adjacent to main channel.		Discussed with site ecologist.	This was rectified within 24hrs.
30.	19/2/24	Surface water chamber in POD sediment controls include pumping water further up the line into adjacent drain and over pumping around works using 2-inch pump. The volume of the stream/drain was impacted with a lowering of water levels although not to an great extent.		Discussed with site ecologist.	Continued to implement sediment controls and permit to pump system for duration to works.

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31.	21/2/24	Welfare facilities positioned in Circus field within the zone of flooding.		Discussed with site ecologist.	Welfare facilities are scheduled for removal.
32.	02/24	Corner of funeral home works area, monitored for JKW. Nothing was observed growing during the month.		Liaised with site ecologist. Supervision by JKW expert required when excavations resume.	Area was monitored for JKW during the works. Excavations were undertaken under the supervision of JKW expert, Lisa Dolan.
33.	21/2/24	Housing keeping issue at green area near the Springmount stream along the R639, where waste materials from works are present. Also, storage of road equipment which is not ideal.		Alerted site ecologist during ET007.	To be rectified.

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34.	21/2/24	At the Meadowbrook drainage works area, the ground around the gullies were layered with a layer of fine sediment. This suggested sedimented water was allowed to be pumped out of the works area without the proper sediment controls.		Reported to site ecologist who investigated the issue.	Investigation revealed a pump failure and the absence of fittings, leading to the suspension of the manifold system's use. As an alternative, a larger green silt bag was deployed, but it proved to be ineffective at capturing silt. Manifold system was reestablished the following day.
35.	22/2/24	Birch tree replaced at Bleach hill. The birch tree was removed during culvert works in 2023 that necessitated the additional removal of the birch tree to accommodate the works.		Documented.	No action required.

No.	Date	Comment	Image	ECoW Action/Recommendation	Sorensens's Action response
36.	26/2/24	Vegetation and tree removal carried out at the entrance to Copper Valley Vue estate as part of enabling works to install a bailey bridge.		Discussed with site ecologist. Recommended the use of silt fence along the banks of the Glenmore river.	Silt fencing was established.
37.	26/2/24	Trees and vegetation removed at New Line culvert as part of enabling works to install a river diversion around the existing culvert.		Discussed with site ecologist. Recommendation to consult with other expert about the possible need for temporary otter passage and/or mammal proof fencing and sediment controls.	Sorensen to consult with IFI and Ross Macklin. Sorensen to carry out temporary works in line with the Work Requirements to protect waterways.

No.	Date	Comment	Image	ECoW Action/Recommendation	Sorensens's Action response
38.	26/2/24	Sallybrook JKW zone embankment works – Lisa Dolan on site to supervise works and ensure biosecurity measures are followed.		Supervision.	JKW rhizomes were marked with red spray paint on the ground. Engineer took GPS of each exposed rhizomes. Where possible rhizomes were then bagged up and deposited into the temporary storage area.
39.	27/2/24	Sallybrook JKW zone embankment works – Lisa Dolan on site to supervise works and ensure biosecurity measures are followed.		Documented	JKW rhizomes were marked with red spray paint on the ground. Engineer took GPS of each exposed rhizomes. Where possible rhizomes were then bagged up and deposited into the temporary storage area.
40.	28/2/24	At Copper Valley Vue enabling works, silt fencing installed along the banks of Glenmore for sediment control.		Discussed with site ecologist.	Silt fencing was installed. Tree roots were left in place where possible along the bank of the river.

No.	Date	Comment	Image	ECoW Action/Recommendation	Sorensens's Action response
41.	29/2/24	Top soiling carried out at Bleach Hill. It is not obvious that the ground underneath the mesh received topsoil. Topsoil not yet grass-seeded. MAR 120 submitted by contractor regarding type of seed.		Discussed with site ecologist.	Site ecologist to confirm that ground under erosion mesh has been top soiled. Site ecologist to revert with date of grass seeding following the approval of MAR 120.
42.	29/2/24	Contaminated material exposed.		Discussed with site ecologist.	Material to be recovered as soon as possible.
43.	29/2/24	Pumping out of off-line drainage system at Pat O Donnell's. Permit to pump in place.		Discussed with site foreman and site ecologist.	Water was visually inspected and found to be clear.



No.	Date	Comment	Image	ECoW Action/Recommendation	Sorensens's Action response
44.	29/2/24	Lack of demarcation and gap in fencing at the JKW area at Sallybrook where the temporary storage area is connected to the north of the JKW zone.		Improve demarcation and fencing.	Signage to be improved and fencing secured.
45.	29/2/24	Excavations at the funeral home have recommenced under the supervision of Lisa Dolan, considering the area's Japanese Knotweed (JKW) potential as indicated in the design drawings.		Extend the erosion mesh already in use at this location.	Erosion mesh to be extended.

Table 2. Outstanding items from February 2024 to be addressed by Sorensen.

Item No.	Issue	Action to be carried out
9.	Otter signage at Funeral home for couch C2.	Erect signage.
15.	Mulched material in northern art of the JKW at Sallybrook requires special attention as material is unsuitable for the intended JKW burial at circus field (pending approval).	Sorensen to revert with plans to deal with mulched material.
31.	Welfare facilities positioned in Circus field within the zone of flooding.	Facilities to be removed outside flood impacted area.
33.	Housing keeping issue at green area near the Springmount stream along the R639, where waste materials from works are present.	To remove road equipment and waste materials from area.
37.	Regarding the proposal to install a temporary diversion of the Glenmore River at O Connell's transport on New line.	Sorensen to consult with IFI and Ross Macklin. Sorensen to carry out temporary works in line with the Work Requirements to protect waterways.
42.	Contaminated material exposed.	Recover to prevent run off.
44.	Lack of demarcation and gap in fencing at the JKW area at Sallybrook where the temporary storage area is connected to the north of the JKW zone.	Signage to be improved and fencing secured.
45.	Erosion mesh to be extended at Funeral home following excavations on February 29 th and March 1 st .	Extend erosion mesh.
N/A	Conditions of Otter Derogation licence received from NPWS	Sound barrier to be placed prior to works occurring in proximity to N2 and N6C & D. Sign to be displayed at couch C2.
N/A	Issues with silt mitigation setup concerning the use of the manifold system at drainage works in Meadowbrook housing estate.	Mitigation system currently in review – Fittings 6” & 4” pumps to manifold system. Report on findings of review.
N/A	Improper washing out of concrete at funeral home.	Concrete wash out to be set up.
N/A	Housekeeping at Sallybrook house/industrial estate, Copper Valley Vue and along the R639.	Tidy up these areas.

Appendix A. Sorensen's Environmental Audit 29/01/24 To 28/02/24:

Attached separately.

Appendix B.

Commentary Sorensen's Environmental Audit 29/01/24 To 28/02/24:

Generally positive. It includes all major environmental issues for the month. The audit would be improved if included the following:

- Included all permits to pump that were in operation over February 2024.
- Include all relevant environmental training that was given to new sub-contractors working on site.