



Environmental Report November 2023

Glashaboy Flood Relief Scheme

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Date of issue: 04/12/2023

Document code: FFEC-GFRS-2023-003

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 report also includes:

- Comments on Sorensen's Environmental Audit for November 2023. Audit attached separately.
- The minutes from the Environmental Workshop. Minutes attached separately.

The main work areas for November 2023 included:

- Bleach Hill (Cuil Chluthair) – Installation of kerbing and footpath, surfacing, and railings.
- Springmount - Culvert Works and Drainage works.
- Hazelwood Shopping Centre – Stripping of topsoil, drainage works, foul sewer.
- Sallybrook - JKW (Japanese knotweed) excavations / drainage works / outfall works.
- Sallybrook house – storm drainage, foul works.
- Pat O Donnell's - Slit trenching.
- Meadow brook – Archaeology trail hole dug.

General site conditions are good with housekeeping at a satisfactory level. A few areas are in consideration for improvement. Areas to be monitored and reported on in next month's Environmental Audit (December 2023).

Lisa Dolan has commenced her employment with Sorensen on the Glashaboy Flood Relief Scheme. Consequently, the main contractor no longer employs the services of Knotweed Solutions. Lisa's initial work concentrating on the Japanese Knotweed (JKW) exclusion zone in Sallybrook. Lisa's designated role is confirmed to center around preparation for upcoming works in 2024, offering expert knowledge, and providing ecological assistance on-site. This includes instream works scheduled in 2024. Her on-site commitment is initially set at one day per week, with the flexibility to increase as needed for sufficient supervision and direction. Lisa will also contribute to Monthly Audits and Risk Assessment and Method Statements (RAMS) moving forward.

An Environmental Workshop took place on the 16th of November 2023. The purpose of this Workshop was to run through environmental issues for works so far and a look ahead to works planned in 2024. The meeting was attended by members of both the employer's ecological team (Flynn Furney Environmental Consultants) and the main contractors' environmental team. A full list of all attendees can be found in the minutes of the meeting in the appendix. Most notably, a number of actions resulted from the Workshop which are summarised below:

- Sorensen will incorporate environmental and ecology-related toolbox talks in their monthly audits moving forward.
- Employers' ecologist and site ecologist will actively participate in biweekly Environmental Tours going forward.
- An updated Construction Environmental Management Plan (CEMP) is scheduled to be submitted before the next EMG meeting.
- Sorensen to explore enhancing the environmental component of their Risk Assessment and Method Statements (RAMS) to be more site-specific.
- Sorensen will explore and provide an environmental/ecology program of surveys to prevent any delays in the upcoming year.
- Sorensen is planning to buy or custom-make pump inlet protection devices (for fish and lamprey species) in advance of their requirement.
- The ER team will report back to Sorensen with the outcome of the review of suspended solids levels by designers.
- The IAPS (Invasive Alien Plant Species) Management Plan is scheduled for review and reissue.
- Sorensen will respond to Richard Watkins' email dated 23/10/2023 regarding the contaminated mulch material in the Japanese Knotweed (JKW) exclusion zone at Sallybrook.
- Sorensen will liaise with Ross Macklin about the otter holts at Meadowbrook and upstream of Grandons.
- Sorensen is responsible for issuing any outstanding reports by Ross Macklin.
- Sorensen will collaborate with the UCC Dipper Monitoring Programme.

- Sorensen will investigate a process to ensure that all subcontractors working in close proximity to watercourses have their oils/hydraulic fluids checked for the use of biodegradable oils.
- Sorensen will report findings on fish netting activities during instream works in the 2023 season.
- Sorensen will report back with a list of all additional trees removed that were outside the original designs.




As a result of the Environmental Workshop, Environmental Tour 001 occurred on 22/11/2023. This is a formalised collaborative site-audit between the employers and the main contractor ecologists. The initial audit was positive and productive. This process will continue to be refined. The next Environmental Tour is preliminary planned for early in December 2023.

The outstanding final report by Brian Keeley of Wildlife Surveys Ireland for bat survey work in advance of tree felling in Areas 1 – 4, has been issued and is in line with the Work Requirements. Likewise, the outstanding Ross Macklin reports that covers the camera monitoring periods when works were carried out in the vicinity of the N2 holt, has been issued and is in line with Work Requirements.

Sorensen have provided hand-held turbidity and pH monitoring records for areas where there has been potential for impact by works' pumping-activities. The records are included in Sorensen's November Audit.




Sorensen has appointed an 'Environmental Champion' tasked with overseeing the management and upkeep of certain ecological and environmental controls on the site. For example, that all pumps, where required, have silt bags fixed on the outflow. This decision follows an action form the Environmental Workshop and aims to streamline urgent actions between the Sorensen site ecologist and ground workers. The 'Environmental Champion' does not replace the role of the site ecologist.

Inland Fishers Ireland (IFI) were notified of pumping activities at Springmount culvert by Sorensen. IFI were also consulted in relation to the maintenance of the Cois na Gleann culvert by the Employer's Representatives.

Item number	Date	Comment	Image	ECoW Action/Recommendation	Sorensens's Action response
1	1/11/2023	Springmount culvert – pumping of works area into the stream. No silt mitigation in place.		Informed site ecologist. Email sent to project manager.	Contractor ecologist immediately went to location, the pump was turned off and redirected to a location that would not come into contact with the watercourse, a silt sock was attached before the pump was turned back on.
2	1/11/2023	Springmount - Dumper leaking dirty water from works area onto main road.		Informed site ecologist. Email sent to project manager.	Steps taken to prevent sedimented water reaching drain system. Road sweeper deployed to clean road.
3	2/11/2023	Springmount - there was a brief period during which pumping from the works area, where concrete pouring was taking place, discharged directly into the stream. No monitoring measures were in place.		Informed site ecologist.	Pumped water was diverted into the combined system avoiding the watercourse.

4	2/11/2023	At the Hazelwood work area, preclearance activities necessitated the removal of a wooden shed. It was noted that the non-third schedule invasive plant species <i>Clematis vitalba</i> was growing on the shed.		Queried site ecologist about biosecurity measures.	Action was taken to contain the spread of this potentially invasive plant.
5	3/11/2023	Circus Field- Vegetative clearance within the otter exclusion zone and corrective action required to address the incorrect positioning of fence at otter holt in Circus Field.		Informed site ecologist via email.	Contractor's otter specialist notified – disturbance deemed minor as clearance work did not encroach on riparian habitat and a wheeled, rather than tracked, excavator was used for the activity. Fence repositioned correctly.
6	4/11/2023	Wheel wash at JKW stockpile removed and replaced with larger one.		Queried site ecologist about biosecurity measures.	Wheel wash at point of entry to JKW stockpile location, washed out into the JKW area, removed off site and replaced on 4/11/23.
7	6/11/2023	At Springmount pumping out works area into stream.		Discussed with site ecologist.	Contractor ecologist on site shortly after incident was raised. The pump was turned off and redirected into the combined system.

8	9/11/2023	Pump breaks down at Springmount flooding works area.		Discussed with site ecologist and environmental sustainability manager.	Sedimented water from flooded works area tanked out for disposal in a safe location. Good silt management being followed.
9	10/11/2023	Bund removed from trunk of tree at Sallybrook House.		Corrective action taken in response to last month's Audit.	No further action required.
10	14/11/2023	Pumping out of works area at Sallybrook into attenuation area behind temporary sheet-pile wall. The use of check dams within the drainage channel and the use of silt socks at the end of hoses were noted.		Discussed with site ecologist. Good silt management being followed.	The use of silt fencing, straw dam extended with stone, cofferdam, silt socks and pumping being diverted through a settlement tank are examples of good silt management on site.

<p>11</p>	<p>15_16_17/ 11/2023</p>	<p>Lisa Dolan on site supervising drainage works in Area 1 JKW exclusion zone. Widespread evidence was found of JKW infestation within the exclusion zone. Biosecurity measures implemented throughout works.</p>		<p>Discussions onsite with knotweed specialist.</p>	<p>No action required.</p>
<p>12</p>	<p>15/11/2023</p>	<p>Fresh JKW canes growing from stockpile within the temporary cell.</p>		<p>Advised that, though not strictly necessary, canes could be sprayed with herbicide to increase biosecurity during future relocation.</p>	<p>Advice taking into consideration.</p>
<p>13</p>	<p>15/11/2023</p>	<p>Contaminated mulched material from the JKW exclusion zone is transferred to a designated area within the temporary cell.</p>		<p>Discussions with site ecologists about the long-term plan for this material.</p>	<p>The official plan has not been issued yet. From discussions on site, the preliminary plan is to stockpile and manage the material to facilitate decomposition and mitigate JKW growth throughout the duration of the works.</p>

14	20/11/2023	Drainage works commence at Sallybrook house. Noted presence of non-third schedule IAPS on the bank adjacent to works - Montbretia and Winter Heliotrope.		Discussed with site ecologist. Followed up with an email.	Sorensen confirmed that the trench was backfilled with the excavated material avoiding spread of plant around site.
15	20/11/2023	Sallybrook - drainage works in progress within JKW exclusion zone. The absence of a clear entrance and exit poses potential challenges to biosecurity procedures.		Informed site ecologist. Followed up with an email.	Procedure was not affected for ground crew, however, the boot wash and sign in/out sheet were relocated to ensure procedures would remain unaffected.
16	22/11/2023	During Environmental Tour with site ecologists, it was noted that a check dam within the attenuation area at Sallybrook house needed adjusting.		Discussed with site ecologists on site.	It was confirmed during the Tour that the ongoing turbidity meter readings continued to remain at acceptable levels at this location, therefore, no siltation event was occurring.

17	22/11/2023	Water from the drainage works at Sallybrook House are being pumped into the temporary sheet pile attenuation area onto bare ground. It was discussed that the use of stone or matting beneath the hose would prevent scouring and subsequent avoidable sediment mobilisation.		Discussed with site ecologists during Environmatal Tour.	It was discussed that this approach should be a “standard detail” going forward, where required, and could be put in place for precautionary reasons. It was confirmed during the Tour, that ongoing turbidity meter readings continued to remain at acceptable levels at this location, therefore, no siltation event was occurring.
18	22/11/2023	The reinstated embankment of the former slipway at Sallybrook was inspected, revealing the presence of Terram within the embankment. Erosion from recent heavy rain and high river levels had exposed this material. Immediate action is required to prevent this material from entering the waterway.		Discussed with site ecologists during Environmatal Tour.	It was discussed on site that the removal of the Terram would likely de-stabilise the embankment. It was agreed that the Contractor would apply erosion matting over the bank to protect the integrity of the embankment.
21	22/11/2023	Reinstated embankment at Sallybrook could include further action to reduce erosion.		Discussed with site ecologists during Environmatal Tour.	ER to approve MAR071 SSI Coir Mesh before corrective action can take place.

19	22/11/2023	The siltation tank in use near the furniture makers has an outlet with torn mesh screening. Action to explore the option of installing a new screen with a larger mesh size, such as Hessian.		Discussed with site ecologists during Environmental Tour.	Sorensen to explore material options and fitting new screen.
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Appendix A. Sorensen's Environmental Audit 31/10/2023 To 28/11/23:

Attached separately.

Appendix B. Comments on Sorensen's November's 2023 Environmental Audit:

Overall, good. Includes mostly all issues raised during the month. This is the result of greater collaboration between the contractors and employers' ecology teams. In particular, the shared site-audits (planned to occur every two weeks) and the use of follow-up-emails after discussions. Additional comments:

- No mention of Lisa on document as having contributed to the audit. Has this occurred as agreed in Environmental Workshop.
- No mention of contaminated mulched material being relocated.
- Does not include ecological toolbox talks, if any, that were undertaken during the month of November 2023. This was an agreed action in the Environmental Workshop.
- Does not include JKW exclusion zone (Area 1) vehicle wash-down and JKW exclusion zone sign-in / sign-out documentation.
- No mention of the use or non-use of Sorensen's permit systems – Permit to Pump and Permit to Remove Vegetation.

Appendix C.

Minutes of Environmental Workshop. Attached separately.