

Environmental Report October 2023

Glashaboy Flood Relief Scheme

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The following is the clients Ecological Clerk of Works (EcCOW) 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 contractors monthly report for October is commented on in the appendices.
- Change Orders for October included three change orders which were the Springmount in-stream extension, the Bleach hill in-stream additional extension and Area 1 embankment changes.

The main work areas for October 2023 included:

- Bleach Hill (Cuil Chluthair) Culvert Works.
- Springmount Culvert Works and Drainage works.
- Sallybrook JKW (Japanese knotweed) excavations and transport, mulching of woody material, and drainage works.

Sorensen have introduced two new environmental permit systems since last month. These are a Permit to clear vegetation and a Permit to Pump. An example of each can be viewed in Sorensen's October Environmental Audit. These can be effective if implemented and adhered to by ground workers.

Instream works have mainly ceased though extensions were granted to work at the Bleach hill and Springmout culverts. Instream works associated with the Bleach hill culvert was completed during the month. Works at the Springmount culvert is ongoing into November. However, the stream at Springmount is diverted with no works taking place within the stream.

General site conditions are good with housekeeping at a satisfactory level.

The main contractor continues to employ the services of Knotweed Solutions for works around recorded Third Schedule Invasive Alien Plant Species. However, an issue occurred this month where excavations were carried out within the JKW exclusion area at Sallybrook without the supervision from Knotweed Solutions. The ER team are in the opinion that this resulted in excessive material being added to the temporary cell. Sorensens are to consult with Knotweed Solutions about the matter and respond accordingly.

The main contractor employed the services of Brian Keeley of Wildlife Surveys Ireland for bat survey work in advance of tree felling in Areas 1-4. The ECOW is still waiting on a final version of this survey so an evaluation can be made of its quality and compliance with the conditions outlined in the EIAR and Work Requirements. An email were sent requesting this information on 26/09/2023. Due to busy work schedules with the sub-contractor, final report due for issue in early November 2023.

The main contractor has continues to employ the services of otter specialist Ross Macklin. Works have ceased around otter holt N2 at Sallybrook. The report that covers the camera monitoring periods when works were carried out in the vicinity of the N2 holt have not yet been issued. An email was sent requesting this information on 26/09/2023. Report due to be published in November. Vegetation clearance and Heras panel installation was carried out at otter holt N6. This is not in line with the terms and conditions of the derogation license for this holt.

Capital Water Systems Ltd. have removed the four in-situ water monitors from the main channel while in stream works are not in operation. This is in line with the works requirements.

An environmental workshop to run through ecology matters with Sorensens in preparation for 2024 instream works is scheduled for November. The workshop plans to cover 2024 Instream works, mitigation measures, monitoring, invasive species management, specialists, licences, CEMP Requirements, EIAR requirements and Work Requirements.

Sorensen's have recruited the services of Lisa Dolan, a senior ecologist with 20 years of experience in environmental consultancy. She has extensive experience in dealing with JKW. It is expected that she will bring considerable experience to Sorensen's environmental team. She is expected to start in November 2023, on a part-time basis.

Item	Date	Comment	Image	ECoW	Sorensens's Action
number				Action/recommend	response
				ation	

1	3/10/2023	Oil boom left in stream. Low environmental impact. Looks unsightly and not best practice	gartar at a sa.	Informed site ecologist.	Sorensen unable to remove due to high water levels throughout October.
2	3/10/2023	JKW Exclusion area at Sallybrook not being maintained.		Informed contractor's site ecologist.	Sorensen later boosted the exclusion zone with additional signage and fencing.
3	3/10/2023	Bleach hill culvert overpumping works area – silt sock is torn. No evidence of turbidity monitoring. No silt mitigation downstream.	C6/10/2023 18:T64	Informed contractor's site ecologist.	Hand-monitoring results were later issued. The instream works were completed this day before mitigation could be organised.

4	3/10/2023	Sub-contractor did not utilize any ground protection measures when working in O'Callaghans park causing compaction and damage to amenity grassland.	102 (10.28)29 NZ 20	Documented.	Area was graded the next day. Compaction later evidenced following flood event by pooling in same area.
5	4/10/2023	Temporary sheet pile area being use as attenuation area from the adjacent drainage works-site. Holes in sheet piles leaking sediment rich water into main channel.	96 Nova 123 - No. 101	Discussed with ground crew. Informed site ecologist.	Sorensen installed sandbags and positioned in front of sheet pile holes to block water escaping through.
6	5/10/2023	Brust hose leads to oil spill on Newline Rd.	06/10/2023 12:58	Discussed with site ecologist and subcontractors.	Sorensen responded by applying absorbent granules to the oil on the road, an oil boom positioned on the drain and using a road sweeper to collect the contaminated granules.

7	9/10/2023	Flag stones inserted into Bleach hill culvert high on one side.	8571072023 113 · 20	Discussed with site foreman.	Flag stones lowered on high side.
8	9/10/2023	Plastimul used for culvert should be kept in a dry area.	CEL 101 SIXX 18-21	Discussed with site ecologist.	This was acknowledged by Sorensen's personnel and placed in a more appropriate position.
9	9/10/2023	Suggested spoil should be dug out to check for protected species eel/lamprey by spreading out.	00/12/2023-14/50	Discussed with site ecologist.	Spoil was checked for eel and lamprey species by site ecologist prior to infilling.

10	3/10/2023	Sallybrook - Embankment re-established where ramp was created to allow access for pile driver is exposed showing signs of slippage and erosion.	000/10/2022-10-20	Suggested to site ecologist this should be sown with grass seed ASAP to reduce loss of sediments and erosion. Same for all areas machinery had to access riverbank.	Embankment reinstatement part of temporary works.
11	11/10/2023	Avoidable siltation into main channel occurs from mounded and exposed earth behind temporary sheet pile wall during flood event.	10/10/28:28 12:28	Documented.	The next day Sorensen installed check dams of stone and straw bales as mitigation while the flood water receded.
12	11/10/2023	Pumping out of stream at Sallybrook house has the potential to disturb fish and riverbed substrates.	11/10/2002/10:18	Discussed with site ecologist and advised hose to be shortened.	This stream was reopened to the main channel behind the temporary sheet pile wall. Pumping was stopped preventing any potential disturbance to substrates.

13	12/10/2023	Mulching of tree felling branches into JKW area.	12/10/2023 10-26	Later raised via email to site ecologist and project manager via email.	Sorensen yet to respond.
14	12/10/2023	The over-pumping of water from the stream at Bleach Hill throughout the construction process has resulted in the erosion of the downstream bank.	12/10/3322 10 32	Discussed with site ecologist.	Site ecologist agreed to monitor over winter period to determine if corrective measures are required.
15	16/10/2023	Sallybrook JKW exclusion area has received increased signage and fencing.	18/18/2023 11:48	Documented.	This is a corrective action by Sorensen in response to last month's Audit that raised this issue.

16	16/10/2023	Drain installed behind temporary sheet pile wall to facilitate drainage from overtopping and attenuation from pumped out drainage works.	Tio/10,2022 to 26	Documented.	This action by Sorensen was carried out to mitigate sediment entering the main channel.
17	17/10/2023	Mound of earth around tree at Sallybrook house.	17/18/20227 31:14	Discussed with site ecologist. Advised to remove material around tree as this could cause suffocation over time.	Sorensen to carry out advised action. This was carried out in early November.
18	17/10/2023	Drain behind temporary sheet pile receives layer of stone to help with erosion and run off.	\$3,000 %620, 11 15	Documented.	This action by Sorensen was carried out to mitigate sediment entering the main channel.

19	17/10/2023	Surface water runoff from works area at Bleach hill into drain leading into stream – no preventive action in place to minimize silt entering stream.	17/10/2023 13-45	Documented. Informed site ecologist.	Sorensen took the corrective action of installing a sediment barrier around the drain to prevent any further access of sediment into the stream.
20	18/10/2023	Sorensen help to prevent flooding of businesses at Sallybrook.	19/19/2020 12:23	Documented.	No action required.
21	19/10/2023	Stockpiling of flood material by Council at Circus Field. Otter fencing not maintained.	19/10/2023 10 53	Discussed with site ecologist.	Haras panels were installed around the holt to demarcate the area and prevent any accidental stockpiling within the otter holt buffer zone.

22	24/10/2023	Oil slick at riverstown bridge investigated.	30181323 5131	Source could not be determined. Works upriver of this site investigated for possible connection but none was observed.	No action required.
23	24/10/2023	Heras panels being stored within otter N6 exclusion zone at Circus field.	AM THE SELECT NEEDS	Discussed with site ecologist.	Heras panels were removed.
24	25/10/2023	Change Order to alter bund at Sallybrook.	EST UPTARES AT A B	Memo GFRS-23-008 generated.	No action required.

25	25/10/2023	Trench excavations at Sallybrook to facilitate drainage works. Works not supervised by JKW specialist. Potentially unnecessary material added to of temporary cell.	25/10/2023 11:08	Discussed with site ecologist. ER sends email raising the issue with Sorensen.	Sorensen yet to respond.
26	26/10/2023	Oil slick on the ground next to pump at Furniture shop at Sallybrook.	SURENSEIV 28/10/2029 11:20	Discussed with site ecologist.	Refuelling spillage according to site ecologist. This is not in line with Section 12 of the Work Requirements (Mitigation Measures to Prevent Harm to Soils, Geology and Hydrogeology).
27	26/10/2023	Vegetation clearance and Heras panels installed within the otter exclusion zone at Circus Field in noncompliance with terms and conditions of derogation license.	25/10/2023 [15:4]	Email sent advising contractor to adhere to terms and conditions of derogation license.	Heras panels were relocated by Sorensen to allow the 20m buffer to be achieved around the otter holt.

28	31/10/2023	Pumping out works area		Discussed with site	Silt sock was
		into drain that feeds		ecologist.	attached shortly
		directly into stream at			after speaking with
		Springmount without silt			site ecologist.
		protection in place.			
			76:81 890819119		

Appendix A. Sorensen's Environmental Audit 28/09/2023 To 27/10/23:

Attached separately.

Appendix B. Comments on Sorensen's October 2023 Environmental Audit:
 pH monitoring records for concrete pouring at Bleach hill and Sallybrook RE not included in the report. An email was sent requesting the results.
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- There was no mention of turbidity monitoring taking place during instream works at the Bleach hill culvert. Turbidity monitoring results that were verbally understood to have been conducted were not included in the report. An email was sent requesting the results.
- Does not mention that the tree mulching of branches, from the tree felling works in the JKW exclusion at Sallybrook, has now created additional contaminated material within this area. This mulched material was filled into the archaeology trench and tracked into the general area.
- No mention of the tree felling sub-contractors lack of ground protection measures.
- No mention of silty water leaking out though holes in the temporary sheet piles.
- No mention of avoidable siltation into main channel occurring from mounded and exposed earth behind the temporary sheet pile wall during flood event on 11th October.
- No mention of vegetation clearance and panel installation in otter holt N6 exclusion zone at Circus Field.
- No mention of unsupervised excavations at Sallybrook's JKW exclusion area and the not following of their IAPS Management Plan and Biosecurity measures dated 18th August 2023 during trench works on 25/10/23.