

SORENSEN

Monthly Site Environmental Audit



SPILL CONTROL
OIL
ABSORBENT
GRANULES



INVASIVE
PLANT
SPECIES
AREA



Glanmire Flood Relief Scheme

28/08/2023 To 27/09/23

Details			
Project:		Glanmire Flood Relief Scheme	
Auditor:	Tim Field	Audit Period:	September
Locations Audited: All site.			

1.0 Water Pollution Control/Management Over the Period

Question	Yes	No	Photo Taken?
1.1 Are watercourses free from signs of dis-colouration/turbid water over the auditing period?	✓		No
1.2 Are excavated materials stored at least 10m from bank of water courses?	✓		No
1.3 Has each operating pump have a permit to pump in place?	✓		No
1.4 Have all operating pumps have silt bags fitted to connecting lay-flat?		✗	No
1.5 Ha settlement/stilling ponds free from visual signs of pollution?			N/A
1.6 Has the site free from areas of localised flooding/water pooling?		✗	Yes
1.7 Are all other temporary mitigation infrastructure/measures being maintained?	✓		Yes

Further Comments/Observations

Works have now commenced in the mainstream of the River. Access ramp into river was constructed. Kelly blocks were put into the river at the foot of the ramp to create an area of slack water at the foot of the ramp. This allowed to the suspended solids generated by our works entering into the river be controlled and dispersed gradually.

River stone has been placed in the river to even up the river bed. Placing of this stone was agreed with inland fisheries

Silt netting has been placed in the water prior to works commencing. It was found that the flow of water is too great to create an effective effect to slow down or remove the silt from the water.

Water Sonds have been placed into the River to record water quality as per Appendix 1/28 of the works specification. Sonds installed on 7/9/23 and on W/C 18/9/23

Bleach hill culvert works are progressing. The contractor is witnessing issues with the water table/ volume of water the needs to be managed. 4 no Pumps have been installed to manage the over-pumping for the works. Meeting with fisheries on site occurred on the 31st. Works were assessed with the officer and agreed that no electrofishing was required for these culverts. Ground water within the 'dry section' of culvert was pumped into a settlement chamber and a silt controlling measure before being removed for discharge over ground.

2.0 Fuel/Oil & Chemical Management

Question	Yes	No	Photo Taken?
2.1 Has the site remained free from any obvious signs of hydrocarbon spills/staining?		✗	No
2.2 Are spill trays/plant nappies in place under small mobile plant (e.g. generators)?	✓		No
2.3 Are spill trays and/or bunds free of rainwater/waste oil/hydrocarbon product residue?	✓		No
2.4 Are containers for fuels/oil & chemicals clearly labelled?	✓		No
2.5 Are chemicals/solvents stored in an internally banded COSHH cabinet?	✓		Yes
2.6 Are Gas Bottles/Welding Cylinders stored in a safe, secure manner?			N/A

Further Comments/Observations

No issues with refueling of plant seen during the previous months work

All chemical are stored in a banded COSHH store. COSHH review to be carried out for the project to highlight potential high risk items.

Items of COSHH containers need to be labeled to prevent accidental miss use and or mixing of fuels.

Area of concern has been raised in the sluice at the back of Grandons car garage where oil contamination is impacting the river. Containment measures are in place, however , oil contamination continues to impact the river daily.

3.0 Litter Control & Housekeeping

Question	Yes	No	Photo Taken?
3.1 Is the site entrance/boundary free from evidence of windblown litter and/or fly-tipping over the audit period?	✓		No
3.2 Is the site compound, main access roads, car park and/or canteen area free from signs of litter, are work areas in a tidy state and free from litter?	✓		No
3.3 Is the area around the waste compound being kept tidy and free of litter?	✓		No

Further Comments/Observations

House keeping across the project is to a general high standard across the project. No issues observed or complaints received with regard to housekeeping over the month of September.

4.0 Waste Management

Question	Yes	No	Photo Taken?
4.1 Are the skips only being used for the waste type designated on the signage?	✓		No
4.2 Are skips and/or bins clearly labelled with appropriate signage?	✓		No
4.3 Are skips/bins being maintained & replaced regularly?		✗	Yes
4.4 Are mixed dry recyclables being stored onsite in an enclosed skip?	✓		Yes
4.5 Is canteen food waste being stored separately from general waste?		✗	No
4.6 Are all drums, barrels and containers clearly labelled?		✗	No
4.7 Are all drums, tanks and other containers containing liquid wastes stored in bunded areas?	✓		No
4.8 Is there adequate storage capacity for waste oils?	✓		No
4.9 Are all hazardous materials stored correctly in UN approved barrels?		✗	No

Further Comments/Observations

COSHH bins required for the project for haz waste – eg oily rags, paint tins, aerosol cans etc. Sorensen have requested these and they should be in place in the coming month

Waste segregation required for the project as follows, Mixed general , Dry recyclables, Wood, Office/canteen waste.

Potential contaminated ground identified at O Donnell's yard – Samples have been taken. Likely to be removed as waste from the project. – Results have been received and classified as 17 05 04 – Non Haz/ Inert material.

Further potential contamination has been observed in Grandons car park. Oil sheen observed on the water surface. Samples taken and awaiting test results. Likely to be removed as waste from the project.

Waste soil at the back of Sallybrooke house has been removed. This material has been removed as a waste to landfill restoration via supply chain partners. Waste have been logged in.

5.0 Air, Dust & Mud Control Management

Question	Yes	No	Photo Taken?
5.1 Is the site free of noticeable dust levels throughout the month?	✓		Yes
5.2 Is dust monitoring in place on site?	✓		No
5.3 Is the main entrance and the public roads leading to the site free from signs of mud deposits?	✓		No
5.4 Is the site free from 3 rd Party complaints on dust arisings /general aesthetics of public roads & peripheral access routes?	✓		No

Further Comments/Observations

Noise and vibration monitoring is set up across the project, no issues or complaints have been identified on the project.

No issues with dust across the project, dampening down was carried out during the dry spells in early September

6.0 Noise & Vibration

Question	Yes	No	Photo Taken?
6.1 Is plant switched off when not is use?	✓		Yes
6.2 Are noisy plant items located away from noise sensitive locations?	✓		No
6.3 Is noise being monitored at sensitive receptors?	✓		No
6.4 Is vibration monitoring being carried out at sensitive receptors?	✓		No
6.5 Is the site free from 3 rd Party noise/vibration complaints this week?	✓		No

Further Comments/Observations

No issues with noise or vibration activities observed so far across the project.

Noise and vibration monitoring is set up across the project.

Generator at circus field is a temporary power measure that will be removed for a mains connection in the coming months. This will reduce the ambient noise emitted from the office compound.

7.0 Ecology			
Question	Yes	No	Photo Taken?
7.1 Is protected species fencing & signage in place and intact?		✗	Yes
7.2 Are ecological exclusion zones in place & being maintained?		✗	No
7.3 Are biosecurity measures in place on site?	✓		No
7.4 Are there sensitive habitats/species at risk from works in this area? If yes, give details below:	✓		No
7.5 Are there Ecological mitigation measures prescribed in the Planning documentation and/or Method Statements for this area? If yes, give details below:	✓		
7.6 Are work crews in this area aware of the ecological mitigation measures required? If yes, give details below:		✗	
7.7 Are the mitigation measures in place effective? If no, give details of what additional measures are required below:	✓		
Further Comments/Observations			
<p>IAPS management plan has been developed and implemented across the site.</p> <p>Ecological exclusion zones have been improved throughout the project. This included areas around Area 1 Compound, and Grandons Car park. Otter holt N2 is fenced but signage is not in place due to the exclusion zone being located within the river current. Buffer zone at holt N6 is fenced and signage is in place, recurring issue of a single fence stake falling to be addressed in the coming weeks.</p> <p>Knotweed Survey has been carried out across the rest of the project by the contractors Knotweed specialist. Survey report issued 21st of the month. New JKW stands have been identified in Area 2. Site management aware of the presence of JKW in these new areas. Biosecurity measures will be implemented in affected Area 2 locations for works going forward.</p> <p>Biosecurity has been set up in Area 1. New JKW stands have to be demarcated and signposted. Barriers have been installed. JKW specialist has commented on the proactive measures taken with the set up of the biosecurity at the temporary stockpile area. Proactive measure include the designated area provided to store the JKW. Wheelwash is included to remove any potential rhizomes from the wheels. Powerwash is also included at the wheelwash to power wash the wheels. Sheltered area with Knotweed identification and washdown records in place.</p> <p>Permit to remove vegetation will be introduced to the project via the Sorensen internal IMS, as a controlled permitted system. The permit will be requested by site team prior to the removal of any vegetation and agreed by the Sorensen environmental team.</p> <p>Permit to pump water will be introduced to the project via the Sorensen internal IMS, as a controlled permitted system. The permit will be requested by site team prior to the pumping of any water on site and agreed by the Sorensen environmental team.</p> <p>Bat activity and bat tree roost surveys were carried out by Brian Keely on the nights of 18th and 19th of September. Verbal confirmation has been received stating no bat roosts are present in any trees due to be felled. Survey report will be issued in the coming weeks.</p> <p>Vegetation at the back of Sallybrook house has been removed as waste. This had the presence of a non-Third Schedule invasive species, best practice Guidelines from NRA 2010 were utilized for its removal.</p>			

ENVIRONMENTAL AUDIT

Soil/silt was removed from under the wall from the river near the joinery by Sallybrooke, this soil/silt was suitable habitat for lamprey and eels, this soil was removed by excavator to allow any lamprey or eels be released back into the River, this activity was supervised by the contractors environmental manager and the ER's ECoW.

Electrofishing was carried out by an officer of Inland Fisheries Ireland on the 21st of the month. A number of fish, including juvenile trout and eel, were successfully translocated.

8.0 Emergency Response Resources

Question		Yes	No	Photo Taken?
8.1	Are Spill stations accessible at active work fronts & key areas in around the compound?		X	Yes
8.2	Are spill stations adequately stocked with spill containment/clean-up materials?	✓		No
8.3	Does the fuel bowser have a spill response kit stored on board?	✓		No
8.4	Do all tracked and rubber wheeled plant machinery have on board spill kits?	✓		No

Further Comments/Observations

All machinery on the job have an on-board spill kit (Grab Bag)

Marine oil booms have been placed in areas where mechanical works are occurring alongside the river channel, these will be deployed in the event of a spill. These booms will be removed prior to any weather events to reduce the risk of them being washed away.

9.0 Energy Conservation Awareness

Question	Yes	No	Photo Taken?
9.1 Are machines being shut down instead of being left to idle for prolonged periods?			
9.2 Are machine operators aware that engine idling time should be kept to a minimum?			No
9.3 Are plant items operating cleanly and not emitting black smoke?			No
9.4 Is there evidence of daily/weekly equipment checks being conducted – signed off check sheets?			No
9.5 Are windows of site offices/canteen closed while heating is on?			No
9.6 Are lights off in unoccupied offices, meeting rooms, etc?			No
9.7 Are energy awareness posters, notices or stickers displayed in site offices/canteens/printing rooms, etc			No
9.8 Are there motion sensor lights installed in toilets/meetings room or corridors?			No
9.9 Are all office devices powered down when not in use for long periods?			No

Further Comments/Observations

Site is temporarily being powered by a diesel generator until such time as mains power can be connected. Hybrid system is being investigated for suitability for the project.

Automatic light in the welfare have been installed in common areas.

Some machines observed to be idling when not in use. Sustainability manager is assessing behavioral change initiatives with regard to fuel management across the Sorensen Group.

10.0 Look Ahead

Question: Works applicable in the coming Month

Instream works are due to cease at the end of this month.

All instream piling is has been completed. RC wall due to be placed behind temporary sheet piles in Area 1.

Culvert works will commence at Springmount

Drainage works will be underway in Area 1 and Area 2.

Tree Felling – Sitewide (ongoing)

Riverside embankments removed for River access during piling works to be replaced.

Results of Environmental Surveys

Badger: No badger setts were identified during Badger Sett surveys completed in July 2023.

Otter: Otter holt activity surveys completed in August 2023 for Area 1 and 2 identified 3 Active otter holts, 2 of which confirmed to be within 150m of proposed works for this year. Otter holt activity surveys completed in September for Area 3 and 4 identified 1 Active holt located >150m from proposed works for this year.

Bats: An evaluation of the site for potential for bat tree roosts, feeding, commuting, and potential impacts of proposed tree felling on bats was undertaken by bat specialist Brian Keeley. Surveys took place over 2 nights on the 18th and 19th of this month. Survey report will be received in the coming weeks – verbal correspondence confirmed the presence of a number of bat species utilizing the river channel for feeding and that no bats were observed to be roosting in any trees due to be felled.

IAPS: Surveys were completed by Knotweed Solutions in July for Area 1 and September for Areas 2, 3 and 4. Multiple stands of knotweed were identified in Areas 1 and 2. A number of Himalayan Balsam plants were also identified in Area 2 and 4 as well as multiple non-Third schedule species in all areas.

Status of Ecological Licenses

Otter Derogation Licence: Status: Received. Licence No.: DER-OTTER-2023-90.

Bat Derogation Licence: Status: Applied for 5th of this month, no longer required for tree felling activity as no bat tree roosts present.

Removal and Transportation of Japanese Knotweed (*Fallopia japonica*) Licence: Status: Received
Licence No.: REG 49 48/2023

Additional Comments can be added on next page

Additional Comments/Observations

- * Overall, the project is to relatively high standard.
- * Number of areas of concern, including silt control to be assessed in the coming weeks.
- * Emergency response material needs to be reviewed across the project.
- * Heavy rainfall has led to overtopping of dam at Bleach hill on multiple occasions
- * Heavy rainfall on the 27th led to some flooding/pooling of water throughout the site.

Audit Marking Scheme

Gross failure to meet Regulatory Requirements	Multiple issues identified which should be dealt with immediately as the project is grossly failing to meet Regulatory Requirements in relation to this specific Question. If applicable, works should be stopped and rectified before recommencement.
Major Non-Compliance	More than one issue identified as not meeting basic Sorensen requirements in relation to this specific Question. If applicable, works should be stopped & rectified before recommencement.
Minor Non-Compliance	Issue identified as not meeting the Sorensen Requirements in relation to this specific Question. If applicable, works should be stopped & rectified before associated works recommence.
Compliance	No Issues identified, with all works meeting the minimum Regulatory and Sorensen IMS Requirements in relation to this specific Question.
Good	Performance to a good standard, beyond the minimum Sorensen IMS requirements in relation to this specific Question.
Excellent	At the forefront of industry best practice and/or an innovative approach demonstrating the very highest level of achievement far above the minimum Sorensen or Regulatory requirements.

Action Response Classification

	Not meeting Regulatory or Sorensen Standards – failed audit	Escalation to Director Level	Stop Works – Rectify Immediately
	Not meeting Sorensen standards – unacceptable performance	Escalation to Contracts Manager & Relevant HSEQ Manager level	Before End of Shift
	Meeting or exceeding Sorensen standards	Positive Performance	Within 7 days
	At the forefront of Industry Best Practice	Excellent Performance	Advice note only, so date may be N/A

Audit Report Actions			
Category	Action	Assigned to	Action Close Out Date
	COSHH Bins to be ordered -	TF/MS/MB	30/9/23
	Removal of vegetation – Permit system to be introduced to control the removal and clearance of trees and vegetation on the project	TF	01/09/23
	Permit to Pump water to be introduced	TF/SD	01/10/23
	Knotweed/ Invasive to be demarcated to prevent unauthorised entry to IAPS area	SD/ CM/ RH	01/10/23
	Silt mitigation to be improved sitewide	MB/SD/TF	09/10/23

Audit Acceptance/Sign-Off	
Auditor Signature	Site Representative Signature
T. Field	J. O'Sullivan <i>John O'Sullivan</i>

Space provided on following pages for Images

Photo 1



Caption 1 Section

Silt mitigation at river access point – demarcation of otter holt

Photo 2



Caption 2 Section

Silt mitigation measures instream at piling works

Photo 3



Caption 3 Section

Oil boom below works area

Photo 4



Caption 4 Section

Dam at Bleach hill culvert

Photo 5



Caption 5 Section

Fish guards on Abstraction pumps

Photo 6



Caption 6 Section

Removal of silted water

Photo 7



Caption 7 Section

Water monitoring Sonde located by Glanmire Credit Union

Photo 8



Caption 8 Section

Silt control measures instream

Photo 9

Photo 10



Caption 9 Section

Caption 10 Section

Successfully translocated fish post-electrofishing by IFI Officer

Oil slick visible at Grandons

Photo 11

Photo 12



Caption 11 Section

Caption 12 Section

Newly identified JKW stand – Area 2

Newly identified Himalayan Balsam – Area 2

Photo 13



Caption 13 Section

Wheelwash in place as per biosecurity measures

Photo 14



Caption 14 Section

Jet wash in place for washing down of plant at the jet wash

Photo 15



Caption 15 Section

Terram in place along the bund for the knotweed set down area.

Photo 16



Caption 16 Section

Bund (flood protection) in place for knotweed set down area.

Photo 17			Photo 18		
Caption 17	Section		Caption 18	Section	

Photo 19			Photo 20		
Caption 19	Section		Caption 20	Section	

Photo 21**Photo 22**

Caption 21	Section		Caption 22	Section	

Photo 23**Photo 24**

Caption 23	Section		Caption 24	Section	