

**SORENSEN**

**Monthly Site  
Environmental Audit**



**Glanmire Flood Relief Scheme**

29/01/24 To 28/02/24

Details			
<b>Project:</b>	Glanmire Flood Relief Scheme		
<b>Auditor:</b>	SD/LD	<b>Audit Period:</b>	February
<b>Locations Audited:</b>	All sites.		

**Week Commencing 29<sup>th</sup> January**

**Comments/Observations**

- Environmental Tour 005 (29/01/24) – Key findings:
  - Erosion protection required at F.Home riverbank (installed 03/02/24),
  - Pumping at Meadowbrook not in line with RAMS, manifold system not in use due to connection issue (manifold pipe & discharge hose both ‘male’ connection points) – adapter acquired and set up amended 31/01/24. (Photo 1)
  - Improved biosecurity infrastructure at Area 1 JK exclusion zone (wooden fencing improved and hut installed to house sign-in sheets)
- Good use of nappies/spill trays throughout all site areas. (Photos 8, 9 & 10)
- Sallybrook attenuation area altered during installation of septic tank – drainage stone placed as filtration measure, silt curtain installation improved.

**Week Commencing 5<sup>th</sup> February**

**Comments/Observations**

- Discussions had with IFI re. pumping of Sallybrook Stream. Downstream section to remain active until the instream window. Upper stream sections ok to be over-pumped and dried out.
- Trees potentially needing felling surveyed for bat roost features and nesting birds – no significant findings. No nesting birds, no suitable bat roost features – some extensive ivy-coverage but located close to foot/road traffic and street lighting. (Note: outside the main bat hibernation period (Dec/Jan), bat maternity season (May-Jul/Aug) and bird nesting season (Mar-Aug)).
- Fuel spill Meadowbrook from overflow of Powers Group tractor – Oil booms and pads deployed around gullies immediately. Area treated with Bioversal HC cleaning product. TBT on Spill response Training scheduled for last week of Feb. (Photo 2 & 3)
- Concrete poured back of Funeral Home – pH of discharged waters monitored, no influence on waters pH as level maintained below that of which would come into contact with the concrete.
- Environmental Tour 006 (09/02/24) – Key findings:
  - Drainage works R639 – plant arm hitting tree branches when turning. SCE unable to swing arm over the road due to risk of injury to pedestrians and vehicle users, tree branches cut back (14/02/24) to prevent plant arm impacting them. (Photo 4)
  - Erosion protection to be extended F.Home riverbank – completed 14/02/24 (Photo 5)
  - Shutter oil visible in water at intake point of pump (back of F.Home) oil and sediment sock on discharge hose for the purpose of removing pollutant from water, however, sock required maintenance (emptying of sediment) for effective control of shutter oil. Pumping was ceased and sock actioned for maintenance, action completed within 30 mins and pumping allowed to recommence. (Photo 6)

**Week Commencing 12th February****Comments/Observations**

- Erosion control matting extended along riverbank at back of Funeral Home.
- Updated Biosecurity Management Plan Rev.02 issued to ARUP 15/02/24.
- Terram and stone placed in JK exclusion zone (Area 1) for access of materials for embankment works – prevents delivery vehicles coming into contact with infested ground. Biosecurity Management Plan Rev 02 abided by at all times. (Photo 7)
- Proposal made to EMG on extra trees to be felled. (Photo 18)
- Hedge and trees removed Meadowbrook for outfall pipe from pumping station – ecological survey completed prior to removal.
- Panels moved back in circus field as Otter Holt N6 no longer present (collapsed – likely during Oct flood event). Area surveyed for JK prior to extension of yard, no above ground growth present - Terram placed before stone to ensure no contact between plant/personnel and potentially infested soil.
- Trees cut at Copper Valley Vue for enabling works.

**Week Commencing 19th February****Comments/Observations**

- Triturus Ltd. January Otter Activity report issued to ARUP 19/02/24 – N6 has collapsed, 2no. new holts in Meadowbrook. Signage and sound barriers to be erected.
- Tree branches trimmed back in Meadowbrook in preparation of flood defence structure work. (Photo 11)
- Mobile Welfare Unit placed in Circus Field temporarily alongside river (~3m) until permanent unit installation is completed in site compound. Weather monitoring ongoing – Unit will be removed if there is a risk of flood.
- Environmental Tour 007 21/02/24 – Key findings:
  - Housekeeping (Hazelwood & Copper Valley) – completed 27/02/24
  - Issues with silt mitigation setup (Meadowbrook) – manifold system only connects to 6" hose, issue with 6" pump led to use of 4" pump. 4" hose fitted with large green silt sock which did not contain the initial silt at the onset of pumping (~5min) during earthwork activity. Mitigation system currently in review – earthworks complete and water discharging clean of silt at time of tour and in the days since.
- Hedge and tree planting commenced at Cuil Chluthair
- Otter Derogation licence received from NPWS for holts N2, C2, N6C, N6D and N8 – expires 31/12/24. Signage denoting Ecologically Sensitive Areas to be erected at Sallybrook, C2 and Meadowbrook. Sound barrier to be placed prior to works occurring in proximity to N2 and N6C & D.
- EMG response to proposed extra tree felling – **Sallybrook: Rejected Copper Valley: Approved New Line: Approved.**

**ENVIRONMENTAL AUDIT**

<b>Week Commencing 26th February</b>
<b>Comments/Observations</b>
<ul style="list-style-type: none"> <li>• Stocktake of yellow spill kit bins and silt mitigation equipment completed. Order of new stock to be placed before end of week.</li> <li>• Topsoil placed – Cuil Chluthair</li> <li>• Hedge planting completed at Cuil Chluthair (Photo 13 &amp; 14)</li> <li>• Vegetation clearance and placement of Terram and stone ongoing at Copper Valley Vue. Silt fencing installed along the perimeter of Glenmore Stream.</li> <li>• TBT – Spill Response Training (28/02/24) (Photo 12)</li> <li>• Dumper and digger washed down and removed from JK storage area (28/02/24). (Photo 15 &amp; 16)</li> <li>• Water quality monitored throughout month (Photo 17)</li> </ul>

<b>Ecological Licenses Schedule</b>				
<b>Comments/Observations</b>				
<b>GFRS – Ecological Licences</b>				
<u>Ecological Feature</u>	<u>Licence Type</u>	<u>Status</u>	<u>Start Date</u>	<u>Expiry Date</u>
<b>Badgers</b>	Derogation	Not Required	N/A	N/A
<b>Bats</b>	Derogation	Not Required	N/A	N/A
<b>IAPS</b>	Transport - JKW	Active	02/01/2024	31/06/2024
<b>Otters</b>	Derogation	Active – Holts N2 & N6	22/02/2024	31/12/2024

<b>Action</b>	<b>Assigned to</b>	<b>Action Close Out Date</b>
Place erosion control matting at bleach hill	MC	01/03/24
Commence Kingfisher nest monitoring	SD	28/02/24
Monitor silt control measures – All locations specifically (Copper Valley Vue, Meadowbrook, and Sallybrook/PODs)	SD	Ongoing
Grass seed sowing at Cuil Chluthair	SD	Once MAR approved

<b>Audit Acceptance/Sign-Off</b>	
<b>Auditor Signature</b>	<b>Site Representative Signature</b>
S. Dale L. Dolan	D. Sorensen

**Space provided on following pages for Figures**

**Photo 1**



**Photo 2**



<b>Caption 1</b>	<b>Section</b>	<b>W/C 29/01/24</b>
Silt mitigation manifold system set up at Meadowbrook pumping station.		

<b>Caption 2</b>	<b>Section</b>	<b>W/C 05/02/24</b>
Gully in the process of being bunded with oil boom after fuel spill (Meadowbrook)		

**Photo 3**



**Photo 4**



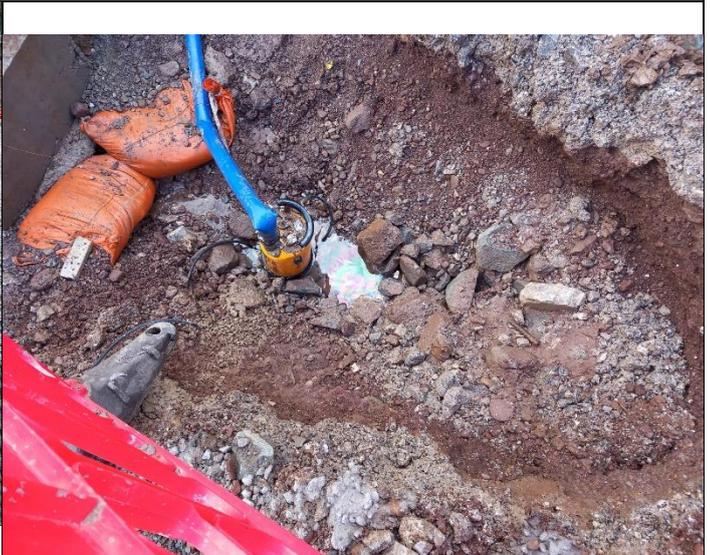
<b>Caption 3</b>	<b>Section</b>	<b>W/C 05/02/24</b>
Road sprayed with Bioversal HC after fuel spill (Meadowbrook)		

<b>Caption 4</b>	<b>Section</b>	<b>W/C 05/02/24</b>
Branches cut back – R639		

**Photo 5**



**Photo 6**



**Caption 5** | Section | W/C 12/02/24

Erosion control mesh extended – F. Home

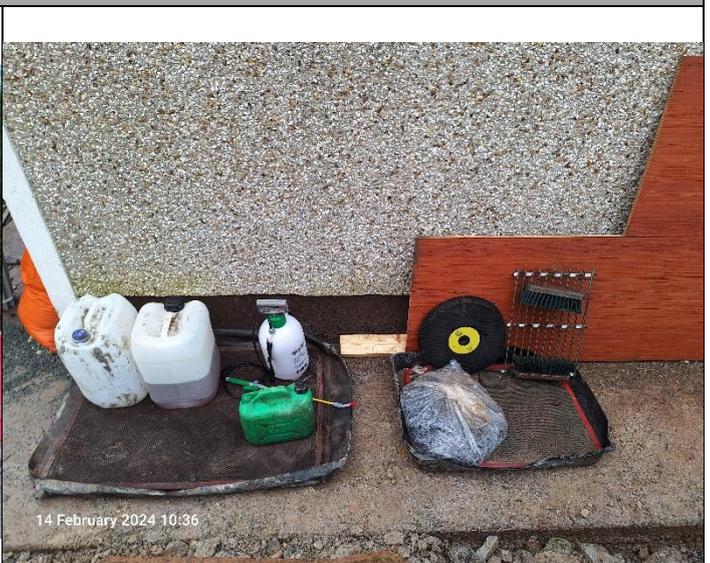
**Caption 6** | Section | W/C 12/02/24

Shutter oil visible in water being pumped at F. home.

**Photo 7**



**Photo 8**



**Caption 7** | Section | W/C 12/02/24

Terram and stone access point to embankment – Area 1

**Caption 8** | Section | N/A

Spill trays in use – F. Home

Photo 9



Photo 10



<b>Caption 9</b>	<b>Section</b>	<b>N/A</b>	<b>Caption 10</b>	<b>Section</b>	<b>N/A</b>
Nappy in use – Copper Valley			Spill nappy in use - PODs		

Photo 11



Photo 12

**SORENSEN**

**IRELAND HSEQT  
PROJECT BRIEFING / TOOLBOX RECORD**

Project Name & No.:	GPS	Project Manager:	
Briefing Title & Details:	Toolbox Talk - B SOIL: RESPONSE TRAINING		
Briefing Date:		Signed:	<i>[Signature]</i>
Briefing Completed by:	SORCHA DACE	Signed:	<i>[Signature]</i>
Translation Completed by:	N/A	Signed:	

In signing this form, I confirm that I have received the above stated briefing and will conform to safe working rules, practices & methods as communicated & highlighted in the briefing completed on the above data on this project.

Forename	Surname	Occupation	Employer	Signature
Michael	Casey	EO	SORENSEN	<i>[Signature]</i>
Shane	O'Connor	Driver	Sorenson	<i>[Signature]</i>
Kevin	O'Neil	Driver	Sorenson	<i>[Signature]</i>
David	Doyle	Driver	POWER	<i>[Signature]</i>
Casey	Gilbert	Driver	SORENSEN	<i>[Signature]</i>
DALNY	CASEY	Operator	SORENSEN	<i>[Signature]</i>
TOM	CASEY	SS	SORENSEN	<i>[Signature]</i>
Paul	Gilbert	Driver	Sorenson	<i>[Signature]</i>

File Ref: Rev 01 Page: Page 1 of 2 Document No: 002\_003\_0170\_0428 Date Published: 01/01/2023

<b>Caption 11</b>	<b>Section</b>	<b>W/C 15/01/24</b>	<b>Caption 12</b>	<b>Section</b>	<b>WC 26/02/24</b>
Trees cut back - Meadowbrook			TBT – Spill Response Training sheet		

**Photo 13**



**Photo 14**



**Caption 13** | Section | **WC 26/02/24**

Topsoiling and planting completed – Cuil Chluthair

**Caption 14** | Section | **WC 26/02/24**

Topsoiling and planting completed – Cuil Chluthair

**Photo 15**



**Photo 16**



**Caption 15** | Section | **WC 26/02/24**

Machine wash down upon exiting JK area

**Caption 16** | Section | **WC 26/02/24**

Machine wash down upon exiting JK area

**Photo 17**

**SORENSEN**

Discharge Water Quality Monitoring – February 2024 (GFRS)

DATE	LOCATION	TIME	TURBIDITY	pH	SIGNS OF EROSION?	SIGN OF OILS/GREASE?	COMMENT
01/02	SALLYBROOK	11:00	10.59	7.07	no	no	
	F. Home	12:00	4.91	7.54	no	no	
	Meadowbrook	12:30	18.93	7.63	no	no	
02/02	SALLYBROOK	12:00	7.86	7.49	no	no	
	Meadowbrook	12:45	12.62	7.32	no	no	
	F. Home	13:00	3.46	7.51	no	no	
* 06/02	Meadowbrook	16:30	13.57	-	-	-	Tested for correlative equation Extraction discharge point. * (River)
		16:35	10.2	7.51	no	no	
07/02	F. Home	11:00	5.21	7.42	no	no	
08/02	F. Home	9:00	5.23	7.42	no	no	
	Sallybrook	9:15	20.2	7.23	no	no	
* 13/02	Meadowbrook	16:30	37.4	-	-	-	Tested for sands correlative calc. Concrete paved. No contact w/water (ground) *
	F. Home A	15:45	2.44	7.17	no	no	
	F. Home B	15:55	4.39	7.02	no	no	
14/02	F. Home A	10:30	6.32	7.00	no	no	
	F. Home B	10:32	5.11	7.02	no	no	
15/02	F. Home A	9:30	5.70	7.03	no	no	
	F. Home B	9:35	5.33	7.27	no	no	
	SALLYBROOK	11:20	50.3	6.76	no	no	No pumping activity - heavy rain during night - River NTU = 121
19/02	SALLYBROOK	9:30	3.25	7.08	no	no	
	F. Home	10:30	5.54	6.89	no	no	
20/02	SALLYBROOK	9:30	2.30	6.94	no	no	
	Meadowbrook	15:00	4.38	6.69	no	no	Pumping. Sign of silt on road.
	Meadowbrook	15:05	11.74	7.42	+	-	Tested for correlative *
* 22/02	Meadowbrook	16:00	10.12	-	-	-	Tested for correlative *
27/02	Meadowbrook	13:15	15.36	7.62	no	no	
28/02	Meadowbrook	8:30	6.10	7.41	no	no	
	Sallybrook	9:00	4.32	7.01	no	no	No pumping from works

**Caption 17** | Section | All

Water quality monitoring sheet - February

**Photo 18**

LOCATION	SPECIES + NO.	REASON FOR FELLING	REPLANTING PLAN
Sallybrook	Black Alder ( <i>Alnus glutinosa</i> ) x7	To enable construction methodology	Black Alder ( <i>Alnus glutinosa</i> ) x7
	Willow ( <i>Salix caprea</i> ) x1		Willow ( <i>Salix caprea</i> ) x1
	Sycamore ( <i>Acer pseudoplatanus</i> ) x1		Sycamore = IAPS. To be replaced w/Black Alder ( <i>Alnus glutinosa</i> ) x1
Copper Valley Vue	Black Alder ( <i>Alnus glutinosa</i> ) x9	To enable construction of Temporary Works (bailey bridge)	Black Alder ( <i>Alnus glutinosa</i> ) x9
	Willow ( <i>Salix caprea</i> ) x2		Willow ( <i>Salix caprea</i> ) x2
	Ash ( <i>Fraxinus excelsior</i> ) x1		Ash ( <i>Fraxinus excelsior</i> ) x1
	Bramble/Blackthorn scrub		Blackthorn ( <i>Prunus spinosa</i> )/Hawthorn ( <i>Crataegus monogyna</i> ) mix x5 <b>indv. plants</b>
	2no. unidentified dead trees	Safety concerns. Prevent risk of falling into TW area.	Oak ( <i>Quercus robur</i> ) x1
New Line Road	Ash ( <i>Fraxinus excelsior</i> ) x1	To enable the diversion of Glenmore Stream	Black Alder ( <i>Alnus glutinosa</i> ) x1
	Black Alder ( <i>Alnus glutinosa</i> ) x3		Black Alder ( <i>Alnus glutinosa</i> ) x4
	Willow ( <i>Salix caprea</i> ) x5		Willow ( <i>Salix caprea</i> ) x5
	Bramble scrub		Wildflower seed mix

**Caption 18** | Section | All

Proposed extra tree felling sent to EMG for approval – **Sallybrook:** Rejected **Copper Valley:** Approved **New Line:** Approved.

