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ENVIRONMENTAL RISK ASSESSMENT

for

Enviro Skip Hire Ltd,
Norton Way
Sandbach
Cheshire
CW11 3WL

Report No 161/1A

May 2026

For

ENVIRO SKIP HIRE

DOCUMENT CONTROL	
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Wash Plant Construction Drawings:
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1. INTRODUCTION

1.1 Report Context

1.1.1 Starling Environmental Limited (SEL) has been commissioned by Enviro Skip Hire Limited (the operator) to prepare an environmental permit variation application for their waste treatment facility located at Norton Way, Sandbach, Cheshire, CW11 3WL.

1.1.2 The site is regulated under environmental permit EPR/XP33396EF which is a bespoke permit allowing hazardous waste transfer and non-hazardous waste treatment. The permit allows acceptance of a wide range of non-hazardous waste but currently limits hazardous waste to only asbestos containing waste.

1.1.3 The proposed changes are:

- Add a washing activity for production of recycled aggregates from non-hazardous waste. This will involve addition a waste activity for physico-chemical treatment of non-hazardous waste by soil washing. The annual throughput of this activity will be 250,000 tonnes.
- Add an installation activity S5.6 A1 (a) (i) for storage of hazardous waste. The annual throughput for this activity will be 30,000 tonnes per year.
- Extend the site boundary to include an area of land to the west and north to house the wash plant and the hazardous waste storage facility
- Addition of two non-hazardous waste codes for scrap metal to the existing waste treatment activity

1.1.4 This report assesses the risks of the proposed changes and has been prepared following guidance available on the gov.uk website, particularly:

- Risk Assessment for your Environmental Permit
- Non-hazardous and inert waste: Appropriate measures for permitted facilities
- Chemical waste: appropriate measures for permitted facilities
- Control & Monitor Emissions for your Environmental Permit

1.1.5 Risks identified in Sections 4 and 5 will be controlled through mitigation, as detailed in Section 6. Mitigation will be incorporated into the Environmental Management System.

1.1.6 Extended pre-application advice was provided by the EA and this advice has been incorporated into the submission documents (EPR/XP3396EF/P003).

1.1.7 All drawings referenced are contained in Appendix A.

1.2 Site Location and Surrounding Area

1.2.1 The site is located off Norton Way, Sandbach, Cheshire, CW11 3WL. The national grid reference for the site is SJ 73701 61138. The location of the site is shown on Drawing No 161/01.

1.2.2 The site is located in a built up area of Sandbach. It is situated on an industrial estate off Norton Way and bordered by industrial units to the north, east and south. Beyond the industrial estate are residential properties. The western boundary is bordered by a strip of woodland approximately 8 to 10 m wide and beyond that the Crewe to Manchester railway line. Across the railway, further west, is another strip of woodland and then residential properties.

1.3 Site Layout

1.3.1 Access to the site is from Norton Way via a set of palisade security gates. The site is bound by palisade fencing and concrete panel walls. The gates are locked outside working hours and the site is covered by 24 hour CCTV.

1.3.2 Features include several waste processing and storage buildings, concrete block bays for external waste storage, an office building, garage/workshops, weighbridges, welfare facilities and parking area. Site features are shown on the Site Layout Plan, Drawing No 161/02B.

1.3.3 The site is surfaced with concrete which drains to a catchpit for water harvesting with overspill draining to foul sewer as shown on the Drainage Plan, Drawing No 161/03A.

1.3.4 Waste processing is carried out both inside the existing buildings and within the yard.

2. CURRENT ACTIVITIES

2.1 There has been some confusion over the current permit. It was varied in 2019 from a standard rules permit SR2008No7 'household, commercial and industrial waste transfer station with treatment & asbestos storage' to a bespoke permit. However the variation was not processed properly by the EA. Instead of a new bespoke permit being issued with a new set of conditions, just an updated table of waste codes was issued.

2.2 Current permitted activities are considered to be as per the standard rules set as of 2019 when the permit was varied, which allowed the activities listed below:

Table 2.1 activities

Description of activities	Limits of activities
D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)	The maximum quantity of asbestos waste received at the site shall not exceed 10 tonnes per day.
R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	The maximum quantity of asbestos waste stored at the site shall not exceed 10 tonnes.
D14: Repackaging prior to submission to any of the operations numbered D1 to 13	Treatment consisting only of manual sorting, separation, screening, baling, shredding, crushing or compaction of non-hazardous waste into different components for disposal, (no more than 50 tonnes per day) or recovery.
D9: Physico-chemical treatment not specified elsewhere in Annex IIA which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D8 and D10 to D12	There shall be no treatment of asbestos waste.
R3: Recycling/reclamation of organic substances which are not used as solvents	No more than a total of 50 tonnes of intact and shredded waste vehicle tyres (waste codes 16 01 03 and 19 12 04) shall be stored at the site.
R4: Recycling/reclamation of metals and metal compounds	
R5: Recycling/reclamation of other inorganic materials	

2.3 The current permitted waste codes are listed in table 2.2 of the permit and the maximum throughput is 75,000 tpa.

2.4 Following the updated activity descriptors which have been adopted by the EA, it is considered that the current permit allows:

- Hazardous waste transfer station (the only hazardous waste currently allowed is asbestos)

- Non-hazardous waste treatment including manual sorting, separation, screening, baling, shredding, crushing or compaction.

2.5 The site operates with two process streams: one for general mixed waste and another for construction, demolition and excavation waste. These waste streams are stored and treated separately.

2.6 General waste comes in from local businesses and households through the skip hire service. This is deposited in the transfer station area and treatment includes shredding, trommelling, manual sorting via a picking line, mechanical separation using magnets and density separation techniques, and baling. Waste is imported in skips and also in commercial vehicles. This treatment process produces recoverable fractions eg. metal, wood, glass, plastic, cardboard etc which are segregated and dispatched for recovery or recycling. Residual waste which cannot be separated for recovery is dispatched for energy recovery as RDF. Fines from trommelling are disposed to landfill.

2.7 Incoming construction and demolition waste is stored separately from the general waste. This is crushed and screened to produce recycled aggregate products in accordance with the WRAP protocol.

2.8 Asbestos containing waste is accepted for storage and transfer only, less than 10 tonnes at any time. Asbestos waste is stored in a secure skip.

2.9 During pre-application discussions the question was raised as whether the non-hazardous waste treatment activity should be a listed activity under Section 5.4. The following explanation was put forward as to why this should not be a listed activity, and this was agreed. It has been included in this document for completeness:

Treatment is only carried out for recovery purposes, so activities listed under section 5.4 (a) do not apply as that is for treatment for disposal only. Section 5.4 (b) is relevant as this refers to treatment of non-hazardous waste for recovery and disposal. The capacity of the existing and proposed treatment activities have the potential to exceed the 75tn per day threshold, however both treatment activities would be classed as physico-chemical treatment which is not listed under S5.4(b):

5.4 (b)Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving one or more of the following activities, and excluding activities covered by Council Directive 91/271/EEC—
(i) biological treatment;
(ii) pre-treatment of waste for incineration or co-incineration;
(iii) treatment of slags and ashes;
(iv) treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components.

Although the residual material from the skip waste sorting process can be dispatched for energy recovery as RDF, this does not constitute pre-treatment of waste for incineration as it does not involve changing one or more of the parameters as listed in RGN2:

The RDF is just the residual material that is left over, it hasn't been altered to change the calorific value, moisture content, ash content, chemical composition or heavy metal content. I have received previous advice form the EA on this matter and have been advised that pulling waste out upstream in the treatment process, such as scrap metal or PVC, does not constitute pre-treatment for incineration as it does not alter the physical or chemical composition of the RDF. This is classed as treatment for another purpose, for the recovery of the removed materials, which may or may not incidentally improve the quality of the waste as a fuel, as stated in RGN2 in the extract above.

3. PROPOSED CHANGES

3.1 Addition of Washing Plant

3.1.1 It is proposed to install a wash plant to produce recycled aggregates as a replacement for the existing dry screening process. This will process non-hazardous waste to produce recycled products.

3.1.2 The operator will use a CDE wash plant comprising of an Evowash sand classification and dewatering system, Aggmax scrubbing and classification system, logwasher, filter press, overband magnet, Aquacycle thickener and sludge tank.

3.1.3 The wash plant will operate on a closed loop system which ensures the constant recirculation of water through the plant. Water will be treated in the onsite Aquacycle water treatment tank using flocculants prior to recirculation through the wash plant.

3.1.4 A process flow diagram is contained in Appendix B. This shows how waste will be processed through the plant and the outputs produced. Recycled products will be inspected and tested as appropriate to meet end of waste requirements in accordance with the WARAP quality protocol.

3.1.5 Filter cake produced from the wash plant will undergo sampling and analysis followed by waste classification according to EA technical guidance WM3.

3.1.6 The wash plant will have the capacity to process up to 1500 tonnes per day, which over a 5-day week and 48 weeks of the year, equates to 360,000 tonnes maximum capacity. Proposed waste types for washing are listed in Table 1 overleaf.

3.1.7 The wash plant will have a daily water demand of around 160 m^3 once it is operating at full capacity. The yard has been re-surfaced with concrete and profiled to drain towards a catch pit. Surface water will be harvested from the catch pit for use in the plant. The plant will be sited on a concrete base which drains to a sump on the upper level, which in turn drains to the catchpit on the lower level. The contents of the catchpit are pumped back up into the plant as part of the closed loop system. The drainage layout is shown on Drawing No 161/03A. The remainder of the water requirements for the plant will be provided by mains water.

3.1.8 Rainfall will shed towards the catch pit and be pumped back into the wash plant to supplement water demand. This system will also catch any runoff from washed products. In theory it would also catch any run-off from the filtercake storage area, but in practice, as this will be stored under cover under the filter press housing it will not produce any run-off. The filtercake itself will be a dry product with the consistency of dry clay, it will not flow and will not contain any free liquid.

Waste Code	Description
01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 07 *May include excavation from mineral workings*
01 04 09	Waste sand and clay *Must not include contaminated sand*
10 11 03	Waste glass based fibrous material *Waste without organic binders only*
15 01 07	Glass packaging
17 01 01	Concrete *Must not include concrete slurry*
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02 02	Clean glass Must not include fibreglass or glass fibre
17 03 02	Bituminous mixtures other than those mentioned in 17 03 01 *Only bituminous mixtures from the repair and refurbishment of the asphalt layers of roads and other paved areas (excluding bituminous mixtures containing coal tar and classified as waste code 17 03 01)* *Must not include coal tar or tarred products* *Must not include freshly mixed bituminous mixtures*
17 05 04	Soil and stones other than those mentioned in 17 05 03 *Must not contain any contaminated soil or stone from contaminated sites*
17 05 06	Dredging spoil other than those mentioned in 17 05 05 *Only inert aggregate from dredgings* *Must not contain contaminated dredgings* *Must not contain fines*
17 05 08	Track ballast, soil and stones other than those mentioned in 17 05 07 *Must not contain soil and stones from contaminated sites*
17 09 04	Mixed construction and demolition waste other than those mentioned in 17 09 01, 17 09 02 and 17 09 03 *mixed construction and demolition waste, limited to that generated from utilities trenching, consisting of sub base aggregates, and containing only material that would be described as 17 01 01, 17 03 02 and 17 05 04*
19 12 05	Glass *Does not include glass from cathode ray tubes*
19 12 09	Minerals (eg sand, stones) *Must not contain contaminated concrete, bricks, tiles, sand, stone or gypsum from recovered plasterboard*
19 12 12	Hardcore including bricks, concrete and stones (excluding trommel fines)
20 01 02	Glass *Must not include fibreglass*
20 02 02	Garden and park waste (including cemetery waste) – soil and stones *Must not contain contaminated stones from garden and parks waste*

Table 1: Proposed Waste Types for the Soil Washing Activity

3.1.9 Selected wash plant construction drawings are contained in Appendix A. Full construction details are provided in an information pack provided with the application entitled 'wash plant construction detail'. This shows the dimensions of the different sections of the plant and the foundations beneath.

3.1.10 The concrete surface beneath the plant has been designed to accommodate the weight of the plant and has been installed by specialist building contractor Magna Projects Ltd, who report the specification of the concrete is *C32/40 Air Entrained, 1-layer A252 Mesh Btm, 20mm dowel bars @ 300 centres. Expansion foam around all plinths and bases. And expansion joints at valleys on top and bottom yard.*

3.1.11 The yard has been resurfaced to accommodate the plant and the activity. Structural calculations for the concrete are included within the wash plant information pack in a document titled 'External Yard Design'.

3.2 Hazardous Waste Storage

3.2.1 It is proposed to store hazardous waste for bulking and onward transfer. Hazardous waste will be stored in a dedicated, fully enclosed building with sealed drainage. The majority of the proposed waste types are Chapter 17 construction and demolition waste. Due to the nature of construction projects, waste often has to be moved quickly and if it is suspected to be hazardous it is classified as hazardous waste as a worst-case scenario without representative testing. This is particularly the case with track ballast which has to be removed quickly to prevent prolonged railway delays.

3.2.2 The operator wishes to be able to accept these waste types and then carry out representative testing according to EA guidance WM3. If the waste is confirmed as hazardous it will be dispatched off-site to a suitable facility. If it is found to be non-hazardous, it will be reclassified and moved to the appropriate treatment or storage area on site. Hazardous wastes for bulking and testing are listed in Table 2a.

Waste Code	Description
17 01 06*	mixtures of, or separate fractions of concrete, bricks tiles and ceramics containing hazardous substances
17 03 01*	bituminous mixtures containing coal tar
17 03 03*	coal tar and tarred products
17 04 10*	Cables containing oil, coal tar and other hazardous substances
17 05 03*	soil and stones containing hazardous substances
17 05 05*	dredging spoil containing hazardous substances
17 05 07*	track ballast containing hazardous substances
17 06 03*	other insulating materials consisting of or containing hazardous materials
17 08 01*	gypsum-based construction materials contaminated with hazardous substances
17 09 03*	other construction and demolition wastes (including mixed wastes) containing hazardous substances
19 12 11*	other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances
19 13 01*	solid wastes from soil remediation containing hazardous substances

Table 2a: Proposed Hazardous Waste for Storage

3.2.2 It is proposed to add a number of hazardous waste codes for batteries, cables and WEEE that may come in as part of mixed skip waste as household waste. These will be segregated from incoming waste and stored separately in the WEEE container shown on the site layout plan. These are listed in Table 2b below.

Waste Code	Description
16 06 01*	Lead acid batteries
16 06 02*	Ni-Cd batteries
16 06 03*	Mercury containing batteries
17 04 10*	Cables containing oil, coal tar and other hazardous substances
20 01 33*	Batteries and accumulators included in 16 06 01*, 16 06 02* or 16 06 03* and unsorted batteries and accumulators containing these batteries
20 01 35*	Discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components

Table 2b: Hazardous Waste Types for Storage

3.3 Increase in Throughput

3.3.1 It is requested that the annual throughput is increased as follows:

Soil washing - annual throughput of 250,000 tonnes for the washing activity. Although this is less than the maximum capacity of 360,000 tonnes per annum, it is considered a realistic figure when taking account of down time and variation in feedstock.

Hazardous waste storage – 30,000 tonnes per annum

3.4 Expansion of the Site Boundary to the North and West

3.4.1 The permit boundary will be expanded to include land to the north and west which is owned by Enviro Skip Hire Ltd. The additional area will house the washing activity and the hazardous waste storage area. This additional area is concrete surfaced with sealed drainage and is secured by a combination of concrete walls and palisade fencing.

3.4.2 Drawing No 161/05A Shows the existing permit boundary and the proposed extension area. The proposed area to the north which connects to Station Road will be used as a new HGV entrance/exit to improve traffic management.

3.5 Addition of Waste Codes to the Existing Permitted Activity

3.5.1 It is proposed to add two non-hazardous wastes for transfer and/or treatment for recovery under the existing non-hazardous waste activity. These codes are listed in Table 3.

Waste Code	Description
19 10 01	Iron and steel waste
19 10 02	Non-ferrous waste

Table 3: Additional non-hazardous waste types for treatment

3.5.2 It is considered that this change is a minor variation as it does not require changes to any of the management plans, and it does not present any new risks as the waste types are similar to other waste codes already permitted for acceptance eg. 17 04 05 iron and steel and 17 04 07 mixed metals.

3.6 BAT Assessment

3.6.1 A BAT assessment has been carried out for the installation activity and is presented in Report No 161/3A. The assessment covers the general BAT requirements which overlap with the EAs appropriate measures guidance.

3.6.2 Emissions will be controlled by storage of hazardous waste inside a building. The building will not be enclosed with four walls and a roof and a roller shutter door. It will have sealed drainage to prevent escape of run-off. The material stored within the building will be damped down if dry to prevent dust emissions.

3.6.3 During enhanced pre-application advice the requirement for extraction and abatement for the storage building was discussed. It was explained that '*Hazardous waste enclosed within a building does not necessarily need extraction and abatement. If there is a risk of emissions e.g. if the waste stored is releasing harmful fumes vapours or gases, then it will be a requirement. Also, if there is a risk of explosive atmosphere then there must be ventilation under DSEAR'.*

3.6.4 Emissions from VOCs and odour during storage will be minimised by pre-acceptance controls, whereby waste will not be accepted for treatment if it is odorous. Only bulk solid waste will be accepted, no free-flowing sludges thereby limiting the amount of volatile (liquid) components. Waste acceptance procedures will ensure no free-phase contamination which may be a source of VOCs.

3.7 Emissions to Sewer

3.7.1 Surface water from the yard drains to an interceptor and then out to foul sewer. Extended pre-application advice stated '*We have identified that the open waste bays and that the soil washing activity does not contain all waters. Given this there is potential for contaminated run off. Any runoff that contacts waste is classed as contaminated and must be risk-assessed before we can authorise its discharge to surface water or sewer*.'

3.7.2 The surface of the site is concreted and has been re-laid to drain towards a catchpit to enable rainwater harvesting for use in the wash plant. Excess water that is not collected in the catchpit will be discharged to sewer.

3.7.3 Surface water sampling has been undertaken to gather data for the H1 screening exercise. The sampling approach was discussed and agreed through pre-application advice. Samples have been taken from the interceptor chamber located as shown on Drawing No 161/03A. This is a three-chamber interceptor and samples were retrieved from the third chamber before release to sewer.

3.7.4 Initial screening for hazardous substances was carried out on samples taken on 17th and 23rd March 2026. This was to identify any hazardous substances that may be present in the effluent from the spreadsheet provided in EA guidance 'Environmental Quality Standards (EQSs) for Inland Freshwaters'. Testing has been carried out for as many as these substances as possible, listed in table 4 below. The screening results did not identify any hazardous substances present in the yard run-off. The majority of substances were below the limit of detection (LOD). The laboratory certificates are appended at Appendix F and the results summarised in Table 4.

Substance	Screening Result
Metals	Majority below the LOD or recorded at very low concentrations just above the LOD
BTEX and volatile organic compounds	All below the LOD
semi-volatile organic compounds	All below the LOD
PAHs	Either below LOD or just above. Total PAHS of 0.12 µg/l
PCBs	All below the LOD
Dioxins/furans	All below the LOD
Herbicides and pesticides (including acid herbicides, carbamates, urea herbicides and OCP + OPP pesticide suite)	All below the LOD
Organotin compounds	All below the LOD

Table 4: Hazardous Substances Screening Results

3.7.5 A further 10 samples were collected during April which were analysed for a reduced list of contaminants consisting of:

- pH
- ammoniacal nitrogen
- hydrogen sulphide
- BTEX
- total petroleum hydrocarbons (TPH)
- PAH's
- metals

3.7.6 No contamination was observed, with most results either at or below the LOD. The laboratory certificates are appended at Appendix F and are summarised in table 5 below.

3.7.7 The results have been input into the H1 screening model (version 2.78). Both the mean and the maximum concentration for the 12 samples was entered into the H1 model. Where a substance was reported as below the LOD, this was entered as the LOD for the maximum value and half the LOD for the mean.

Parameter	Units	Limit of Detection	Min	Max	Mean	EQS
pH (w)	pH	0.01	7.8	8.18	8.04	
Ammoniacal nitrogen as N (w)	mg/l	0.05	0.09	0.22	0.18	0.3
Sulphide (w)	mg/l	0.1	0.1	0.1	0.1	
Hydrogen Sulphide (Unionised) (H2S) as S (w)	mg/l	0.001	0.006	0.014	0.009	0.25
Arsenic (dissolved)	µg/l	1	<1	1	1	10
Boron (dissolved)	µg/l	10	73	83	79.8	2000
Cadmium (dissolved)	µg/l	0.2	<0.2	0.2	0.1	0.09
Copper (dissolved)	µg/l	4	4	5	4.09	1
Chromium (dissolved)	µg/l	1	<1	1	0.5	4.7
Lead (dissolved)	µg/l	0.1	<0.1	0.2	0.06	1.2
Mercury (dissolved)	µg/l	0.1	<0.1	0.1	0.05	0.07*
Nickel (dissolved)	µg/l	2	<2	2	1	4
Selenium (dissolved)	µg/l	1	<1	1	0.5	
Zinc (dissolved)	µg/l	2	2	9	3.6	10.9
TPH total dissolved (>C6-C40) (w)	µg/l	40	<40	40	20	
BTEX (w)						
BTEX - Benzene (w)	µg/l	1	<1	1	0.5	10
BTEX - Toluene (w)	µg/l	1	<1	1	0.5	74
BTEX - Ethyl Benzene (w)	µg/l	1	<1	1	0.5	
BTEX - m & p Xylene (w)	µg/l	1	<1	1	0.5	
BTEX - o Xylene (w)	µg/l	1	<1	1	0.5	
PAH 16MS (w)						
Acenaphthene (w)	µg/l	0.01	<0.01	0.03	0.01	
Acenaphthylene (w)	µg/l	0.01	<0.01	0.01	0.005	
Anthracene (w)	µg/l	0.01	<0.01	0.01	0.004	
Benzo(a)anthracene (w)	µg/l	0.01	<0.01	0.03	0.008	
Benzo(a)pyrene (w)	µg/l	0.01	<0.01	0.02	0.01	0.05
Benzo(b)fluoranthene (w)	µg/l	0.01	<0.01	0.02	0.008	
Benzo(ghi)perylene (w)	µg/l	0.01	<0.01	<0.01	0.0055	
Benzo(k)fluoranthene (w)	µg/l	0.01	<0.01	0.02	0.007	
Chrysene (w)	µg/l	0.01	<0.01	0.02	0.007	
Dibenzo(ah)anthracene (w)	µg/l	0.01	<0.01	0.01	0.005	
Fluoranthene (w)	µg/l	0.01	<0.01	0.06	0.0263	
Fluorene (w)	µg/l	0.01	<0.01	0.01	0.005	
Indeno(123-cd)pyrene (w)	µg/l	0.01	<0.01	0.01	0.005	
Naphthalene (w)	µg/l	0.01	<0.01	0.01	0.005	
Phenanthrene (w)	µg/l	0.01	<0.01	0.02	0.003	
Pyrene (w)	µg/l	0.01	<0.01	0.06	0.02	
Total PAH 16MS (w)	µg/l	0.01	<0.05	0.27	0.08	

Table 5: Summary of Monitoring Results

* The EQS for mercury is the maximum acceptable concentration. The remainder are the annual average.

3.7.8 The discharge to sewer is treated at Sandbach WwTW and subsequently discharged into the River Wheelock. The discharge points are shown as Outlet 1 and 2 in figure 1 below, which is an extract from the United Utilities permit number 016810106 for the WwTW.

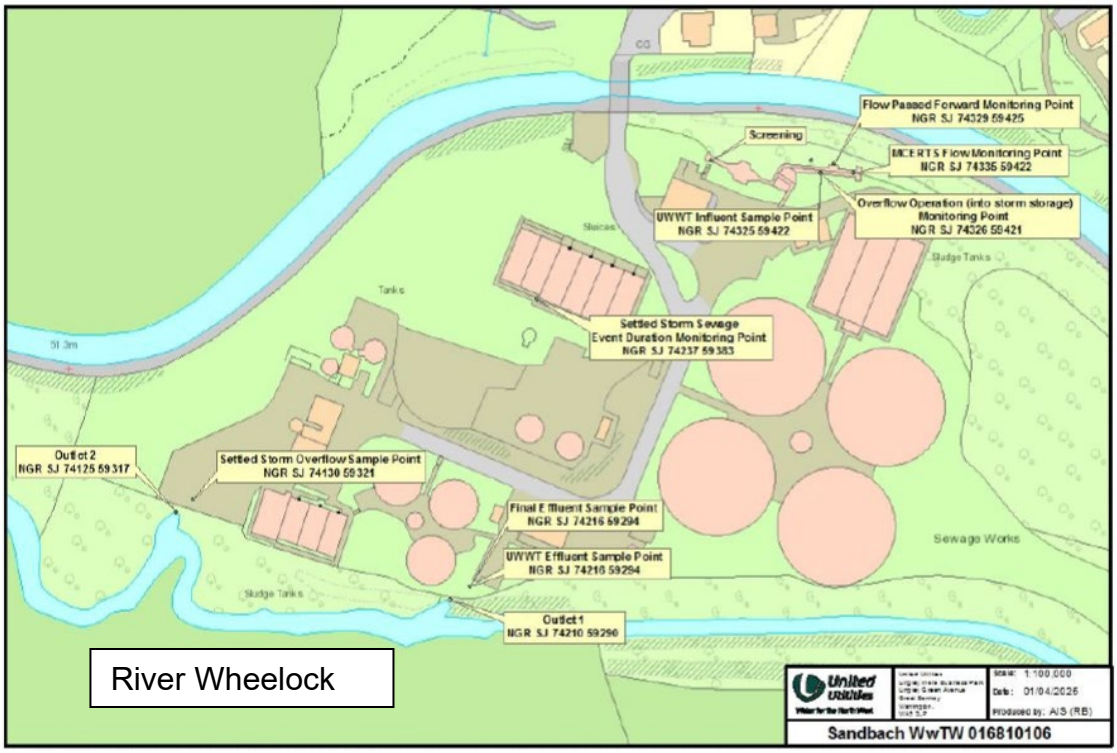


Figure 1: Discharge Points into River Wheelock from Sandbach WwTW

3.7.9 The model requires Q_{95} flow data to be entered for the receiving water, but there is no data available for the River Wheelock on the National River Flow Archive. The closest recording stations within the same operational catchment are Dane @ Hulme Walfield and Dane @ Congleton Park. There is also a recording station downstream of the site on the River Weaver, which is within the Weaver-Gowy operational catchment. The location and data from all three were reviewed to assess which would be the most suitable.

Recording Station	Q_{95} flow rate (m^3/s)	Details
Dane @ Hulme Walfield	0.411	Upstream of site. River Dane receives the Wheelock d/s of site
Dane @ Congleton Park	0.716	Upstream of site. River Dane receives the Wheelock d/s of site
Weaver @ Ashbrook	1.247	Downstream but a larger river, after receiving the River Dane

Table 6: National River Archive Flow Data

3.7.10 The flow rate entered into the model was that for the Dane @ Congleton Park[1]. This builds conservatism into the model as the Wheelock is a much

[1] https://nrfa.ceh.ac.uk/data/station/meanflow/68006

larger watercourse than the Dane at this location. The Dane @ Hulme Walfield was considered too small to support a discharge from a wastewater treatment works and would not be commensurate with the River Wheelock. The Weaver @ Ashbrook was considered to be a larger watercourse than the Wheelock.

3.7.11 The discharge flow rate is entirely dependant on rainfall. Application form B6 states 'for rainfall dependent discharges this should typically be based on the 1-in-30-year storm event'. This was calculated by a specialist drainage engineer at BEK Enviro Ltd and a technical note detailing the rainfall discharge calculation is contained in Appendix G.

3.7.12 The calculations showed that:

- FEH Rainfall Data for the 1 in 30 year 24 hour event = 61.8mm
- Runoff Volume 1 in 30 Year Event FLOW CALCS = 937m^3
- Summary with Modified Rational Method for the Discharge (2.74 x 1.865 x 61.8 = 315.8 l/s)

3.7.13 The H1 model requested input of the maximum and the mean flow rate. The figure of 315.8 l/s was input as the maximum flow rate. This figure is based on a storm duration of 360 minutes (6 hours). The mean flow rate was entered as the total run-off volume averaged over 24 hours as 11 l/s (937/24 = 39.04 m^3/hr /60 = 0.65 m^3/minute / 60 = 0.011 m^3/second).

3.7.14 The emissions screened out at Tests 3, 4a and 4b. It is not proposed to continue to monitor the discharge to sewer due to the very low emissions.

Notes to Accompany Form B6

3.7.15 Section 9 asks '*have you answered yes to questions 8a to 8c? If so submit a completed H1 model and send in the raw data'*. The answer to these questions was no as monitoring did not detect any hazardous substances, however the H1 model has still been completed because this was specifically requested during pre-app advice.

3.7.16 Section 10 asks about monitoring arrangements. It states that a flow monitoring point is not required if the volume of effluent is less than 50 m^3 per day. There will be no process effluent produced, only rainfall dependant runoff which has shown to be uncontaminated by the monitoring carried out to date. Any discharge to sewer will be minimal and expected to be well below 50 m^3 per day. On this basis questions 10d and 10e have not been completed as a continuous flow monitor is not considered to be a proportionate requirement for the risks demonstrated.

4. IDENTIFICATION OF RISKS

4.1 Receptors

4.1.1 The location of the site in relation to potential receptors is shown on Drawing No 161/06A and listed in Table 7 below.

Receptor	Direction from Site	Approximate Distance from Site at closest point (m)
Domestic Dwellings		
Elizabeth Close	E	10
Haliwell Court	W	40
Cestria Close	E	80
Cedda Place	SE	85
Industrial/Commercial Premises		
James Lynch and Sons Transport	S	Adjacent
White Self Storage Cheshire	NW	Adjacent
The Crane Centre	SE	Adjacent
Oniti Home care	N	Adjacent
Train Fitness Studio	N	50
Springvale Industrial Estate	S	95
Somerford Equipment Limited	S	95
XL Engineering Ltd	S	100
Moss Lane Business Centre	S	105
Aggregate Industries Concrete	S	355
Sandbach Commercial Dismantlers	S	540
Water Features		
Trent and Mersey Canal	W	350
Fodens Flash (the moat)	W	590
Plex Flash	NW	600
Watchlane Flash	SW	640
Amenity/Recreation		
Elworth Gardens and Play Area	N	270
Ettily Heath Playing Fields	S	750
Highway/Major Road or Transport Link		
Manchester to Crewe railway line	W	10
Sandbach Railway Station	N	150
Middlewich Road A533	N	290
Ecological Sites		
Priority Habitat Woodland	NW	64
Sandbach Flashes SSSI	W	490
Dragons Lake & Moston House Fields	W	470
Wheelock Disused Railway	SE	650
Educational Institutions		
Elworth CE Primary Schol	E	300
Elworth Hall Primary School	NE	650
Hospitals/Care Homes		
St Stephens Care Home	E	90
Turnpike Court Care Home	E	565

Table 7: Potential Receptors Within 1 km

4.1.2 The closest domestic dwellings are off Elizabeth Close, behind Station Road. These are approximately 10 m from the new entrance point off Station Road, but they are over 150 m from the closest waste processing area. Haliwell Court to the west is the closest residential area to the processing operations.

Surface Water

4.1.3 The closest waterbody is the Trent and Mersey Canal which is approximately 350 m west.

4.1.4 The EA's Data Catchment Explorer website shows the site to be within the Weaver-Gowy management catchment and the Wheelock (including Hassall Brook) Water Body[2], which is reported as having poor ecological status.

Groundwater

4.1.5 The underlying bedrock is shown on the BGS Viewer as Wilkesley Halite Member, which is designated by the EA as 'unproductive aquifer'.

4.1.6 The underlying superficial strata is shown as 'Glaciofluvial sheet deposits, Devensian' which are designated by the EA as 'secondary A Aquifer'.

4.1.7 The site is not within a groundwater source protection zone.

Ecological Receptors

4.1.8 A pre-application conservation screening request was submitted to the EA. The report provided is contained in Appendix D. The habitats sites identified are listed in table 8 below.

Site	Designation	Distance & Direction
Sandbach Flashes	SSSI	489 m W
Midland Meres & Mosses - Phase 1	Ramsar	6.4 km NE
Midland Meres & Mosses - Phase 2	Ramsar	16 km NW

Table 8: Habitats Sites
SSSI = Site of Special Scientific Interest

4.1.9 A habitats assessment is required as there are qualifying sites within the 2 km screening distance. Risks specific to the habitats sites are considered in Table 15.

4.1.10 The citation for Sandbach Flashes SSSI is contained in Appendix E and it describes the habitat as:

Sandbach Flashes is a site of physiographical and biological importance. It consists of a series of pools formed as a result of subsidence due to the

[2] https://environment.data.gov.uk/catchment-planning/WaterBody/GB112071065651

solution of underlying salt deposits. The water varies from freshwater, chemically similar to other Cheshire meres, to highly saline. Inland saline habitats are extremely rare and are of considerable interest because of the unusual associations of plants and animals.

4.1.11 The SSSI is made up of 14 units and 9 of these are within 2 km of the site. The closest are Units 2 and 15, both approximately 490 m to the west. These are described as standing open water habitat of unfavourable status.

4.1.12 The conservation screening report identified 10 local wildlife sites and two areas of ancient woodland within the 2 km screening distance, as follows:

- Dragons Lake & Moston House Fields
- Wheelock Disused Railway
- Stud Green Meadow
- Abbeyfield Wood
- Watch Lane Roadside Verge/Hedgerow
- Fields Farm Flashes
- Hollins Wood
- Meadow off Dragon's Lane
- Orchards off Dragon's Lane
- Ancient Woodland (south of Park Lane)
- Hollins Wood (LWS and ancient woodland)

4.1.13 These are non-statutory sites and are designated by the local authority. The closest of these sites is Dragons Lane and Moston House Fields which is approximately 470 m west of the site. These sites are shown in Figure 2 below. Potential effects on these sites will be considered as part of the risk assessment.



Figure 2: Local Wildlife Sites within 2 km

4.2 Baseline Conditions

Wind Direction

4.2.1 Figure 3 shows a wind rose for data collected at Hawarden Airport EGNR, Aviation Park, Flint Rd, Saltney Ferry CH4 0GZ. This is which is the closest recording station at approximately 38 km to the west. The data is published on line by Iowa State University[3] and is freely available online.

4.2.2 With reference to the data it is considered that wind direction will be variable but with a prevalence towards the east, north-west and south-east.

[3] https://mesonet.agron.iastate.edu/sites/windrose.phtml?station=EGNC&network=GB__ASOS

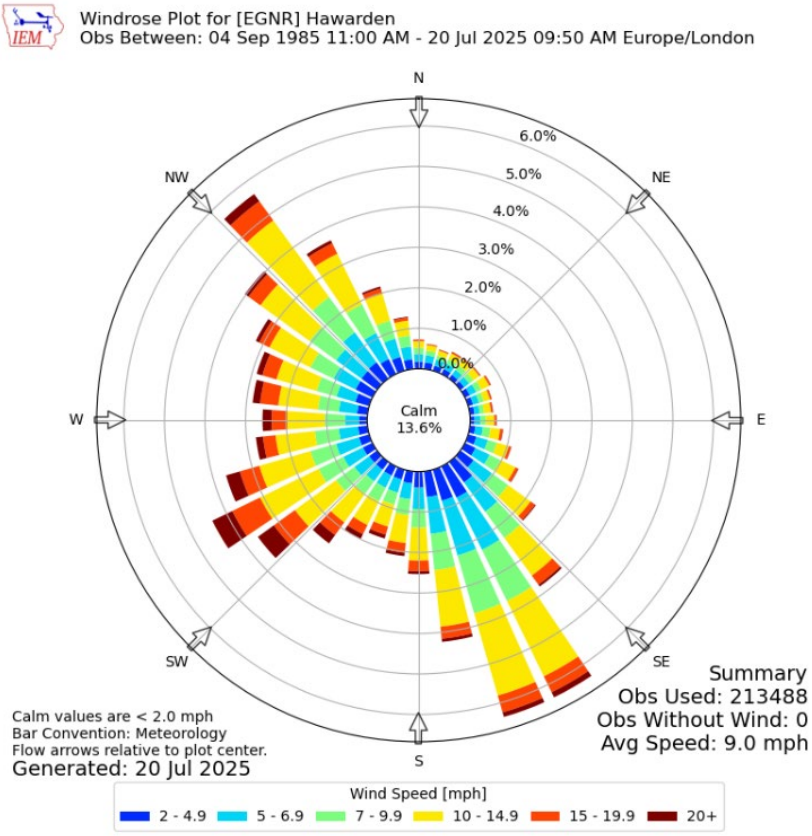


Figure 3: Wind Rose

Rainfall

4.2.3 Reference has been made to rainfall data for Thorncliffe, Leek Climate Station available on the met office website[4]. Total average annual rainfall during the period 1991 to 2020 was 974 mm. The number of days of rainfall greater than or equal to 1 mm was 159 days on average each year, therefore providing natural dampening approximately 44% of the year.

Air Quality

4.2.4 According to the DEFRA interactive map tool[5] the site is not located within an Air Quality Management Area (AQMA).

Potential for Flooding

4.2.5 According to the 'Flood map for planning' tool on the gov.uk website, the site is situated in Flood Zone 1, an area with a low probability of flooding.

[4] https://www.metoffice.gov.uk/research/climate/maps-and-data/location-specific-long-term-averages/gcqw4zwjn
[5] https://uk-air.defra.gov.uk/aqma/maps/

4.3 Identification of Hazards

4.3.1 Potential hazards from the proposed changes to activities have been identified as:

- Noise and Vibration – from operation of the wash plant and increased number of HGVs delivering waste
- Dust – generated in dry conditions from processing operations, stockpiles and site roads
- Mud on the road – deposited on the public highway by outgoing vehicles
- Contaminated run off – surface water run-off which may contain suspended solids from stockpiled waste and site roads; run-off from hazardous waste containing hazardous substances.
- Emissions to air of dust and volatile organic compounds (VOCs);
- Odour emissions – odours associated with contamination on waste;
- Accidents (fire, spillage of fuel/oil or escape of water from the washing operations)

4.3.2 The proposed wastes will result in negligible generation of litter or attract birds, vermin or insects.

4.3.3 A Dust Emissions Management Plan has been prepared to assess the risks from dust which includes mitigation and control measures. This is presented as Report No 161/2A and is included with the application.

4.3.4 A Noise Impact Assessment has been carried out to assess the risk from noise. This is presented as Report No J005693-9535-RDC-2. A Noise management Plan has been produced to demonstrate mitigation and control of noise. This is presented as Report No 161/5A and is included with the application.

4.3.5 Pre-application advice identified that a fire prevention plan would be required for assessment due to the changes in the waste types, in particular the addition of WEEE and batteries which can present a fire risk. This is presented as Report No 161/6 and is included with the application.

4.3.6 An odour management plan has not been submitted with the application as it was agreed during pre-application advice that the proposed waste codes and treatment activity would not increase the risk from odours.

5. RISK ASSESSMENT

5.1 Methodology

5.1.1 Overall risk is a combination of the severity of an event and the likelihood that it will occur. Probability of occurrence is designated as:

- Probable – expected to occur based on previous occurrences
- Likely – expected to occur due to proposed changes
- Possible – this may occur, it may or may not have happened occasionally in the past
- Unlikely – not expected to occur
- Very Unlikely – has never and is not expected to occur.

5.1.2 The magnitude of risk is determined by the probability of exposure and the severity of the consequences, whereby:

- High – severe and long lasting environmental effects to the wider locality
- Medium – effects to the local environment and community
- Low - minor, short lived effects just beyond the site boundary
- Negligible – no discernible effect beyond the site boundary

5.1.3 An event could have a high probability of occurring but have minor environmental consequences; therefore it will be designated as a low risk. Likewise a risk with severe consequences could be unlikely to occur and will be designated as a low risk. A high risk designation would be assigned to an event that has severe consequences and is expected to occur.

5.2 Assessment

5.2.1 The risks associated with the identified hazards have been assessed and are presented in Tables 9 to 15, including mitigation and control measures.

Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Mitigated Risk
Noise from incoming and outgoing HGVs for additional throughput (engine noise, reversing warning noise)	Residential properties off Station Road to the east; properties to the west beyond the railway line; properties to the south. Commercial neighbours	Air (noise) Vibration (ground)	Nuisance noise from delivery vehicles	Possible: wash plant is external and residential properties are within the vicinity of the site.	Medium	• A noise impact assessment has been carried out to model predicted noise from the operations. This concluded that due to the erection of new noise barriers the positive with a reduction in the overall impact. • Noise Management Plan in place to minimise noise including the following measures: - Construction of noise barriers - Site access is concrete surfaced and will be maintained to prevent pot-holes and minimise noise generated by vehicles; - Vehicle drivers to adhere to 10 mph speed limit - All machinery & plant maintained as per manufacturer's specifications for efficient running; - Noise only during daytime working hours, no nighttime operations; - Vehicles delivering waste to the site will be utilised to backfill with product to reduce HGV movements	Low
Noise from operation of the wash plant (material handling, washing)			Nuisance noise detected beyond the site boundary from processing operations during daytime working hours		Medium		Low

Table 9: Assessment of Risks from Noise and Vibration

Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Mitigated Risk
Mud on the road	Public highway (Norton Way and Station Road)	Material carried on vehicle wheels and axles on leaving the site.	Mud carried onto public highway which could be a skid hazard for motorists.	Possible due to the proposed waste types	Medium	• Concreted site surface is checked and scraped clean daily using the loading shovel • Site access road is checked daily, swept with a road sweeper every other day which provides dampening • Power washer is used to wash down vehicles before leaving site if required • the site is concrete surfaced so not a source of mud and incoming vehicles will have travelled across public highway, not across unmade ground	Low

Table 10: Assessment of Risks from Mud on the Road

Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Overall Risk
Dust from operation of the wash plant	Closest residents, commercial neighbours	Dust generated and carried beyond the site boundary	Annoyance to neighbours, loss of amenity, reduction in air quality and possible health impacts	Unlikely as the washing activity provides inherent dampening	Low	• A Dust Emissions Management Plan has been prepared to assess the risk from dust and propose mitigation and controls • Incoming hazardous waste will be stored in a building. • Non-hazardous waste is stored in a three-sided concrete block bay. Products are stored in bays. All to minimise wind whipping and contain material. • Stockpiles are damped down with a bowser during dry conditions • Site access road is checked daily and scraped clean with a loading shovel • Site surface is dampened with a bowser • All loads are covered on entering and exiting site • Crusher is fitted with a water spray bar for dust suppression	Low
Dust from vehicle movements carrying additional throughput		Dust carried off site on wheels or from waste loads, or dust generated from dusty roads		Possible	Medium		
Dust from stockpiled waste		Wind whipped dust whilst waiting for treatment					
Dust from dry processing of additional throughput		Dust generated from crushing of additional waste					

Table 11: Assessment of Risks from Dust

Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Mitigated Risk
Surface water run-off from hazardous waste	Underlying ground and groundwater (secondary A aquifer)	Contaminants soak into underlying ground and groundwater	Reduction of groundwater quality, restricting use as a water resource	Possible – the underlying superficial strata is classed as secondary A aquifer, although the bedrock is classed as unproductive.	Medium	• Hazardous waste will be stored in a building with concrete pavement and sealed drainage • The whole site is surfaced with concrete and drains via interceptors to foul sewer. There are no areas of unmade ground within the site.	Low
	Surface Water - Wheelock (including Hassall Brook) Water Body	Flow off site and into watercourse	Reduction of water quality causing reduction in habitat quality	Unlikely - there is no direct connection to surface water course	Low	• Rainwater run-off will be harvested for reuse. The concreted yard surface is laid to a fall towards a catchpit and water will be pumped back to the plant for reuse. • Excess water will drain to foul sewer via a three chamber interceptor	Low
Surface water run-off carrying sediment from stockpiled waste, products and site surface	Surface Water - Wheelock (including Hassall Brook) Water Body	Flow off site and into watercourse	Increased sediment load reducing water quality	Unlikely:- there is a substantial distance between the site and any surface water course and no direct link	Low	• Run-off will drain across the concreted surface to the catchpit and pumped back into the plant for reuse. • Excess water will drain to foul sewer via a three chamber interceptor which also serves as a sediment trap • The interceptor is cleaned out periodically to remove sediment	Low
	Groundwater (secondary A aquifer)	Percolation into underlying aquifer	None – sediment will sit on the surface, not percolate through	Very Unlikely	Low		Low

Table 12 (continued overleaf): Assessment of Risk from Contaminated Run-off

Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Mitigated Risk
Spillage or leakage of wash plant water; leaching of contaminants from filtercake	Underlying ground and groundwater (secondary A aquifer) Surface Water - Wheelock (including Hassall Brook) Water Body	Concentrated contaminants in recycled wash water or filtercake soak into underlying ground	Build up of contaminants in groundwater, deteriorating water quality	Possible – the underlying superficial strata is classed as secondary A aquifer, although the bedrock is classed as unproductive.	Medium	• Wash plant spillages will be contained in the catchpit within the concreted area and returned to the plant • A programme of sampling and testing of recycled water and filtercake will be undertaken to establish if contaminants are becoming concentrated. • Filtercake will be stored on a concreted surface and in a covered bay beneath the filter press housing to shelter from rainfall and prevent generation of runoff from the filtercake	Low

Table 12 (continued): Assessment of Risk from Contaminated Run-off

Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Mitigated Risk
Emission of VOCs from hazardous waste	Local residents, commercial neighbours & wider community	Vaporisation into atmosphere and subsequent dispersal	Contribution to reduction in air quality possibly resulting in respiratory irritation and reduced air quality for the local population.	Possible	Medium	• Storage of hazardous waste within an enclosed building • Waste acceptance procedures to ensure no free-phase contamination which may be a source of VOCs • Only bulk solid waste will be accepted, no free flowing sludges thereby limiting the amount of volatile (liquid) components	Low
Odour release during delivery of waste and storage in reception area		Diffusion of odour from stockpiled waste	Odour nuisance to local population	Unlikely: waste not considered to be odour generating, not biodegradable	Low	• Vehicles delivering waste will be covered • Waste acceptance procedures to prevent acceptance of malodorous waste	Low

Table 13: Assessment of Risks from Emissions to Air (VOCs and Odour)

Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Overall Risk
Spillage or leakage of fuel, oils & coolants Minor (< 5 litres) Major (> 5 litres)	Surface water	Oil or fuel seeps off site into surface water	Contamination of watercourses	Very unlikely due to topography and distance between site and water bodies	Low	• Concreted surface drains to an interceptor which separates oil from the discharge • Fuel stored in bunded tanks in concreted yard area • Vehicles inspected as part of daily checks for leaks • Tank inspection procedure • Oil stored in bunded area • Spillage procedure detailed in the EMS	Low
	Underlying ground and groundwater	Percolates through hardstanding into Secondary A aquifer	Contamination of aquifer	Possible as fuel stored on site	Medium		
Fire and firewater	Closest residents and neighbouring businesses	Overland flow of firewater; Increased airborne particulates from smoke	Contaminated firewater flows off site; Smoke causes nuisance and respiratory effects to local residents	Unlikely - the risk of fire is very low as the proposed waste types are non-combustible.	Low	• Permitted activities do not allow flammable materials to be accepted on site and burning of waste not allowed on site. • The site has a no-smoking policy • The site operates according to a fire prevention plan	Low
Flooding		Site floods and waste is washed off-site, adding sediment to the water environment	Waste material may be washed out of the site	Unlikely: The site is in Flood Zone 1 (low probability)	Very Low	• No direct pathways to watercourses, site drains via interceptors to sewer	Very Low

Table 14: Assessment of Risk from Accidents

Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Mitigated Risk
Noise and Vibration	Sandbach Flashes 590 m W; Local wildlife sites and ancient woodland as listed in Section 4.1	Noise through the air and vibration through the ground.	Disturbance to animal species due to unfamiliar noise	Very unlikely due to distance from the site	Low	• Site management measures as detailed in Tables 7 to 12 above. • The habitats site is to the west and the prevailing wind is towards the east.	Very Low
Dust		Airborne windblown dust.	Smothering habitat with dust	Unlikely due to distance and direction from site and intervening built up area between site and habitat			
Pests		Rodents overland; by air for flying insects and birds	Competing with native species for habitat and food source	Unlikely – proposed waste types will not attract pests			
Litter		Windblown from site to SSSI	Contamination of habitat and attraction of pests	Very unlikely- proposed waste types do not generate litter and the distance between is significant			
Contaminated run-off		Overland flow of run-off	Reduction of water quality causing reduction in habitat quality	Unlikely – no hydrological connection between site and the habitats site			
Emissions of VOCs		Dispersed through the air	Reduction in air quality causing reduction in habitat quality	Very unlikely due to distance from site			
Odour		Air	None: odour is an amenity effect	Nil			
Accidents: Contaminated run-off, fuel spillage, fire.		Air and overland flow	Contamination of habitat with ash, firewater, fuel spillage	Very unlikely: no direct pathway for overland flow; and fire unlikely as waste types non-combustible			

Table 15: Assessment of Risks to Habitats Site

6. MITIGATION AND CONTROL

6.0.1 Risks assessed as medium or high will require mitigation and control which is detailed below. Proposed measures are outlined below and have been incorporated into the EMS.

6.1 Noise and Vibration

6.1.1 Noise and vibration risks associated with the proposed changes have been assessed by a Noise Impact Assessment, Report No J005693-9535-RDC-2 by specialist consultants PDA Limited. Noise generated by the proposed changes is calculated to be between -2 and +2 dB above background at the surrounding receptors, which is no significant effect.

6.1.2 The proposals include erection of noise attenuation barriers as part of the proposed changes and modelling has shown that these will reduce the impact of both the proposed changes and the existing background noise, so this is considered to be an overall positive impact.

6.1.3 A noise management plan has been prepared to demonstrate the use of appropriate measures to minimise noise.

6.2 Mud on Road

6.2.1 Risks associated with mud on the road have been determined as medium.

6.2.2 This is mitigated to low risk by the concreted surface, daily scraping of the surface, removal of any accidental deposit by a road sweeper, as well as regular checks of the site entrance.

6.3 Dust

6.3.1 Risks from fugitive dust emissions were assessed as medium and a Dust Emissions Management Plan has been produced to demonstrate how dust will be managed to reduce the risk to an acceptable level.

6.3.2 The washing activity is inherently dampening so will not raise dust. Crushing will be carried out with an integrated spray bar to minimise dust generation. The stockpile of incoming waste and products could become dusty when dry and will be managed by storage of material inside bays and damping down on dry days.

6.3.3 Dust monitoring will be carried out daily and contingency actions are in place to prevent dust emissions from occurring.

6.4 Control of Run-off

6.4.1 Surface water run-off from the yard is directed towards a catchpit shown on the drainage plan, from where it is pumped back into the water storage tank for reuse. Surplus water (eg. if the plant is not operational and the water holding tank is full) will be discharged to sewer via a three-stage interceptor.

6.4.2 The interceptor will be fitted with a penstock valve so that it can be closed off in the event of a fire to stop firewater from running directly to sewer.

6.4.3 The concreted surface, catchpit and interceptor provide a secondary containment system in line with the requirements of CIRIA 736. Pre-application advice stated '*In order to evidence that the containment systems are in line with CIRIA 736 the catch pits and impermeable surfaces the design needs to be assessed for structural integrity and signed off by a competent person'.* Detailed drawings and structural calculations provided in the wash plant information pack demonstrate that these have been designed by competent engineers following established methods and practices.

6.4.4 Hazardous waste will be stored in an enclosed building with sealed drainage. The concreted floor of the building surface will be laid to fall to a sump at the rear of the building to contain run-off. The building will prevent generation of contaminated run-off by preventing rainfall from percolating through the waste

6.5 Waste Acceptance

6.5.1 Unsuitable waste will be prevented from being accepted into the site by checks carried out as part of the waste acceptance procedures which form part of the EMS. Waste acceptance information is contained in the following documents:

i) acceptance of skip waste and commercial waste into the transfer station for sorting is controlled through the waste acceptance procedures in section 3.1 to 3.6 of the EMS, Version 3.

ii) acceptance of construction and demolition waste for production of recycled aggregates is detailed in the WRAP quality manual, Reference ESH v1.

iii) acceptance of hazardous waste for storage is detailed in the Hazardous Waste Management Procedures, Report No 161/7.

Acceptance of Non-hazardous Waste for Washing

6.5.2 Pre-Acceptance waste enquiries will be directed to the technical assessor and shall include information on the origin of the waste and whether it is from a contaminated site. When an enquiry is received, a member of the management team may carry out a site visit to inspect the waste. Photographs of the site and any stockpiles will be taken. If the waste consists only of hardcore it will be accepted on the basis of the visual inspection.

6.5.3 For excavated soil, chemical analysis will be required to confirm the level of contamination unless the material can be clearly shown to be from a greenfield site. This is assessed by the technical assessor. Only uncontaminated material will be accepted for washing to produce end of waste products, in alignment with the wrap protocol. The waste acceptance steps for non-hazardous waste for production of aggregates are detailed in the ESH Quality Manual v1.

Acceptance of Hazardous Waste for Storage

6.5.4 Hazardous waste for storage will not be accepted if it is odorous, if it flows or has free-phase contamination (eg. petroleum products such as oil or diesel). Hazardous waste acceptance will be in accordance with the Hazardous Waste Management Procedures, Report No 161/7.

6.5.5 If the waste is assessed as suitable it will be booked into site and undergoes further verification checks when it arrives.

6.5.6 Waste which is found to be unsuitable after delivery will be rejected.

6.6 Sampling and Testing of Washwater

6.6.1 A programme of testing will be carried out to establish concentration of contaminants in washwater and identify whether these are becoming concentrated by recycling the washwater.

6.6.2 It is proposed to take regular samples of washwater and filtercake and test for the following parameters:

- Arsenic
- Chromium
- Cadmium
- Copper
- Lead
- Nickel
- Tin
- Zinc
- Total Petroleum Hydrocarbons (TPH)
- PAH 16
- pH

6.6.3 Sampling will be carried out by trained competent personnel and samples will be submitted to an accredited laboratory for analysis. A wash plant monitoring plan has been included in Appendix C.

6.6.4 The aim of the monitoring plan is to:

- Characterise the washwater
- Build up a picture of variation
- Establish if contaminants are becoming concentrated
- Classify the filtercake as either hazardous or non-hazardous waste

6.6.5 If contaminants are observed to be building up in the washwater then an action plan will be proposed to reduce contaminants to an acceptable level.

7. CONCLUSIONS

7.1 The risks to the environment from the proposed activity have been determined and where required mitigation has been proposed to reduce the risks to an acceptably low level.

7.2 Emissions from the storage of hazardous waste will be controlled through storage within a building with sealed drainage to prevent the generation of contaminated run-off.

7.3 Emissions to air from the treatment of non-hazardous waste, primarily from raising dust and emissions to air, will be controlled by the inherent dampening of the washing activity. Waste acceptance controls will also control inputs to prevent emissions.

7.4 Noise will be minimised by the use of attenuation barriers, maintenance of plant and the use of silencers, maintenance of roads and working within the permitted operational hours.

7.5 Risks from surface water run-off will be minimised through containment and primary treatment to remove sediment and catch any fuel or oil spillages in a silt trap interceptor. Water will be harvested on site for reuse in the wash plant and surplus water will be discharged to sewer.

7.6 Risks from accidents will be reduced through effective management of the site through an Environmental Management System.

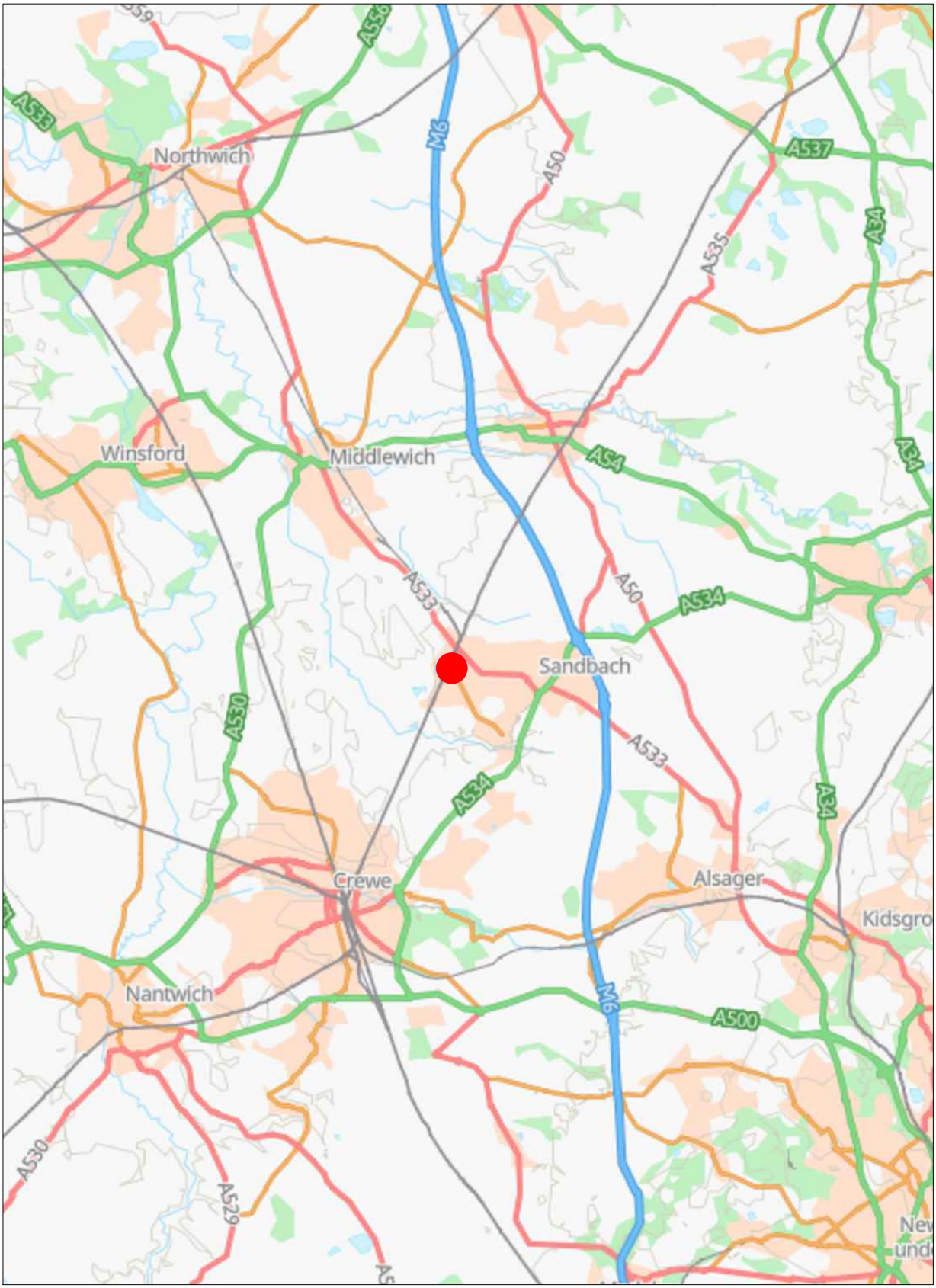
7.7 Risks from mud on the road will be mitigated through regular cleaning of surfaces.

7.8 Risks from dust will be minimised by use of buildings and storage bays, dampening and daily monitoring and management.

7.9 In conclusion it has been demonstrated that the risks posed by the proposed operation can be mitigated so they will not have a significant impact on the surrounding environment.

APPENDIX A

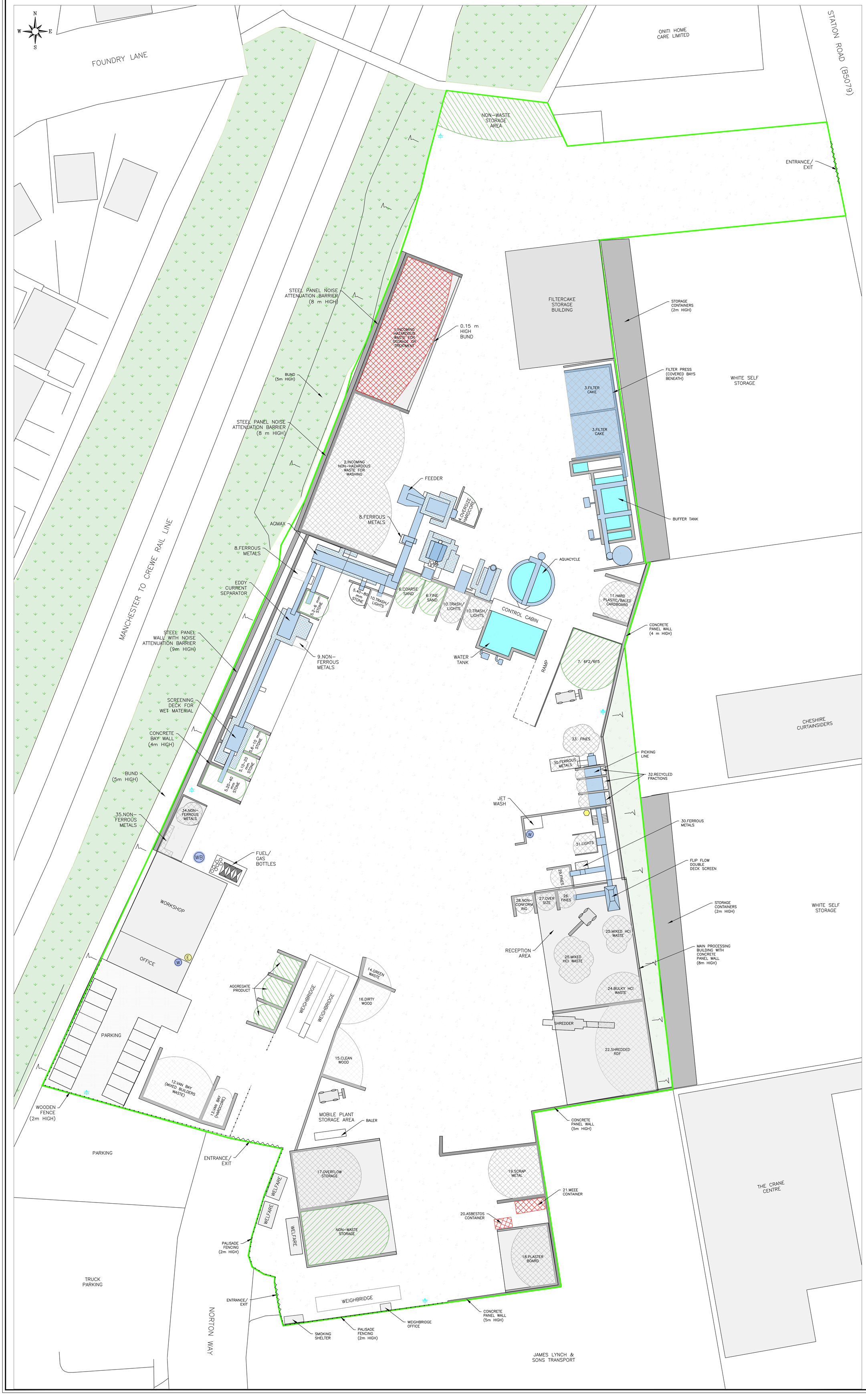
Drawings



LEGEND ● SITE

STARLING ENVIRONMENTAL LIMITED
67 Chorley Old Road, Bolton,
Greater Manchester, BL1 3AJ
www: starlingenvironmental.co.uk
email: claire@starlingenvironmental.co.uk
Tel: 07989 673122

CLIENT: ENVIROSKIPS LIMITED		DRAWN BY: M.Y.B	APPROVED BY: C.G
JOB TITLE: ENVIROSKIPS LIMITED TRANSFER STATION		DATE: 18/08/25	DRAWING No. 161/01
DRAWING TITLE: SITE LOCATION PLAN		SCALE @ A4: NTS	



Legend

- PERMIT BOUNDARY
- CONCRETE SURFACE
- TARMACK SURFACE
- BUILDING
- WOODLAND
- NON-HAZARDOUS WASTE STORAGE
- HAZARDOUS WASTE STORAGE
- NON-WASTE STORAGE OR PRODUCT
- GATES
- BOUNDARY FENCING
- (W) MAINS WATER
- (WB) MOBILE DUST SUPPRESSION EQUIPMENT
- FUEL/OIL STORAGE
- DUST/ODOUR MONITORING POINT
- (E) ELECTRICITY MAINS

REV.	DESCRIPTION	DATE	BY
B	MINOR MODIFICATIONS	21/5/26	MYB
A	MINOR MODIFICATIONS	30/3/26	MYB

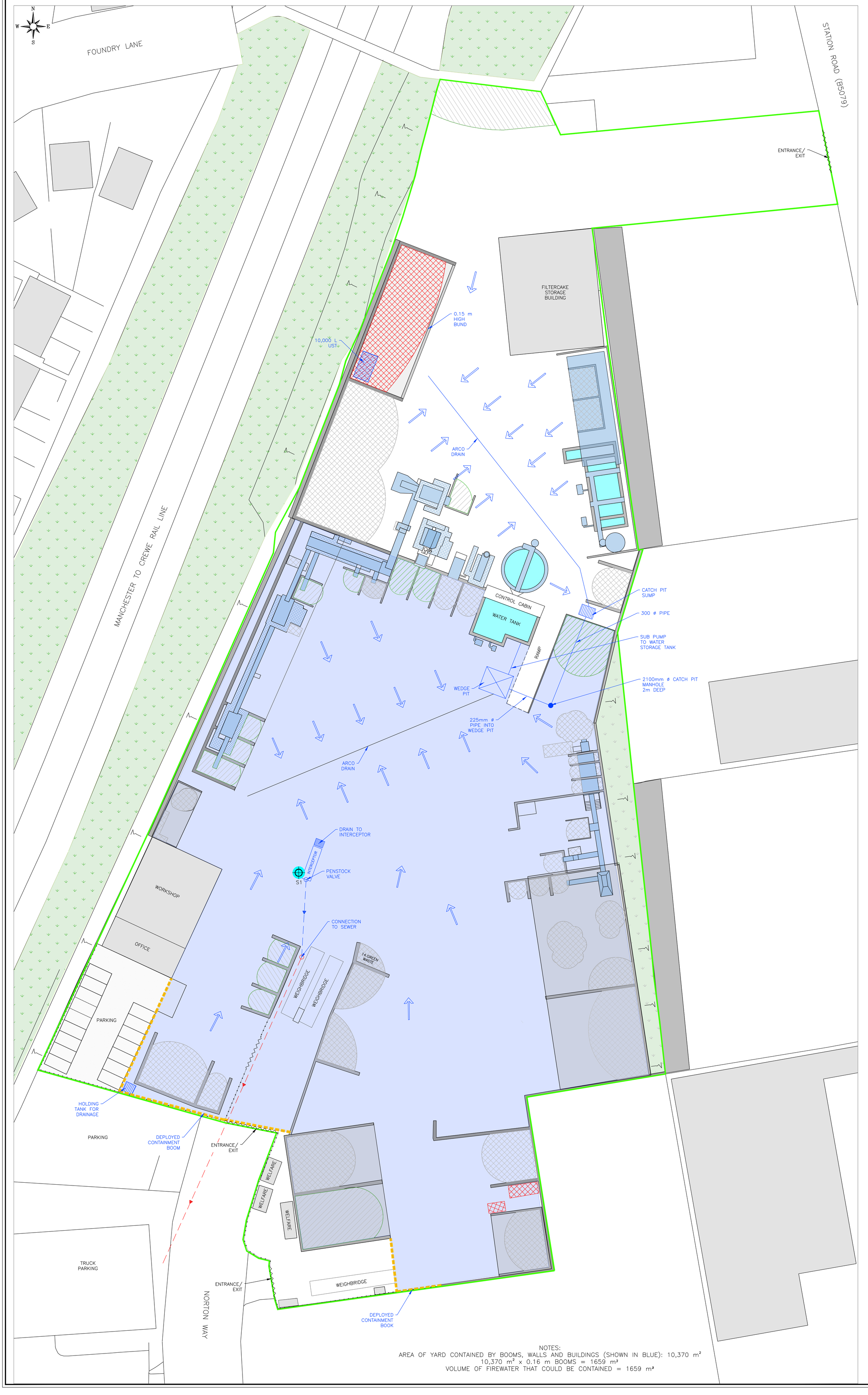
STARLING ENVIRONMENTAL LIMITED
67 Chorley Old Road, Bolton, Greater Manchester, BL1 3AJ
www: starlingenvironmental.co.uk
email: claire@starlingenvironmental.co.uk
Tel: 07989 673122

CLIENT.
ENVIRO SKIPS HIRE LIMITED

JOB TITLE.
ENVIRO SKIPS HIRE LIMITED
SANDBACH
TRANSFER STATION

DRAWING TITLE.
SITE LAYOUT PLAN

DRAWN BY.	APPROVED BY.	DRAWING No.
M.Y.B	C.G	161/02B
DATE. 08/08/25	SCALE. 1:250	



Legend

- PERMIT BOUNDARY
- BUILDING
- WOODLAND
- NON–HAZARDOUS WASTE STORAGE
- HAZARDOUS WASTE STORAGE
- NON–WASTE STORAGE OR PRODUCT
- GATES
- BOUNDARY FENCING
- FIREWATER CONTAINED
- SURFACE FLOW DIRECTION
- FOUL SEWER
- CONTAINMENT BOOM
- S1 SURFACE WATER DISHCARGE AND SAMPLING POINT

NOTES:
AREA OF YARD CONTAINED BY BOOMS, WALLS AND BUILDINGS (SHOWN IN BLUE): 10,370 m²
10,370 m² x 0.16 m BOOMS = 1659 m³
VOLUME OF FIREWATER THAT COULD BE CONTAINED = 1659 m³

REV.	DESCRIPTION	DATE	BY
A	MINOR MODIFICATIONS	21/5/26	MYB

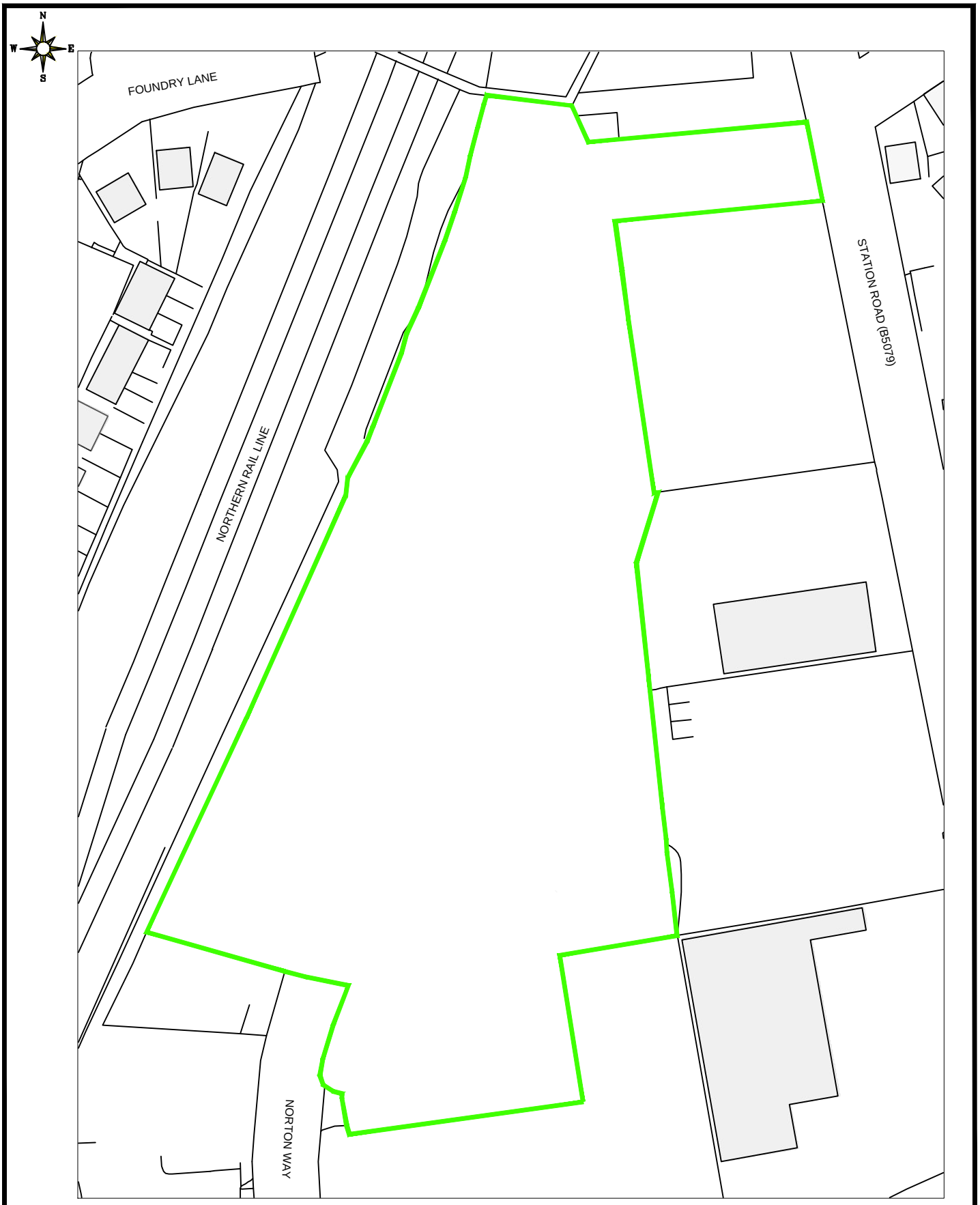
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ENVIRO SKIPS HIRE LIMITED

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ENVIRO SKIPS HIRE LIMITED
SANDBACH
TRANSFER STATION

DRAWING TITLE.
DRAINAGE LAYOUT PLAN

DRAWN BY.	APPROVED BY.	DRAWING No.
M.Y.B	C.G	161/03A
DATE. 08/08/25	SCALE. 1:250	



LEGEND — PROPOSED PERMIT BOUNDARY

STARLING ENVIRONMENTAL LIMITED
67 Chorley Old Road, Bolton,
Greater Manchester, BL1 3AJ
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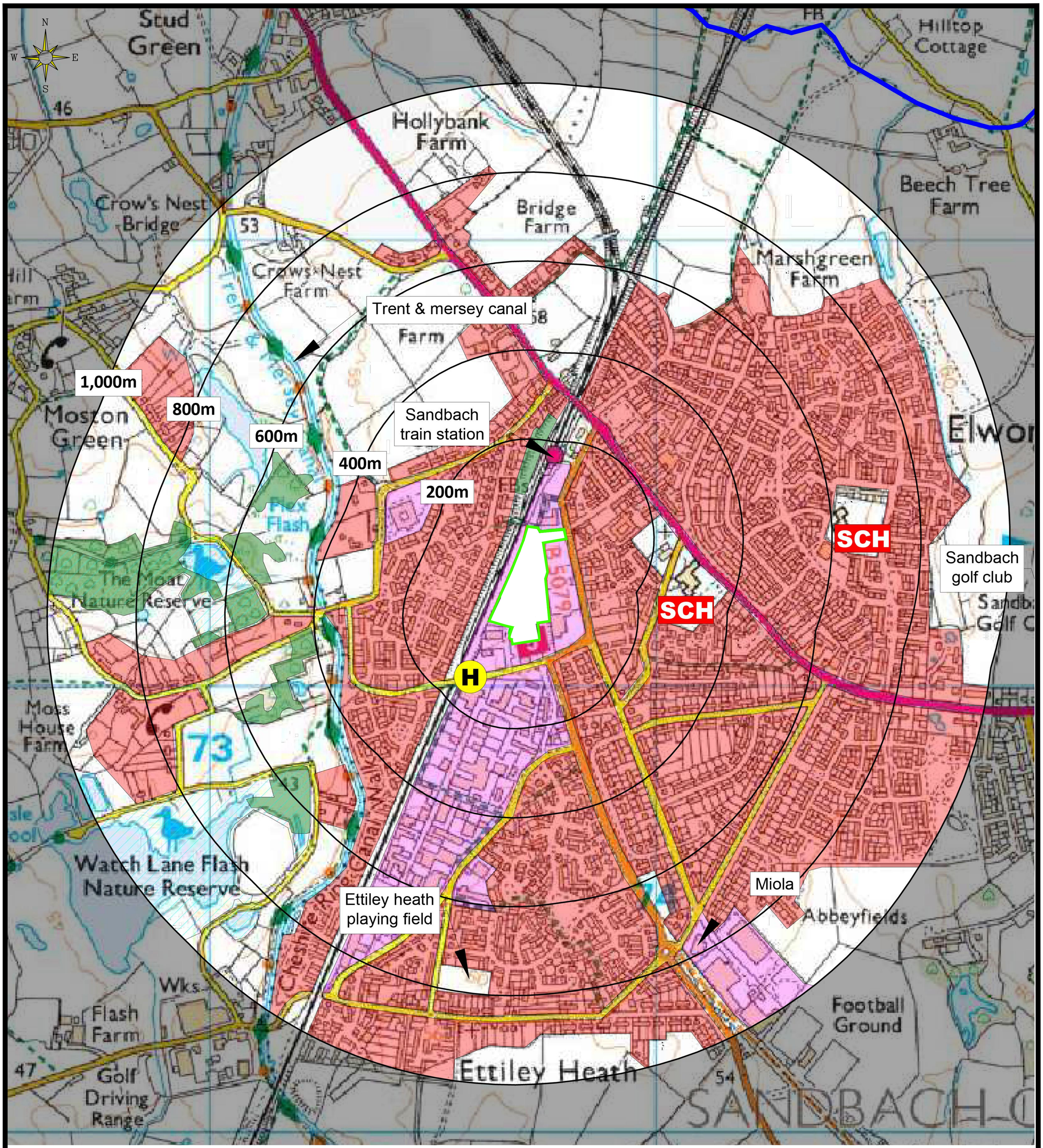
CLIENT: ENVIROSKIPS LIMITED		DRAWN BY: M.Y.B	APPROVED BY: C.G
JOB TITLE: ENVIROSKIPS LIMITED TRANSFER STATION		DATE: 18/08/25	DRAWING No.: 161/05A
DRAWING TITLE: PROPOSED PERMIT BOUNDARY		SCALE @ A4: 1:1,250	



LEGEND PROPOSED PERMIT BOUNDARY EXISTING PERMIT BOUNDARY

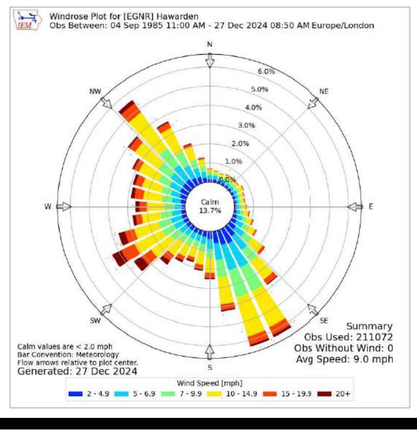
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CLIENT: ENVIROSKIPS LIMITED		DRAWN BY: M.Y.B	APPROVED BY: C.G
JOB TITLE: ENVIROSKIPS LIMITED TRANSFER STATION		DATE: 18/08/25	DRAWING No.: 161/05A
DRAWING TITLE: EXISTING AND PROPOSED PERMIT BOUNDARY		SCALE @ A4: 1:1,250	



LEGEND

- Class A, B, C roads
- Nearest fire hydrant
- Railway line
- School
- Woodland areas
- Priority habitat inventory (deciduous woodland)
- Sites of special scientific interest



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CLIENT
ENVIROSKIPS LIMITED

DRAWN BY.
M.Y.B

APPROVED BY.
C.G

JOB TITLE.
ENVIROSKIPS LIMITED TRANSFER STATION

DATE.
18/08/25

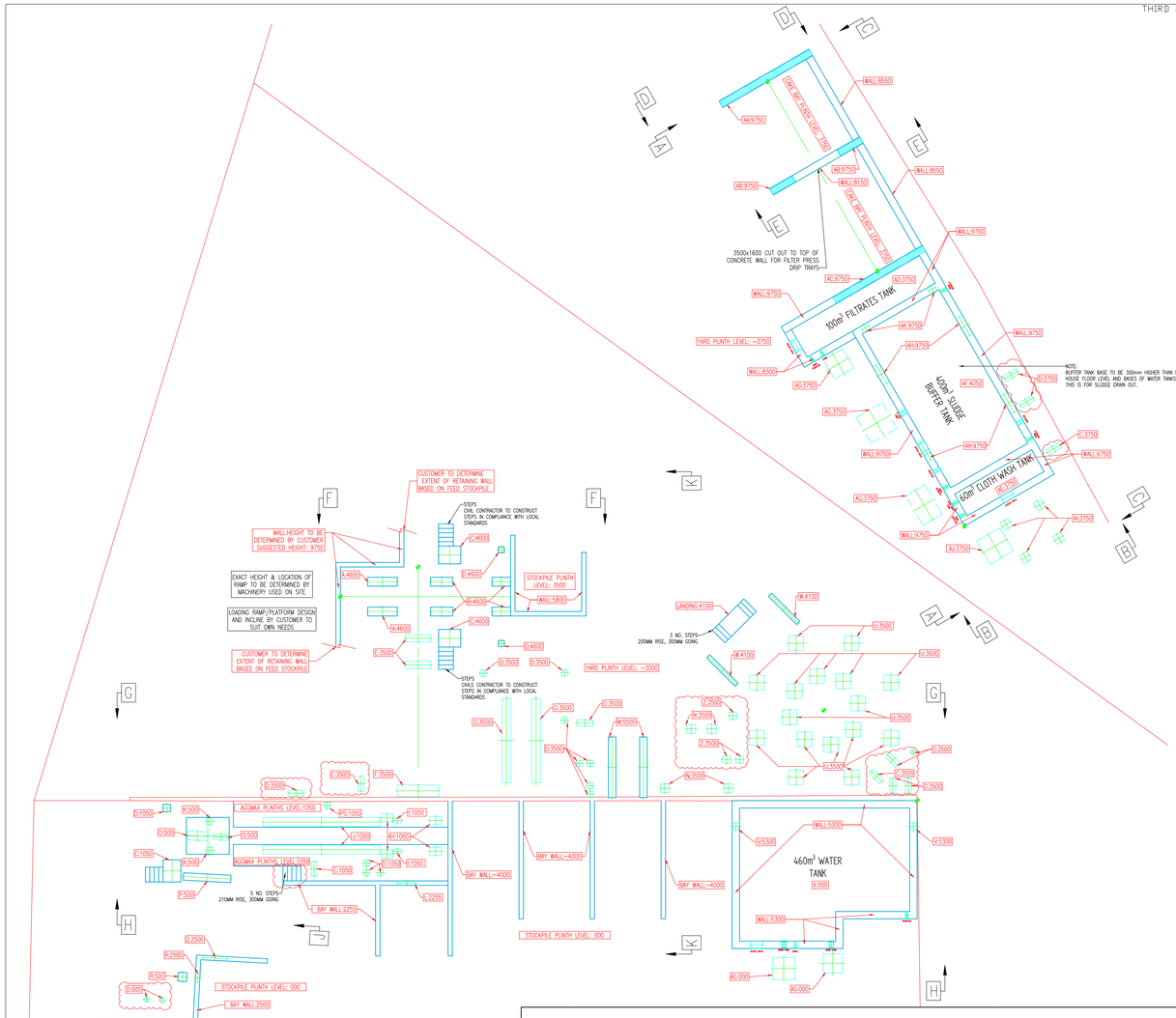
DRAWING No.
161/06A

DRAWING TITLE.
RECEPTORS PLAN (1 Km)

SCALE @ A1.
1:1,250

THIRD ANGLE PROJECTION.

Rev	Rev Notes	Date	Initials
00	PRELIMINARY PAGE 1 OF LOAD PADS, ELEVATIONS & LOCATIONS, LOADINGS & WALLS.	14/05/2025	BW
A	LOAD PADS, LOCATIONS AND LOADINGS UPDATED.	05/06/2025	BW
B	UNDERGROUND PIPEWORK AND CABLE DUCTS DETAIL INCLUDED	06/06/2025	BW
C	LOAD PAD POSITION FOR P2-75 FEED CONVEYOR LOCATION ADJUSTED. LOADING TABLE UPDATED	01/07/2025	BW
D	ADDITIONAL LOAD PADS FOR C, D & Z. LOAD PAD NUMBER CHANGED FOR N. LOAD VALUES UPDATED FOR N, S, V, W, Y, Z, AJ, AK FOLLOWING DESIGN UPDATE AND ANALYSIS. UNDER GROUND PIPE WORK AND DUCTS ROUTING UPDATED FOR PILE LOCATIONS. FILTER PRESS AREA UPDATED TO INDICATED GRADE LEVEL AT 3750	22/07/2025	BW
E	EXIT TERMINATION OF PIPE DUCTS 4, 5, 6, 7, 8, 9, 11, 24, 26, 27, 28, & 29 MOVED TO AVOID PILES. WATER PIPE WORK TT & UU REMOVED. WATER PIPE WORK TERMINATION POINT SS MOVED.	26/08/2025	BW



KEY

CONCRETE DETAIL (Main plinth)

LOAD FOUNDATION AREAS

ACTUAL PLANT ITEM FOOTPRINT

NOTE

1. MAIN PLINTH DETAILS:
   - APPROX 200mm CONCRETE TO BE LAID ON GENERAL PLINTH AREAS (DEPENDING ON GROUND BEARING PRESSURE)
   - CONCRETE TO HAVE A CHARACTERISTIC COMPRESSIVE STRENGTH AT 28 DAYS OF 30N/MM² & MIN CEMENT CONTENTS OF 300KG/M³ (UNLESS SPECIFIED BY CIVIL ENGINEER)
   - CONCRETE TO BE ADEQUATELY VIBRATED
2. ALL CIVIL DETAIL (I.E. WALLS AND LOAD PADS DETAILS) TO BE SPECIFIED BY A CIVIL ENGINEER
3. CDE WILL NOT ACCEPT RESPONSIBILITY FOR ANY CIVIL CONSTRUCTION
4. RE-BAR MINIMUM DEPTH BELOW LEVEL 000 AT LOAD PADS = 200MM. THIS ALLOWS DRILLING FOR THROUGH BOLTS FOR FIXING MAIN PLANT ITEMS
5. ALL LOAD PADS LEVELS AS STATED ON DRAWINGS.
6. CONCRETE PLINTHS TO BE DESIGNED TO ALLOW FOR TEMPORARY ACCESS FOR CRANES AND DELIVERY LORRIES FOR ASSEMBLY AND ERECTION OF WASH PLANT (DEPENDING ON ITEMS SUPPLIED, THIS CAN BE UP TO 150T OF TEMPORARY LOADING ON CONCRETE PLINTH – DETAILS OF PROJECT SPECIFIC TEMPORARY LOADS CAN BE CONFIRMED WITH CDE PROJECT PROMAN).
7. PLEASE NOTE THAT ANY RISE AND GOINGS INDICATED FOR REQUIRED STEPS IN THE CONCRETE CIVILS ARE INDICATIVE ONLY AND CIVIL ENGINEER/CONTRACTOR TO ENSURE THAT STEPS COMPLY WITH LOCAL REGULATIONS.
8. CIVIL DRAWINGS TO BE READ WITH LATEST VERSION OF MAIN LAYOUT DRAWING.
9. PLEASE NOTE THAT THE CUSTOMER IS RESPONSIBLE FOR THE EDGE PROTECTION ON ALL RAISED CONCRETE CONSTRUCTIONS/PLINTHS.

DATUM POINTS IN CIVILS:

1. CIVILS CONTRACTOR MUST PHYSICALLY MARK OUT ALL DATUM POINTS AS INDICATED ON THE CIVILS DRAWINGS TO ENSURE THAT INSTALLATION ENGINEER HAS THE CORRECT REFERENCE POINTS FOR SETTING OUT CDE PLANT IN CORRECT POSITIONS.
2. 57.08 GRADE LEVEL IS THE 000 LEVEL ON CDE CIVIL DRAWING FROM CORNER OF SITE RAMP WHERE WATER TANK WILL BE LOCATED.

PLANT LOADING INFORMATION

LOAD PAD	QTY OF PADS	LOAD DESCRIPTION	PAD HEIGHT (MM)	Gk (T) PER PAD	Gk+D (T)	Qk (T) PER PAD	Qk+D (T)	TOTAL PER PAD (T)	PAD SIZE (MM)	HORIZONTAL Gk (T) (PER PAD)	HORIZONTAL Qk (T) (PERPAD)	ADDITIONAL LOADING DUE TO WIND: MAX UPLIFT/PAD (SLS) (T)	ADDITIONAL LOADING DUE TO WIND: ADDITIONAL DOWNFORCE/PAD (SLS) (T)	ADDITIONAL LOADING DUE TO WIND: MAX Hz SHEAR/PAD (SLS) (T)	COMMENTS	NOTES
A	2	R4500 REAR LOAD PADS	1100	10.0	14.0	9.0	14.4	28.4	2000x600	NIL	NIL	NIL	4.4	1.7		ALL LOADS GIVEN ARE PER INDIVIDUAL PAD PAD HEIGHT is from the closest grade level. (All loads in Metric Tons) Gk = Dead Load (Service = Unfactored) Gk + D = Dead Load (Factored) Qk = Live Load (Service) Qk + D = Live Load (Factored) Total = (Dead Load Factored) + (Live Load Factored) All wind loadings are unfactored (SLS) Loads (Worst case shear given, consider equal in both directions)
B	4	R4500 MIDDLE AND FRONT LOAD PADS	1100	1.8	2.5	0.8	1.2	3.7	1500x600 & 1250x600	NIL	1.0	0.8	2.3	1.0		
C	10	ACCESS STAIR LOAD PAD	VARIES	1.0	1.4	0.5	0.8	2.2	VARIES	NIL	NIL	N/A	N/A	N/A	Negligible wind load	
D	22	WALKWAY SUPPORT LOAD PAD	VARIES	1.0	1.4	0.5	0.8	2.2	VARIES	NIL	NIL	N/A	N/A	N/A	Negligible wind load	
E	5	FEED CONVEYOR MID SUPPORT LOAD PAD	VARIES	2	2.8	0.8	1.3	4.1	1700x500	NIL	NIL	2.1	3.9	0.9	One side of pad uplift, other downforce under wind load	
F	2	FEED CONVEYOR HEAD SUPPORT LOAD PAD	VARIES	4	5.6	1.5	2.4	8.0	2800x800 & 3000x800	NIL	NIL	1.5	3.8	0.9	One side of pad uplift, other downforce under wind load	
G	2	CFCU 200 AND EVOWASH LOAD PADS	0	12.5	17.5	15	24.0	41.5	600x5700	NIL	NIL	NIL	11.0	2.2		
H	4	AGGMAX PRE-SCREEN LOAD PADS	1050	3.125	4.4	2.1	3.4	7.7	800x550	NIL	1.0	0.4	3.2	0.6		
I	2	AGGMAX TRASH SCREEN LOAD PADS	1050	5.0	7.0	2.2	3.5	10.5	550x300	NIL	NIL	NIL	0.5	0.4		
J	2	AGGMAX CHASSIS LOAD PADS	1050	18.8	26.3	20.5	32.8	59.1	7850x600	NIL	NIL	0.3	9.6	2.9		
K	2	AGGMAX SIZING SCREEN CHUTE LOAD PADS	500	2.3	3.2	5.0	8.0	11.2	450x450	NIL	NIL	NIL	1.8	0.8		
L	1	AGGMAX TRASH CONVEYOR LOAD PAD	2255	1	1.4	1	1.6	3.0	1200x250	NIL	NIL	NIL	0.4	0.1		
M	2	ORGANICS SCREEN LOAD PADS	2000	6.6	9.2	4.75	7.6	16.8	500x4100	NIL	NIL	NIL	1.5	0.9		
N	4	ROTARY DRUM LOAD PADS	0	2	2.8	3.9	6.2	9.0	600x600	NIL	NIL	0.2	1.6	0.5		
O	3	CONVEYOR SUPPORT LOAD PADS	VARIES	1.0	1.4	0.5	0.8	2.2	VARIES	NIL	NIL	0.04	0.5	0.2	One side of pad uplift, other downforce under wind load	
P	1	CONVEYOR TAIL SUPPORT LOAD PADS	500	2.0	2.8	1.0	1.6	4.4	3200x500	NIL	NIL	0.04	0.5	0.2	One side of pad uplift, other downforce under wind load	
Q	1	CONVEYOR HEAD SUPPORT LOAD PAD	2500	0.5	0.7	0.7	1.1	1.8	1600x300	NIL	NIL	0.3	0.5	0.3	One side of pad uplift, other downforce under wind load	
R	2	CONVEYOR HEAD SUPPORT LOAD PAD	VARIES	0.3	0.4	0.4	0.6	0.9	600x600 & 300x600	NIL	NIL	0.3	0.5	0.3	One side of pad uplift, other downforce under wind load	
S	4	MAGNETIC SEPARATOR LOAD PAD	500	4.0	5.6	3.0	4.8	10.4	800x800	NIL	NIL	1.2	1.1	0.6	Inlet pads will have lighter Dead Load of 2.1T/pad due to cantilever design. Discharge end pads will have no uplift.	
T	6	PROGRADE STRUCTURE LOAD PADS	4250	3.0	4.2	1.3	2.1	6.3	500x500	NIL	1.0	NIL	1.3	0.7		
U	16	A600 LOAD PADS	0	2	2.8	25	40.0	42.8	1000x1000	NIL	NIL	NIL	0.2	0.3		
V	2	CONTROL CABIN	5300	1.5	2.1	1.5	2.4	4.5	450x450	NIL	NIL	NIL	1.1	1.2		
W	2	POLY CABIN LOAD PADS	600	2	2.8	2	3.2	6.0	2700x300	NIL	NIL	NIL	0.6	0.7		
X	1	WATER TANK BASE	N/A	480T ACTING OVER BASE					93.5m²	-	-	-	-	-	Total Forces given. Downforce will act as UDL over pad	
Y	2	CONTROL CABIN SIDE WALL LOADS	5300	1.6	2.2	1.6	2.6	4.8	300x1000	2.6	2.6	NIL	1.2	0.6	Hz load is split 1.3Ton pullout at top mount of bracket, 1.3Ton compressive into wall bottom mount due to twisting moment of cantilever	
Z	3	DEAERATION SUPPORT LAOD PADS	0	1.1	1.5	3.4	5.4	7.0	500x500	NIL	NIL	1.0	0.5	0.3		
AA	1	PROPRESS NON FEED END LOADS (UDL OVER PAD)	6000	24.2	33.9	1.1	1.8	35.6	7000x400	3.0	5.5	NIL	3.0	3.3	Should be applied over two patch loads where diagonals bolt to walls	
AB	2	PROPRESS CENTRE SUPPORT LOADS LOADS (UDL OVER PAD)	6000	30.5	42.7	11.0	17.6	60.3	1750x400	NIL	NIL	NIL	5.9	6.6	Note: Pad each side so total load on centre wall 79.2Ton	
AC	1	PROPRESS FEED END LOADS (UDL OVER PAD)	6000	44.3	62.0	7.2	11.5	73.5	7000x400	NIL	NIL	NIL	3.0	3.3	Should be applied over two patch loads where diagonals bolt to walls	
AD	1	FILTRATES TANK BASE	N/A	100T ACTING OVER BASE					21.5m²	-	-	-	-	-	Total Forces given. Downforce will act as UDL over pad	
AE	1	POTABLE WATER TANK BASE	N/A	60T ACTING OVER BASE					10.2m²	-	-	-	-	-	Total Forces given. Downforce will act as UDL over pad	
AF	1	BUFFER TANK BASE	300 BASE	560T ACTING OVER BASE					72m²	-	-	-	-	-	Total Forces given. Downforce will act as UDL over pad	
AG	5	PUMP LOAD PAD	0	2.0	2.8	0.5	0.8	3.6	VARIES	NIL	NIL	N/A	N/A	N/A	Negligible wind load	
AH	4	AGITATOR BRIDGE LOAD PAD	6000	1.5	2.1	0.6	1.0	3.1	1400 x 500	NIL	NIL	N/A	N/A	0.7		
AI	4	LIME SILO LOAD PAD	0	3.0	4.2	22.0	35.2	39.4	600 x 600	NIL	NIL	3.6	6.4	1.4		
AJ	1	LIME MIXING TANK LOAD PAD	0	2.4	3.4	1.5	2.4	5.8	1800 x 1800	NIL	NIL	N/A	N/A	N/A	Negligible wind load	
AK	2	FILTER PRESS FLOOR SUPPORT	6000	2.2	3.1	4.1	6.6	9.6	500 x 500	NIL	NIL	NIL	1.6	1.1	Worst case, these wind loads will be less	
PS	*TBC*	PIPEWORK LOAD PADS	VARIES	3	4.2	1	1.6	5.8	VARIES	NIL	NIL	N/A	N/A	N/A	Negligible wind load	

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TEL: +44 (0)28 8676 7590
www.cdeglobal.com

NAME:	SPS40 CIVIL 01
CLIENT:	ENVIRO SKIP HIRE LTD
DATE:	NORTON WAY, SANDBACH
JOB:	SPS40
DRAWN BY:	Ben Winter
DATE:	26/08/25
DRWG NO:	CT77824
REVISION:	E
APP BY:	Ciaran Hegarty
DATE:	26/08/25
EXT NO:	SPS40-CIVILS-01
SCALE:	1:200@A1 SHEET 1 of 5
SIZE:	A1

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THIRD ANGLE PROJECTION

Rev	Rev Notes	Date	Initials
00	PRELIMINARY PAGE 1 OF LOAD PADS, ELEVATIONS & LOCATIONS, LOADINGS & WALLS.	14/05/2025	BW
A	LOAD PADS, LOCATIONS AND LOADINGS UPDATED.	05/06/2025	BW
B	UNDERGROUND PIPEWORK AND CABLE DUCTS DETAIL INCLUDED	06/06/2025	BW
C	LOAD PAD POSITION FOR P2-75 FEED CONVEYOR LOCATION ADJUSTED. LOADING TABLE UPDATED	01/07/2025	BW
D	ADDITIONAL LOAD PADS FOR C, D & Z. LOAD PAD NUMBER CHANGED FOR N. LOAD VALUES UPDATED FOR N, S, V, W, Y, Z, AJ, AK FOLLOWING DESIGN UPDATE AND ANALYSIS. UNDER GROUND PIPE WORK AND DUCTS ROUTING UPDATED FOR PILE LOCATIONS. FILTER PRESS AREA UPDATED TO INDICATED GRADE LEVEL AT 3750	22/07/2025	BW
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KEY

CONCRETE DETAIL (Main plinth)

LOAD FOUNDATION AREAS

ACTUAL PLANT ITEM FOOTPRINT

NOTE

1. MAIN PLINTH DETAILS:
   - APPROX 200mm CONCRETE TO BE LAID ON GENERAL PLINTH AREAS (DEPENDING ON GROUND BEARING PRESSURE)
   - CONCRETE TO HAVE A CHARACTERISTIC COMPRESSIVE STRENGTH AT 28 DAYS OF 30N/MM² & MIN CEMENT CONTENTS OF 300KG/M³ (UNLESS SPECIFIED BY CIVIL ENGINEER)
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2. 57.08 GRADE LEVEL IS THE 000 LEVEL ON CDE CIVIL DRAWING FROM CORNER OF SITE RAMP WHERE WATER TANK WILL BE LOCATED.

Base Plate	Qty of Plates	Positioned on Load Pad	Base Plate Size (mm)	Fixings
BP-1	2	A	1387x200x10	M20x160 THROUGH BOLT
BP-2	2	B	875x200x10	M20x160 THROUGH BOLT
BP-3	2	B	566x200x10	M20x160 THROUGH BOLT
BP-4	12	E & F	260x340x20	M20x200 THROUGH BOLT
BP-5	4	G	AS DRAWN 8MM PLATE	M16X150 THROUGH BOLT M20x160 THROUGH BOLT
BP-6	4	H	600x350x15	M20x130 THROUGH BOLT
BP-7	2	I	440x250x15	M20x130 THROUGH BOLT
BP-8	2	J	AS DRAWN 10MM PLATE	M20x130 THROUGH BOLT
BP-9	2	J	AS DRAWN 10MM PLATE	M20x130 THROUGH BOLT
BP-10	2	K	300x260x10	M20x130 THROUGH BOLT
BP-11	1	L	AS DRAWN 8MM PLATE	M16x150 THROUGH BOLT
BP-12	2	M	(150x150 SHS)x3811	M16x150 THROUGH BOLT
BP-13	2	N	450x450x15	M20x150 CHEM FIXING
BP-14	2	N	320x450x15	M20x150 CHEM FIXING
BP-15	4	O & P	200x400x10	M16x150 THROUGH BOLT
BP-16	2	O	190x190x10	M16x150 THROUGH BOLT
BP-17	2	P	220x320x10	M16x150 THROUGH BOLT
BP-18	2	Q	320x220x10	M16x150 THROUGH BOLT
BP-19	2	R	200x400x10	M16x150 THROUGH BOLT
BP-20	4	S	400x450x15	M20x150 CHEM FIXING
BP-21	2	E	100x120x10	M20x200 THROUGH BOLT
BP-22	6	T	400x300x20	M20x150 CHEM FIXING
BP-23	2	O	80x90x8	M20x130 THROUGH BOLT
BP-24A	8	U	300x300x20	M20x215 THROUGH BOLT
BP-24B	8	U	350x270x20	M20x215 THROUGH BOLT
BP-25	6	V & W	CONTAINER TWIST LOCK	N/A
BP-26	2	AA & AC	(356x368 UC)x6880	M20x200 THROUGH BOLT & M16x125 THROUGH BOLT
BP-27	2	AB	(356x368 UC)x1669	
BP-28	2	AA	310x263x20	
BP-29	1	AG	AS DRAWN 8MM PLATE	M16x150 THROUGH BOLT
BP-30	1	AG	AS DRAWN 6MM PLATE	M16x150 THROUGH BOLT
BP-31	1	AG	AS DRAWN 8MM PLATE	M16x150 THROUGH BOLT
BP-32	1	AG	AS DRAWN 8MM PLATE	M16x150 THROUGH BOLT
BP-33	1	AG	AS DRAWN 8MM PLATE	M16x150 THROUGH BOLT
BP-34	4	AH	AS DRAWN 10MM PLATE & 260x90 PFC	M16x150 THROUGH BOLT
BP-35	2	Y	AS DRAWN 10MM PLATE	M16x150 CHEM FIXING
BP-36	2	AK	400x500x20	M20x200 THROUGH BOLT
BP-37	4	AI	400x400x10	M20x150 CHEM FIXING
BP-38	3	AJ	300x200x6	M12x150 THROUGH BOLT
BP-39	3	Z	350x320x20	M20x150 CHEM FIXING

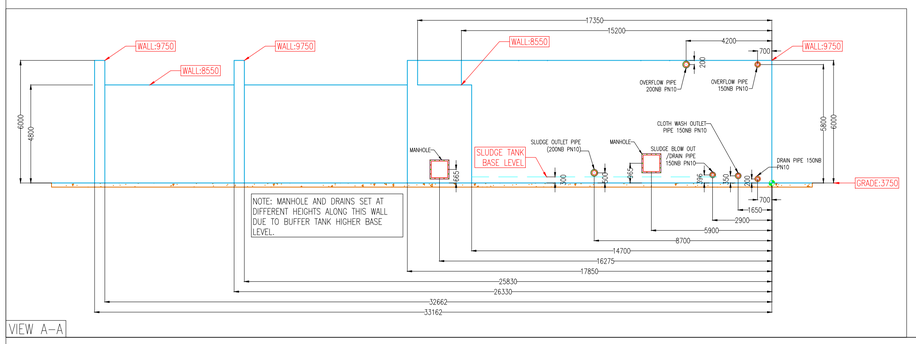
CDE
Kilcronagh, Sandholes Road, Cookstown, Co. Tyrone, N. Ireland, BT80 9HJ
TEL: +44 (0)28 8676 7900
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NAME	SP1540 CIVIL 01		
CLIENT	ENVIRO SKIP HIRE LTD		
SITE	NORTON WAY, SANDBACH		
JOB	SP1540	DRWN BY: Ben Winter	DATE: 26/08/25
DRWG NO	L777824 REVISION E	APP BY: Ciaran Hegarty	DATE: 26/08/25
EXT NO	SP1540-CIVILS-01	SCALE: 1200@A1 SHEET 2 of 6	SIZE: A1

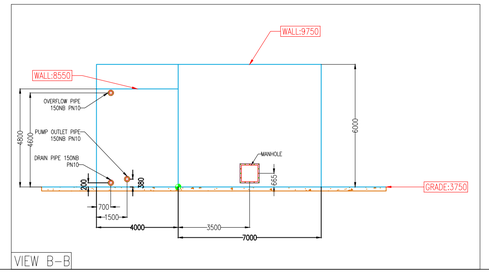
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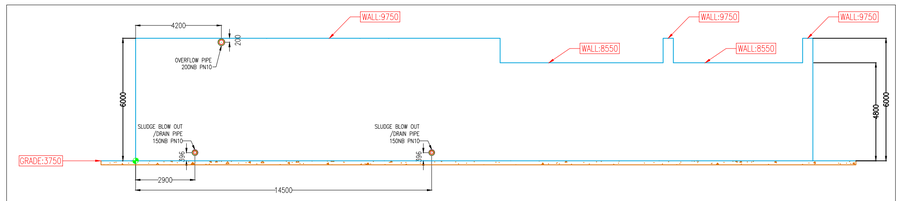
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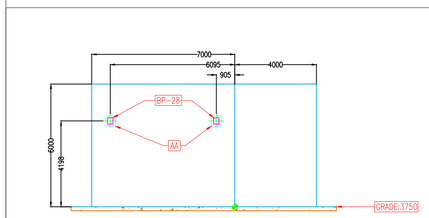
VIEW A-A



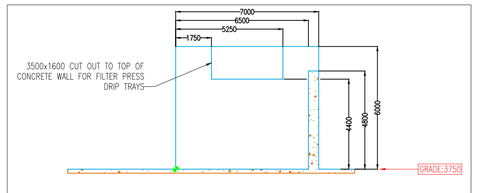
VIEW B-B



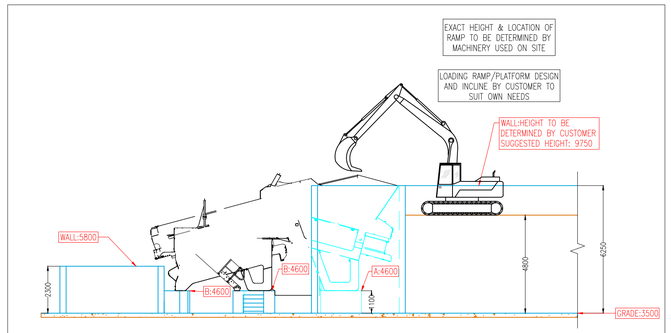
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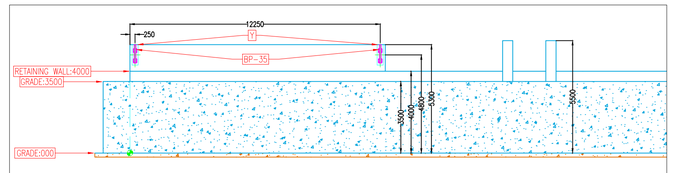
VIEW D-D



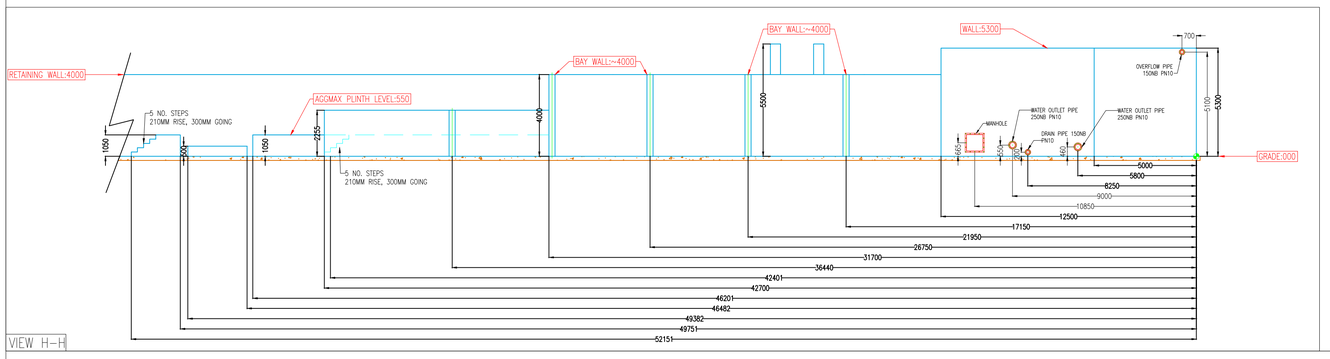
VIEW E-E



VIEW F-F

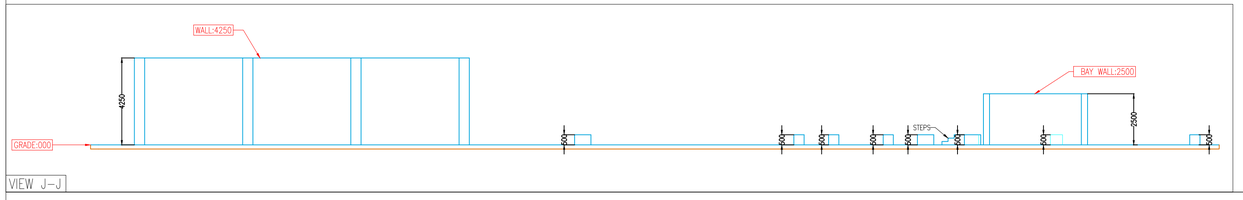


VIEW G-G

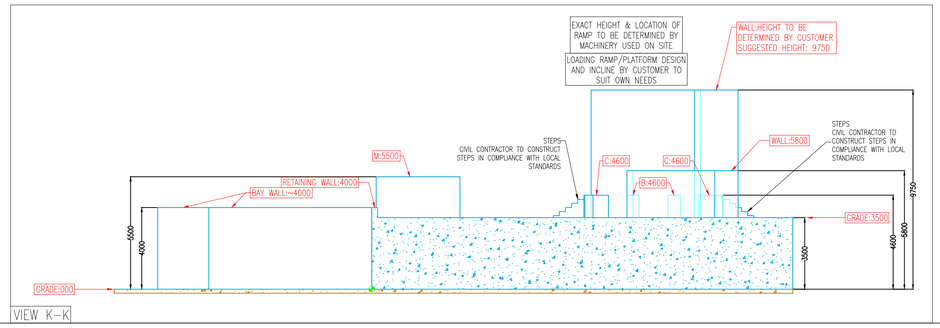


VIEW H-H





VIEW J-J



VIEW K-K

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NAME:	SP1540 CIVIL 01		
CLIENT:	ENVIRO SKIP HIRE LTD		
SITE:	NORTON WAY, SANDBACH		
JOB:	SP1540	DRWN BY: Ben Winter	DATE: 26/08/25
DRWG NO:	C7T7824 REVISION E	APP BY: Ciaran Hegarty	DATE: 26/08/25
EXT NO:	SP1540-CIVILS-01	SCALE: 1:50@A1 SHEET 3 of 6	SIZE: A1

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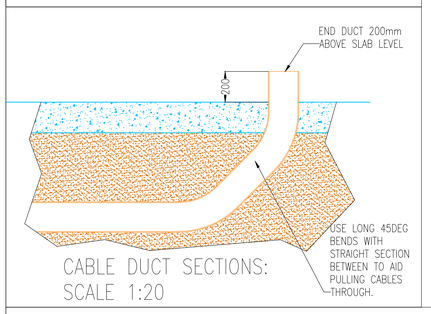
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ITEM	DETAILS/DESCRIPTION	DUCT LENGTH	DUCT/PIPE SIZE	SUPPLY	COMMENTS
1	CABLE DUCT - P2-75 & M0665 POWER & SIGNAL CABLES DUCT 1	~45.5m	Ø150 mm	CUSTOMER	Duct to retaining wall then cables transfer to to Duct 6
2	CABLE DUCT - P2-75 FEED CONVEYOR POWER & SIGNAL CABLES DUCT 1	~40m	Ø150 mm	CUSTOMER	Duct to retaining wall then cables transfer to to Duct 5
3	CABLE DUCT - ECS POWER & SIGNAL CABLES DUCT 1	~21.5m	Ø150 mm	CUSTOMER	Duct to retaining wall then cables transfer to to Duct 4
4	CABLE DUCT - ECS POWER & SIGNAL CABLES DUCT 2	~45.5m	Ø150 mm	CUSTOMER	
5	CABLE DUCT - P2-75 FEED CONVEYOR POWER & SIGNAL CABLES DUCT 2	~45.5m	Ø150 mm	CUSTOMER	
6	CABLE DUCT - P2-75 & M0665 POWER & SIGNAL CABLES DUCT 2	~45.5m	Ø150 mm	CUSTOMER	
7	CABLE DUCT - MOBILE AGG CONVEYORS POWER & SIGNAL CABLES DUCT	~45.5m	Ø150 mm	CUSTOMER	
8	CABLE DUCT - AGGMAX POWER & SIGNAL CABLES DUCT 1	~45.5m	Ø150 mm	CUSTOMER	
9	CABLE DUCT - AGGMAX POWER & SIGNAL CABLES DUCT 2	~45.5m	Ø200 mm	CUSTOMER	
10	CABLE DUCT - AGGMAX FEED CONVEYOR POWER & SIGNAL CABLES DUCT	~25.5m	Ø150 mm	CUSTOMER	
11	CABLE DUCT - ORGANICS SCREEN POWER & SIGNAL CABLES DUCT	~11.5m	Ø150 mm	CUSTOMER	
12	CABLE DUCT - MAINS SUPPLY CABLE FOR CDE MAIN CONTROL PANEL	XX m	Øxxx mm	CUSTOMER	Customer to determine duct size
13	CABLE DUCT - TOP UP PUMP SIGNAL CABLES	XX m	Øxxx mm	CUSTOMER	Customer to determine duct size
14	CABLE DUCT - POTABLE WATER SUPPLY PUMP SIGNAL CABLES	XX m	Øxxx mm	CUSTOMER	Customer to determine duct size
15	CABLE DUCT - EVO/CFCU 200 POWER & SIGNAL CABLES DUCT 1	~23m	Ø150 mm	CUSTOMER	
16	CABLE DUCT - EVO/CFCU 200 POWER & SIGNAL CABLES DUCT 2	~23.5m	Ø150 mm	CUSTOMER	
17	CABLE DUCT - ROTARY DRUM POWER & SIGNAL CABLES DUCT	~12.5m	Ø150 mm	CUSTOMER	
18	CABLE DUCT - R4500 POWER & SIGNAL CABLES DUCT 1	~33m	Ø150 mm	CUSTOMER	
19	CABLE DUCT - R4500 POWER & SIGNAL CABLES DUCT 2	~34m	Ø150 mm	CUSTOMER	
20	CABLE DUCT - MAIN CONTROL PANEL TO P40 CONTROL PANEL POWER & SIGNALS CABLE DUCT	~13m	Ø150 mm	CUSTOMER	
21	CABLE DUCT - A400 POWER & SIGNAL CABLES DUCT	~11m	Ø150 mm	CUSTOMER	
22	PNEUMATICS DUCT - A400 PNEUMATICS DUCT	~10m	Ø100 mm	CUSTOMER	
23	PNEUMATICS DUCT - ORGANICS SCREEN PNEUMATICS DUCT	~21m	Ø100 mm	CUSTOMER	
24	PNEUMATICS DUCT - CFCU PNEUMATICS DUCT	~25.5m	Ø100 mm	CUSTOMER	
25	PNEUMATICS DUCT - WATER PUMP PNEUMATICS DUCT	~16m	Ø100 mm	CUSTOMER	
26	CABLE DUCT - MAIN CONTROL PANEL TO FILTER PRESS CONTROL PANEL SIGNAL CABLES DUCT	~24.5m	Ø150 mm	CUSTOMER	Duct ran in trench along with pipework
27	PIPEWORK DUCT - ROTARY DRUM WATER SUPPLY PIPEWORK DUCT	~24.5m	Ø150 mm	CUSTOMER	Duct ran in trench along with pipework
28	CABLE DUCT - LIME SILO/CORE WASH POWER & SIGNAL CABLES DUCT	~24.5m	Ø150 mm	CUSTOMER	Duct ran in trench along with pipework
29	CABLE DUCT - MAINS SUPPLY CABLE FOR FILTER PRESS CONTROL PANEL	XX m	Øxxx mm	CUSTOMER	Customer to determine duct size

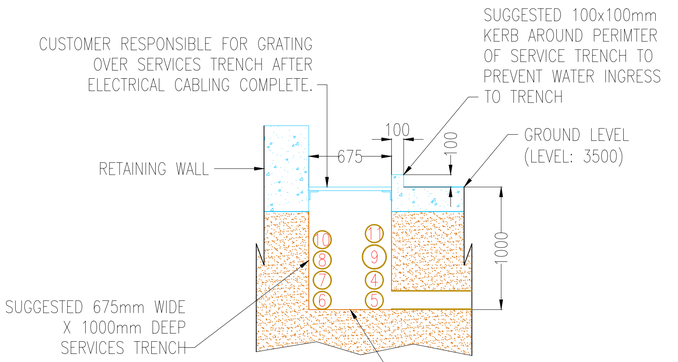
NOTES:
· WAVIN SEWER PIPES CAN BE USED AS DUCTING
· LONG RADIUS SWEEP BENDS TO BE USED WHERE HORIZONTAL PIPE TURNS TO VERTICAL. LEAVE PIPE END MIN 200MM ABOVE G.L.
· PULL ROPES TO BE FED INTO DUCTING DURING LAYING OF PIPES.

SEE CABLE DUCT SECTION DETAIL FOR ALL CABLE DUCTS

KEY
- CONCRETE DETAIL (Main plinth)
- LOAD FOUNDATION AREAS
- DUCT PIPE DETAILS

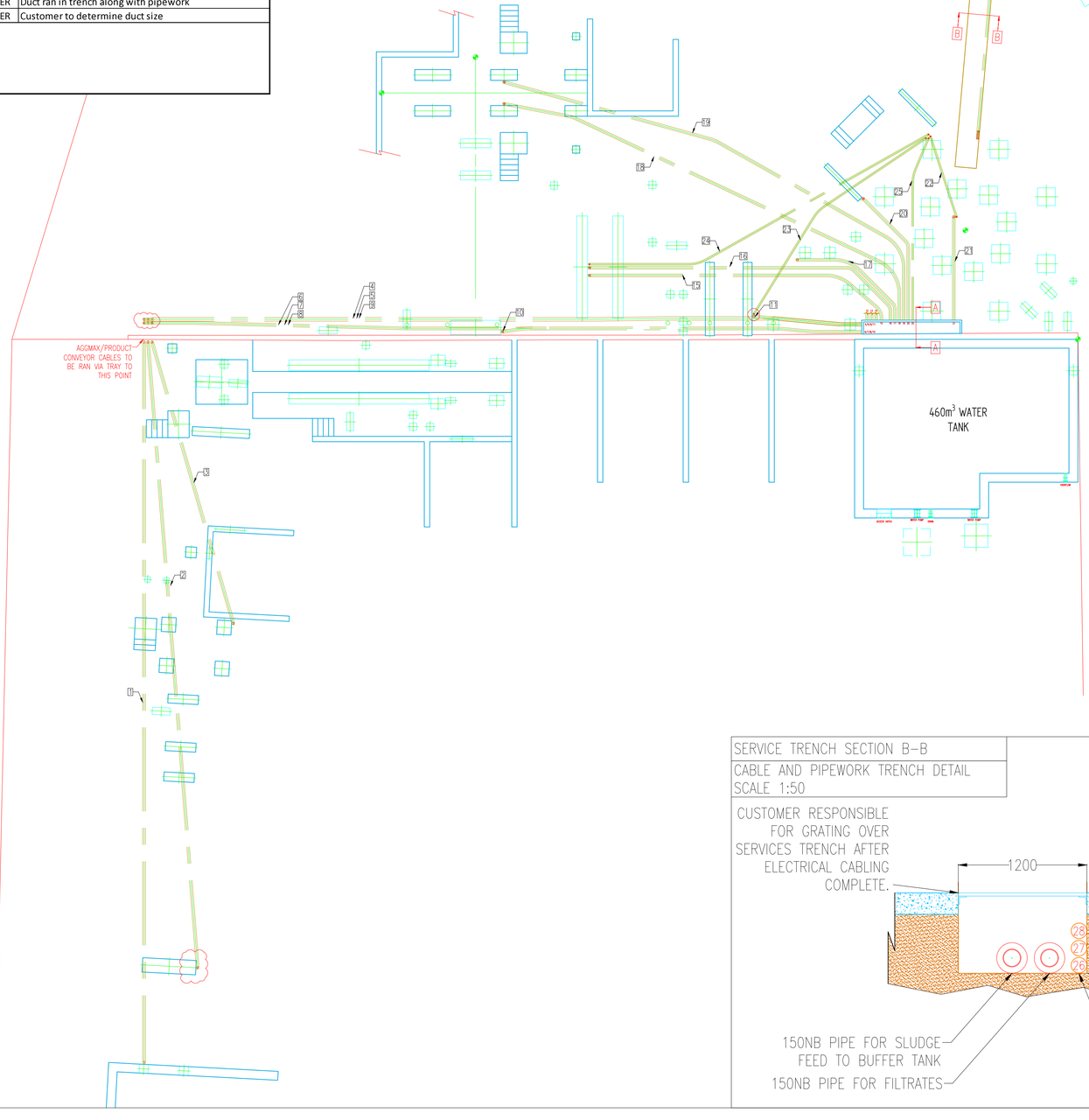


CABLE DUCT SECTIONS:
SCALE 1:20



SERVICES TRENCH SECTION A-A
SCALE 1:50

NOTES:
- IF CDE SUPPLYING SITE CABLING, CABLE LENGTHS ARE BASED ON THE PROPOSED DUCT LAYOUT ABOVE. IF CUSTOMER ALTERS ROUTES AND INCREASES THE LENGTH OF DUCTS, THEY ARE LIABLE FOR ADDITIONAL COSTS FOR CABLING.
- LONG RADIUS SWEEPING BENDS AND SMOOTH DUCT PIPING ARE TO BE USED TO ALLOW CABLES AND PE PIPING TO BE PULLED THROUGH DUCTS.



SERVICE TRENCH SECTION B-B
CABLE AND PIPEWORK TRENCH DETAIL
SCALE 1:50

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NAME:	SP1540 CIVIL 01		
CLIENT:	ENVIRO SKIP HIRE LTD		
SITE:	NORTON WAY, SANDBACH		
JOB:	SP1540	DRWN BY: Ben Winter	DATE: 26/08/25
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EXT NO:	SP1540-CIVILS-01	SCALE: 1:50@A1 SHEET 4 of 6	SIZE: A1

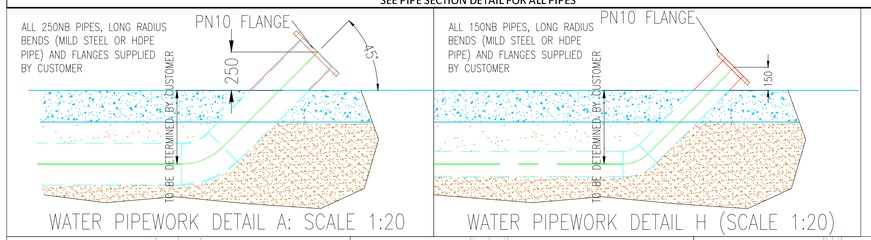
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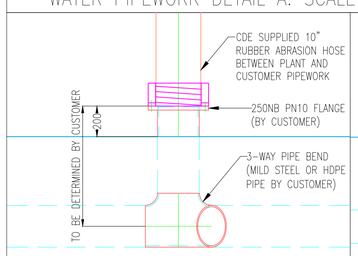
ITEM	DESCRIPTION	CONNECTION FLANGE	HEIGHT	SUPPLY	PIPE SIZE & LABEL)
AA	WATER RECIRCULATION SUPPLY PIPE (PUMP CONNECTION). FLANGE CONNECTION 250NB PN10 (DETAIL A)	250NB PN10	250mm	CUSTOMER	PIPE 1 250NB PN10 PIPE RUN TO BE 250NB GENERALLY BUT REDUCING DOWN TO STATED FLANGE REQUIREMENT CLOSE TO DISCHARGE FLANGE
BB	WATER RECIRCULATION SUPPLY PIPE (TERMINATION PRE RETAINING WALL). FLANGE CONNECTION 250NB PN10 (DETAIL B)	250NB PN10	200mm	CUSTOMER	
CC	WATER RECIRCULATION SUPPLY PIPE TO AGGMAX PRE SCREEN (DISCHARGE CONNECTION). FLANGE CONNECTION 150NB PN10 (DETAIL C)	150NB PN10	200mm	CUSTOMER	
DD	WATER RECIRCULATION SUPPLY PIPE TO AGGMAX MANIFOLD (DISCHARGE CONNECTION). FLANGE CONNECTION 200NB PN10 (DETAIL D)	200NB PN10	200mm	CUSTOMER	
EE	WATER RECIRCULATION SUPPLY PIPE (RESUMPTION POST RETAINING WALL). FLANGE CONNECTION 250NB PN10 (DETAIL E)	250NB PN10	200mm	CUSTOMER	PIPE 2 250NB PN10 PIPE RUN TO BE 250NB GENERALLY BUT REDUCING DOWN TO STATED FLANGE REQUIREMENT CLOSE TO DISCHARGE FLANGE
FF	WATER RECIRCULATION SUPPLY PIPE TO R4500 WASHDOWN HOSE - OPTIONAL (DISCHARGE CONNECTION). FLANGE CONNECTION 80NB PN10 (DETAIL F)	80NB PN10	200mm	CUSTOMER	
GG	WATER RECIRCULATION SUPPLY PIPE TO EVOWASH (DISCHARGE CONNECTION). FLANGE CONNECTION 100NB PN10 (DETAIL G)	100NB PN10	200mm	CUSTOMER	
HH	WATER RECIRCULATION SUPPLY PIPE TO ORGANICS SCREEN (DISCHARGE CONNECTION). FLANGE CONNECTION 100NB PN10 (DETAIL G)	100NB PN10	200mm	CUSTOMER	
JJ	WATER RECIRCULATION SUPPLY PIPE TO A600 AQUACYCLE WATER MANIFOLD (DISCHARGE CONNECTION). FLANGE CONNECTION 80NB PN10 (DETAIL F)	80NB PN10	200mm	CUSTOMER	
KK	WATER RECIRCULATION SUPPLY PIPE (PUMP CONNECTION). FLANGE CONNECTION 150NB PN10 (DETAIL H)	150NB PN10	150mm	CUSTOMER	PIPE 3 150NB PN10
LL	WATER RECIRCULATION SUPPLY PIPE (TERMINATION PRE RETAINING WALL). FLANGE CONNECTION 150NB PN10 (DETAIL J)	150NB PN10	200mm	CUSTOMER	
MM	WATER RECIRCULATION SUPPLY PIPE (RESUMPTION POST RETAINING WALL). FLANGE CONNECTION 150NB PN10 (DETAIL J)	150NB PN10	200mm	CUSTOMER	PIPE 4 150NB PN10
NN	WATER RECIRCULATION SUPPLY PIPE TO CFCU MANIFOLD (DISCHARGE CONNECTION). FLANGE CONNECTION 150NB PN10 (DETAIL J)	150NB PN10	200mm	CUSTOMER	
PP	FILTRATES PIPE (A600 CONNECTION). FLANGE CONNECTION 150NB PN10 (DETAIL J)	150NB PN10	200mm	CUSTOMER	PIPE 5 150NB PN10
QQ	FILTRATES PIPE (FILTER PRESS CONNECTION). FLANGE CONNECTION 150NB PN10 (DETAIL H)	150NB PN10	150mm	CUSTOMER	
RR	SLUDGE FEED PIPE (A600 CONNECTION). FLANGE CONNECTION 150NB PN10 (DETAIL H)	150NB PN10	150mm	CUSTOMER	PIPE 6 150NB PN10
SS	SLUDGE FEED PIPE (BUFFER TANK CONNECTION). FLANGE CONNECTION 150NB PN10 (DETAIL J)	150NB PN10	200mm	CUSTOMER	
~~TT~~	~~CORE WASH PIPE (A600 CONNECTION). FLANGE CONNECTION 80NB PN10 (DETAIL F)~~	~~80NB PN10~~	~~200mm~~	~~CUSTOMER~~	~~PIPE 7 80NB PN10~~
~~UU~~	~~CORE WASH PIPE (FILTER PRESS CONNECTION). FLANGE CONNECTION 80NB PN10 (DETAIL E)~~	~~80NB PN10~~	~~200mm~~	~~CUSTOMER~~	
VV	POTABLE WATER SUPPLY PIPEWORK TO CLOTH WASH TANK (TBCm^3/hr TOP UP RATE REQUIRED). PIPEWORK SIZE AND FLANGE CONNECTION TO BE CONFIRMED BY CUSTOMER. NOTE: CUSTOMER TO PIPE INTO CLOTH WASH TANK. LOCATION INDICATED IN DRAWING IS FOR PIPEWORK COMING UP THROUGH GROUND LEVEL.	(TBC BY CUSTOMER)	200mm	CUSTOMER	PIPE 8 (TBC)NB PN10
WW	TOP UP PROCESS WATER SUPPLY PIPEWORK TO A600 (TBCm^3/hr TOP UP RATE REQUIRED). PIPEWORK SIZE AND FLANGE CONNECTION TO BE CONFIRMED BY CUSTOMER. NOTE: CUSTOMER TO PIPE INTO A600 AQUACYCLE. LOCATION INDICATED ON DRAWING IS SUGGESTED LOCATION FOR PIPEWORK COMING UP THROUGH GROUND LEVEL.	(TBC BY CUSTOMER)	200mm	CUSTOMER	PIPE 9 (TBC)NB PN10
XX	POTABLE WATER SUPPLY PIPEWORK TO P40 POLYPLANT (TBCm^3/hr TOP UP RATE REQUIRED). PIPEWORK SIZE AND FLANGE CONNECTION TO BE CONFIRMED BY CUSTOMER. NOTE: CDE TO PIPE INTO P40 POLYPLANT. LOCATION INDICATED IN DRAWING IS FOR PIPEWORK COMING UP THROUGH GROUND LEVEL.	(TBC BY CUSTOMER)	200mm	CUSTOMER	PIPE 10 (TBC)NB PN10

SEE PIPE SECTION DETAIL FOR ALL PIPES

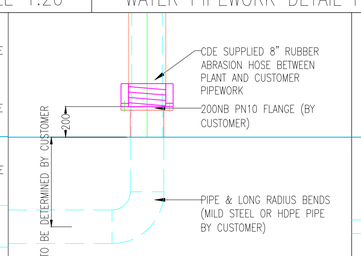


WATER PIPEWORK DETAIL A: SCALE 1:20

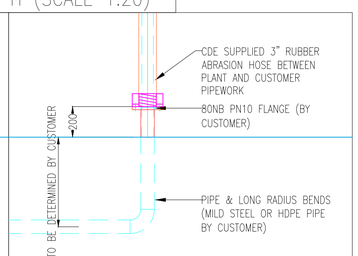
WATER PIPEWORK DETAIL H (SCALE 1:20)



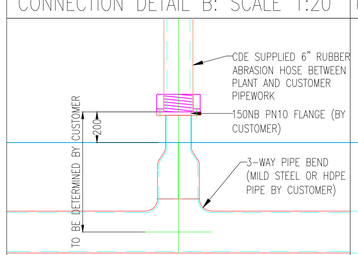
WATER SUPPLY PIPEWORK CONNECTION DETAIL B: SCALE 1:20



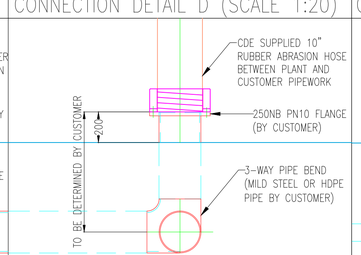
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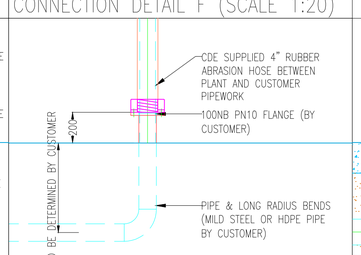
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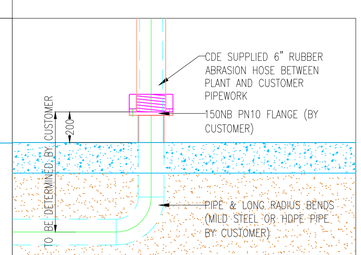
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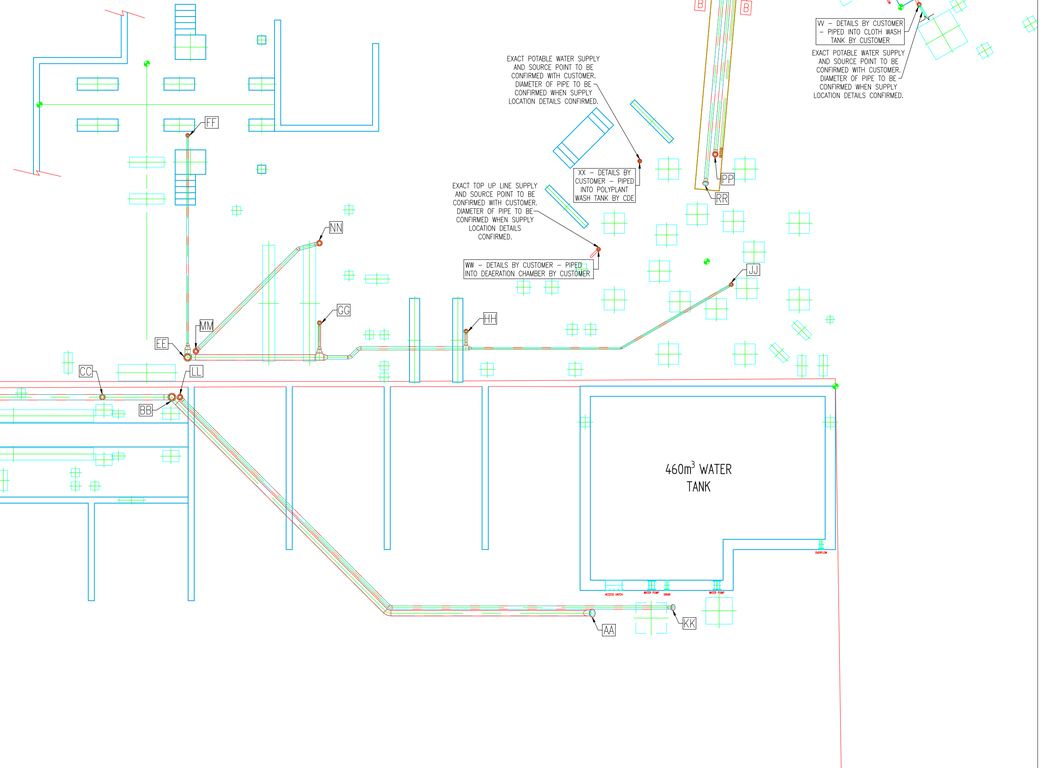
WATER SUPPLY PIPEWORK CONNECTION DETAIL E: SCALE 1:20



WATER SUPPLY PIPEWORK CONNECTION DETAIL G (SCALE 1:20)



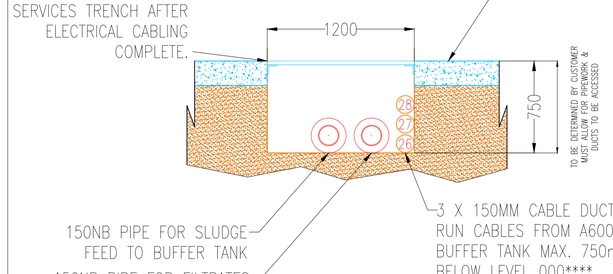
WATER SUPPLY PIPEWORK CONNECTION DETAIL J: SCALE 1:20



SERVICE TRENCH SECTION B-B

CABLE AND PIPEWORK TRENCH DETAIL
SCALE 1:50

CUSTOMER RESPONSIBLE FOR GRATING OVER SERVICES TRENCH AFTER ELECTRICAL CABLING COMPLETE.



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www.cdeglobal.com

NAME:	SP1540 CIVIL 01
CLIENT:	ENVIRO SKIP HIRE LTD
SITE:	NORTON WAY, SANDBACH
JOB:	SP1540
DRWG NO:	C777824 REVISION E
EXT NO:	SP1540-CIVILS-01
DRAWN BY:	Ben Winter DATE: 26/08/25
APP BY:	Ciaran Hegarty DATE: 26/08/25
SCALE:	1:50@A1 SHEET: 5 of 6 SIZE: A1

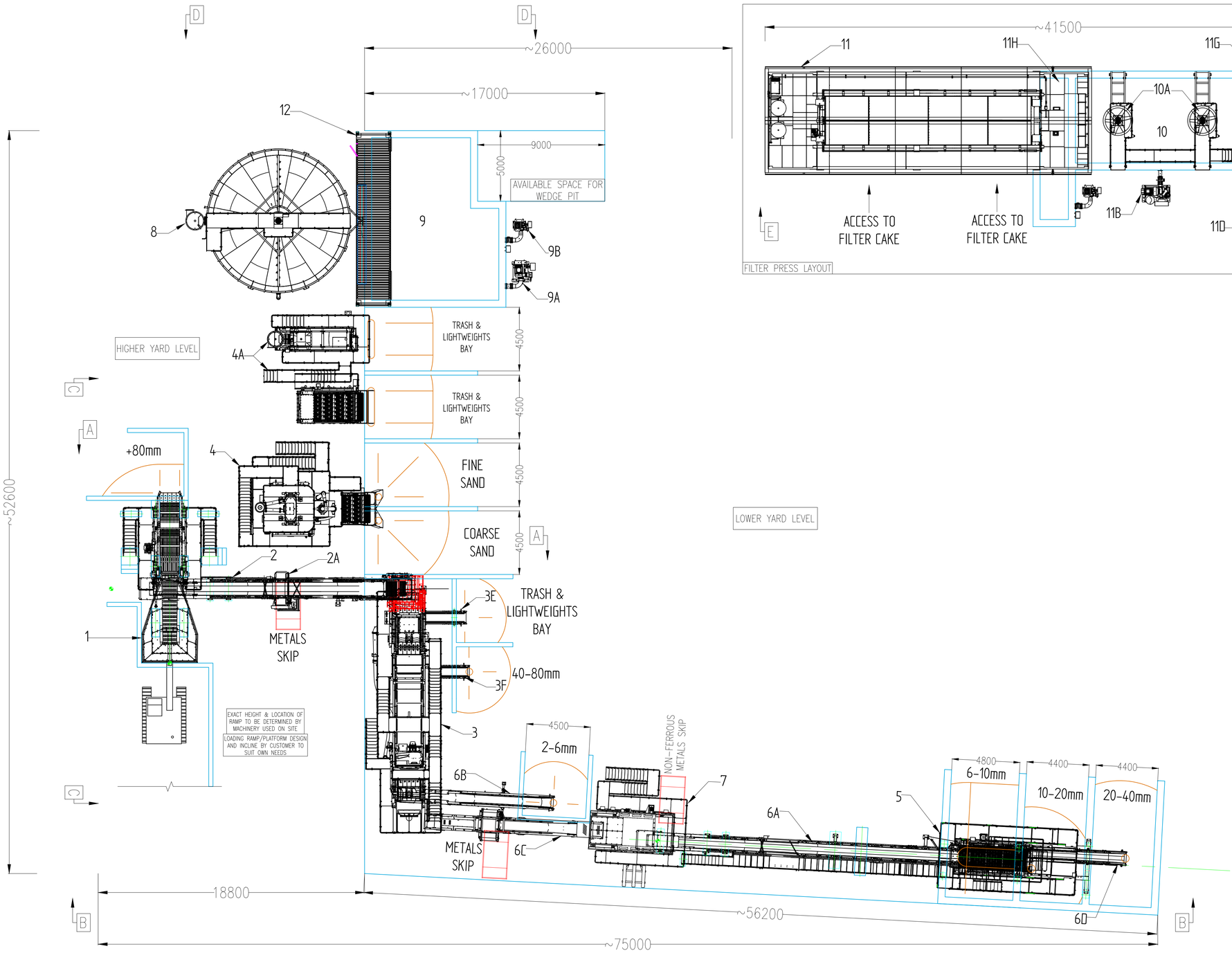
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THIRD ANGLE PROJECTION

Rev	Rev Notes	Date	Initials
B			
C			

ITEM	QTY	NAMES, DESIGNATION, MATERIAL ETC.	REFERENCE
1	1	R4500 APRON FEEDER C/W 20T BIN	CDE SUPPLY
2	1	M1810 FEED CONVEYOR C/W BELT SCALE	CDE SUPPLY
2A	1	- OVERBAND MAGNET	CDE SUPPLY
3	1	AGGMAX 253SR	CDE SUPPLY
3E	1	- AGGMAX TRASH CONVEYOR	CDE SUPPLY
3F	1	- AGGMAX OVERSIZE CONVEYOR	CDE SUPPLY
4	1	CFCU EVO A(S),50(2),50,100,30 C/W CFCU 200	CDE SUPPLY
4A	1	D1-65 ORGANICS SCREEN & ROTARY DRUM	CDE SUPPLY
5	1	PROGRADE P2-75 DRY SCREEN	CDE SUPPLY
6A	1	- S2408 FEED CONVEYOR	CDE SUPPLY
6B	1	- M1265 MOBILE RADIAL STOCKPILE CONVEYOR	CDE SUPPLY
6C	1	- M1580 STOCKPILE TRANSFER CONVEYOR	CDE SUPPLY
		- C/W OVERBAND MAGNET	CDE SUPPLY
6D	1	- M0665 STOCKPILE TRANSFER CONVEYOR	CDE SUPPLY
7	1	EDDY CURRENT SEPARATOR	CDE SUPPLY
8	1	A600 AQUACYCLE	CDE SUPPLY
9	1	460m³ INSITU CONCRETE WATER TANK	CUSTOMER SUPPLY
9A	1	- MAIN PROCESS WATER PUMP	CDE SUPPLY
9B	1	- CFCU WATER PUMP	CDE SUPPLY
10	1	400m³ INSITU CONCRETE SLUDGE BUFFER TANK	CUSTOMER SUPPLY
10A	2	- CDE SLUDGE AGITATORS	CDE SUPPLY
11	1	CDE X3-160	CDE SUPPLY
11B	1	- SLUDGE FEED PUMP	CDE SUPPLY
11D	1	- CLOTH WASH PUMP (80 BAR)	CDE SUPPLY
11G	1	- 50m³ INSITU CONCRETE POTABLE WATER TANK	CUSTOMER SUPPLY
11H	1	- 100m³ INSITU CONCRETE FILTRATES TANK	CUSTOMER SUPPLY
12	1	12m CONTROL CABIN C/W P40 FLOCSTATION	CDE SUPPLY
13	1	LIME DOSING UNIT	CDE SUPPLY

NOTES:
CUSTOMER TO SUPPLY AND FIT THE FOLLOWING:
1. ADEQUATE BASE FOR PLANT – CDE TO SUPPLY CIVIL DRAWINGS UPON LAYOUT APPROVAL
2. RAMP DESIGN AND INCLINE TO SUIT CUSTOMER LOADING ARRANGEMENTS.
3. TOP UP WATER, POTABLE WATER AND 2 NO. ELECTRICAL POWER SUPPLIES (SEPERATE SUPPLY REQUIRED TO WASH PLANT CONTROL PANEL & TO FILTER PRESS CONTROL PANEL).
4. COLOUR SCHEME – GENERALLY BLUE (RAL 5015) & WHITE (RAL 9016). A600 TANK RAL 9016 WHITE. FILTER PRESS ENCLOSURE CLADDING TO BE GOOSE WING GREY.



FILTER PRESS LAYOUT

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NAME:	CDE TROMMEL FINES WASH PLANT LAYOUT		
CLIENT:	ENVIRO SKIP HIRE LTD		
SITE:	NORTON WAY, SANDBACH		
JOB:	SP1540	DRAWN BY: B.WINTER	DATE: 15/04/25
DRWG NO:	L7733232 REVISION: A	APP BY: C.HEGARTY	DATE: 26/03/25
EXT NO:	SP1540 LAYOUT 01	SCALE: 1:50 SHEET: 1 of 3	SIZE: A1

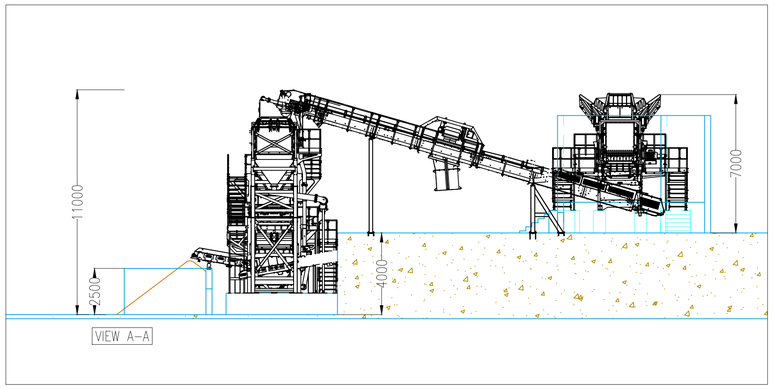
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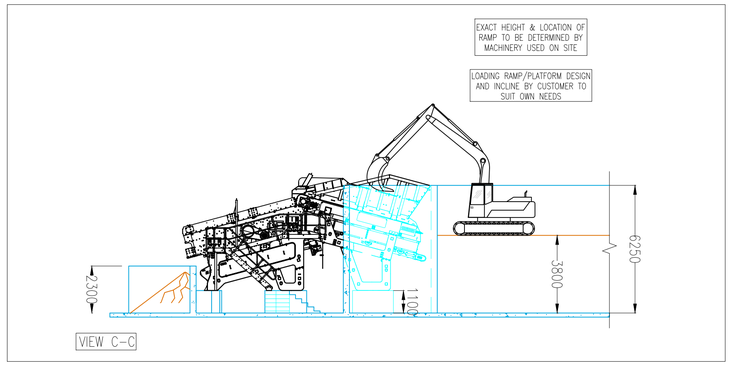
THIRD ANGLE PROJECTION

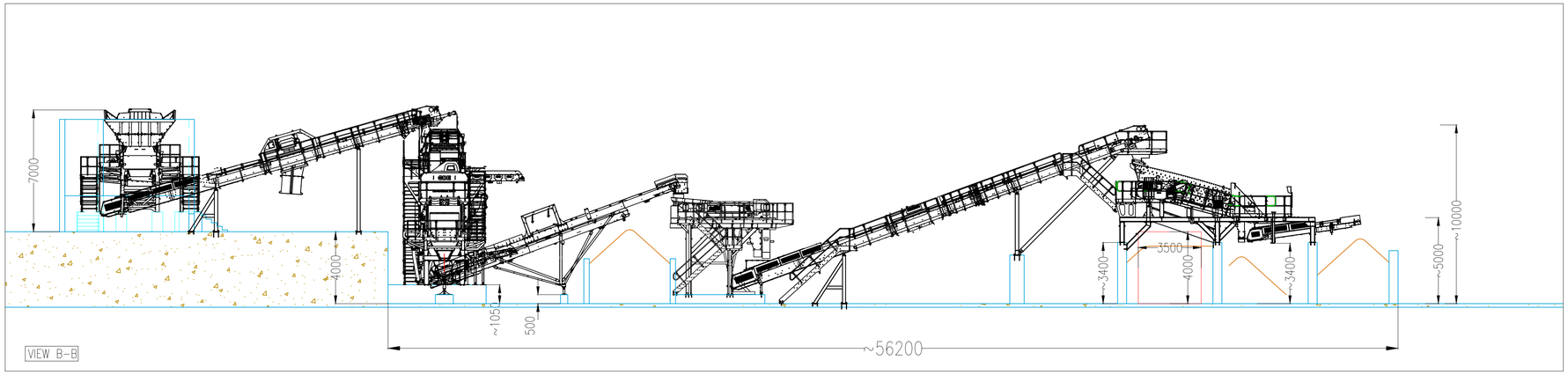
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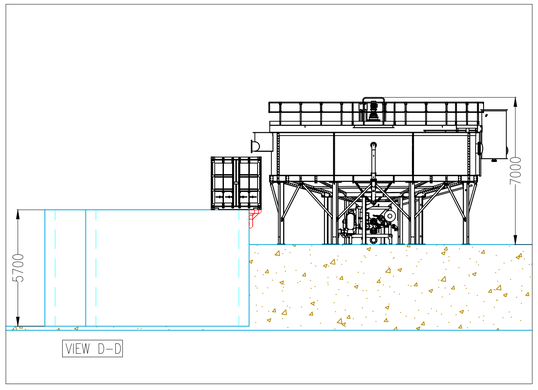
NOTES:
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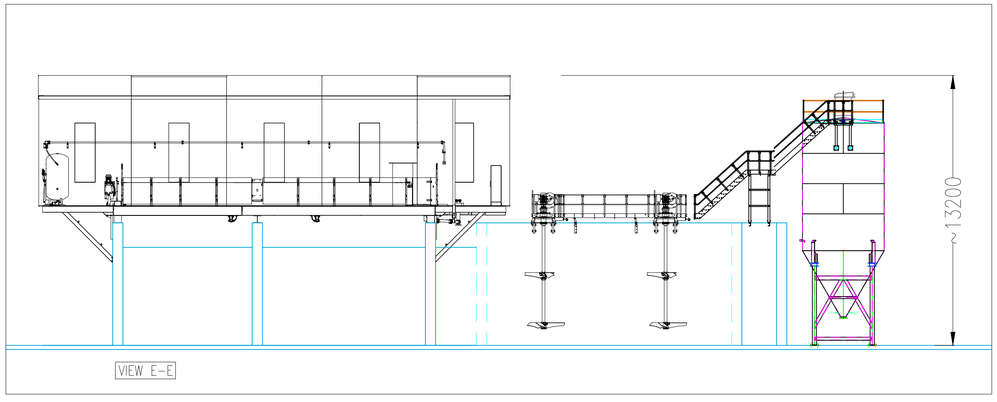
Rev	Rev Notes	Date	Initials
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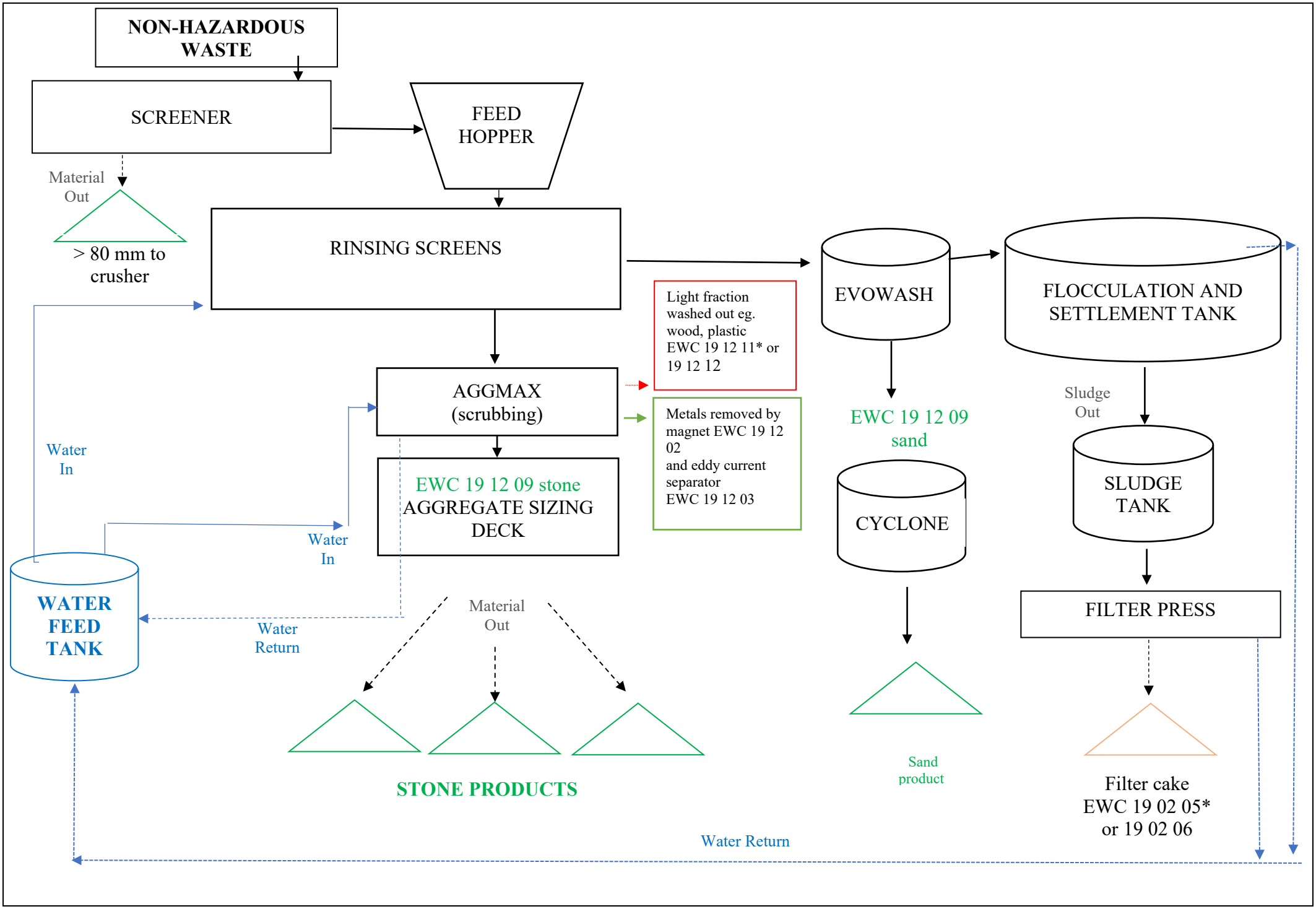
CDE
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DRWG NO:	L773232 REVISION A	APP BY: C.HEGARTY	DATE: 26/03/25
EXT NO:	SP1540 LAYOUT 01	SCALE: 1:150 SHEET: 2 of 3	SIZE: A1

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APPENDIX B

Process Flow Chart


NON-HAZARDOUS WASTE
SCREENER
FEED HOPPER
Material Out
> 80 mm to crusher
RINSING SCREENS
EVOWASH
FLOCCULATION AND SETTLEMENT TANK
Light fraction washed out eg. wood, plastic EWC 19 12 11* or 19 12 12
AGGMAX (scrubbing)
Metals removed by magnet EWC 19 12 02 and eddy current separator EWC 19 12 03
EWC 19 12 09 sand
Sludge Out
Water In
EWC 19 12 09 stone AGGREGATE SIZING DECK
CYCLONE
SLUDGE TANK
Water In
WATER FEED TANK
Water Return
Material Out
FILTER PRESS
STONE PRODUCTS
Sand product
Filter cake EWC 19 02 05* or 19 02 06
Water Return

APPENDIX C

Wash Plant Monitoring Plan

1.0 GENERAL

This monitoring plan is in place to achieve the following goals:

- Characterise filtercake for waste classification following WM3
- Build up a picture of variation
- Establish if contaminants are becoming concentrated in the washwater

Monitoring will be carried out by trained, competent personnel.

2.0 WASH WATER MONITORING

2.1 Sampling Location

Samples of wash water will be taken either as it weirs over the edge of the Aquacycle tank or from the take off point on the water feed return. This will be determined by access once the plant is constructed. Either way the water will be sampled after it has left the flocculation tank and before it reaches the water storage tank.

2.2 Sampling Procedure

Samples will be collected from the sample point by holding a sampling bottle directly under the flow of water. Sample bottles are filled in compliance with the instructions provided by the UKAS accredited laboratory. Any preservatives required for particular samples are pre-filled in the bottle by the laboratory.

Bottle labels are filled in to include the site name, date, monitoring point or location reference. A chain of custody form is completed for the samples.

Once collected, samples are placed in a cool box to keep them at a consistent temperature. They are then taken to a UKAS accredited laboratory for analysis.

Samples are tracked from site and through the laboratory process using a chain of custody form, this is included when the samples are sent to the laboratory. This typically includes information regarding the sample number, type, date, time of sampling and the analyses to be performed.

2.3 Analytical Parameters

Wash water samples will be analysed for the following suite:

pH
Electrical Conductivity
Dissolved Organic Carbon
Metals (As, Cd, Cu, Cr, Pb, Ni, Sn & Zn)
Total petroleum hydrocarbons (TPH)
Polycyclic Aromatic Hydrocarbons (PAHs)

3.0 FILTERCAKE MONITORING

3.1 Sampling Location

Samples of filtercake will be taken from below the filter plant housing, where filtercake is dropped and stored.

3.2 Sampling Procedure

Composite samples will be collected by taking 10 individual scoops from across the pile and placing into a bucket. The filtercake will be mixed together and then placed into containers provided by the laboratory.

Samples will be labelled, stored and submitted to an accredited laboratory for testing as described in section 2.2 above.

3.3 Analytical Parameters

Filtercake samples will be analysed for the following suite:

pH
Total Organic Carbon
Metals (As, Cd, Cu, Cr, Pb, Ni, Sn & Zn)
Total TPH
Total PAHs
Asbestos

4.0 SAMPLING FREQUENCY, DATA RECORDING AND REVIEW

It is proposed to take one composite filtercake sample for every full bay of material. The storage bay beneath the filter press has a capacity of 360 m^3.

Once the bay is full, a composite sample will be collected and submitted for analysis to enable waste classification before the material is removed from site.

A washwater sample will be taken each time a filtercake sample is taken.

When results are received from the laboratory they will be reviewed by the Technical Advisor without delay, filed securely and logged onto a master spreadsheet.

The filtercake will be classified as either hazardous or non-hazardous waste and transfer off-site will be arranged.

5.0 ASSESSMENT LEVELS

Filtercake

Filtercake monitoring results will be assessed against hazardous waste thresholds according to EA Technical Guidance WM3 which are listed in Table 1. This will allow waste classification and assignment of the relevant mirror image EWC, so it can be removed from site for recovery or disposal.

Substance	Hazardous Waste Threshold	Haz waste Cut off Value to prevent assessment of Cumulative Effects
Arsenic mg/kg	758 as arsenic trioxide	750
Cadmium mg/kg	2500 as cadmium	1000
Chromium (VI) mg/kg	520 as chromium trioxide	520
Chromium (III) mg/kg	2052 as chromium oxide	n/a
Copper mg/kg	2220 as copper (I) oxide	880
Lead mg/kg	2500 as Pb	1000
Nickel mg/kg	495 as Nickel carbonate	494
Selenium mg/kg	1780 as Selenium Oxide	710
Zinc mg/kg	2008 as Zinc oxide	802
TPH (C10 - C25) mg/kg	1000	n/a
TPH (C25 - C40) mg/kg[1]	10,000	n/a
PAH total mg/kg	1000	n/a
Asbestos fibres[2]	< 0.1% w/w	n/a

Table 1: Hazardous Waste Thresholds and Cut-off values

Notes

1. Only if the oil can be confirmed as diesel or weathered diesel and supported by a chromatograph.
2. If there are visible pieces of 'asbestos containing material' the waste should be classed as hazardous. This limit applies to asbestos fibres only as identified by laboratory testing.

Wash Water

As the wash water is being recycled there is no intent to discard it therefore waste classification will not be carried out on the routine monitoring results. However, the wash water will be monitored in tandem with the filtercake so that its suitability for reuse can be assessed.

The flocculation process should partition contaminants into the filtercake which are associated with the silt fraction of the soil/stone mixtures. Most metal compounds are insoluble at pH neutral to alkaline and as such would be flocculated into the filtercake.

Any organic contaminants such as petroleum hydrocarbons and PAHs are hydrophobic and would preferentially associate with the silt fraction rather than be dissolved in the water and would therefore also be removed by flocculation.

If the flocculation process is working efficiently, there should be proportionally more contaminants in the filtercake than in the wash water. To assess this, samples of wash water will be taken at the same time as the filtercake and the trend in concentrations will be observed, with comparison to the concentrations in the filtercake. If the concentration in the wash water (in mg/l) is higher than that in the filtercake (in mg/kg) then this will indicate that any contaminants are not being removed by the flocculation process. A trigger level will be applied so that if concentrations in the wash water are more than the equivalent in the filtercake, then the actions detailed below will be carried out.

Action Plan

Action Level 1 – to be implemented if the contaminant concentrations in the wash water are more than the equivalent in the filtercake. If the wash water trigger level is exceeded (ie. concentrations in mg/l are more than those in the filtercake in mg/kg) then the amount of flocculant used will be reviewed and if applicable the flocculant dose will be increased. Monitoring will be repeated after the increase in dose to assess the effectiveness. If this has been effective the monitoring will revert back to the previous schedule. If this has not been effective the dose will be increased further and monitoring repeated until successful.

Action Level 2 – this will be implemented if Level 1 actions taken have been unsuccessful and concentrations in the washwater continue to increase above their equivalents in the filtercake. Testing will be carried out across all stages of the process to pinpoint the problem including from the flocculation tank, the sludge holding tank, the water storage tank and filtercake. Results will show which stages of the process have high levels of contaminants. A proportion of sludge or water will be removed by tanker from the stage/stages of the process which have elevated levels of contaminants. Processing will resume and testing frequency will be increased. Monitoring will reduce back to the previous schedule once contaminant levels reduce back below the action level.

Before removal of sludge or water, the site will liaise with disposal outlets and carry out any additional testing required for that particular route. Waste will be classified in accordance with EA guidance WM3 and be removed from site following Duty of Care requirements. Waste disposal will be in accordance with the waste hierarchy.

6.0 MONITORING PLAN REVIEW

The plan will be reviewed once the plant has been constructed to include the precise location of the sampling points.

After six months of data collection, the results will be reviewed to assess the proportion of hazardous to non-hazardous filtercake produced and assess whether the plan needs to be revised. A record of review will be maintained overleaf.

Date	Version	Changes

APPENDIX D

Conservation Screening Advice

Nature and Heritage Conservation

Screening Report: Bespoke installation

Reference	**EPR/XP3396EF/P003**
NGR	**SJ 73701 61138**
Buffer (m)	**200**
Date report produced	**18/02/26**
Number of maps enclosed	**1**

This nature and heritage conservation report

The nature and heritage conservation sites, protected species and habitats, and other features identified in the table below **must be considered in your application**.

In the further information column, there are links which give more information about the site or feature type and indicate where you are able to self-serve to get the most accurate site boundaries or feature locations.

Most designated site boundaries are available on Magic map. Using Magic map allows you to zoom in and see the site boundary or feature location in detail, Magic map also allows you to measure the distance from these sites and features to your proposed boundary. Help videos are available on Magic map to guide you through.

Where information is not publicly available, or is only available to those with GIS access, we have provided a map at the end of this report.

Sites and Features within screening distance	Screening distance (km)	Further Information
Ramsar	10	Joint Nature Conservation Committee and Magic map
Midland Meres & Mosses - Phase 1		
Midland Meres & Mosses - Phase 2		
Sites of Special Scientific Interest (SSSI)	2	Natural England and Magic map
Sandbach Flashes		

Local Wildlife Sites (LWS) (see map below) **Dragons Lake & Moston House Fields** **Wheelock Disused Railway** **Stud Green Meadow** **Abbeyfield Wood** **Watch Lane Roadside Verge/Hedgerow** **Fields Farm Flashes** **Hollins Wood** **Meadow off Dragon's Lane** **Orchards off Dragon's Lane**	2	Appropriate Local Record Centre (LRC) Appropriate Wildlife Trust
Ancient Woodland **Hollins Wood** **Unnamed Ancient & Semi-Natural Woodland at SJ7488660178**	2	Woodland Trust Forestry Commission Natural England and Magic map

Where protected species are present, a licence may be required from Natural England to handle the species or undertake the proposed works.

The relevant Local Records Centre must be contacted for information on the features within local wildlife sites. A small administration charge may also be incurred for this service.

The following nature and heritage conservation sites, protected species and habitats, and other features have been checked for, where they are relevant for the permit type requested, but have not been found within screening distance of your site unless included in the list above.

Special Areas of Conservation (cSAC or SAC), Special Protection Area (pSPA or SPA), Marine Conservation Zone (MCZ), Ramsar, Sites of Special Scientific Interest (SSSI), National Nature Reserve (NNR), Local Nature Reserve (LNR), Local Wildlife Sites (LWS), Ancient Woodland, relevant species and habitats.

Please note we have screened this application for features for which we have information. It is however your responsibility to comply with all environmental and

planning legislation, this information does not imply that no other checks or permissions will be required.

The nature and heritage screening we have conducted as part of this report is subject to change as it is based on data we hold at the time it is generated. We cannot guarantee there will be no changes to our screening data between the date of this report and the submission of the permit application, which could result in the return of an application or requesting further information.

Local Wildlife Sites

Environment Agency

Local Wildlife Sites

Local Wildlife Sites

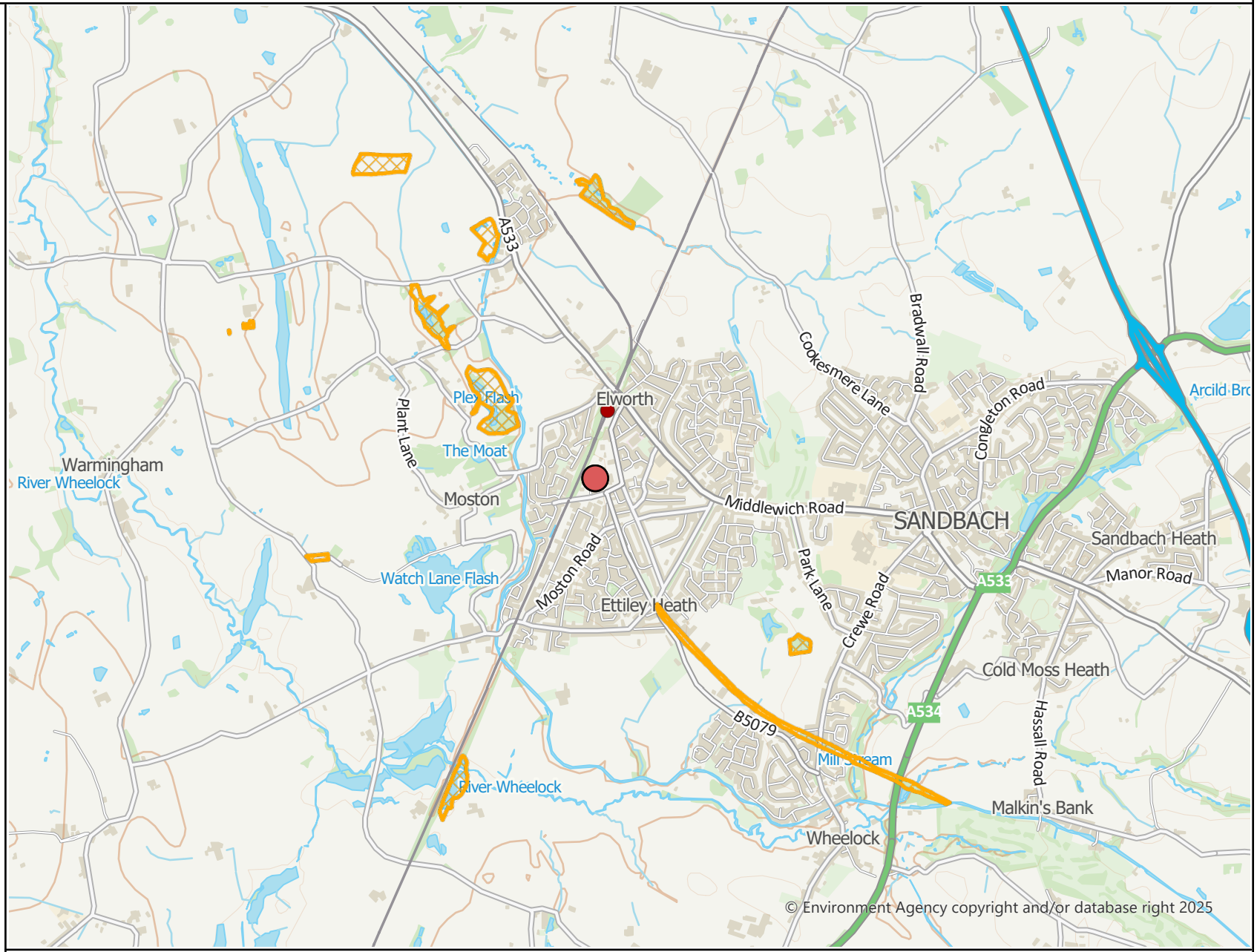
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Override 1

Override 2

Override 1

Override 1



Scale: 1:32,456

0 0.25 0.5 0.75 1 1.25 km

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APPENDIX E

Sandbach Flashes SSSI Citation

COUNTY: CHESHIRE SITE NAME: SANDBACH FLASHES

DISTRICT: CONGLETON/CREWE & NANTWICH SITE REF: 15WCF

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 198f as amended

Local Planning Authority: CHESHIRE COUNTY COUNCIL, Congleton Borough Council, Crewe & Nantwich Borough
Council

National Grid Reference: SJ 725594 Area: 152.9 (ha.) 377.8 (ac.)

Ordnance Survey Sheet 1:50,000: 118 1:10,000: SJ 75 NW, SJ 76 SW

Date Notified (Under 1949 Act): 1963 Date of Last Revision: 1979

Date Notified (Under 1981 Act): 1986 Date of Last Revision: 1987

Other Information:
Part of the site is managed by the Sandbach Flashes Joint Management Committee. Site boundary alteration (extension & reduction).

Description and Reasons for Notification:
Sandbach Flashes is a site of physiographical and biological importance. It consists of a series of pools formed as a result of subsidence due to the solution of underlying salt deposits. The water varies from freshwater, chemically similar to other Cheshire meres, to highly saline. Inland saline habitats are extremely rare and are of considerable interest because of the unusual associations of plants and animals.

Most of the flashes are surrounded by semi-improved or improved grassland. Fodens Flash is partly surrounded by an important area of wet woodland.

Biology
Due to the differing age, depth and water chemistry the flashes show considerable variation in their plant and animal communities. Generally the most recently formed have narrow disjunct stands of emergent vegetation dominated by great reedmace *Typha latifolia* and occasionally by lesser pond sedge *Carex acutiformis*, whilst the oldest have extensive stands of common reed *Phragmites australis*. At Fodens Flash the emergent vegetation grades into fen and wet woodland dominated by alder *Alnus glutinosa* and willow *Salix* spp. Wood small-reed *Calamagrostis epigejos* is locally dominant in the ground flora and the woodland also has an exceptional lichen flora for Cheshire.

In some areas periodic flooding occurs and species such as water pepper *Polygonum hydropiper*, plicate sweetgrass *Glyceria plicata* and celery-leaved water-crowfoot *Ranunculus sceleratus* occur. Shore-weed *Littorella uniflora*, a rare plant in Cheshire, is also present.

A number of uncommon aquatic invertebrates occur including a mayfly *Caenis robusta* and a snail *Gyraulis laevis*.

The more saline flashes are fed by natural brine springs and contain a range of species tolerant of brackish water, for example, spiked water-milfoil *Myriophyllum spicatum*, fennel-leaved pondweed *Potamogeton pectinatus* and horned pondweed *Zannichellia palustris*. Of particular interest is *Enteromorpha intestinalis* which is often associated with saline conditions. Adjacent to these saline flashes are areas of saltmarsh vegetation containing species such as sea aster *Aster tripolium*, lesser sea spurrey *Spergularia marina* and reflexed saltmarsh grass *Puccinellia distans*. A number of notable brackish water invertebrates occur including the water boatmen *Sigara concinna* and *S. stagnalis* and the shrimps *Gammarus duebeni* and *G. tigrinus*.

Several of the flashes are important for breeding birds and also support large numbers of wildfowl and waders as migrants and winter residents. Wigeon *Anas penelope* (200), teal *Anas crecca* (500), lapwing *Vanellus vanellus* (500), snipe *Gallinago gallinago* (200) and curlew *Numeius arquata* (50) are regularly recorded.

Geology

The Moston Flash area consists of two parallel, elongated hollows which were formed by the removal in solution of underlying salt deposits and resultant collapse of glacial deposits above. These features were initially formed naturally but brine extraction for salt production has accelerated their development, which continues up to the present day. The site provides an excellent illustration of the active linear subsidence features which are characteristic of the Cheshire Plan.

APPENDIX F

Laboratory Results for Surface Water Analysis

envirolab
Hattersley Science & Technology Park
Stockport Road, Hattersley, SK14 3QU

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 26/03378
Issue Number: 1 **Date:** 30 April, 2026

Client:
Starling Environmental Limited
67 Chorley Old Road
Bolton
UK
BL1 3AJ

Project Manager: Claire Gettinby
Project Name: Enviro Skip Hire Ltd, Sandbach
Project Ref: 161
Order No: PO/161/01
Date Samples Received: 19/03/26
Date Instructions Received: 20/03/26
Date Analysis Completed: 30/04/26

Approved by:



Richard Wong
Client Manager

UKAS TESTING
1247

Envirolab Job Number: 26/03378

Client Project Name: Enviro Skip Hire Ltd, Sandbach

Client Project Ref: 161

Lab Sample ID	26/03378/1	26/03378/2						Units	Limit of Detection	Method ref
Client Sample No	1									
Client Sample ID	Surface Water 1	Surface Water 2								
Depth to Top										
Depth To Bottom										
Date Sampled	17-Mar-26	23-Mar-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
pH (w)$_A^\#$	7.94	-						pH	0.01	A-T-031w
Ammoniacal nitrogen as N (w)$_A^\#$	0.54	-						mg/l	0.05	A-T-033w
Ammonia (Free Unionised) as N (w) at 25degC	0.022900	-						mg/l	0.000036	Calc
Chloride (w)$_A^\#$	135	-						mg/l	1	A-T-026w
Chlorine (free/available/residual) (w)$_A$	<0.05	-						mg/l	0.05	Test kit
Sulphate (w)$_A^\#$	178	-						mg/l	1	A-T-026w
Cyanide (free) (w)$_A^\#$	<0.005	-						mg/l	0.005	A-T-042wFCN
Phenols - Total by HPLC (w)$_A$	<0.01	-						mg/l	0.01	A-T-050w
Arsenic (dissolved)$_A^\#$	1	-						µg/l	1	A-T-025w
Boron (dissolved)$_A^\#$	71	-						µg/l	10	A-T-025w
Cadmium (dissolved)$_A^\#$	<0.2	-						µg/l	0.2	A-T-025w
Cobalt (dissolved)$_A^\#$	<1	-						µg/l	1	A-T-025w
Copper (dissolved)$_A^\#$	<4	-						µg/l	4	A-T-025w
Chromium (dissolved)$_A^\#$	<1	-						µg/l	1	A-T-025w
Chromium (hexavalent) (w)$_A^\#$	<0.05	-						mg/l	0.05	A-T-040w
Chromium (trivalent) (w)	<0.05	-						mg/l	0.01	Calc
Iron (dissolved)$_A^\#$	22	-						µg/l	10	A-T-025w
Lead (dissolved)$_A^\#$	<0.1	-						µg/l	0.1	A-T-025w
Manganese (dissolved)$_A^\#$	1200	-						µg/l	1	A-T-025w
Mercury (dissolved)$_A^\#$	<0.1	-						µg/l	0.1	A-T-025w
Nickel (dissolved)$_A^\#$	<2	-						µg/l	2	A-T-025w
Selenium (dissolved)$_A^\#$	<1	-						µg/l	1	A-T-025w
Silver (dissolved)$_A$	<1	-						µg/l	1	A-T-072w
Tin (dissolved)$_A$	<1	-						µg/l	1	A-T-072w
Vanadium (dissolved)$_A^\#$	<1	-						µg/l	1	A-T-025w
Zinc (dissolved)$_A^\#$	<2	-						µg/l	2	A-T-025w
Bromide (w)$_A^\#$	0.12	-						mg/l	0.05	A-T-060w
Dioxins/Furans (w)$_A^\#$	-	Appended						ng/l		Subcon Veritas

Envirolab Job Number: 26/03378

Client Project Name: Enviro Skip Hire Ltd, Sandbach

Client Project Ref: 161

Lab Sample ID	26/03378/1	26/03378/2						Units	Limit of Detection	Method ref
Client Sample No	1									
Client Sample ID	Surface Water 1	Surface Water 2								
Depth to Top										
Depth To Bottom										
Date Sampled	17-Mar-26	23-Mar-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
Acid Herbicides (x25) (w)										
2,3,6-TBA (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
2,4-D (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
2,4-DB (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
2,4,5-T (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
2,4,5-TP; (Fenoprop); (Silvex) (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
4-CPA (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Benazolin (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Bentazone (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Bromoxynil (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Clopyralid (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Dicamba (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
2,4-DP; (Dichlorprop)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Diclofop (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Flamprop (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Fluroxypyr (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Ioxynil (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
MCPA (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
MCPB (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
MCPP; (Mecoprop) (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
PCP; (Pentachlorophenol) (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Picloram (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Triclopyr (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
2-methyl-4,6-dinitrophenol (DNOC)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Dinoseb (DNBP)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Acifluorfen$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw

Lab Sample ID	26/03378/1	26/03378/2						Units	Limit of Detection	Method ref
Client Sample No	1									
Client Sample ID	Surface Water 1	Surface Water 2								
Depth to Top										
Depth To Bottom										
Date Sampled	17-Mar-26	23-Mar-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
Carbamate (x8) (w)										
Carbetamide (w)$_A$	-	Appended						µg/l	0.1	Subcon RPS MHw
Chlorbufam (w)$_A$	-	Appended						µg/l	0.1	Subcon RPS MHw
Chlorpropham (w)$_A$	-	Appended						µg/l	0.1	Subcon RPS MHw
Ethiofencarb (w)$_A$	-	Appended						µg/l	0.1	Subcon RPS MHw
Phenmedipham (w)$_A$	-	Appended						µg/l	0.1	Subcon RPS MHw
Pirimicarb (w)$_A$	-	Appended						µg/l	0.1	Subcon RPS MHw
Propham (w)$_A$	-	Appended						µg/l	0.1	Subcon RPS MHw
Propamocarb (w)$_A$	-	Appended						µg/l	0.1	Subcon RPS MHw
OCP+OPP Combined Pest Suite (excl. Atrazine+Simazine) (w)										
Dichlobenil (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Tecnazene (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Trifluralin (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
alpha-Hexachlorocyclohexane (HCH) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Hexachlorobenzene (HCB) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
beta-Hexachlorocyclohexane (HCH) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Quintozene (PCNB) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Triallate (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
delta-Hexachlorocyclohexane (HCH) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Chlorothalonil (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Heptachlor (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Aldrin (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Triadimefon (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Telodrin (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Isodrin (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Pendimethalin (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Heptachlor epoxide (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
trans-Chlordane (Gamma) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
o,p-DDE (2,4) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Endosulphan I (Alpha) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w

Lab Sample ID	26/03378/1	26/03378/2						Units	Limit of Detection	Method ref
Client Sample No	1									
Client Sample ID	Surface Water 1	Surface Water 2								
Depth to Top										
Depth To Bottom										
Date Sampled	17-Mar-26	23-Mar-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
cis-Chlordane (Alpha) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
p,p-DDE (4,4) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Dieldrin (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
o,p-DDD (2,4) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Endrin (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Endosulphan II (Beta) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
p,p-DDD (4,4) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
o,p-DDT (2,4) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Endrin Aldehyde (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Endosulphan Sulphate (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
p,p-DDT (4,4) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
o,p-Methoxychlor (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Endrin Ketone (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
p,p-Methoxychlor (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Permethrin I (cis) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Permethrin II (trans) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Dichlorvos (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Mevinphos (w)$_A$	<0.5	-						µg/l	0.5	A-T-056w
Demeton-S (w)$_A$	<0.5	-						µg/l	0.5	A-T-056w
Phorate (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Dimethoate (w)$_A$	<0.5	-						µg/l	0.5	A-T-056w
Demeton-O (w)$_A$	<0.5	-						µg/l	0.5	A-T-056w
Propetamphos (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Diazinon (Dimpylate) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Disulfoton (w)$_A$	<0.5	-						µg/l	0.5	A-T-056w
Chlorpyrifos-methyl (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Methyl Parathion (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Pirimiphos-methyl (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Fenitrothion (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Malathion (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Chlorpyrifos (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Fenthion (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Parathion (Ethyl Parathion) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w

Envirolab Job Number: 26/03378

Client Project Name: Enviro Skip Hire Ltd, Sandbach

Client Project Ref: 161

Lab Sample ID	26/03378/1	26/03378/2						Units	Limit of Detection	Method ref
Client Sample No	1									
Client Sample ID	Surface Water 1	Surface Water 2								
Depth to Top										
Depth To Bottom										
Date Sampled	17-Mar-26	23-Mar-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
Trichloronate (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Chlorfenvinphos (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Fensulphothion (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Prothiofos (Tokuthion) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Ethion (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Triazophos (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Carbophenothion (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Phosalone (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Azinphos-methyl (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Azinphos-ethyl (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Coumaphos (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
gamma-Hexachlorocyclohexane (HCH / Lindane) (w)$_A$	<0.1	-						µg/l	0.1	A-T-056w
Organotins (w)										
Dibutyltin (w)$_A$	Appended	-						µg/l	1	Subcon DETS
Triphenyltin (TPT) (w)$_A$	Appended	-						µg/l	1	Subcon DETS
Tributyltin (TBT) (w)$_A$	Appended	-						µg/l	1	Subcon DETS

Envirolab Job Number: 26/03378

Client Project Name: Enviro Skip Hire Ltd, Sandbach

Client Project Ref: 161

Lab Sample ID	26/03378/1	26/03378/2						Units	Limit of Detection	Method ref
Client Sample No	1									
Client Sample ID	Surface Water 1	Surface Water 2								
Depth to Top										
Depth To Bottom										
Date Sampled	17-Mar-26	23-Mar-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
PAH 16MS (w)										
Acenaphthene $(w)_A^{\#}$	<0.01	-						µg/l	0.01	A-T-019w
Acenaphthylene $(w)_A^{\#}$	<0.01	-						µg/l	0.01	A-T-019w
Anthracene $(w)_A^{\#}$	<0.01	-						µg/l	0.01	A-T-019w
Benzo(a)anthracene $(w)_A^{\#}$	<0.01	-						µg/l	0.01	A-T-019w
Benzo(a)pyrene $(w)_A^{\#}$	0.01	-						µg/l	0.01	A-T-019w
Benzo(b)fluoranthene $(w)_A^{\#}$	0.02	-						µg/l	0.01	A-T-019w
Benzo(ghi)perylene $(w)_A^{\#}$	<0.01	-						µg/l	0.01	A-T-019w
Benzo(k)fluoranthene $(w)_A^{\#}$	<0.01	-						µg/l	0.01	A-T-019w
Chrysene $(w)_A^{\#}$	0.01	-						µg/l	0.01	A-T-019w
Dibenzo(ah)anthracene $(w)_A^{\#}$	<0.01	-						µg/l	0.01	A-T-019w
Fluoranthene $(w)_A^{\#}$	0.04	-						µg/l	0.01	A-T-019w
Fluorene $(w)_A^{\#}$	<0.01	-						µg/l	0.01	A-T-019w
Indeno(123-cd)pyrene $(w)_A^{\#}$	<0.01	-						µg/l	0.01	A-T-019w
Naphthalene $(w)_A^{\#}$	<0.01	-						µg/l	0.01	A-T-019w
Phenanthrene $(w)_A^{\#}$	<0.01	-						µg/l	0.01	A-T-019w
Pyrene $(w)_A^{\#}$	0.04	-						µg/l	0.01	A-T-019w
Total PAH 16MS $(w)_A^{\#}$	0.12	-						µg/l	0.01	A-T-019w

Envirolab Job Number: 26/03378

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Client Sample No	1									
Client Sample ID	Surface Water 1	Surface Water 2								
Depth to Top										
Depth To Bottom										
Date Sampled	17-Mar-26	23-Mar-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
Speciated PCB-EC7 & WHO12 (w)										
PCB BZ 28 $(w)_A^{\#}$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 52 $(w)_A^{\#}$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 81 $(w)_A$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 101 $(w)_A^{\#}$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 105 $(w)_A$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 114 $(w)_A$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 118 $(w)_A^{\#}$	<0.020	-						µg/l	0.002	A-T-004w
PCB BZ 123 $(w)_A$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 126 $(w)_A$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 138 $(w)_A^{\#}$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 153 $(w)_A^{\#}$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 156 $(w)_A$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 157 $(w)_A$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 167 $(w)_A$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 169 $(w)_A$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 180 $(w)_A^{\#}$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 189 $(w)_A$	<0.010	-						µg/l	0.001	A-T-004w
PCB BZ 77 $(w)_A$	<0.010	-						µg/l	0.001	A-T-004w
Total Speciated PCB-EC7 & WHO12 $(w)_A$	<0.020	-						µg/l	0.001	A-T-004w

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Lab Sample ID	26/03378/1	26/03378/2						Units	Limit of Detection	Method ref
Client Sample No	1									
Client Sample ID	Surface Water 1	Surface Water 2								
Depth to Top										
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Date Sampled	17-Mar-26	23-Mar-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
SVOC (excluding PAH-16) (w)										
1,2,4-Trichlorobenzene$_A$	<1	-						µg/l	1	A-T-052w
1,2-Dichlorobenzene$_A$	<1	-						µg/l	1	A-T-052w
1,3-Dichlorobenzene$_A$	<1	-						µg/l	1	A-T-052w
1,4-Dichlorobenzene$_A$	<1	-						µg/l	1	A-T-052w
2,4,5-Trichlorophenol$_A$	<1	-						µg/l	1	A-T-052w
2,4,6-Trichlorophenol$_A$	<1	-						µg/l	1	A-T-052w
2,4-Dichlorophenol$_A$	<1	-						µg/l	1	A-T-052w
2,4-Dimethylphenol$_A$	<1	-						µg/l	1	A-T-052w
2,4-Dinitrotoluene$_A$	<1	-						µg/l	1	A-T-052w
2,6-Dinitrotoluene$_A$	<1	-						µg/l	1	A-T-052w
2-Chloronaphthalene$_A$	<1	-						µg/l	1	A-T-052w
2-Chlorophenol$_A$	<1	-						µg/l	1	A-T-052w
2-Methylnaphthalene$_A$	<1	-						µg/l	1	A-T-052w
2-Methylphenol$_A$	<1	-						µg/l	1	A-T-052w
2-Nitrophenol$_A$	<1	-						µg/l	1	A-T-052w
4-Bromophenyl phenyl ether$_A$	<1	-						µg/l	1	A-T-052w
4-Chloro-3-methylphenol$_A$	<1	-						µg/l	1	A-T-052w
Bis(2-chloroisopropyl)ether$_A$	<1	-						µg/l	1	A-T-052w
3+4-Methylphenol$_A$	<1	-						µg/l	1	A-T-052w
4-Nitrophenol$_A$	<1	-						µg/l	1	A-T-052w
Bis(2-chloroethyl)ether$_A$	<1	-						µg/l	1	A-T-052w
Bis(2-chloroethoxy)methane$_A$	<1	-						µg/l	1	A-T-052w
Bis(2-ethylhexyl)phthalate$_A$	<10	-						µg/l	10	A-T-052w
Butylbenzyl phthalate$_A$	<1	-						µg/l	1	A-T-052w
Carbazole$_A$	<1	-						µg/l	1	A-T-052w
Dibenzofuran$_A$	<1	-						µg/l	1	A-T-052w
n-Dibutylphthalate$_A$	<1	-						µg/l	1	A-T-052w
n-Dioctylphthalate$_A$	<10	-						µg/l	10	A-T-052w
n-Nitroso-n-dipropylamine$_A$	<1	-						µg/l	1	A-T-052w
Diethyl phthalate$_A$	<1	-						µg/l	1	A-T-052w
Dimethyl phthalate$_A$	<1	-						µg/l	1	A-T-052w
Hexachlorobutadiene$_A$	<1	-						µg/l	1	A-T-052w

Envirolab Job Number: 26/03378

Client Project Name: Enviro Skip Hire Ltd, Sandbach

Client Project Ref: 161

Lab Sample ID	26/03378/1	26/03378/2						Units	Limit of Detection	Method ref
Client Sample No	1									
Client Sample ID	Surface Water 1	Surface Water 2								
Depth to Top										
Depth To Bottom										
Date Sampled	17-Mar-26	23-Mar-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
Hexachlorobenzene SVOC$_A$	<1	-						µg/l	1	A-T-052w
Pentachlorophenol SVOC$_A$	<1	-						µg/l	1	A-T-052w
Phenol$_A$	<1	-						µg/l	1	A-T-052w
Hexachloroethane$_A$	<1	-						µg/l	1	A-T-052w
Nitrobenzene$_A$	<1	-						µg/l	1	A-T-052w
Isophorone$_A$	<1	-						µg/l	1	A-T-052w
Perylene$_A$	<1	-						µg/l	1	A-T-052w

Envirolab Job Number: 26/03378

Client Project Name: Enviro Skip Hire Ltd, Sandbach

Client Project Ref: 161

Lab Sample ID	26/03378/1	26/03378/2						Units	Limit of Detection	Method ref
Client Sample No	1									
Client Sample ID	Surface Water 1	Surface Water 2								
Depth to Top										
Depth To Bottom										
Date Sampled	17-Mar-26	23-Mar-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
Triazine Herbicides (x8)										
Atrazine (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Cyanazine (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Prometryn (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Propazine (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Simazine (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Terbuthylazine (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Terbutryn (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw
Trietazine (w)$_A$	-	Appended						µg/l	0.02	Subcon RPS MHw

Envirolab Job Number: 26/03378

Client Project Name: Enviro Skip Hire Ltd, Sandbach

Client Project Ref: 161

Lab Sample ID	26/03378/1	26/03378/2						Units	Limit of Detection	Method ref
Client Sample No	1									
Client Sample ID	Surface Water 1	Surface Water 2								
Depth to Top										
Depth To Bottom										
Date Sampled	17-Mar-26	23-Mar-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
Urea Herbicides (x 12) (w)										
Chloroxuron (w) [A]	-	Appended						µg/l	0.05	Subcon RPS MHw
Chlortoluron (w)[A]	-	Appended						µg/l	0.05	Subcon RPS MHw
Diflubenzuron (w)[A]	-	Appended						µg/l	0.05	Subcon RPS MHw
Dimefuron (w) [A]	-	Appended						µg/l	0.05	Subcon RPS MHw
Diuron (w)[A]	-	Appended						µg/l	0.05	Subcon RPS MHw
Isoproturon (w)[A]	-	Appended						µg/l	0.05	Subcon RPS MHw
Linuron (w)[A]	-	Appended						µg/l	0.05	Subcon RPS MHw
Methabenzthiazuron (w)[A]	-	Appended						µg/l	0.05	Subcon RPS MHw
Metoxuron (w)[A]	-	Appended						µg/l	0.05	Subcon RPS MHw
Monolinuron (w)[A]	-	Appended						µg/l	0.05	Subcon RPS MHw
Monuron (w)[A]	-	Appended						µg/l	0.05	Subcon RPS MHw
Pencycuron (w)[A]	-	Appended						µg/l	0.05	Subcon RPS MHw

Lab Sample ID	26/03378/1	26/03378/2						Units	Limit of Detection	Method ref
Client Sample No	1									
Client Sample ID	Surface Water 1	Surface Water 2								
Depth to Top										
Depth To Bottom										
Date Sampled	17-Mar-26	23-Mar-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
VOC (w)										
Dichlorodifluoromethane$_A$	<1	-						µg/l	1	A-T-006w
Chloromethane$_A$	<10	-						µg/l	10	A-T-006w
Vinyl Chloride$_A^\#$	<1	-						µg/l	1	A-T-006w
Bromomethane$_A^\#$	<1	-						µg/l	1	A-T-006w
Chloroethane$_A^\#$	<1	-						µg/l	1	A-T-006w
Trichlorofluoromethane$_A^\#$	<1	-						µg/l	1	A-T-006w
trans 1,2-Dichloroethene$_A^\#$	<1	-						µg/l	1	A-T-006w
Dichloromethane$_A$	<5	-						µg/l	5	A-T-006w
Carbon Disulphide$_A^\#$	<1	-						µg/l	1	A-T-006w
1,1-Dichloroethene$_A^\#$	<1	-						µg/l	1	A-T-006w
1,1-Dichloroethane$_A^\#$	<1	-						µg/l	1	A-T-006w
cis 1,2-Dichloroethene$_A^\#$	<1	-						µg/l	1	A-T-006w
Bromochloromethane$_A^\#$	<5	-						µg/l	5	A-T-006w
Chloroform$_A^\#$	<1	-						µg/l	1	A-T-006w
2,2-Dichloropropane$_A^\#$	<1	-						µg/l	1	A-T-006w
1,2-Dichloroethane$_A^\#$	<2	-						µg/l	2	A-T-006w
1,1,1-Trichloroethane$_A^\#$	<1	-						µg/l	1	A-T-006w
1,1-Dichloropropene$_A^\#$	<1	-						µg/l	1	A-T-006w
Benzene$_A^\#$	<1	-						µg/l	1	A-T-006w
Carbon Tetrachloride$_A^\#$	<1	-						µg/l	1	A-T-006w
Dibromomethane$_A^\#$	<1	-						µg/l	1	A-T-006w
1,2-Dichloropropane$_A^\#$	<1	-						µg/l	1	A-T-006w
Bromodichloromethane$_A^\#$	<10	-						µg/l	10	A-T-006w
Trichloroethene$_A^\#$	<1	-						µg/l	1	A-T-006w
cis 1,3-Dichloropropene$_A^\#$	<1	-						µg/l	1	A-T-006w
trans 1,3-Dichloropropene$_A^\#$	<1	-						µg/l	1	A-T-006w
1,1,2-Trichloroethane$_A^\#$	<1	-						µg/l	1	A-T-006w
Toluene$_A^\#$	<1	-						µg/l	1	A-T-006w
1,3-Dichloropropane$_A^\#$	<1	-						µg/l	1	A-T-006w
Dibromochloromethane$_A^\#$	<3	-						µg/l	3	A-T-006w
1,2-Dibromoethane$_A^\#$	<1	-						µg/l	1	A-T-006w
Tetrachloroethene$_A$	<1	-						µg/l	1	A-T-006w

Lab Sample ID	26/03378/1	26/03378/2						Units	Limit of Detection	Method ref
Client Sample No	1									
Client Sample ID	Surface Water 1	Surface Water 2								
Depth to Top										
Depth To Bottom										
Date Sampled	17-Mar-26	23-Mar-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
1,1,1,2-Tetrachloroethane$_A$	<1	-						µg/l	1	A-T-006w
Chlorobenzene$_A^\#$	<1	-						µg/l	1	A-T-006w
Ethylbenzene$_A^\#$	<1	-						µg/l	1	A-T-006w
m & p Xylene$_A^\#$	<1	-						µg/l	1	A-T-006w
Bromoform$_A^\#$	<3	-						µg/l	3	A-T-006w
Styrene$_A^\#$	<1	-						µg/l	1	A-T-006w
1,1,2,2-Tetrachloroethane$_A$	<1	-						µg/l	1	A-T-006w
o-Xylene$_A^\#$	<1	-						µg/l	1	A-T-006w
1,2,3-Trichloropropane$_A^\#$	<1	-						µg/l	1	A-T-006w
Isopropylbenzene$_A^\#$	<1	-						µg/l	1	A-T-006w
Bromobenzene$_A^\#$	<1	-						µg/l	1	A-T-006w
2-Chlorotoluene$_A^\#$	<1	-						µg/l	1	A-T-006w
n-propylbenzene$_A^\#$	<1	-						µg/l	1	A-T-006w
4-Chlorotoluene$_A^\#$	<1	-						µg/l	1	A-T-006w
1,2,4-Trimethylbenzene$_A^\#$	<1	-						µg/l	1	A-T-006w
4-Isopropyltoluene$_A^\#$	<1	-						µg/l	1	A-T-006w
1,3,5-Trimethylbenzene$_A^\#$	<1	-						µg/l	1	A-T-006w
1,2-Dichlorobenzene$_A^\#$	<1	-						µg/l	1	A-T-006w
1,4-Dichlorobenzene$_A^\#$	<1	-						µg/l	1	A-T-006w
sec-Butylbenzene$_A^\#$	<1	-						µg/l	1	A-T-006w
tert-Butylbenzene$_A^\#$	<2	-						µg/l	2	A-T-006w
1,3-Dichlorobenzene$_A^\#$	<1	-						µg/l	1	A-T-006w
n-butylbenzene$_A^\#$	<1	-						µg/l	1	A-T-006w
1,2-Dibromo-3-chloropropane$_A^\#$	<2	-						µg/l	2	A-T-006w
1,2,4-Trichlorobenzene$_A^\#$	<3	-						µg/l	3	A-T-006w
1,2,3-Trichlorobenzene$_A^\#$	<3	-						µg/l	3	A-T-006w
Hexachlorobutadiene$_A^\#$	<1	-						µg/l	1	A-T-006w

Report Notes

General

•This report shall not be reproduced, except in full, without written approval from Envirolab.
•The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
•The results reported herein relate only to the material supplied to the laboratory.
•The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
•Analytical results reflect the quality of the sample at the time of analysis only.
•Opinions and Interpretations expressed are outside our scope of accreditation.
•A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
•If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
•Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript "#"	Accredited to ISO 17025
Superscript "M"	Accredited to MCertS
Superscript "U"	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript "A"	Analysis performed on as-received Sample
Subscript "D"	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript "D" on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript "^"	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
Subscript "@"	Result is an opinion
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.
Stones etc. are not removed from the sample prior to analysis
"Trace Asbestos Identified" will be reported if there is not enough present to verify the type.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs
Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.					

Soil Chemical Analysis:

All results are reported as dry weight (<40°C).
For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.
For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts
All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH by method A-T-007:

For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only.
Results "with Clean up" indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:

EPH CWG results have humics mathematically subtracted through instrument calculation.
Where these humic substances have been identified in any IDs from "TPH CWG with clean up" please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:

Results greater than 12900µS/cm @ 25^0C / 11550µS/cm @ 20^0C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Starling Environmental Limited, 67 Chorley Old Road, Bolton, UK, BL1 3AJ

Project: Enviro Skip Hire Ltd, Sandbach

Clients Project No: 161

Project No: 26/03378

Date Received: 20/03/2026 (am)

Cool Box Temperatures (°C): 8.1

Lab Sample ID	26/03378/1
Client Sample No	1
Client Sample ID/Depth	Surface Water 1
Date Sampled	17/03/26
Deviation Code	
F	✓

Key
F *Maximum holding time exceeded between sampling date and analysis for analytes listed below*

HOLDING TIME EXCEEDANCES

Lab Sample ID	26/03378/1
Client Sample No	1
Client Sample ID/Depth	Surface Water 1
Date Sampled	17/03/26
pH (w)	✓

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	26/03378/1	26/03378/2
Client Sample No	1	
Client Sample ID/Depth	Surface Water 1	Surface Water 2
Date Sampled	17/03/26	23/03/26
A-T-004w	30/03/2026	
A-T-006w	24/03/2026	
A-T-019w	25/03/2026	
A-T-025w	09/04/2026	
A-T-026w	24/03/2026	
A-T-031w	23/03/2026	
A-T-033w	25/03/2026	
A-T-040w	24/03/2026	
A-T-042wFCN	24/03/2026	
A-T-050w	03/04/2026	
A-T-052w	26/03/2026	
A-T-056w	31/03/2026	
A-T-060w	07/04/2026	
A-T-072w	25/03/2026	
Calc	30/03/2026	
Test kit	20/03/2026	

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

TEST REPORT

Report Number: 2026-1371

Customer Name : Envirolab Ltd
Customer Address : Housesteads
Off Stockport Road
Hattersley, SK14 3QU
Order Number : P0759478
Project Reference: 161
Issue : 0
Date of Receipt : 25/03/2026
Date of Analysis : 27/03/2026
Date of Report : 30/03/2026
Sample Type : Surface Water
Customer Sample Identifier : 26/03378/2 Surface Water 2 23/03/26
Sample Condition : Conforming

Comments:
Any opinions or interpretations are outside the laboratory's scope of accreditation. The results included within the report are representative of the samples submitted for analysis and are expressed on as received basis, unless otherwise stated. This certificate shall not be reproduced, except in full, without the prior written approval of VLS. Customer name, address, order number, additional reference and sample identifier as provided by the customer.

Approved by : Karolina Pettit
Position : Director

Signature : K. Pettit

UKAS TESTING
26667

Veritas Laboratory Services Ltd
Shepherds Road, Bartley, Southampton, SO40 2LH

Results Summary

Sample Type : Surface Water
Test Report Number : 2026-1371
Customer Sample Identifier : 26/03378/2 Surface Water 2 23/03/26
Sample Condition : Conforming
Test Method : VLS SOP 019

Units [ng/l]

Analysis	TEF Type	TEQ Lower Bound	TEQ Medium Bound	TEQ Upper Bound
Dioxin/Furan	WHO 2005/Mammals	0.0000	0.0018	0.0037
	WHO 1998	0.0000	0.002	0.004
	NATO	0.0000	0.0016	0.0033
	Birds	0.0000	0.0025	0.0051
	Fish	0.0000	0.0021	0.0043

Results Dioxins/Furans

Sample Type : Surface Water
Test Report Number : 2026-1371
Customer Sample Identifier : 26/03378/2 Surface Water 2 23/03/26
Sample Condition : Conforming
Test Method : VLS SOP 019

Units [ng/l]

Analysis	Concentration
PCDD/F - 17 congeners	
2378-TCDD	< 0.0006
12378-PCDD	< 0.0015
123478-HxCDD	< 0.0015
123678-HxCDD	< 0.0015
123789-HxCDD	< 0.0014
1234678-HpCDD	< 0.0016
OCDD	< 0.003
Total 2,3,7,8-Dioxins	0.0000
2378-TCDF	< 0.0006
12378-PCDF	< 0.0015
23478-PCDF	< 0.0014
123478-HxCDF	< 0.0015
123678-HxCDF	< 0.0014
123789-HxCDF	< 0.0014
234678-HxCDF	< 0.0015
1234678-HpCDF	< 0.0015
1234789-HpCDF	< 0.0013
OCDF	< 0.003
Total 2,3,7,8-Furans	0.0000
WHO (2005) - PCDD TEQ (lower bound)	0.0000
WHO (2005) - PCDD TEQ (middle bound	0.0018
WHO (2005) - PCDD TEQ (upper bound)	0.0037

Certificate of Analysis

Certificate Number	26-06860	*Issued:*	02-Apr-26

Client Envirolab Ltd
Housesteads
Off Stockport Road
Hattersley
SK14 3QU

Our Reference	26-06860
Client Reference ~	26/03378
Order No ~	P0759476
Contract Title ~	(not supplied)
Description	1 River/Surface Water sample.
Date Received	23-Mar-26
Date Started	23-Mar-26
Date Completed	02-Apr-26
Test Procedures	Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

Reyhan Irfan
Operations Manager

Normec DETS Limited
Unit 2, Park Road Industrial Estate South, Consett, Co Durham, DH8 5PY
Tel: 01207 582333 • email: info-dets@normecgroup.com • normecdets.com

Summary of Chemical Analysis
Water Samples

Our Ref 26-06860
Client Ref ~ 26/03378
Contract Title ~

Lab No	2660002
	26/03378/1
Sample ID ~	
Depth ~	
Other ID ~	
Sample Type ~	RIVER/SURFACE WATER
Sampling Date ~	17/03/2026
Sampling Time ~	n/s

Test	Method	LOD	Units	
Organotins				
Dibutyl Tin	DETSC 3421*	1	ug/l	< 1.0
Triphenyl Tin	DETSC 3421*	1	ug/l	< 1.0
Tributyl Tin	DETSC 3421*	1	ug/l	< 1.0

Information in Support of the Analytical Results

Our Ref 26-06860
Client Ref ~ 26/03378
Contract ~

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2660002	26/03378/1 RIVER/SURFACE WATER	17/03/26	PB 500ml		

Key: P-Plastic B-Bottle

Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Key:
~ Sample details are provided by the client and can affect the validity of the results
***** -not accredited.
# -MCERTS (accreditation only applies if report carries the MCERTS logo).
$ -subcontracted.
n/s -not supplied.
I/S -insufficient sample.
U/S -unsuitable sample.
t/f -to follow.
nd -not detected.

End of Report Ver 26.03.15

Certificate of Analysis

Report No.:	**26-02616-1**
Issue No.:	**1**
Date of Issue	**30/04/2026**
Customer Details:	Envirolab Ltd, 7 - 8 Sandpits Business Park, Mottram Road, Hyde, Greater Manchester, SK14 3AR, United Kingdom
Customer Contact:	Richard Wong
Customer Order No.:	P0759477
Customer Reference:	Not Supplied
Quotation Reference:	Q26-04672 (Issue: 6)
Description:	1 water sample
Date Received:	25/03/2026
Date Started:	26/03/2026
Date Completed:	17/04/2026
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	None



Approved By: **David Long, Operations & LIMS Manager**

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.
This certificate shall not be reproduced except in full without the prior written approval of the laboratory.
Observations and interpretations are outside of the scope of UKAS accreditation.
Results reported herein relate only to the items supplied to the laboratory for testing.
Results on an Interim Report are not dry-weight corrected.
Where the laboratory is not responsible for the sampling and/or filtering, results apply to the sample(s) as they were received.
The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

Testing performed by Tetra Tech Environmental Management Limited. Registered in England No. 01756175.
13 St Martins Way, Bedford, Bedfordshire, MK42 0LF. T +44 1462 480 400
Terms and conditions apply - copy on request

Results Summary

Report No.: 26-02616-1

Customer Reference: Not Supplied

Customer Order No: P0759477

Customer Sample No	**Surface Water 2**
Customer Sample ID	26/03378/2
Tetra Tech Sample No	149143
Sample Type	**WATER**
Sample Matrix	SW
Sampling Date	23/03/2026

Determinand	CAS No	Codes	SOP	RL	Units	
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)	93-76-5	N	L534	0.02	µg/L	< 0.02
2,4,5-TP (Fenoprop)	93-72-1	N	L534	0.02	µg/L	< 0.02
2,4-dichlorophenoxyacetic acid (2,4-D)	94-75-7	N	L534	0.02	µg/L	< 0.02
acifluorfen	50594-66-6	N	L534	0.02	µg/L	< 0.20
bentazone	25057-89-0	N	L534	0.02	µg/L	< 0.02
clopyralid	1702-17-6	N	L534	0.02	µg/L	< 0.02
dichlorprop (2,4-DP)	120-36-5	N	L534	0.02	µg/L	< 0.02
dinoseb (DNBP)	88-85-7	N	L534	0.02	µg/L	< 0.02
2-methyl-4-chlorophenoxyacetic acid (MCPA)	94-74-6	N	L534	0.02	µg/L	< 0.02
mecoprop (MCPP)	7085-19-0	N	L534	0.02	µg/L	< 0.02
pentachlorophenol (PCP)	87-86-5	N	L534	0.02	µg/L	< 0.02
2,3,6-trichlorobenzoic acid (2,3,6-TBA)	50-31-7	N	L534	0.02	µg/L	< 0.02
4-(2,4-dichlorophenoxy)butanoic acid (2,4-DB)	94-82-6	N	L534	0.02	µg/L	< 0.20
4-chlorophenoxyacetic acid (4-CPA)	122-88-3	N	L534	0.02	µg/L	< 0.20
benazolin	3813-05-6	N	L534	0.02	µg/L	< 0.20
bromoxynil	1689-84-5	N	L534	0.02	µg/L	< 0.02
dicamba	1918-00-9	N	L534	0.02	µg/L	< 0.02
diclofop	40843-25-2	N	L534	0.02	µg/L	< 0.02
2-methyl-4,6-dinitrophenol (DNOC)	534-52-1	N	L534	0.02	µg/L	< 0.02
flamprop	58667-63-3	N	L534	0.02	µg/L	< 0.02
fluroxypyr	69377-81-7	N	L534	0.02	µg/L	< 0.02
ioxynil	1689-83-4	N	L534	0.02	µg/L	< 0.02
MCPB	94-81-5	N	L534	0.02	µg/L	< 0.02
picloram	1918-02-1	N	L534	0.02	µg/L	< 0.02
triclopyr	55335-06-3	N	L534	0.02	µg/L	< 0.02
atrazine	1912-24-9	N	L164	0.02	µg/L	< 0.02
cyanazine	21725-46-2	N	L164	0.02	µg/L	< 0.02
prometryn	7287-19-6	N	L164	0.02	µg/L	< 0.02

Results Summary

Report No.: 26-02616-1

Customer Reference: Not Supplied

Customer Order No: P0759477

Customer Sample No	**Surface Water 2**
Customer Sample ID	26/03378/2
Tetra Tech Sample No	149143
Sample Type	**WATER**
Sample Matrix	SW
Sampling Date	23/03/2026

Determinand	CAS No	Codes	SOP	RL	Units	
propazine	139-40-2	N	L164	0.02	µg/L	< 0.02
simazine	122-34-9	N	L164	0.02	µg/L	< 0.02
terbuthylazine	5915-41-3	N	L164	0.02	µg/L	< 0.02
terbutryn	886-50-0	N	L164	0.02	µg/L	< 0.02
trietazine	1912-26-1	N	L164	0.02	µg/L	< 0.02
chloroxuron	1982-47-4	N	L005	0.05	µg/L	< 0.05
chlorotoluron	15545-48-9	N	L005	0.05	µg/L	< 0.05
diflubenzuron	35367-38-5	N	L005	0.05	µg/L	< 0.05
dimefuron	34205-21-5	N	L005	0.05	µg/L	< 0.05
diuron	330-54-1	N	L005	0.05	µg/L	< 0.05
isoproturon	34123-59-6	N	L005	0.05	µg/L	< 0.05
linuron	330-55-2	N	L005	0.05	µg/L	< 0.05
methabenzthiazuron	18691-97-9	N	L005	0.05	µg/L	< 0.05
metoxuron	19937-59-8	N	L005	0.05	µg/L	< 0.05
monolinuron	1746-81-2	N	L005	0.05	µg/L	< 0.05
monuron	150-68-5	N	L005	0.05	µg/L	< 0.05
pencycuron	66063-05-6	N	L005	0.05	µg/L	< 0.05
carbetamide	16118-49-3	N	L075	0.1	µg/L	< 0.10
chlorbufam	1967-16-4	N	L075	1	µg/L	< 1.0
chlorpropham	101-21-3	N	L075	1	µg/L	< 1.0
ethiofencarb	29973-13-5	N	L075	0.1	µg/L	< 0.10
phenmedipham	13684-63-4	N	L075	0.1	µg/L	< 0.10
pirimicarb	23103-98-2	N	L075	0.1	µg/L	< 0.10
propamocarb	24579-73-5	N	L075	0.1	µg/L	< 0.10
propham	122-42-9	N	L075	0.1	µg/L	< 0.10

Comments

Report No.: 26-02616-1

Customer Reference: Not Supplied

Customer Order No: P0759477

Tetra Tech Sample Number	Customer Number	Sample Comments
149143	Surface Water 2	For 2,4-DB, 4-CPA, Acifluorfen, Benazolin, reporting limits were raised due to matrix interference.

Deviating Samples

Report No.: 26-02616-1

Customer Reference: Not Supplied

Customer Order No: P0759477

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
Tetra Tech is not responsible for the integrity of samples as received, unless Tetra Tech personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

Tetra Tech N	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
149143	Surface Water 2	26/03378/2	23/03/2026	GGB1 1 L green glass bottle	No	
149143	Surface Water 2	26/03378/2	23/03/2026	GGB1 1 L green glass bottle	No	

Type	Matrix Code	Description
Food	CEREALPROD	Cereals, grains & products
Food	DRIEDFRUIT	Dried fruits
Food	FRIEDBAKED	Fried or baked food
Food	LEGUME	Legumes
Food	MEAT	Meat
Food	POWDERED	Powdered food
Food	PULSE	Pulses (dried legumes)
Food	VEGETABLES	Vegetables
Gas	TDTUBE	TD Tube
Gas	TENAX	Tenax Tube
Gas	TUBE	Tube
Gas	VAPOUR	Gas
Geological	SED_MAR	Marine Sediment
Geological	SED_RIV	River Sediment
Geological	SLUDG_SOL	Sludge (solid only)
Geological	SOIL	Soil
Liquid	BEVERAGE	Beverage
Liquid	BLOOD	Blood
Liquid	CONDENSATE	Condensate
Liquid	FOAM_LIQ	Liquid foam
Liquid	FORMULATN	Formula
Liquid	LEACHATE	Leachate
Liquid	OIL/GREASE	Oil or grease
Liquid	SLUDG_LIQ	Sludge (liquid only)
Liquid	SOLVENT	Solvent
Liquid	URINE	Urine
Sludge	SLUDG_WHL	Sludge for bulk route
Solid	BADGE	Badge
Solid	BEDDING	Bedding
Solid	BIOTA	Biota (general)
Solid	BIOTA_F	Biota (fish)
Solid	BIOTA_SF	Biota (shellfish)
Solid	CONSTRCTN	Construction materials
Solid	FABRIC	Fabrics & furnishing materials
Solid	FEED	Animal feed
Solid	FERTILISER	Fertiliser
Solid	FILTER	Filter
Solid	FOAM	Solid foam material
Solid	LATEX	Latex/Rubber
Solid	PACKAGING	Packaging material
Solid	PAPER	Paper
Solid	PLANT	Plant (vegetation)
Solid	POWDER	Powder
Solid	SWAB	Swab
Water	BAL	Ballast Water
Water	BIL	Bilge Water
Water	DW	Drinking Water
Water	EFFLUENT	Effluent
Water	GW	Ground Water
Water	INFLUENT	Influent
Water	LIQUOR	Liquor
Water	MINEW	Mine Water
Water	MW	Mineral Water
Water	SALTW	Salt Water
Water	SW	Surface Water
Water	TW	Tap Water
Water	W	Unknown Water

Key Code	Description
N	Not Accredited Test
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
UF	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
O	Marine Management Organisation (MMO) Validated
SN	Subcontracted to approved laboratory not accredited for the test
SU	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SIN	Subcontracted to internal Tetra Tech laboratory not accredited for the test
SIU	Subcontracted to internal Tetra Tech laboratory UKAS Accredited for the test
SIM	Subcontracted to internal Tetra Tech laboratory MCERTS/UKAS Accredited for the test
*	Modified standard method
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis
L (in results)	Result is outside normal limits

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 week from the issue date of this report
Waters	1 week from the issue date of this report
Other Liquids	1 week from the issue date of this report
Solids / Soils	1 week from the issue date of this report
Sediments	1 week from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Dev code	Description
D	No sampling date provided.
T	No sampling time provided.
Z	Temperature of samples exceeded in transit/storage.
V	Excessive headspace for volatile determinands.
P	Sample submitted without required preservative(s).
C	Incorrect container.
H	Holding time exceeded (sampling to extraction).
X	Holding time exceeded (sampling to receipt).

envirolab
Hattersley Science & Technology Park
Stockport Road, Hattersley, SK14 3QU

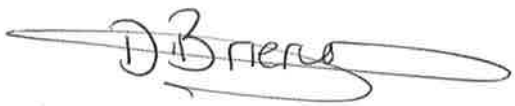
FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 26/04459
Issue Number: 1 **Date:** 06 May, 2026

Client:
Starling Environmental Limited
67 Chorley Old Road
Bolton
UK
BL1 3AJ

Project Manager: Claire Gettinby
Project Name: Enviro Skip Hire Ltd, Sandbach
Project Ref: 161
Order No: 161/02
Date Samples Received: 13/04/26
Date Instructions Received: 14/04/26
Date Analysis Completed: 06/05/26

Approved by:



Danielle Brierley
Client Services Supervisor

UKAS TESTING
1247

Envirolab Job Number: 26/04459

Client Project Name: Enviro Skip Hire Ltd, Sandbach

Client Project Ref: 161

Lab Sample ID	26/04459/1	26/04459/2	26/04459/3					Units	Limit of Detection	Method ref
Client Sample No	3	4	5							
Client Sample ID	Surface Water	Surface Water	Surface Water							
Depth to Top										
Depth To Bottom										
Date Sampled	09-Apr-26	09-Apr-26	09-Apr-26							
Sample Type	WATER - SW	WATER - SW	WATER - SW							
Sample Matrix Code	N/A	N/A	N/A							
pH (w)$_A^\#$	7.80	7.94	7.93					pH	0.01	A-T-031w
Ammoniacal nitrogen as N (w)$_A^\#$	0.19	0.18	0.22					mg/l	0.05	A-T-033w
Sulphide (w)$_A$	<0.1	<0.1	<0.1					mg/l	0.1	A-T-043-w
Hydrogen Sulphide (Unionised) (H2S) as S (w)	<0.014	<0.012	<0.012					mg/l	0.001	Calc
Arsenic (dissolved)$_A^\#$	1	1	1					µg/l	1	A-T-025w
Boron (dissolved)$_A^\#$	75	80	83					µg/l	10	A-T-025w
Cadmium (dissolved)$_A^\#$	<0.2	<0.2	<0.2					µg/l	0.2	A-T-025w
Copper (dissolved)$_A^\#$	<4	<4	<4					µg/l	4	A-T-025w
Chromium (dissolved)$_A^\#$	<1	<1	<1					µg/l	1	A-T-025w
Lead (dissolved)$_A^\#$	<0.1	0.1	0.2					µg/l	0.1	A-T-025w
Mercury (dissolved)$_A^\#$	<0.1	<0.1	<0.1					µg/l	0.1	A-T-025w
Nickel (dissolved)$_A^\#$	<2	<2	<2					µg/l	2	A-T-025w
Selenium (dissolved)$_A^\#$	<1	<1	<1					µg/l	1	A-T-025w
Zinc (dissolved)$_A^\#$	7	3	3					µg/l	2	A-T-025w
TPH total dissolved (>C6-C40) (w)$_A^\#$	<40	<40	<40					µg/l	40	A-T-007w
BTEX (w)										
BTEX - Benzene (w)$_A^\#$	<1	<1	<1					µg/l	1	A-T-022w
BTEX - Toluene (w)$_A^\#$	<1	<1	<1					µg/l	1	A-T-022w
BTEX - Ethyl Benzene (w)$_A^\#$	<1	<1	<1					µg/l	1	A-T-022w
BTEX - m & p Xylene (w)$_A^\#$	<1	<1	<1					µg/l	1	A-T-022w
BTEX - o Xylene (w)$_A^\#$	<1	<1	<1					µg/l	1	A-T-022w

Envirolab Job Number: 26/04459

Client Project Name: Enviro Skip Hire Ltd, Sandbach

Client Project Ref: 161

Lab Sample ID	26/04459/1	26/04459/2	26/04459/3					Units	Limit of Detection	Method ref
Client Sample No	3	4	5							
Client Sample ID	Surface Water	Surface Water	Surface Water							
Depth to Top										
Depth To Bottom										
Date Sampled	09-Apr-26	09-Apr-26	09-Apr-26							
Sample Type	WATER - SW	WATER - SW	WATER - SW							
Sample Matrix Code	N/A	N/A	N/A							
PAH 16MS (w)										
Acenaphthene (w)$_A^{\#}$	0.03	0.02	0.02					µg/l	0.01	A-T-019w
Acenaphthylene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Anthracene (w)$_A^{\#}$	0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Benzo(a)anthracene (w)$_A^{\#}$	<0.01	0.03	0.01					µg/l	0.01	A-T-019w
Benzo(a)pyrene (w)$_A^{\#}$	<0.01	0.02	<0.01					µg/l	0.01	A-T-019w
Benzo(b)fluoranthene (w)$_A^{\#}$	<0.01	0.02	<0.01					µg/l	0.01	A-T-019w
Benzo(ghi)perylene (w)$_A^{\#}$	<0.01	0.01	<0.01					µg/l	0.01	A-T-019w
Benzo(k)fluoranthene (w)$_A^{\#}$	<0.01	0.02	0.01					µg/l	0.01	A-T-019w
Chrysene (w)$_A^{\#}$	<0.01	0.02	0.01					µg/l	0.01	A-T-019w
Dibenzo(ah)anthracene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Fluoranthene (w)$_A^{\#}$	0.06^{U}	0.06	0.04					µg/l	0.01	A-T-019w
Fluorene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Indeno(123-cd)pyrene (w)$_A^{\#}$	<0.01	0.01^{U}	<0.01^{U}					µg/l	0.01	A-T-019w
Naphthalene (w)$_A^{\#}$	<0.01	<0.01	<0.01					µg/l	0.01	A-T-019w
Phenanthrene (w)$_A^{\#}$	0.02	0.01	<0.01					µg/l	0.01	A-T-019w
Pyrene (w)$_A^{\#}$	0.06	0.05	0.03					µg/l	0.01	A-T-019w
Total PAH 16MS (w)$_A^{\#}$	0.18	0.27	0.12					µg/l	0.01	A-T-019w

Report Notes

General

•This report shall not be reproduced, except in full, without written approval from Envirolab.
•The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
•The results reported herein relate only to the material supplied to the laboratory.
•The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
•Analytical results reflect the quality of the sample at the time of analysis only.
•Opinions and Interpretations expressed are outside our scope of accreditation.
•A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
•If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
•Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript "#"	Accredited to ISO 17025
Superscript "M"	Accredited to MCertS
Superscript "U"	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript "A"	Analysis performed on as-received Sample
Subscript "D"	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript "D" on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript "^"	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
Subscript "@"	Result is an opinion
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.
Stones etc. are not removed from the sample prior to analysis
"Trace Asbestos Identified" will be reported if there is not enough present to verify the type.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs
Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.					

Soil Chemical Analysis:
All results are reported as dry weight (<40°C).
For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.
For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts
All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH by method A-T-007:
For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only.
Results "with Clean up" indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:
EPH CWG results have humics mathematically subtracted through instrument calculation.
Where these humic substances have been identified in any IDs from "TPH CWG with clean up" please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:
Results greater than 12900µS/cm @ 25^0C / 11550µS/cm @ 20^0C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Starling Environmental Limited, 67 Chorley Old Road, Bolton, UK, BL1 3AJ

Project No: 26/04459

Date Received: 14/04/2026 (am)

Project: Enviro Skip Hire Ltd, Sandbach

Cool Box Temperatures (°C): 9.4

Clients Project No: 161

Lab Sample ID	26/04459/1	26/04459/2	26/04459/3
Client Sample No	3	4	5
Client Sample ID/Depth	Surface Water	Surface Water	Surface Water
Date Sampled	09/04/26	09/04/26	09/04/26
Deviation Code			
A8 (no NaOH)	✓	✓	✓
F	✓	✓	✓

Key

A8 (no NaOH) *No NaOH preserved bottle provided (cyanides, sulphide will be deviating)*

F *Maximum holding time exceeded between sampling date and analysis for analytes listed below*

HOLDING TIME EXCEEDANCES

Lab Sample ID	26/04459/1	26/04459/2	26/04459/3
Client Sample No	3	4	5
Client Sample ID/Depth	Surface Water	Surface Water	Surface Water
Date Sampled	09/04/26	09/04/26	09/04/26
pH (w)	✓	✓	✓

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	26/04459/1	26/04459/2	26/04459/3
Client Sample No	3	4	5
Client Sample ID/Depth	Surface Water	Surface Water	Surface Water
Date Sampled	09/04/26	09/04/26	09/04/26
A-T-007w	23/04/2026	23/04/2026	23/04/2026
A-T-019w	20/04/2026	27/04/2026	27/04/2026
A-T-022w	20/04/2026	20/04/2026	20/04/2026
A-T-025w	23/04/2026	01/05/2026	01/05/2026
A-T-031w	15/04/2026	16/04/2026	16/04/2026
A-T-033w	20/04/2026	16/04/2026	16/04/2026
A-T-043-w	17/04/2026	17/04/2026	17/04/2026
Calc	06/05/2026	06/05/2026	06/05/2026

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

envirolab
Hattersley Science & Technology Park
Stockport Road, Hattersley, SK14 3QU

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 26/04770
Issue Number: 1 **Date:** 11 May, 2026

Client:
Starling Environmental Limited
67 Chorley Old Road
Bolton
UK
BL1 3AJ

Project Manager: Claire Gettinby
Project Name: Enviro Skip Hire Ltd, Sandbach
Project Ref: 161
Order No: 161/03
Date Samples Received: 20/04/26
Date Instructions Received: 21/04/26
Date Analysis Completed: 11/05/26

Approved by:



Amy Riding
Client Manager

UKAS TESTING
1247

Envirolab Job Number: 26/04770

Client Project Name: Enviro Skip Hire Ltd, Sandbach

Client Project Ref: 161

Lab Sample ID	26/04770/1	26/04770/2	26/04770/3	26/04770/4	26/04770/5			Units	Limit of Detection	Method ref
Client Sample No	6	7	8	9	10					
Client Sample ID	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water					
Depth to Top										
Depth To Bottom										
Date Sampled	16-Apr-26	17-Apr-26	18-Apr-26	19-Apr-26	20-Apr-26					
Sample Type	WATER - SW	WATER - SW	WATER - SW	WATER - SW	WATER - SW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A					
pH (w)$_A^\#$	8.10	8.15	8.16	8.17	8.18			pH	0.01	A-T-031w
Ammoniacal nitrogen as N (w)$_A^\#$	0.11	0.15	0.12	0.11	0.20			mg/l	0.05	A-T-033w
Sulphide (w)$_A$	<0.1	<0.1	<0.1	<0.1	<0.1			mg/l	0.1	A-T-043-w
Hydrogen Sulphide (Unionised) (H2S) as S (w)	<0.008	<0.006	<0.006	<0.006	<0.006			mg/l	0.001	Calc
Arsenic (dissolved)$_A^\#$	1	1	1	1	1			µg/l	1	A-T-025w
Boron (dissolved)$_A^\#$	83	83	81	83	83			µg/l	10	A-T-025w
Cadmium (dissolved)$_A^\#$	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.2	A-T-025w
Copper (dissolved)$_A^\#$	<4	<4	<4	<4	<4			µg/l	4	A-T-025w
Chromium (dissolved)$_A^\#$	<1	<1	<1	<1	<1			µg/l	1	A-T-025w
Lead (dissolved)$_A^\#$	<0.1	<0.1	<0.1	0.1	<0.1			µg/l	0.1	A-T-025w
Mercury (dissolved)$_A^\#$	<0.1	<0.1	<0.1	<0.1	<0.1			µg/l	0.1	A-T-025w
Nickel (dissolved)$_A^\#$	<2	<2	<2	<2	<2			µg/l	2	A-T-025w
Selenium (dissolved)$_A^\#$	<1	<1	<1	<1	<1			µg/l	1	A-T-025w
Zinc (dissolved)$_A^\#$	<2	<2	<2	<2	<2			µg/l	2	A-T-025w
TPH total dissolved (>C6-C40) (w)$_A^\#$	<40	<40	<40	<40	<40			µg/l	40	A-T-007w
BTEX (w)										
BTEX - Benzene (w)$_A^\#$	<1	<1	<1	<1	<1			µg/l	1	A-T-022w
BTEX - Toluene (w)$_A^\#$	<1	<1	<1	<1	<1			µg/l	1	A-T-022w
BTEX - Ethyl Benzene (w)$_A^\#$	<1	<1	<1	<1	<1			µg/l	1	A-T-022w
BTEX - m & p Xylene (w)$_A^\#$	<1	<1	<1	<1	<1			µg/l	1	A-T-022w
BTEX - o Xylene (w)$_A^\#$	<1	<1	<1	<1	<1			µg/l	1	A-T-022w

Envirolab Job Number: 26/04770

Client Project Name: Enviro Skip Hire Ltd, Sandbach

Client Project Ref: 161

Lab Sample ID	26/04770/1	26/04770/2	26/04770/3	26/04770/4	26/04770/5			Units	Limit of Detection	Method ref
Client Sample No	6	7	8	9	10					
Client Sample ID	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water					
Depth to Top										
Depth To Bottom										
Date Sampled	16-Apr-26	17-Apr-26	18-Apr-26	19-Apr-26	20-Apr-26					
Sample Type	WATER - SW	WATER - SW	WATER - SW	WATER - SW	WATER - SW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A					
PAH 16MS (w)										
Acenaphthene (w)$_A^\#$	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Acenaphthylene (w)$_A^\#$	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Anthracene (w)$_A^\#$	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Benzo(a)anthracene (w)$_A^\#$	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Benzo(a)pyrene (w)$_A^\#$	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Benzo(b)fluoranthene (w)$_A^\#$	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Benzo(ghi)perylene (w)$_A^\#$	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Benzo(k)fluoranthene (w)$_A^\#$	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Chrysene (w)$_A^\#$	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Dibenzo(ah)anthracene (w)$_A^\#$	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Fluoranthene (w)$_A^\#$	0.01	0.01	0.01	0.01	0.01			µg/l	0.01	A-T-019w
Fluorene (w)$_A^\#$	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Indeno(123-cd)pyrene (w)$_A^\#$	<0.01^U	<0.01^U	<0.01^U	<0.01^U	<0.01^U			µg/l	0.01	A-T-019w
Naphthalene (w)$_A^\#$	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Phenanthrene (w)$_A^\#$	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Pyrene (w)$_A^\#$	0.01	0.01	0.01	0.01	0.01			µg/l	0.01	A-T-019w
Total PAH 16MS (w)$_A^\#$	<0.05	<0.05	<0.05	<0.05	<0.05			µg/l	0.01	A-T-019w

Report Notes

General

•This report shall not be reproduced, except in full, without written approval from Envirolab.
•The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
•The results reported herein relate only to the material supplied to the laboratory.
•The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
•Analytical results reflect the quality of the sample at the time of analysis only.
•Opinions and Interpretations expressed are outside our scope of accreditation.
•A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
•If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
•Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript "#"	Accredited to ISO 17025
Superscript "M"	Accredited to MCertS
Superscript "U"	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript "A"	Analysis performed on as-received Sample
Subscript "D"	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript "D" on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript "^"	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
Subscript "@"	Result is an opinion
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.
Stones etc. are not removed from the sample prior to analysis
"Trace Asbestos Identified" will be reported if there is not enough present to verify the type.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs
Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.					

Soil Chemical Analysis:
All results are reported as dry weight (<40°C).
For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.
For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts
All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH by method A-T-007:
For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only.
Results "with Clean up" indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:
EPH CWG results have humics mathematically subtracted through instrument calculation.
Where these humic substances have been identified in any IDs from "TPH CWG with clean up" please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:
Results greater than 12900µS/cm @ 25^0C / 11550µS/cm @ 20^0C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Starling Environmental Limited, 67 Chorley Old Road, Bolton, UK, BL1 3AJ

Project No: 26/04770

Date Received: 21/04/2026 (am)

Project: Enviro Skip Hire Ltd, Sandbach

Cool Box Temperatures (°C): 12.1

Clients Project No: 161

Lab Sample ID	26/04770/1	26/04770/2	26/04770/3	26/04770/4	26/04770/5
Client Sample No	6	7	8	9	10
Client Sample ID/Depth	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Date Sampled	16/04/26	17/04/26	18/04/26	19/04/26	20/04/26
Deviation Code					
A8 (no NaOH)	✓	✓	✓	✓	✓
F	✓	✓	✓	✓	✓

Key

A8 (no NaOH) *No NaOH preserved bottle provided (cyanides, sulphide will be deviating)*

F *Maximum holding time exceeded between sampling date and analysis for analytes listed below*

HOLDING TIME EXCEEDANCES

Lab Sample ID	26/04770/1	26/04770/2	26/04770/3	26/04770/4	26/04770/5
Client Sample No	6	7	8	9	10
Client Sample ID/Depth	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Date Sampled	16/04/26	17/04/26	18/04/26	19/04/26	20/04/26
pH (w)	✓	✓	✓		
Sulphide (w)	✓	✓	✓	✓	✓

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	26/04770/1	26/04770/2	26/04770/3	26/04770/4	26/04770/5
Client Sample No	6	7	8	9	10
Client Sample ID/Depth	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Date Sampled	16/04/26	17/04/26	18/04/26	19/04/26	20/04/26
A-T-007w	24/04/2026	24/04/2026	24/04/2026	24/04/2026	24/04/2026
A-T-019w	27/04/2026	27/04/2026	27/04/2026	27/04/2026	27/04/2026
A-T-022w	24/04/2026	24/04/2026	24/04/2026	24/04/2026	24/04/2026
A-T-025w	07/05/2026	07/05/2026	07/05/2026	07/05/2026	07/05/2026
A-T-031w	22/04/2026	22/04/2026	22/04/2026	22/04/2026	22/04/2026
A-T-033w	27/04/2026	27/04/2026	27/04/2026	27/04/2026	27/04/2026
A-T-043-w	06/05/2026	06/05/2026	06/05/2026	06/05/2026	06/05/2026
Calc	11/05/2026	11/05/2026	11/05/2026	11/05/2026	11/05/2026

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

envirolab
Hattersley Science & Technology Park
Stockport Road, Hattersley, SK14 3QU

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 26/05226
Issue Number: 1 **Date:** 21 May, 2026

Client:
Starling Environmental Limited
67 Chorley Old Road
Bolton
UK
BL1 3AJ

Project Manager: Claire Gettinby
Project Name: Enviro Skip Hire Ltd, Sandbach
Project Ref: 161
Order No: PO 161/04
Date Samples Received: 29/04/26
Date Instructions Received: 29/04/26
Date Analysis Completed: 20/05/26

Approved by:



Amy Riding
Client Manager

UKAS TESTING
1247

Envirolab Job Number: 26/05226

Client Project Name: Enviro Skip Hire Ltd, Sandbach

Client Project Ref: 161

Lab Sample ID	26/05226/1	26/05226/2						Units	Limit of Detection	Method ref
Client Sample No	11	12								
Client Sample ID	Surface Water	Surface Water								
Depth to Top										
Depth To Bottom										
Date Sampled	27-Apr-26	29-Apr-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
pH (w)$_A^\#$	8.02	8.06						pH	0.01	A-T-031w
Ammoniacal nitrogen as N (w)$_A^\#$	0.11	0.09						mg/l	0.05	A-T-033w
Sulphide (w)$_A$	<0.1	<0.1						mg/l	0.1	A-T-043-w
Hydrogen Sulphide (Unionised) (H2S) as S (w)	<0.009	<0.008						mg/l	0.001	Calc
Arsenic (dissolved)$_A^\#$	<1	<1						µg/l	1	A-T-025w
Boron (dissolved)$_A^\#$	74	73						µg/l	10	A-T-025w
Cadmium (dissolved)$_A^\#$	<0.2	<0.2						µg/l	0.2	A-T-025w
Copper (dissolved)$_A^\#$	5	<4						µg/l	4	A-T-025w
Chromium (dissolved)$_A^\#$	<1	<1						µg/l	1	A-T-025w
Lead (dissolved)$_A^\#$	<0.1	<0.1						µg/l	0.1	A-T-025w
Mercury (dissolved)$_A^\#$	<0.1	<0.1						µg/l	0.1	A-T-025w
Nickel (dissolved)$_A^\#$	<2	<2						µg/l	2	A-T-025w
Selenium (dissolved)$_A^\#$	<1	<1						µg/l	1	A-T-025w
Zinc (dissolved)$_A^\#$	9	6						µg/l	2	A-T-025w
TPH total dissolved (>C6-C40) (w)$_A^\#$	<40	<40						µg/l	40	A-T-007w
BTEX (w)										
BTEX - Benzene (w)$_A^\#$	<1	<1						µg/l	1	A-T-022w
BTEX - Toluene (w)$_A^\#$	<1	<1						µg/l	1	A-T-022w
BTEX - Ethyl Benzene (w)$_A^\#$	<1	<1						µg/l	1	A-T-022w
BTEX - m & p Xylene (w)$_A^\#$	<1	<1						µg/l	1	A-T-022w
BTEX - o Xylene (w)$_A^\#$	<1	<1						µg/l	1	A-T-022w

Envirolab Job Number: 26/05226

Client Project Name: Enviro Skip Hire Ltd, Sandbach

Client Project Ref: 161

Lab Sample ID	26/05226/1	26/05226/2						Units	Limit of Detection	Method ref
Client Sample No	11	12								
Client Sample ID	Surface Water	Surface Water								
Depth to Top										
Depth To Bottom										
Date Sampled	27-Apr-26	29-Apr-26								
Sample Type	WATER - SW	WATER - SW								
Sample Matrix Code	N/A	N/A								
PAH 16MS (w)										
Acenaphthene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Acenaphthylene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Anthracene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Benzo(a)anthracene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Benzo(a)pyrene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Benzo(b)fluoranthene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Benzo(ghi)perylene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Benzo(k)fluoranthene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Chrysene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Dibenzo(ah)anthracene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Fluoranthene $(w)_A^{\#}$	0.02	0.02						µg/l	0.01	A-T-019w
Fluorene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Indeno(123-cd)pyrene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Naphthalene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Phenanthrene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Pyrene $(w)_A^{\#}$	<0.01	<0.01						µg/l	0.01	A-T-019w
Total PAH 16MS $(w)_A^{\#}$	0.02	0.02						µg/l	0.01	A-T-019w

Report Notes

General

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•The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
•The results reported herein relate only to the material supplied to the laboratory.
•The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
•Analytical results reflect the quality of the sample at the time of analysis only.
•Opinions and Interpretations expressed are outside our scope of accreditation.
•A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
•If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
•Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript "#"	Accredited to ISO 17025
Superscript "M"	Accredited to MCertS
Superscript "U"	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript "A"	Analysis performed on as-received Sample
Subscript "D"	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript "D" on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript "^"	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
Subscript "@"	Result is an opinion
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.
Stones etc. are not removed from the sample prior to analysis
"Trace Asbestos Identified" will be reported if there is not enough present to verify the type.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs
Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.					

Soil Chemical Analysis:
All results are reported as dry weight (<40°C).
For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.
For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts
All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH by method A-T-007:
For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only.
Results "with Clean up" indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:
EPH CWG results have humics mathematically subtracted through instrument calculation.
Where these humic substances have been identified in any IDs from "TPH CWG with clean up" please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:
Results greater than 12900µS/cm @ 25^0C / 11550µS/cm @ 20^0C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Starling Environmental Limited, 67 Chorley Old Road, Bolton, UK, BL1 3AJ

Project: Enviro Skip Hire Ltd, Sandbach

Clients Project No: 161

Project No: 26/05226

Date Received: 29/04/2026 (pm)

Cool Box Temperatures (°C): 13.9

Lab Sample ID	26/05226/1	26/05226/2
Client Sample No	11	12
Client Sample ID/Depth	Surface Water	Surface Water
Date Sampled	27/04/26	29/04/26
Deviation Code		
A8 (no NaOH)	✓	✓

Key
A8 (no NaOH) *No NaOH preserved bottle provided (cyanides, sulphide will be deviating)*

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	26/05226/1	26/05226/2
Client Sample No	11	12
Client Sample ID/Depth	Surface Water	Surface Water
Date Sampled	27/04/26	29/04/26
A-T-007w	07/05/2026	07/05/2026
A-T-019w	05/05/2026	05/05/2026
A-T-022w	06/05/2026	06/05/2026
A-T-025w	20/05/2026	20/05/2026
A-T-031w	30/04/2026	30/04/2026
A-T-033w	11/05/2026	11/05/2026
A-T-043-w	06/05/2026	06/05/2026
Calc	11/05/2026	11/05/2026

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

APPENDIX G

Rainfall Discharge Rates Technical Note Drainage Calulations

BEK Geo-Environmental Consulting
No.2 Landwick Court, Metcalf Drive, Altham Business Park,
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Our Ref: BEK/26056/260420/1

20 April 2026

STARLING ENVIRONMENTAL LIMITED
67 Chorley Old Road
Bolton
BL1 3AJ

Enviro Skips Hire Limited, Sandbach Transfer Station – Rainfall Discharge Rates Technical Note

BEK has been commissioned by Starling Environmental Limited to provide a technical note for the maximum rate of discharge and a total daily flow for the 1in 30 year rainfall event for the site at Sandbach Transfer Station (hereafter referred to as 'the site').

Model Outputs

The site area has been calculated to be 18,650 m^2 (1.865 Hectares) with FEH rainfall data used to determine the maximum rate of discharge in l/s and modelled outputs for the runoff volume for the 1 in 30 year event.

- FEH Rainfall Data for the 1 in 30 year 24 hour event = **61.8mm** (See Annex A)
- Runoff Volume 1 in 30 Year Event FLOW CALCS = **937m^3** (See Annex B)
- Summary with Modified Rational Method for the Discharge (2.74 x 1.865 x 61.8 = **315.8 l/s**

I trust the above is satisfactory. Please get in touch should you have any questions.

Yours sincerely

Michael Buckley
BSC (Hons) MSc MEnvSci CEnv

BEK Geo-Environmental Consulting
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ANNEX A

FEH Rainfall Data

VERSION "FEH Web Version 1.0.0 exported a 11:53:28 GMT Mon 20-Apr-26
Parameters
Rainfall mo FEH22
Calculation Design rainfall
Calculation For a point
Calculation Point GB 373714 361188 SJ 73714 61188
Duration= 24 Hours
Fixed durat no
Return per 30 Years
Annual ma yes
A design rainfall of 61.8 mm was calculated.
This design rainfall has been calculated for a return period on the annual maximum scale.
The data in the following table have been computed using sliding durations.

Duration h	Duration d	2 year rain	5 year rain	10 year rai	20 year rai	30 year rai	50 year rai	75 year rai	100 year ra
0.25	0.010417	7.05	10.84	13.47	16.09	17.58	19.59	21.22	22.42
0.5	0.020833	9.13	13.98	17.45	20.91	22.95	25.66	27.93	29.62
0.75	0.03125	10.35	15.92	19.87	23.92	26.31	29.46	32.09	34.02
1	0.041667	11.33	17.34	21.65	26.06	28.69	32.19	35.08	37.21
1.25	0.052083	12.4	18.65	23.15	27.72	30.46	34.12	37.14	39.37
1.5	0.0625	13.41	19.82	24.42	29.1	31.93	35.69	38.81	41.11
1.75	0.072917	14.35	20.86	25.54	30.3	33.19	37.04	40.24	42.61
2	0.083333	15.2	21.8	26.53	31.36	34.31	38.23	41.5	43.93
2.25	0.09375	15.9	22.62	27.43	32.34	35.35	39.36	42.72	45.23
2.5	0.104167	16.53	23.36	28.24	33.23	36.31	40.4	43.85	46.44
2.75	0.114583	17.11	24.04	28.99	34.05	37.19	41.36	44.9	47.56
3	0.125	17.65	24.67	29.68	34.82	38.02	42.27	45.89	48.62
3.25	0.135417	18.15	25.26	30.33	35.54	38.79	43.12	46.82	49.62
3.5	0.145833	18.61	25.81	30.94	36.21	39.52	43.92	47.71	50.57
3.75	0.15625	19.05	26.32	31.51	36.85	40.2	44.68	48.55	51.48
4	0.166667	19.46	26.81	32.04	37.45	40.86	45.41	49.35	52.34
4.25	0.177083	19.86	27.26	32.55	38.03	41.48	46.11	50.13	53.17
4.5	0.1875	20.23	27.69	33.03	38.58	42.07	46.79	50.87	53.97
4.75	0.197917	20.58	28.1	33.49	39.1	42.64	47.43	51.58	54.74
5	0.208333	20.92	28.48	33.92	39.61	43.18	48.05	52.27	55.47
5.25	0.21875	21.24	28.86	34.34	40.09	43.7	48.64	52.93	56.18
5.5	0.229167	21.55	29.21	34.75	40.56	44.21	49.22	53.57	56.86
5.75	0.239583	21.85	29.55	35.13	41	44.69	49.77	54.18	57.52
6	0.25	22.13	29.88	35.51	41.44	45.16	50.31	54.77	58.15
6.25	0.260417	22.39	30.2	35.87	41.86	45.63	50.83	55.35	58.77
6.5	0.270833	22.65	30.51	36.22	42.27	46.08	51.34	55.91	59.37
6.75	0.28125	22.9	30.8	36.56	42.67	46.51	51.83	56.45	59.94
7	0.291667	23.14	31.09	36.89	43.05	46.93	52.31	56.97	60.5
7.25	0.302083	23.37	31.36	37.21	43.42	47.35	52.77	57.48	61.04
7.5	0.3125	23.59	31.63	37.51	43.79	47.74	53.21	57.97	61.57
7.75	0.322917	23.81	31.89	37.81	44.14	48.13	53.65	58.45	62.07
8	0.333333	24.02	32.15	38.11	44.48	48.51	54.07	58.91	62.57
8.25	0.34375	24.22	32.39	38.39	44.81	48.88	54.49	59.36	63.05

8.5	0.354167	24.42	32.63	38.67	45.14	49.23	54.89	59.8	63.52
8.75	0.364583	24.61	32.87	38.94	45.45	49.58	55.28	60.23	63.97
9	0.375	24.8	33.09	39.2	45.76	49.92	55.66	60.65	64.41
9.25	0.385417	24.98	33.32	39.46	46.06	50.25	56.03	61.05	64.84
9.5	0.395833	25.16	33.53	39.71	46.36	50.58	56.39	61.45	65.27
9.75	0.40625	25.33	33.75	39.95	46.64	50.89	56.74	61.83	65.68
10	0.416667	25.5	33.95	40.19	46.92	51.2	57.09	62.21	66.08
10.25	0.427083	25.67	34.16	40.43	47.2	51.5	57.43	62.58	66.47
10.5	0.4375	25.83	34.35	40.66	47.46	51.8	57.76	62.94	66.85
10.75	0.447917	25.99	34.55	40.88	47.73	52.09	58.08	63.29	67.22
11	0.458333	26.15	34.74	41.1	47.98	52.37	58.4	63.64	67.59
11.25	0.46875	26.3	34.93	41.32	48.23	52.65	58.71	63.97	67.94
11.5	0.479167	26.45	35.11	41.53	48.48	52.92	59.01	64.3	68.29
11.75	0.489583	26.6	35.29	41.74	48.72	53.18	59.31	64.62	68.63
12	0.5	26.74	35.47	41.94	48.96	53.44	59.6	64.94	68.97
12.25	0.510417	26.89	35.64	42.14	49.19	53.7	59.88	65.25	69.29
12.5	0.520833	27.03	35.81	42.34	49.41	53.94	60.16	65.55	69.61
12.75	0.53125	27.16	35.98	42.54	49.64	54.18	60.43	65.85	69.93
13	0.541667	27.3	36.15	42.73	49.85	54.42	60.69	66.14	70.23
13.25	0.552083	27.43	36.31	42.92	50.07	54.65	60.95	66.42	70.53
13.5	0.5625	27.57	36.47	43.1	50.28	54.88	61.21	66.7	70.83
13.75	0.572917	27.69	36.63	43.28	50.48	55.11	61.46	66.97	71.12
14	0.583333	27.82	36.78	43.46	50.68	55.33	61.71	67.24	71.4
14.25	0.59375	27.95	36.93	43.63	50.88	55.54	61.95	67.5	71.67
14.5	0.604167	28.07	37.08	43.8	51.08	55.75	62.19	67.76	71.95
14.75	0.614583	28.19	37.23	43.97	51.27	55.96	62.42	68.02	72.21
15	0.625	28.31	37.38	44.14	51.46	56.17	62.65	68.26	72.48
15.25	0.635417	28.43	37.52	44.3	51.65	56.37	62.87	68.51	72.73
15.5	0.645833	28.55	37.66	44.46	51.83	56.57	63.09	68.75	72.98
15.75	0.65625	28.66	37.8	44.62	52.01	56.76	63.31	68.98	73.23
16	0.666667	28.77	37.94	44.78	52.18	56.96	63.53	69.21	73.48
16.25	0.677083	28.89	38.07	44.93	52.36	57.14	63.74	69.44	73.72
16.5	0.6875	29	38.21	45.08	52.53	57.33	63.94	69.67	73.95
16.75	0.697917	29.1	38.34	45.23	52.7	57.51	64.15	69.89	74.18
17	0.708333	29.21	38.47	45.38	52.86	57.69	64.35	70.1	74.41
17.25	0.71875	29.32	38.59	45.52	53.03	57.87	64.54	70.31	74.63
17.5	0.729167	29.42	38.72	45.66	53.19	58.04	64.74	70.52	74.85
17.75	0.739583	29.53	38.85	45.8	53.35	58.22	64.93	70.73	75.07
18	0.75	29.63	38.97	45.94	53.51	58.39	65.12	70.93	75.28
18.25	0.760417	29.73	39.09	46.07	53.66	58.55	65.3	71.12	75.48
18.5	0.770833	29.83	39.21	46.2	53.81	58.71	65.47	71.32	75.68
18.75	0.78125	29.93	39.32	46.33	53.95	58.87	65.65	71.5	75.88
19	0.791667	30.02	39.44	46.46	54.1	59.03	65.82	71.69	76.08
19.25	0.802083	30.12	39.55	46.58	54.24	59.18	65.99	71.87	76.27
19.5	0.8125	30.21	39.66	46.7	54.38	59.33	66.16	72.05	76.46
19.75	0.822917	30.31	39.77	46.83	54.52	59.48	66.33	72.23	76.64
20	0.833333	30.4	39.88	46.95	54.66	59.63	66.49	72.4	76.82

20.25	0.84375	30.49	39.99	47.07	54.8	59.78	66.65	72.58	77
20.5	0.854167	30.58	40.1	47.18	54.93	59.93	66.81	72.75	77.18
20.75	0.864583	30.67	40.21	47.3	55.07	60.07	66.97	72.92	77.36
21	0.875	30.76	40.31	47.42	55.2	60.21	67.12	73.08	77.53
21.25	0.885417	30.85	40.42	47.53	55.33	60.35	67.28	73.24	77.7
21.5	0.895833	30.94	40.52	47.64	55.46	60.49	67.43	73.41	77.87
21.75	0.90625	31.03	40.62	47.75	55.59	60.63	67.58	73.57	78.04
22	0.916667	31.11	40.73	47.87	55.71	60.76	67.72	73.72	78.2
22.25	0.927083	31.2	40.83	47.98	55.84	60.9	67.87	73.88	78.36
22.5	0.9375	31.29	40.93	48.08	55.96	61.03	68.01	74.03	78.52
22.75	0.947917	31.37	41.03	48.19	56.08	61.16	68.16	74.18	78.68
23	0.958333	31.45	41.13	48.3	56.21	61.29	68.3	74.33	78.84
23.25	0.96875	31.54	41.22	48.41	56.33	61.42	68.44	74.48	78.99
23.5	0.979167	31.62	41.32	48.51	56.45	61.55	68.58	74.63	79.14
23.75	0.989583	31.7	41.42	48.61	56.56	61.68	68.71	74.77	79.29
24	1	31.78	41.51	48.72	56.68	61.8	68.85	74.91	79.44
24.25	1.010417	31.86	41.61	48.82	56.8	61.92	68.98	75.05	79.58
24.5	1.020833	31.94	41.7	48.92	56.91	62.04	69.11	75.19	79.72
24.75	1.03125	32.02	41.8	49.03	57.02	62.16	69.23	75.32	79.86
25	1.041667	32.1	41.89	49.13	57.13	62.28	69.36	75.45	80
25.25	1.052083	32.18	41.98	49.23	57.25	62.4	69.48	75.58	80.13
25.5	1.0625	32.25	42.07	49.33	57.36	62.51	69.61	75.71	80.27
25.75	1.072917	32.33	42.16	49.43	57.46	62.63	69.73	75.84	80.4
26	1.083333	32.41	42.25	49.53	57.57	62.74	69.85	75.97	80.53
26.25	1.09375	32.48	42.34	49.63	57.68	62.86	69.97	76.09	80.66
26.5	1.104167	32.56	42.43	49.73	57.79	62.97	70.09	76.22	80.79
26.75	1.114583	32.63	42.52	49.82	57.89	63.08	70.21	76.34	80.92
27	1.125	32.71	42.61	49.92	58	63.19	70.32	76.46	81.04
27.25	1.135417	32.78	42.7	50.02	58.1	63.3	70.44	76.58	81.17
27.5	1.145833	32.86	42.78	50.11	58.21	63.41	70.55	76.7	81.29
27.75	1.15625	32.93	42.87	50.21	58.31	63.52	70.67	76.82	81.41
28	1.166667	33	42.96	50.3	58.42	63.63	70.78	76.94	81.54
28.25	1.177083	33.08	43.04	50.4	58.52	63.73	70.89	77.06	81.66
28.5	1.1875	33.15	43.13	50.49	58.62	63.84	71	77.17	81.78
28.75	1.197917	33.22	43.21	50.58	58.72	63.95	71.12	77.29	81.89
29	1.208333	33.29	43.3	50.68	58.82	64.05	71.22	77.4	82.01
29.25	1.21875	33.36	43.38	50.77	58.92	64.15	71.33	77.52	82.13
29.5	1.229167	33.43	43.47	50.86	59.02	64.26	71.44	77.63	82.24
29.75	1.239583	33.5	43.55	50.95	59.12	64.36	71.55	77.74	82.36
30	1.25	33.57	43.63	51.04	59.22	64.46	71.66	77.85	82.47
30.25	1.260417	33.64	43.72	51.13	59.31	64.56	71.76	77.96	82.59
30.5	1.270833	33.71	43.8	51.22	59.41	64.67	71.87	78.07	82.7
30.75	1.28125	33.78	43.88	51.31	59.51	64.77	71.97	78.18	82.81
31	1.291667	33.85	43.96	51.4	59.6	64.87	72.08	78.29	82.92
31.25	1.302083	33.92	44.04	51.49	59.7	64.96	72.18	78.39	83.03
31.5	1.3125	33.99	44.12	51.58	59.79	65.06	72.28	78.5	83.14
31.75	1.322917	34.06	44.21	51.67	59.89	65.16	72.38	78.6	83.24

32	1.333333	34.12	44.29	51.76	59.98	65.26	72.48	78.71	83.35
32.25	1.34375	34.19	44.36	51.85	60.07	65.36	72.59	78.81	83.46
32.5	1.354167	34.26	44.44	51.93	60.17	65.45	72.69	78.92	83.56
32.75	1.364583	34.33	44.52	52.02	60.26	65.55	72.78	79.02	83.67
33	1.375	34.39	44.6	52.11	60.35	65.64	72.88	79.12	83.77
33.25	1.385417	34.46	44.68	52.19	60.44	65.74	72.98	79.22	83.88
33.5	1.395833	34.52	44.76	52.28	60.53	65.83	73.08	79.32	83.98
33.75	1.40625	34.59	44.84	52.36	60.62	65.93	73.18	79.42	84.08
34	1.416667	34.66	44.91	52.45	60.71	66.02	73.27	79.52	84.18
34.25	1.427083	34.72	44.99	52.53	60.8	66.11	73.37	79.62	84.28
34.5	1.4375	34.79	45.07	52.62	60.89	66.21	73.46	79.72	84.38
34.75	1.447917	34.85	45.15	52.7	60.98	66.3	73.56	79.82	84.48
35	1.458333	34.92	45.22	52.78	61.07	66.39	73.65	79.91	84.58
35.25	1.46875	34.98	45.3	52.87	61.16	66.48	73.75	80.01	84.68
35.5	1.479167	35.04	45.37	52.95	61.25	66.57	73.84	80.1	84.78
35.75	1.489583	35.11	45.45	53.03	61.33	66.66	73.93	80.2	84.87
36	1.5	35.17	45.52	53.12	61.42	66.75	74.03	80.29	84.97
36.25	1.510417	35.24	45.6	53.2	61.51	66.84	74.12	80.39	85.06
36.5	1.520833	35.3	45.67	53.28	61.59	66.93	74.21	80.48	85.16
36.75	1.53125	35.36	45.75	53.36	61.68	67.02	74.3	80.58	85.25
37	1.541667	35.42	45.82	53.44	61.77	67.11	74.39	80.67	85.35
37.25	1.552083	35.49	45.9	53.52	61.85	67.19	74.48	80.76	85.44
37.5	1.5625	35.55	45.97	53.6	61.94	67.28	74.57	80.85	85.54
37.75	1.572917	35.61	46.04	53.68	62.02	67.37	74.66	80.94	85.63
38	1.583333	35.67	46.12	53.76	62.11	67.45	74.75	81.03	85.72
38.25	1.59375	35.74	46.19	53.84	62.19	67.54	74.84	81.12	85.81
38.5	1.604167	35.8	46.26	53.92	62.27	67.63	74.93	81.21	85.9
38.75	1.614583	35.86	46.34	54	62.36	67.71	75.01	81.3	85.99
39	1.625	35.92	46.41	54.08	62.44	67.8	75.1	81.39	86.08
39.25	1.635417	35.98	46.48	54.16	62.52	67.88	75.19	81.48	86.17
39.5	1.645833	36.04	46.55	54.24	62.6	67.97	75.27	81.57	86.26
39.75	1.65625	36.1	46.62	54.32	62.69	68.05	75.36	81.65	86.35
40	1.666667	36.16	46.7	54.4	62.77	68.14	75.44	81.74	86.44
40.25	1.677083	36.22	46.77	54.48	62.85	68.22	75.53	81.83	86.52
40.5	1.6875	36.28	46.84	54.55	62.93	68.3	75.61	81.91	86.61
40.75	1.697917	36.34	46.91	54.63	63.01	68.39	75.7	82	86.7
41	1.708333	36.4	46.98	54.71	63.09	68.47	75.78	82.09	86.79
41.25	1.71875	36.46	47.05	54.78	63.17	68.55	75.87	82.17	86.87
41.5	1.729167	36.52	47.12	54.86	63.25	68.63	75.95	82.26	86.96
41.75	1.739583	36.58	47.19	54.94	63.33	68.71	76.03	82.34	87.04
42	1.75	36.64	47.26	55.01	63.41	68.8	76.12	82.42	87.13
42.25	1.760417	36.7	47.33	55.09	63.49	68.88	76.2	82.51	87.21
42.5	1.770833	36.76	47.4	55.17	63.57	68.96	76.28	82.59	87.29
42.75	1.78125	36.82	47.47	55.24	63.65	69.04	76.36	82.67	87.38
43	1.791667	36.87	47.54	55.32	63.73	69.12	76.44	82.75	87.46
43.25	1.802083	36.93	47.61	55.39	63.81	69.2	76.52	82.84	87.54
43.5	1.8125	36.99	47.68	55.47	63.88	69.28	76.61	82.92	87.63

43.75	1.822917	37.05	47.74	55.54	63.96	69.36	76.69	83	87.71
44	1.833333	37.11	47.81	55.62	64.04	69.44	76.77	83.08	87.79
44.25	1.84375	37.16	47.88	55.69	64.12	69.52	76.85	83.16	87.87
44.5	1.854167	37.22	47.95	55.77	64.19	69.59	76.92	83.24	87.95
44.75	1.864583	37.28	48.02	55.84	64.27	69.67	77	83.32	88.03
45	1.875	37.34	48.08	55.91	64.35	69.75	77.08	83.4	88.11
45.25	1.885417	37.39	48.15	55.99	64.42	69.83	77.16	83.48	88.19
45.5	1.895833	37.45	48.22	56.06	64.5	69.91	77.24	83.56	88.27
45.75	1.90625	37.51	48.29	56.13	64.58	69.98	77.32	83.64	88.35
46	1.916667	37.57	48.35	56.21	64.65	70.06	77.4	83.72	88.43
46.25	1.927083	37.62	48.42	56.28	64.73	70.14	77.47	83.79	88.51
46.5	1.9375	37.68	48.49	56.35	64.8	70.21	77.55	83.87	88.58
46.75	1.947917	37.73	48.55	56.43	64.88	70.29	77.63	83.95	88.66
47	1.958333	37.79	48.62	56.5	64.95	70.37	77.7	84.03	88.74
47.25	1.96875	37.85	48.69	56.57	65.03	70.44	77.78	84.1	88.82
47.5	1.979167	37.9	48.75	56.64	65.1	70.52	77.86	84.18	88.89
47.75	1.989583	37.96	48.82	56.72	65.18	70.59	77.93	84.26	88.97
48	2	38.02	48.89	56.79	65.25	70.67	78.01	84.33	89.05
48.25	2.010417	38.07	48.95	56.86	65.33	70.74	78.08	84.41	89.12
48.5	2.020833	38.13	49.02	56.93	65.4	70.82	78.16	84.48	89.19
48.75	2.03125	38.19	49.09	57	65.47	70.89	78.23	84.55	89.26
49	2.041667	38.24	49.15	57.07	65.55	70.97	78.31	84.63	89.34
49.25	2.052083	38.3	49.22	57.14	65.62	71.04	78.38	84.7	89.41
49.5	2.0625	38.35	49.28	57.21	65.69	71.11	78.45	84.77	89.48
49.75	2.072917	38.41	49.35	57.29	65.77	71.19	78.53	84.84	89.55
50	2.083333	38.47	49.42	57.36	65.84	71.26	78.6	84.92	89.62
50.25	2.09375	38.52	49.48	57.43	65.91	71.33	78.67	84.99	89.69
50.5	2.104167	38.58	49.55	57.5	65.99	71.41	78.75	85.06	89.76
50.75	2.114583	38.63	49.61	57.57	66.06	71.48	78.82	85.13	89.83
51	2.125	38.69	49.68	57.64	66.13	71.55	78.89	85.2	89.91
51.25	2.135417	38.74	49.74	57.71	66.2	71.63	78.96	85.27	89.98
51.5	2.145833	38.8	49.81	57.78	66.27	71.7	79.04	85.35	90.05
51.75	2.15625	38.86	49.87	57.85	66.35	71.77	79.11	85.42	90.12
52	2.166667	38.91	49.94	57.92	66.42	71.84	79.18	85.49	90.19
52.25	2.177083	38.97	50	57.99	66.49	71.92	79.25	85.56	90.25
52.5	2.1875	39.02	50.07	58.06	66.56	71.99	79.32	85.63	90.32
52.75	2.197917	39.08	50.13	58.13	66.63	72.06	79.39	85.7	90.39
53	2.208333	39.13	50.2	58.19	66.7	72.13	79.47	85.77	90.46
53.25	2.21875	39.19	50.26	58.26	66.77	72.2	79.54	85.84	90.53
53.5	2.229167	39.24	50.33	58.33	66.85	72.27	79.61	85.91	90.6
53.75	2.239583	39.29	50.39	58.4	66.92	72.34	79.68	85.98	90.67
54	2.25	39.35	50.45	58.47	66.99	72.42	79.75	86.05	90.74
54.25	2.260417	39.4	50.52	58.54	67.06	72.49	79.82	86.12	90.8
54.5	2.270833	39.46	50.58	58.61	67.13	72.56	79.89	86.19	90.87
54.75	2.28125	39.51	50.65	58.67	67.2	72.63	79.96	86.25	90.94
55	2.291667	39.57	50.71	58.74	67.27	72.7	80.03	86.32	91.01
55.25	2.302083	39.62	50.77	58.81	67.34	72.77	80.1	86.39	91.07

55.5	2.3125	39.67	50.84	58.88	67.41	72.84	80.17	86.46	91.14
55.75	2.322917	39.73	50.9	58.95	67.48	72.91	80.24	86.53	91.21
56	2.333333	39.78	50.96	59.01	67.55	72.98	80.31	86.6	91.28
56.25	2.34375	39.84	51.03	59.08	67.62	73.05	80.38	86.66	91.34
56.5	2.354167	39.89	51.09	59.15	67.69	73.12	80.45	86.73	91.41
56.75	2.364583	39.94	51.15	59.22	67.76	73.19	80.51	86.8	91.48
57	2.375	40	51.21	59.28	67.83	73.26	80.58	86.87	91.54
57.25	2.385417	40.05	51.28	59.35	67.89	73.33	80.65	86.93	91.61
57.5	2.395833	40.1	51.34	59.42	67.96	73.4	80.72	87	91.67
57.75	2.40625	40.16	51.4	59.49	68.03	73.46	80.79	87.07	91.74
58	2.416667	40.21	51.47	59.55	68.1	73.53	80.86	87.14	91.81
58.25	2.427083	40.26	51.53	59.62	68.17	73.6	80.93	87.2	91.87
58.5	2.4375	40.32	51.59	59.69	68.24	73.67	80.99	87.27	91.94
58.75	2.447917	40.37	51.65	59.75	68.31	73.74	81.06	87.34	92
59	2.458333	40.42	51.71	59.82	68.38	73.81	81.13	87.4	92.07
59.25	2.46875	40.48	51.78	59.89	68.44	73.88	81.2	87.47	92.13
59.5	2.479167	40.53	51.84	59.95	68.51	73.94	81.26	87.53	92.2
59.75	2.489583	40.58	51.9	60.02	68.58	74.01	81.33	87.6	92.26
60	2.5	40.63	51.96	60.08	68.65	74.08	81.4	87.67	92.33
60.25	2.510417	40.69	52.02	60.15	68.72	74.15	81.47	87.73	92.39
60.5	2.520833	40.74	52.09	60.22	68.78	74.22	81.53	87.8	92.46
60.75	2.53125	40.79	52.15	60.28	68.85	74.28	81.6	87.86	92.52
61	2.541667	40.84	52.21	60.35	68.92	74.35	81.67	87.93	92.58
61.25	2.552083	40.9	52.27	60.41	68.99	74.42	81.73	87.99	92.65
61.5	2.5625	40.95	52.33	60.48	69.05	74.49	81.8	88.06	92.71
61.75	2.572917	41	52.39	60.55	69.12	74.55	81.87	88.12	92.78
62	2.583333	41.05	52.45	60.61	69.19	74.62	81.93	88.19	92.84
62.25	2.59375	41.1	52.51	60.68	69.25	74.69	82	88.25	92.9
62.5	2.604167	41.16	52.58	60.74	69.32	74.76	82.07	88.32	92.97
62.75	2.614583	41.21	52.64	60.81	69.39	74.82	82.13	88.38	93.03
63	2.625	41.26	52.7	60.87	69.46	74.89	82.2	88.45	93.09
63.25	2.635417	41.31	52.76	60.94	69.52	74.96	82.27	88.51	93.16
63.5	2.645833	41.36	52.82	61	69.59	75.02	82.33	88.58	93.22
63.75	2.65625	41.42	52.88	61.07	69.66	75.09	82.4	88.64	93.28
64	2.666667	41.47	52.94	61.13	69.72	75.16	82.46	88.71	93.34
64.25	2.677083	41.52	53	61.2	69.79	75.22	82.53	88.77	93.41
64.5	2.6875	41.57	53.06	61.26	69.85	75.29	82.59	88.83	93.47
64.75	2.697917	41.62	53.12	61.33	69.92	75.35	82.66	88.9	93.53
65	2.708333	41.67	53.18	61.39	69.99	75.42	82.72	88.96	93.59
65.25	2.71875	41.72	53.24	61.45	70.05	75.49	82.79	89.02	93.66
65.5	2.729167	41.78	53.3	61.52	70.12	75.55	82.85	89.09	93.72
65.75	2.739583	41.83	53.36	61.58	70.19	75.62	82.92	89.15	93.78
66	2.75	41.88	53.42	61.65	70.25	75.68	82.98	89.21	93.84
66.25	2.760417	41.93	53.48	61.71	70.32	75.75	83.05	89.28	93.9
66.5	2.770833	41.98	53.54	61.77	70.38	75.82	83.11	89.34	93.97
66.75	2.78125	42.03	53.6	61.84	70.45	75.88	83.18	89.4	94.03
67	2.791667	42.08	53.66	61.9	70.51	75.95	83.24	89.47	94.09

67.25	2.802083	42.13	53.72	61.97	70.58	76.01	83.31	89.53	94.15
67.5	2.8125	42.18	53.78	62.03	70.64	76.08	83.37	89.59	94.21
67.75	2.822917	42.23	53.84	62.09	70.71	76.14	83.44	89.66	94.27
68	2.833333	42.28	53.9	62.16	70.77	76.21	83.5	89.72	94.33
68.25	2.84375	42.34	53.96	62.22	70.84	76.27	83.56	89.78	94.4
68.5	2.854167	42.39	54.02	62.28	70.9	76.34	83.63	89.84	94.46
68.75	2.864583	42.44	54.08	62.35	70.97	76.4	83.69	89.91	94.52
69	2.875	42.49	54.14	62.41	71.03	76.47	83.76	89.97	94.58
69.25	2.885417	42.54	54.2	62.47	71.1	76.53	83.82	90.03	94.64
69.5	2.895833	42.59	54.26	62.54	71.16	76.6	83.88	90.09	94.7
69.75	2.90625	42.64	54.32	62.6	71.23	76.66	83.95	90.15	94.76
70	2.916667	42.69	54.37	62.66	71.29	76.73	84.01	90.22	94.82
70.25	2.927083	42.74	54.43	62.73	71.36	76.79	84.08	90.28	94.88
70.5	2.9375	42.79	54.49	62.79	71.42	76.85	84.14	90.34	94.94
70.75	2.947917	42.84	54.55	62.85	71.49	76.92	84.2	90.4	95
71	2.958333	42.89	54.61	62.92	71.55	76.98	84.27	90.46	95.06
71.25	2.96875	42.94	54.67	62.98	71.62	77.05	84.33	90.52	95.12
71.5	2.979167	42.99	54.73	63.04	71.68	77.11	84.39	90.59	95.18
71.75	2.989583	43.04	54.79	63.1	71.74	77.18	84.46	90.65	95.24
72	3	43.09	54.85	63.17	71.81	77.24	84.52	90.71	95.3
72.25	3.010417	43.14	54.9	63.23	71.87	77.3	84.58	90.77	95.36
72.5	3.020833	43.19	54.96	63.29	71.94	77.37	84.64	90.83	95.42
72.75	3.03125	43.24	55.02	63.35	72	77.43	84.71	90.89	95.48
73	3.041667	43.29	55.08	63.42	72.06	77.5	84.77	90.95	95.54
73.25	3.052083	43.34	55.14	63.48	72.13	77.56	84.83	91.02	95.6
73.5	3.0625	43.39	55.2	63.54	72.19	77.62	84.9	91.08	95.66
73.75	3.072917	43.44	55.25	63.6	72.26	77.69	84.96	91.14	95.72
74	3.083333	43.49	55.31	63.67	72.32	77.75	85.02	91.2	95.78
74.25	3.09375	43.54	55.37	63.73	72.38	77.81	85.08	91.26	95.84
74.5	3.104167	43.59	55.43	63.79	72.45	77.88	85.15	91.32	95.9
74.75	3.114583	43.64	55.49	63.85	72.51	77.94	85.21	91.38	95.96
75	3.125	43.69	55.54	63.91	72.57	78	85.27	91.44	96.02
75.25	3.135417	43.73	55.6	63.97	72.64	78.07	85.33	91.5	96.07
75.5	3.145833	43.78	55.66	64.04	72.7	78.13	85.4	91.56	96.13
75.75	3.15625	43.83	55.72	64.1	72.76	78.19	85.46	91.62	96.19
76	3.166667	43.88	55.78	64.16	72.83	78.26	85.52	91.68	96.25
76.25	3.177083	43.93	55.83	64.22	72.89	78.32	85.58	91.74	96.31
76.5	3.1875	43.98	55.89	64.28	72.95	78.38	85.64	91.8	96.37
76.75	3.197917	44.03	55.95	64.35	73.02	78.44	85.71	91.86	96.43
77	3.208333	44.08	56.01	64.41	73.08	78.51	85.77	91.92	96.49
77.25	3.21875	44.13	56.06	64.47	73.14	78.57	85.83	91.98	96.54
77.5	3.229167	44.18	56.12	64.53	73.21	78.63	85.89	92.04	96.6
77.75	3.239583	44.23	56.18	64.59	73.27	78.7	85.95	92.1	96.66
78	3.25	44.28	56.24	64.65	73.33	78.76	86.01	92.16	96.72
78.25	3.260417	44.32	56.29	64.71	73.39	78.82	86.08	92.22	96.78
78.5	3.270833	44.37	56.35	64.77	73.46	78.88	86.14	92.28	96.84
78.75	3.28125	44.42	56.41	64.84	73.52	78.95	86.2	92.34	96.89

79	3.291667	44.47	56.46	64.9	73.58	79.01	86.26	92.4	96.95
79.25	3.302083	44.52	56.52	64.96	73.65	79.07	86.32	92.46	97.01
79.5	3.3125	44.57	56.58	65.02	73.71	79.13	86.38	92.52	97.07
79.75	3.322917	44.62	56.64	65.08	73.77	79.2	86.44	92.58	97.13
80	3.333333	44.67	56.69	65.14	73.83	79.26	86.51	92.64	97.19
80.25	3.34375	44.71	56.75	65.2	73.9	79.32	86.57	92.7	97.24
80.5	3.354167	44.76	56.81	65.26	73.96	79.38	86.63	92.76	97.3
80.75	3.364583	44.81	56.86	65.32	74.02	79.45	86.69	92.82	97.36
81	3.375	44.86	56.92	65.38	74.08	79.51	86.75	92.88	97.42
81.25	3.385417	44.91	56.98	65.45	74.14	79.57	86.81	92.94	97.47
81.5	3.395833	44.96	57.03	65.51	74.21	79.63	86.87	93	97.53
81.75	3.40625	45	57.09	65.57	74.27	79.69	86.93	93.06	97.59
82	3.416667	45.05	57.15	65.63	74.33	79.76	86.99	93.12	97.65
82.25	3.427083	45.1	57.21	65.69	74.39	79.82	87.06	93.17	97.7
82.5	3.4375	45.15	57.26	65.75	74.46	79.88	87.12	93.23	97.76
82.75	3.447917	45.2	57.32	65.81	74.52	79.94	87.18	93.29	97.82
83	3.458333	45.25	57.38	65.87	74.58	80	87.24	93.35	97.88
83.25	3.46875	45.29	57.43	65.93	74.64	80.06	87.3	93.41	97.93
83.5	3.479167	45.34	57.49	65.99	74.7	80.13	87.36	93.47	97.99
83.75	3.489583	45.39	57.54	66.05	74.77	80.19	87.42	93.53	98.05
84	3.5	45.44	57.6	66.11	74.83	80.25	87.48	93.59	98.11
84.25	3.510417	45.49	57.66	66.17	74.89	80.31	87.54	93.65	98.16
84.5	3.520833	45.54	57.71	66.23	74.95	80.37	87.6	93.71	98.22
84.75	3.53125	45.58	57.77	66.29	75.01	80.43	87.66	93.76	98.28
85	3.541667	45.63	57.83	66.35	75.07	80.5	87.72	93.82	98.34
85.25	3.552083	45.68	57.88	66.41	75.14	80.56	87.78	93.88	98.39
85.5	3.5625	45.73	57.94	66.47	75.2	80.62	87.84	93.94	98.45
85.75	3.572917	45.77	58	66.53	75.26	80.68	87.9	94	98.51
86	3.583333	45.82	58.05	66.59	75.32	80.74	87.96	94.06	98.56
86.25	3.59375	45.87	58.11	66.65	75.38	80.8	88.02	94.12	98.62
86.5	3.604167	45.92	58.16	66.71	75.44	80.86	88.09	94.17	98.68
86.75	3.614583	45.97	58.22	66.77	75.51	80.93	88.15	94.23	98.73
87	3.625	46.01	58.28	66.83	75.57	80.99	88.21	94.29	98.79
87.25	3.635417	46.06	58.33	66.89	75.63	81.05	88.27	94.35	98.85
87.5	3.645833	46.11	58.39	66.95	75.69	81.11	88.33	94.41	98.9
87.75	3.65625	46.16	58.44	67.01	75.75	81.17	88.39	94.47	98.96
88	3.666667	46.2	58.5	67.07	75.81	81.23	88.45	94.52	99.02
88.25	3.677083	46.25	58.56	67.13	75.87	81.29	88.51	94.58	99.07
88.5	3.6875	46.3	58.61	67.19	75.93	81.35	88.57	94.64	99.13
88.75	3.697917	46.35	58.67	67.25	76	81.41	88.63	94.7	99.19
89	3.708333	46.4	58.72	67.31	76.06	81.48	88.69	94.76	99.24
89.25	3.71875	46.44	58.78	67.37	76.12	81.54	88.75	94.82	99.3
89.5	3.729167	46.49	58.83	67.43	76.18	81.6	88.81	94.87	99.36
89.75	3.739583	46.54	58.89	67.49	76.24	81.66	88.87	94.93	99.41
90	3.75	46.59	58.95	67.55	76.3	81.72	88.93	94.99	99.47
90.25	3.760417	46.63	59	67.61	76.36	81.78	88.99	95.05	99.53
90.5	3.770833	46.68	59.06	67.67	76.42	81.84	89.05	95.11	99.58

90.75	3.78125	46.73	59.11	67.73	76.48	81.9	89.11	95.16	99.64
91	3.791667	46.77	59.17	67.79	76.55	81.96	89.17	95.22	99.7
91.25	3.802083	46.82	59.22	67.85	76.61	82.02	89.23	95.28	99.75
91.5	3.8125	46.87	59.28	67.9	76.67	82.08	89.29	95.34	99.81
91.75	3.822917	46.92	59.33	67.96	76.73	82.15	89.34	95.4	99.87
92	3.833333	46.96	59.39	68.02	76.79	82.21	89.4	95.45	99.92
92.25	3.84375	47.01	59.44	68.08	76.85	82.27	89.46	95.51	99.98
92.5	3.854167	47.06	59.5	68.14	76.91	82.33	89.52	95.57	100.04
92.75	3.864583	47.11	59.56	68.2	76.97	82.39	89.58	95.63	100.09
93	3.875	47.15	59.61	68.26	77.03	82.45	89.64	95.69	100.15
93.25	3.885417	47.2	59.67	68.32	77.09	82.51	89.7	95.74	100.2
93.5	3.895833	47.25	59.72	68.38	77.15	82.57	89.76	95.8	100.26
93.75	3.90625	47.29	59.78	68.44	77.21	82.63	89.82	95.86	100.32
94	3.916667	47.34	59.83	68.5	77.28	82.69	89.88	95.92	100.37
94.25	3.927083	47.39	59.89	68.56	77.34	82.75	89.94	95.97	100.43
94.5	3.9375	47.43	59.94	68.61	77.4	82.81	90	96.03	100.48
94.75	3.947917	47.48	60	68.67	77.46	82.87	90.06	96.09	100.54
95	3.958333	47.53	60.05	68.73	77.52	82.93	90.12	96.15	100.6
95.25	3.96875	47.58	60.11	68.79	77.58	82.99	90.18	96.21	100.65
95.5	3.979167	47.62	60.16	68.85	77.64	83.05	90.24	96.26	100.71
95.75	3.989583	47.67	60.22	68.91	77.7	83.11	90.3	96.32	100.77
96	4	47.72	60.27	68.97	77.76	83.17	90.36	96.38	100.82

150 year ra	200 year ra	500 year ra	1000 year r	10000 year rainfall (mm)
24.23	25.57	30.18	34.15	50.27
32.07	33.89	40.26	45.83	68.63
36.88	39	46.46	53.02	79.88
40.35	42.69	50.98	58.21	88.04
42.68	45.16	54.02	61.69	92.73
44.55	47.15	56.47	64.48	96.27
46.16	48.86	58.55	66.86	99.17
47.59	50.38	60.4	68.95	101.66
49.01	51.89	62.24	71.01	104.17
50.33	53.3	63.93	72.91	106.45
51.56	54.61	65.51	74.67	108.55
52.72	55.85	66.99	76.32	110.49
53.82	57.03	68.39	77.86	112.3
54.87	58.14	69.71	79.31	114
55.86	59.2	70.96	80.68	115.59
56.81	60.21	72.15	81.98	117.1
57.73	61.19	73.28	83.21	118.52
58.61	62.12	74.37	84.38	119.87
59.46	63.02	75.4	85.5	121.16
60.27	63.88	76.39	86.56	122.37
61.05	64.7	77.33	87.58	123.54
61.8	65.49	78.24	88.56	124.64
62.52	66.26	79.12	89.49	125.71
63.22	67	79.96	90.39	126.72
63.89	67.71	80.78	91.27	127.69
64.54	68.39	81.57	92.12	128.62
65.17	69.06	82.33	92.93	129.52
65.77	69.7	83.07	93.72	130.38
66.36	70.32	83.78	94.48	131.21
66.93	70.92	84.46	95.21	132
67.48	71.5	85.13	95.92	132.78
68.01	72.06	85.77	96.6	133.52
68.53	72.61	86.39	97.26	134.24

69.04	73.14	86.99	97.9	134.94
69.53	73.65	87.58	98.52	135.61
70	74.15	88.15	99.13	136.27
70.47	74.64	88.7	99.71	136.9
70.92	75.12	89.24	100.28	137.52
71.36	75.58	89.76	100.83	138.12
71.79	76.03	90.27	101.37	138.7
72.21	76.47	90.76	101.89	139.27
72.62	76.9	91.24	102.4	139.82
73.02	77.32	91.71	102.9	140.36
73.41	77.73	92.17	103.38	140.88
73.8	78.13	92.61	103.85	141.4
74.17	78.52	93.05	104.31	141.89
74.54	78.9	93.47	104.76	142.38
74.89	79.28	93.89	105.19	142.86
75.24	79.64	94.28	105.61	143.32
75.58	80	94.67	106.02	143.77
75.92	80.35	95.05	106.42	144.22
76.25	80.69	95.42	106.81	144.65
76.57	81.02	95.79	107.19	145.07
76.88	81.35	96.14	107.56	145.49
77.19	81.67	96.49	107.92	145.89
77.49	81.98	96.83	108.28	146.29
77.79	82.29	97.16	108.63	146.68
78.08	82.59	97.49	108.97	147.06
78.36	82.89	97.81	109.3	147.44
78.64	83.18	98.12	109.63	147.8
78.91	83.46	98.43	109.95	148.16
79.18	83.74	98.73	110.27	148.51
79.45	84.02	99.03	110.58	148.86
79.71	84.28	99.32	110.88	149.2
79.96	84.55	99.6	111.18	149.53
80.21	84.81	99.88	111.47	149.86
80.46	85.06	100.16	111.76	150.18
80.7	85.31	100.42	112.04	150.5
80.94	85.56	100.69	112.32	150.81
81.17	85.8	100.95	112.59	151.12
81.4	86.04	101.21	112.85	151.42
81.63	86.28	101.46	113.12	151.71
81.85	86.5	101.7	113.37	152
82.06	86.73	101.94	113.63	152.29
82.27	86.95	102.18	113.88	152.57
82.48	87.16	102.42	114.12	152.84
82.69	87.37	102.65	114.36	153.11
82.89	87.58	102.87	114.6	153.38
83.09	87.79	103.09	114.83	153.64
83.28	87.99	103.31	115.06	153.9

83.48	88.19	103.53	115.29	154.15
83.67	88.39	103.74	115.51	154.4
83.85	88.58	103.95	115.73	154.65
84.04	88.77	104.16	115.94	154.89
84.22	88.96	104.36	116.16	155.13
84.4	89.15	104.56	116.37	155.37
84.58	89.33	104.76	116.57	155.6
84.75	89.51	104.95	116.78	155.83
84.92	89.69	105.14	116.98	156.06
85.09	89.86	105.33	117.17	156.28
85.26	90.04	105.52	117.37	156.5
85.43	90.21	105.7	117.56	156.72
85.59	90.38	105.89	117.75	156.93
85.75	90.54	106.06	117.94	157.14
85.91	90.71	106.24	118.12	157.35
86.07	90.87	106.42	118.31	157.55
86.22	91.02	106.58	118.48	157.75
86.36	91.17	106.75	118.66	157.94
86.51	91.32	106.91	118.83	158.13
86.65	91.47	107.07	119	158.32
86.79	91.61	107.23	119.16	158.51
86.93	91.76	107.38	119.33	158.69
87.07	91.9	107.54	119.49	158.88
87.2	92.04	107.69	119.65	159.06
87.34	92.18	107.84	119.81	159.23
87.47	92.31	107.99	119.97	159.41
87.6	92.45	108.14	120.12	159.58
87.74	92.58	108.28	120.28	159.75
87.87	92.72	108.43	120.43	159.92
87.99	92.85	108.57	120.58	160.09
88.12	92.98	108.71	120.73	160.26
88.25	93.11	108.85	120.87	160.42
88.37	93.23	108.99	121.02	160.58
88.49	93.36	109.13	121.16	160.74
88.62	93.49	109.26	121.3	160.9
88.74	93.61	109.4	121.44	161.06
88.86	93.73	109.53	121.58	161.21
88.98	93.85	109.66	121.72	161.37
89.09	93.98	109.79	121.86	161.52
89.21	94.09	109.92	121.99	161.67
89.33	94.21	110.05	122.13	161.82
89.44	94.33	110.18	122.26	161.97
89.56	94.45	110.3	122.39	162.11
89.67	94.56	110.42	122.52	162.26
89.78	94.68	110.55	122.65	162.4
89.89	94.79	110.67	122.78	162.54
90	94.9	110.79	122.9	162.68

90.11	95.01	110.91	123.03	162.82
90.22	95.12	111.03	123.15	162.96
90.33	95.23	111.15	123.28	163.09
90.44	95.34	111.26	123.4	163.23
90.54	95.45	111.38	123.52	163.36
90.65	95.56	111.49	123.64	163.5
90.75	95.67	111.61	123.76	163.63
90.86	95.77	111.72	123.88	163.76
90.96	95.88	111.83	123.99	163.89
91.06	95.98	111.94	124.11	164.02
91.16	96.08	112.05	124.22	164.14
91.26	96.19	112.16	124.34	164.27
91.36	96.29	112.27	124.45	164.39
91.46	96.39	112.38	124.56	164.52
91.56	96.49	112.49	124.67	164.64
91.66	96.59	112.59	124.78	164.76
91.76	96.69	112.7	124.89	164.88
91.86	96.79	112.8	125	165
91.95	96.88	112.91	125.11	165.12
92.05	96.98	113.01	125.22	165.24
92.14	97.08	113.11	125.32	165.36
92.24	97.17	113.21	125.43	165.47
92.33	97.27	113.31	125.53	165.59
92.43	97.36	113.41	125.63	165.7
92.52	97.46	113.51	125.74	165.82
92.61	97.55	113.61	125.84	165.93
92.7	97.64	113.71	125.94	166.04
92.79	97.73	113.81	126.04	166.15
92.88	97.83	113.9	126.14	166.26
92.97	97.92	114	126.24	166.37
93.06	98.01	114.09	126.34	166.48
93.15	98.1	114.19	126.44	166.59
93.24	98.19	114.28	126.53	166.69
93.33	98.28	114.38	126.63	166.8
93.42	98.36	114.47	126.72	166.91
93.5	98.45	114.56	126.82	167.01
93.59	98.54	114.65	126.91	167.11
93.68	98.63	114.74	127.01	167.22
93.76	98.71	114.83	127.1	167.32
93.85	98.8	114.92	127.19	167.42
93.93	98.88	115.01	127.28	167.52
94.02	98.97	115.1	127.38	167.62
94.1	99.05	115.19	127.47	167.72
94.19	99.14	115.28	127.56	167.82
94.27	99.22	115.36	127.65	167.92
94.35	99.3	115.45	127.74	168.02
94.43	99.39	115.54	127.82	168.12

94.52	99.47	115.62	127.91	168.21
94.6	99.55	115.71	128	168.31
94.68	99.63	115.79	128.09	168.4
94.76	99.71	115.88	128.17	168.5
94.84	99.8	115.96	128.26	168.59
94.92	99.88	116.04	128.34	168.69
95	99.96	116.12	128.43	168.78
95.08	100.03	116.21	128.51	168.87
95.16	100.11	116.29	128.59	168.96
95.23	100.19	116.37	128.68	169.05
95.31	100.27	116.45	128.76	169.14
95.39	100.35	116.53	128.84	169.23
95.47	100.43	116.61	128.92	169.32
95.54	100.5	116.69	129	169.41
95.62	100.58	116.77	129.09	169.5
95.7	100.66	116.85	129.17	169.59
95.77	100.73	116.93	129.25	169.68
95.85	100.81	117	129.32	169.76
95.92	100.88	117.07	129.4	169.84
95.99	100.95	117.15	129.47	169.92
96.06	101.02	117.21	129.53	170
96.14	101.09	117.28	129.6	170.07
96.21	101.16	117.35	129.67	170.15
96.28	101.23	117.42	129.74	170.23
96.35	101.3	117.49	129.81	170.3
96.42	101.37	117.56	129.88	170.38
96.49	101.44	117.63	129.95	170.46
96.56	101.51	117.7	130.01	170.53
96.63	101.58	117.76	130.08	170.61
96.7	101.65	117.83	130.15	170.68
96.77	101.72	117.9	130.21	170.75
96.83	101.79	117.97	130.28	170.83
96.9	101.85	118.03	130.35	170.9
96.97	101.92	118.1	130.41	170.97
97.04	101.99	118.17	130.48	171.05
97.11	102.06	118.23	130.54	171.12
97.18	102.12	118.3	130.61	171.19
97.24	102.19	118.36	130.67	171.26
97.31	102.26	118.43	130.74	171.34
97.38	102.32	118.49	130.8	171.41
97.45	102.39	118.56	130.87	171.48
97.51	102.46	118.62	130.93	171.55
97.58	102.52	118.69	131	171.62
97.65	102.59	118.75	131.06	171.69
97.71	102.65	118.81	131.12	171.76
97.78	102.72	118.88	131.19	171.83
97.84	102.78	118.94	131.25	171.9

97.91	102.85	119.01	131.31	171.97
97.98	102.91	119.07	131.37	172.04
98.04	102.98	119.13	131.44	172.11
98.11	103.04	119.19	131.5	172.17
98.17	103.11	119.26	131.56	172.24
98.24	103.17	119.32	131.62	172.31
98.3	103.24	119.38	131.68	172.38
98.37	103.3	119.44	131.74	172.45
98.43	103.36	119.5	131.8	172.51
98.5	103.43	119.57	131.87	172.58
98.56	103.49	119.63	131.93	172.65
98.62	103.55	119.69	131.99	172.71
98.69	103.62	119.75	132.05	172.78
98.75	103.68	119.81	132.11	172.85
98.82	103.74	119.87	132.17	172.91
98.88	103.81	119.93	132.23	172.98
98.94	103.87	119.99	132.29	173.04
99.01	103.93	120.05	132.35	173.11
99.07	103.99	120.11	132.4	173.17
99.13	104.06	120.17	132.46	173.24
99.19	104.12	120.23	132.52	173.3
99.26	104.18	120.29	132.58	173.37
99.32	104.24	120.35	132.64	173.43
99.38	104.3	120.41	132.7	173.5
99.45	104.36	120.47	132.76	173.56
99.51	104.43	120.53	132.81	173.62
99.57	104.49	120.59	132.87	173.69
99.63	104.55	120.65	132.93	173.75
99.69	104.61	120.71	132.99	173.81
99.75	104.67	120.76	133.05	173.88
99.82	104.73	120.82	133.1	173.94
99.88	104.79	120.88	133.16	174
99.94	104.85	120.94	133.22	174.06
100	104.91	121	133.27	174.13
100.06	104.97	121.05	133.33	174.19
100.12	105.03	121.11	133.39	174.25
100.18	105.09	121.17	133.44	174.31
100.24	105.15	121.23	133.5	174.37
100.31	105.21	121.28	133.56	174.43
100.37	105.27	121.34	133.61	174.5
100.43	105.33	121.4	133.67	174.56
100.49	105.39	121.46	133.72	174.62
100.55	105.45	121.51	133.78	174.68
100.61	105.51	121.57	133.83	174.74
100.67	105.57	121.63	133.89	174.8
100.73	105.63	121.68	133.95	174.86
100.79	105.69	121.74	134	174.92

100.85	105.74	121.79	134.06	174.98
100.91	105.8	121.85	134.11	175.04
100.97	105.86	121.91	134.17	175.1
101.03	105.92	121.96	134.22	175.16
101.09	105.98	122.02	134.27	175.22
101.15	106.04	122.07	134.33	175.28
101.2	106.09	122.13	134.38	175.34
101.26	106.15	122.18	134.44	175.39
101.32	106.21	122.24	134.49	175.45
101.38	106.27	122.3	134.55	175.51
101.44	106.33	122.35	134.6	175.57
101.5	106.38	122.41	134.65	175.63
101.56	106.44	122.46	134.71	175.69
101.62	106.5	122.52	134.76	175.74
101.68	106.56	122.57	134.81	175.8
101.73	106.61	122.62	134.87	175.86
101.79	106.67	122.68	134.92	175.92
101.85	106.73	122.73	134.97	175.98
101.91	106.79	122.79	135.03	176.03
101.97	106.84	122.84	135.08	176.09
102.03	106.9	122.9	135.13	176.15
102.08	106.96	122.95	135.19	176.2
102.14	107.01	123	135.24	176.26
102.2	107.07	123.06	135.29	176.32
102.26	107.13	123.11	135.34	176.37
102.31	107.18	123.17	135.4	176.43
102.37	107.24	123.22	135.45	176.49
102.43	107.3	123.27	135.5	176.54
102.49	107.35	123.33	135.55	176.6
102.54	107.41	123.38	135.61	176.66
102.6	107.47	123.43	135.66	176.71
102.66	107.52	123.49	135.71	176.77
102.72	107.58	123.54	135.76	176.82
102.77	107.63	123.59	135.81	176.88
102.83	107.69	123.65	135.86	176.93
102.89	107.75	123.7	135.92	176.99
102.95	107.8	123.75	135.97	177.05
103	107.86	123.8	136.02	177.1
103.06	107.91	123.86	136.07	177.16
103.12	107.97	123.91	136.12	177.21
103.17	108.02	123.96	136.17	177.27
103.23	108.08	124.01	136.22	177.32
103.29	108.14	124.07	136.28	177.38
103.34	108.19	124.12	136.33	177.43
103.4	108.25	124.17	136.38	177.48
103.46	108.3	124.22	136.43	177.54
103.51	108.36	124.28	136.48	177.59

103.57	108.41	124.33	136.53	177.65
103.62	108.47	124.38	136.58	177.7
103.68	108.52	124.43	136.63	177.76
103.74	108.58	124.48	136.68	177.81
103.79	108.63	124.54	136.73	177.86
103.85	108.69	124.59	136.78	177.92
103.91	108.74	124.64	136.83	177.97
103.96	108.8	124.69	136.88	178.02
104.02	108.85	124.74	136.93	178.08
104.07	108.91	124.79	136.98	178.13
104.13	108.96	124.85	137.03	178.19
104.19	109.02	124.9	137.08	178.24
104.24	109.07	124.95	137.13	178.29
104.3	109.13	125	137.18	178.34
104.35	109.18	125.05	137.23	178.4
104.41	109.23	125.1	137.28	178.45
104.46	109.29	125.15	137.33	178.5
104.52	109.34	125.2	137.38	178.56
104.57	109.4	125.25	137.43	178.61
104.63	109.45	125.31	137.48	178.66
104.69	109.51	125.36	137.53	178.71
104.74	109.56	125.41	137.58	178.77
104.8	109.61	125.46	137.63	178.82
104.85	109.67	125.51	137.68	178.87
104.91	109.72	125.56	137.73	178.92
104.96	109.78	125.61	137.78	178.98
105.02	109.83	125.66	137.83	179.03
105.07	109.88	125.71	137.87	179.08
105.13	109.94	125.76	137.92	179.13
105.18	109.99	125.81	137.97	179.18
105.24	110.04	125.86	138.02	179.24
105.29	110.1	125.91	138.07	179.29
105.35	110.15	125.96	138.12	179.34
105.4	110.21	126.01	138.17	179.39
105.46	110.26	126.06	138.22	179.44
105.51	110.31	126.11	138.26	179.49
105.57	110.37	126.16	138.31	179.54
105.62	110.42	126.21	138.36	179.6
105.68	110.47	126.26	138.41	179.65
105.73	110.53	126.31	138.46	179.7
105.79	110.58	126.36	138.51	179.75
105.84	110.63	126.41	138.56	179.8
105.9	110.69	126.46	138.6	179.85
105.95	110.74	126.51	138.65	179.9
106.01	110.79	126.56	138.7	179.95
106.06	110.85	126.61	138.75	180
106.11	110.9	126.66	138.8	180.05

106.17	110.95	126.71	138.85	180.11
106.22	111.01	126.76	138.89	180.16
106.28	111.06	126.81	138.94	180.21
106.33	111.11	126.86	138.99	180.26
106.39	111.17	126.91	139.04	180.31
106.44	111.22	126.96	139.09	180.36
106.5	111.27	127.01	139.13	180.41
106.55	111.33	127.06	139.18	180.46
106.6	111.38	127.11	139.23	180.51
106.66	111.43	127.16	139.28	180.56
106.71	111.49	127.21	139.33	180.61
106.77	111.54	127.26	139.37	180.66
106.82	111.59	127.31	139.42	180.71
106.88	111.64	127.36	139.47	180.76
106.93	111.7	127.41	139.52	180.81
106.98	111.75	127.46	139.56	180.86
107.04	111.8	127.51	139.61	180.91
107.09	111.86	127.55	139.66	180.96
107.15	111.91	127.6	139.71	181.01
107.2	111.96	127.65	139.76	181.06
107.26	112.01	127.7	139.8	181.11
107.31	112.07	127.75	139.85	181.16

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ANNEX B

Runoff Volume 1 in 30 year Event

Pre-development discharge

Site Makeup	Brownfield	OK
Brownfield Method	MRM	Cancel
Contributing Area (ha)	1.865	
PIMP (%)	100	
CV	1.000	
Return Period (years)	30	
Climate Change (%)	0	
Storm Duration (mins)	360	
Betterment (%)	0	
	Calc	
PR	1.000	
Runoff Volume (m³)	937	

Note: FEH point descriptors can be downloaded from fehweb.ceh.ac.uk

Only XML file format can be used

FEH-22 is the current FEH data and this should be used for new development

ReFH2 legacy – Doesn't contain the new BFIHOST19 descriptor
ReFH2 – Contains the new BFIHOST19 descriptor

ENVIRO SKIP HIRE SANDBATCH AREA = 1.865 HECTARES

- RAINFALL DEPTH 1 IN 30 YEAR EVENT 24 HOURS = 61.8mm (See attached FEH Rainfall Data)
- DISCHARGE RATE BASED ON MODIFIED RATIONAL METHOD, 2.74 X 1.865 X 61.8 = 315.8L/S
- VOLUME DURING THE 1 IN 30 YEAR EVENT = 937m^3 (See attached FLOW SOFTWARE print off)



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