

Fire prevention plan template

Plan version: V.2

Date of plan: 27 February 2024

Site details

Site name: Robins of Herstmonceux, The Compound

Site address: Beddingham, Lewes, BN8 6JX

Operator name: Robins

Who this plan is for

All employees working at the Beddingham site and site visitors.

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Figure 1: Proposed Site Plan

Figure 2: Sensitive Receptors

Figure 3: Surface Water Drainage Strategy (2 sheets)

1. Types of Combustible Materials

Combustible waste

It is proposed that the waste products present on this site will be primarily concrete and hardcore waste, which are not combustible.

The following list is of all the materials that Robins is known to work with across their current sites:

- MOT type 1
- Road Planings
- Sand / Ballast
- Green waste (Combustible)
- Compost (Combustible)
- Ice breaking salt
- Coal (Combustible)
- Cement
- Muck away operations
- Hardcore
- Timber (Combustible)
- Surface chip (Combustible)

If required, only one combustible material at a time will be held on this site in the area designated as 'Overflow'. This will be located safely away from active works and buildings, as seen on the site plan.

General waste and recycling: Low levels of general waste and recycling are anticipated for the works site. When office waste is generated it will be separated and placed into relevant waste and recycling bins stored in the office building, where it will be taken to the Robins' Head Office in Herstmonceux for collection.

Persistent organic pollutants

No Persistent Organic Pollutants, hereby referred to as POPs, are going to be held on site. Therefore, no Fire Prevention measures associated with POPs are necessary.

Other combustible materials

Fuel for the plant, machinery (i.e petrol / diesel): When not in use, all fuel on site will be stored away from buildings in steel bunds, and the bunds are segregated into a metal intermodal container (as seen on the site plan). All fuel stored will be accompanied by a spill kit, which all staff are trained to use.

Paper: The office will require the constant use of paper, which will all be stored away from direct sources of heat (i.e radiators).

2. Using this Fire Prevention Plan

Where the plan is kept and how staff know how to use it

A noticeboard will be implemented in the office for all staff to access and the current Fire Prevention Plan will be kept on there as to enable access to all staff on site.

Furthermore, an electronic copy will be made available to all staff.

Testing the plan and staff training

Site inductions will be provided for all new staff to the site covering all site health and safety and will also include fire prevention.

All staff will be given site specific training in emergency preparedness and site evacuation procedures.

Fire drills will regularly be scheduled to maintain ongoing training.

All staff will be familiarised with both the locations and usage of the spill kits and fire extinguishers.

If activities on site are to change the Fire Prevention Plan will be revised and the staff will be required to be retrained in the relevant areas.

3. Fire Prevention Plan Contents

Activities at the site

Operations at the Beddingham site are primarily the importation, storage, processing, and distribution of concrete. Waste concrete is brought onsite by regular customers or is collected from building sites by Robins' employees. The concrete is sorted and crushed by a mobile crusher and then distributed appropriately around the site.

Additionally, importation, storage, processing and distribution of soils which have been imported to the site, mainly from construction sites may occur on site. As above, the soils are brought to site by regular customers or collected by Robins' employees. The soils are then screened, and laid out to dry, if required.

Robins are also involved in the following, but these activities will take place offsite therefore, stocks and waste will not be present on this site.

- MOT type 1 – either brought in bulk or produced on site by crushing concrete to form a natural material suitable for use as a granular sub-base material;
- Road planings – recycled by crushing and sold as general fill material;
- Green waste – collected from construction sites and stored to create compost;
- Compost – base compost materials are imported. Mushroom compost is brought in bulk and then bagged, stored and then sold. This product is classed by the supplier as a product and not a waste;
- Ice breaking salt – winter operation only. Stored in bulk, bagged and then sold;
- Coal – purchased in bulk from coal merchant, bagged stored and then sold;
- Cement – purchase and sold in bags;
- Muck away operations – the Robins fleet of vehicles are often involved in muck away operations. The inert material is brought back to site for screening and segregation;
- Hardcore – including stone and brick collected from construction sites and either delivered directly to customers or brought onto the site for crushing;
- Timber – timber is cut for sale as firewood; and
- Surface chip – untreated woodchip for landscaping projects is brought in bulk and sold.

Site Plan

This document will be accompanied by “10592 Proposed Site Plan - Figure 1”, which depicts the site plan map.

Plan of sensitive receptors near the site

This document will be accompanied by “10592 Sensitive Receptors - Figure 2” which depicts the sensitive receptors near the site.

Drainage

The site Surface Water Drainage Strategy, is shown in 2 maps, included as Figure 3. This shows the location of interceptors, drainage systems, pollution control features such as drainage runs, drain closure valves, and fire water containment systems such as bunded and kerbed areas.

4. Manage common causes of fire

Arson

To minimise the potential for arson to take place there is CCTV across the site to monitor for any trespassing, ensuring any unknown person(s) on site are identified.

Additionally, there is a security guard present on site 24 hours of the day. The presence of which, denotes that immediate action can be taken if there is an unauthorised presence on site.

Plant and equipment

The following machinery will be present on this site:

Loading Shovel

Excavator

Crusher

Screener

Sweeper lorry

Tanker

Haulers

All vehicles are fitted with fire extinguishers, have regular maintenance and will be parked in the designated area and locked when not in use.

Electrical faults including damaged or exposed electrical cables

Electrics certification

Electrics are certified by a qualified electrician

Electrical equipment maintenance arrangements

All electrical equipment is PAT tested every 48 months (2 years).

Discarded smoking materials

Smoking on site policies

Smoking is not permitted on the premises and therefore no further policies are required to regulate the fire safety measures associated.

Hot works safe working practices

No hot works are due to take place at this site. Therefore, this section does not apply.

Industrial heaters

No industrial heaters are present on site and therefore, this section does not apply.

Hot exhausts and engine parts

Dust settling on hot exhausts and engine parts can result in a fire. Therefore, fire watch will be carried out at the end of each working day. Fire watches will be 2 hours long after work has ceased to ensure no signs of fire.

Fire watch procedures

As previously mentioned, a 24-hour security presence will be onsite with access to CCTV. Therefore, the security will be on hand to tackle any signs of fire at the earliest possible point.

The security staff will be provided with an up to date copy of the Fire Prevention Plan, contact details for the local fire service and will be trained on the protocol of what to do if a fire is present on site.

Ignition sources

Electrical equipment: Electrical equipment with defects, lamps, motors etc. can be an ignition source. Therefore, equipment will be maintained / PAT tested, and any hot elements will be kept at an appropriate distance from combustibles.

Friction: Hot bearings, misaligned or broken machine parts will heat up as a result of friction and can pose a potential ignition risk. To avoid this, all machinery will follow a strict inspection and maintenance schedule.

Batteries

All used batteries are stored separately from other wastes

Leaks and spillages of oils and fuels

Spill kits will be present throughout the site, especially near any known locations of fuels (i.e fuel store).

It will be ensured that all members of staff are familiarised with the locations and appropriate usage of the spill kits.

Build-up of loose combustible waste, dust and fluff

To ensure dust suppression, sweeper lorries and tankers will be used on site, when required.

Reactions between wastes

All materials, whether reactive or not, are stored separately with appropriate distances between so that they will not encounter each other.

Waste acceptance and deposited hot loads

This site will not be accepting hot loads and therefore, this section is not relevant.

Hot and dry weather

Where practicable, materials will have shading to prevent the effects of direct sunlight.

If combustible waste is present in the overflow, the stockpile will be turned intermittently to release and disperse any heat build-up.

Reflective surfaces will be covered or moved if there is a potential to reflect direct sunlight onto waste.

5. Prevent self-combustion

General self-combustion measures

No self combustible material will be contained in the overflow.

If self-combustible waste is present in the quarantine area, the stockpile will be turned intermittently in order to release and disperse any heat build-up.

Manage storage time

Method used to record and manage the storage of all waste on site

Robins follows WRAP (Waste & Resource Action Programme) and ensures all waste returns are recorded and sent.

Stock rotation policy

Unprocessed green waste will be stored for short periods only (up to 5 days) therefore the risk of self-combustion is reduced.

Each bay that contains potentially combustible materials will be turned once every 5 days using a front-end loading shovel and/or a 360° excavator, in order to maintain aerobic conditions – this activity will displace any hotspots within the bay.

Monitor and control temperature

Reduce the exposed metal content and proportion of 'fines'

To reduce the exposed metal content, all crushers are equipped with magnets to extract the metal content.

Once separated the metals are taken away by a company with the appropriate certifications to do so.

Monitoring temperature

Monitoring temperature is not necessary. This is as the combustible materials are rotated frequently enough to ensure safe temperatures are maintained.

Controlling temperature

If combustible waste is present in the overflow, the stockpile will be turned intermittently to release and disperse any heat build-up.

Dealing with hot weather and heating from sunlight

Where practicable, materials will have shading to prevent the effects of direct sunlight.

If combustible waste is present in the overflow, the stockpile will be turned intermittently to release and disperse any heat build-up.

Reflective surfaces will be covered or moved if there is a potential to reflect direct sunlight onto waste.

Waste bale storage

There will be no waste bales on site therefore, this section does not apply.

6. Manage waste piles

Storing waste materials in their largest form

Concrete will be stored on site and crushed when required.

Maximum pile sizes for the waste on your site

As this is a recycling business, Robins' waste is kept to a minimum if any at all. Metal waste can accumulate but is regularly taken away by a sub-contractor.

7. Where maximum pile sizes do not apply

Waste stored in containers

Types of containers you are using

Waste will not be stored in containers, therefore this is not applicable.

Accessibility of containers

Waste will not be stored in containers, therefore this is not applicable.

Moving containers in a fire

Waste will not be stored in containers, therefore this is not applicable.

Compost production

Procedures for active management and monitoring of the compost

Material used for compost will only be stored in the quarantine bays, opposite the weighbridge.

Unprocessed green waste will be stored for short periods only (up to 5 days) therefore the risk of self-combustion is reduced.

Bays will be monitored for temperature, oxygen and moisture levels weekly which will be recorded using a probe inserted at least 1.5m into the bay. In the event this monitoring indicates material is too dry, it will be sprayed with water from the site supply.

Each bay will be turned once every 5 days using the front-end loading shovel and/or a 360° excavator, in order to maintain aerobic conditions – this activity will displace any hotspots within the bay.

8. Prevent fire spreading

Separation distances

Primary works will not require separation distances, but the 'overflow' and fuel store will both be individually segregated with safe distances (6m) from any other stores, buildings or works.

Fire walls construction standards

The quarantine storage bays are constructed of concrete block formed walls in line with A1 fire rated construction methods.

Storing waste in bays

Materials will only be stored in bays, in the quarantine area, as detailed below. Only one type of material per bay is permitted, and the bays will not be overloaded.

9. Quarantine Area

Quarantine area location and size

There will be a designated quarantine area opposite the weighbridge, located away from buildings and active works (as seen in Figure 1). The Quarantine area is seven bunker solos separated by A1 fire rated concrete block walls. Each bunker is able to contain 20m³.

The quarantine area is bound by a surface water interceptor which runs to a high end storm water treatment system to provide additional runoff treatment required for runoff discharges to watercourses. This runs to the wastewater treatment system on site, which is approximately 20m to the south-west.

How to use the quarantine area if there is a fire

All material effected by the fire will be extinguished (if necessary) and remain in the quarantine area until the material is safe to be taken away by the appropriate waste management company.

Procedure to remove material stored temporarily if there is a fire

Plant (excavator and loading shovel) will be onsite to move the material to the designated overflow area if a situation occurs that the material needs to be removed, and if safe to do so.

10. Detecting fires

Detection systems in use

The 24-hour security presence will ensure any fires are detected in their earliest stages and the on-site presence allows for immediate action to take place.

The office and security hut will have smoke detectors as a further detection system.

Certification for the systems

Electrical inspections of all fire alarms are completed annually by a certified electrician. In addition to this, the fire alarms are tested by a trained member of staff weekly.

11. Suppressing fires

Suppression systems in use

Fire extinguishers and fire blankets can be found In the office, in vehicles and in fuel store (all of which are inspected annually).

Certification for the systems

Staff are trained to use fire extinguishers and fire blankets. Alternatively, call the Fire Brigade when necessary.

12. Firefighting techniques

Active firefighting

Staff on site will be trained in emergency preparedness and site evacuation procedures.

There will be water supplies (as described in the following section) readily available to

Plant on site (i.e excavators) will be able to move materials around site if necessary to aid firefighting.

This site allows for safe entrance and easy access for the local Fire and Rescue Service to work in all areas of the site.

13. Water supplies

Available water supply

Fire Hydrant 15003

What3Words location: [///polar.florists.agree](https://www.what3words.com/polar.florists.agree)

Grid reference: TQ 43742 06316

A water supply will be available from the local fire hydrant (Fire Hydrant Code: 15003), which is located on the opposite side of the A26 road, 25m south-west from the site entrance. This fire hydrant will provide water at a rate of 2,000 litres per minute, which surpasses what would be required for the maximum combustible pile sizes on this site. In addition to this, the primary material piled on site (concrete) is not combustible, therefore this would not be applicable.

14. Managing fire water

Containing the run-off from fire water

There is drainage across the site, therefore run-off from fire water will be diverted from natural water courses.

Furthermore, Interceptors will be implemented into the drainage systems to ensure that pollutants are removed from the run-off.

15. During and after an incident

Dealing with issues during a fire

All works will cease in the event of the fire and staff will vacate the area (unless active in managing the fire). Staff will not be permitted to return, and works will not commence until the fire is extinguished and the area is deemed safe.

Where appropriate, works and deliveries will be diverted to another Robins site.

Notifying residents and businesses

There are no residents to be informed in the immediate vicinity of this site.

The closest business is Valencia Waste Management, and in the event of a fire they would be notified immediately.

Valencia Waste Management - 01273 858074

Clearing and decontamination after a fire

Use of plant (i.e. excavators) will be appointed to move any contaminated / damaged materials to the quarantine zone. Materials will be kept there and removal of the materials will be sub-contracted to the appropriate company (depending on material).

Making the site operational after a fire

All waste from fire will be stored safely away from buildings and active works, until able to be removed from the site appropriately.

All areas affected by the fire will be inspected to ensure that it is safe for workers to return to regular work activities.

Finally, the Fire Prevention Plan will be updated in accordance with the events of the previous fire.

Figure 1: Site Plan

Figure 2:
10592 Sensitive Receptors

Figure 3:
Surface Water Drainage Strategy (2 sheets)

DISCLAIMER NOTE

DO NOT SCALE FROM THIS DRAWING

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ADJACENT PROPERTIES AND BOUNDARIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND HAVE NOT BEEN SURVEYED UNLESS OTHERWISE STATED.

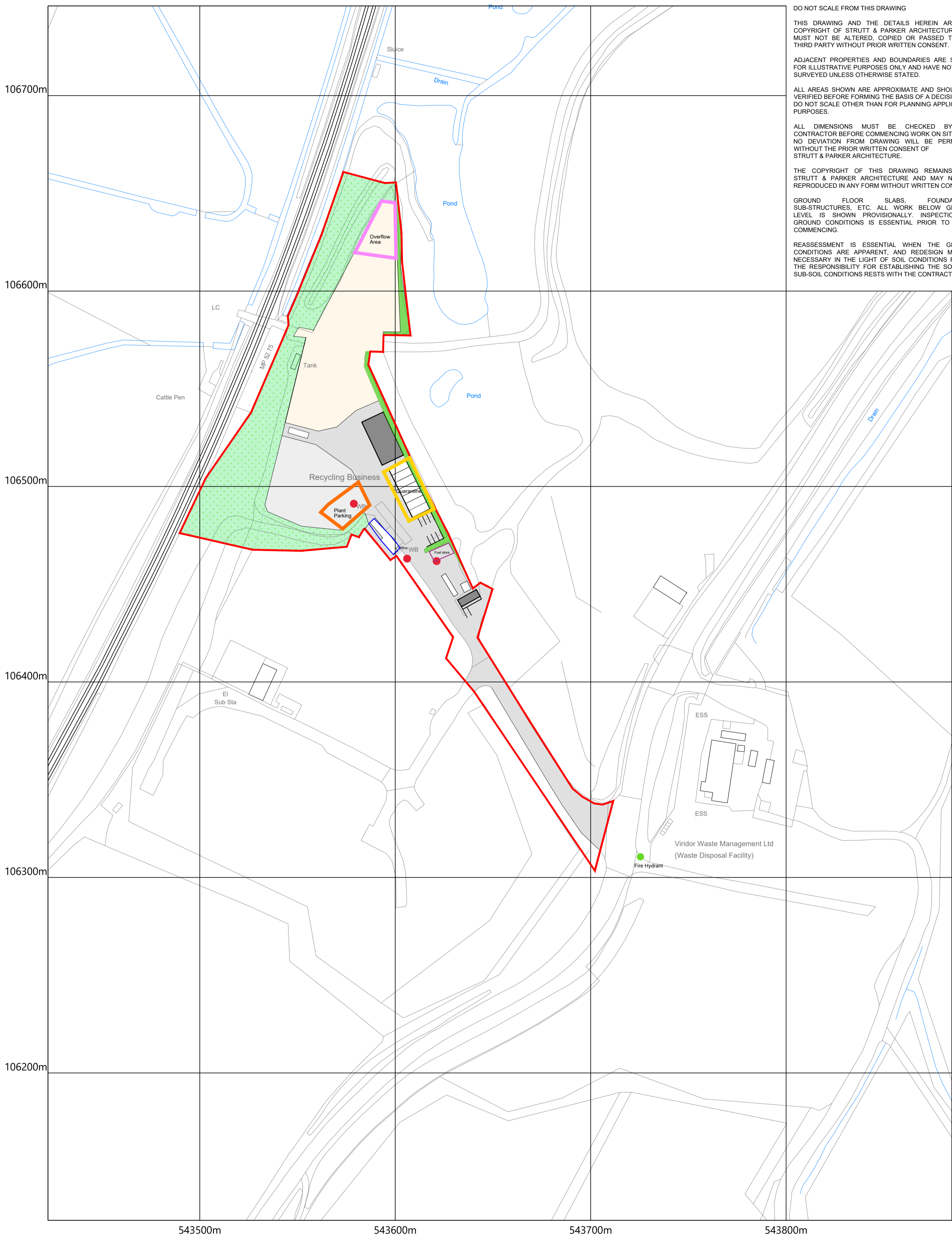
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GROUND FLOOR SLABS, FOUNDATIONS, SUB-STRUCTURES, ETC. ALL WORK BELOW GROUND LEVEL IS SHOWN PROVISIONALLY. INSPECTION OF GROUND CONDITIONS IS ESSENTIAL PRIOR TO WORK COMMENCING.



REASSESSMENT IS ESSENTIAL WHEN THE GROUND CONDITIONS ARE APPARENT, AND REDESIGN MAY BE NECESSARY IN THE LIGHT OF SOIL CONDITIONS FOUND. THE RESPONSIBILITY FOR ESTABLISHING THE SOIL AND SUB-SOIL CONDITIONS RESTS WITH THE CONTRACTOR.

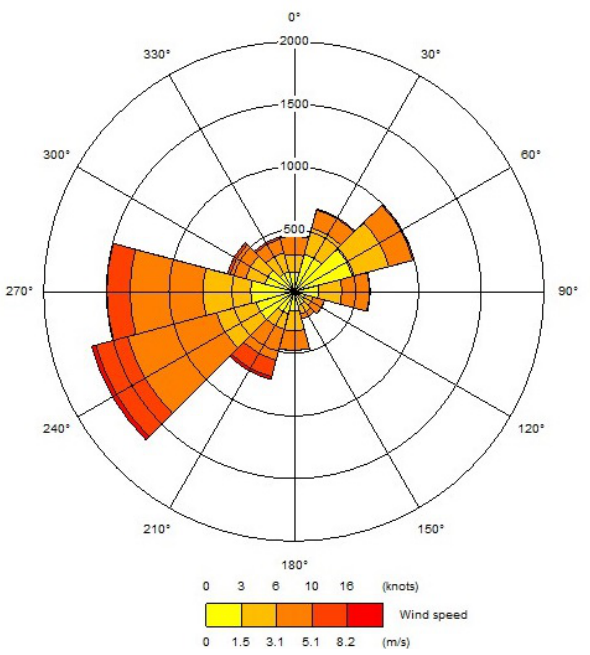


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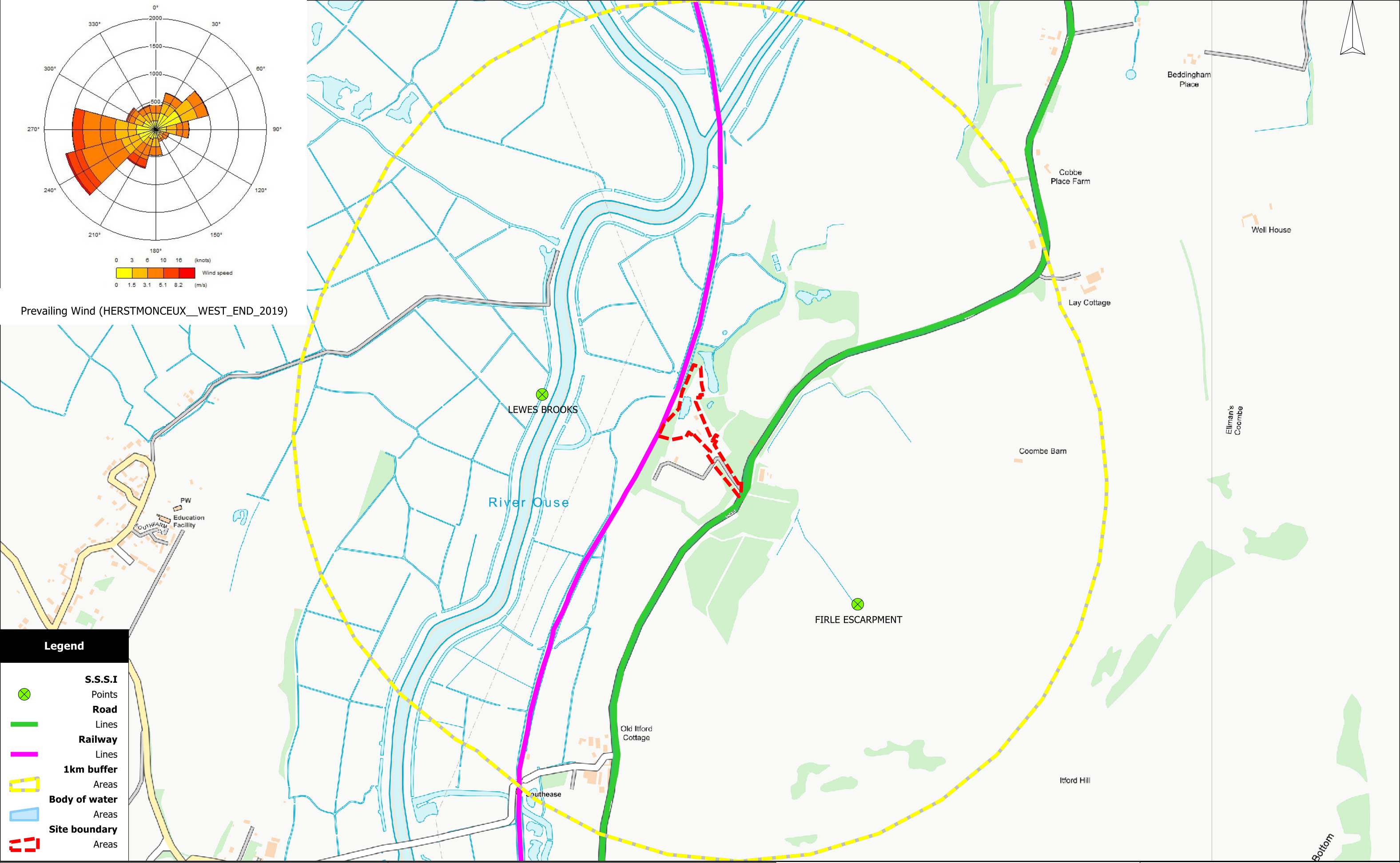
Legend	
—	- Site Boundary
—	- Office
—	- Fuel Store
—	- Overflow
—	- Quarantine Zone
—	- Plant Parking
●	- Spill Kit
●	- Fire Hydrant









Revision Notes: A PLANNING 13.12.21	Project Name and Address: Former Biogen Site, Benimons Road (A26), Beddingham, Lewes, BN8 6JX	Drawing Title: PROPOSED LOCATION PLAN	Project No: 2491	Drawing No: 04	Date: November 2021	 Second Floor Meridian House 9-11 Chertsey Street Guildford Surrey GU1 4HD Tel: 01483 303 098  BNP PARIBAS GROUP
	Purpose of Issue: PLANNING	Drawing Author: KA	Checked By: CG	Revision: --	Scale: 1:1250 @ A2	



Prevailing Wind (HERSTMONCEUX_WEST_END_2019)



Legend

-  **S.S.S.I**
Points
-  **Road**
Lines
-  **Railway**
Lines
-  **1km buffer**
Areas
-  **Body of water**
Areas
-  **Site boundary**
Areas

Robins Beddingham: Sensitive Receptors

Scale: NTS
 Job no.: 10592
 Drawn by: IM
 Printed at: 12/02/2024

THE PROPOSED DEVELOPMENT IS FOR THE REDEVELOPMENT OF THE EXISTING LANDFILL SITE TO AN INERT WASTE RECYCLING FACILITY.

THE TOTAL SITE AREA IS APPROXIMATELY 1HA AND LARGELY IMPERMEABLE. THE PROPOSED IMPERMEABLE AREA WOULD BE 0.976HA.

THE PRESENCE OF WATERCOURSES IN THE WIDER AREA AND CLAY SUPERFICIAL GEOLOGY INDICATES THAT INFILTRATION WOULD NOT BE FEASIBLE. GIVEN THE SITE'S PREVIOUS USE AS A LANDFILL INFILTRATION IS NOT RECOMMENDED.

THE SITE IS BOUNDED BY A WATERCOURSE ON ITS NORTH WESTERN AND EASTERN BOUNDARIES. THE WATERCOURSE ON THE NW BOUNDARY FALLS WITHIN THE PURVIEW OF NETWORK RAIL AND AN OUTFALL TO IT IS UNFEASIBLE. THE SITE CURRENTLY DISCHARGES RUNOFF TO THE WATERCOURSE ON THE EASTERN BOUNDARY AND AS SUCH IT IS PROPOSED TO REUSE THE RESPECTIVE OUTFALL POST-DEVELOPMENT.

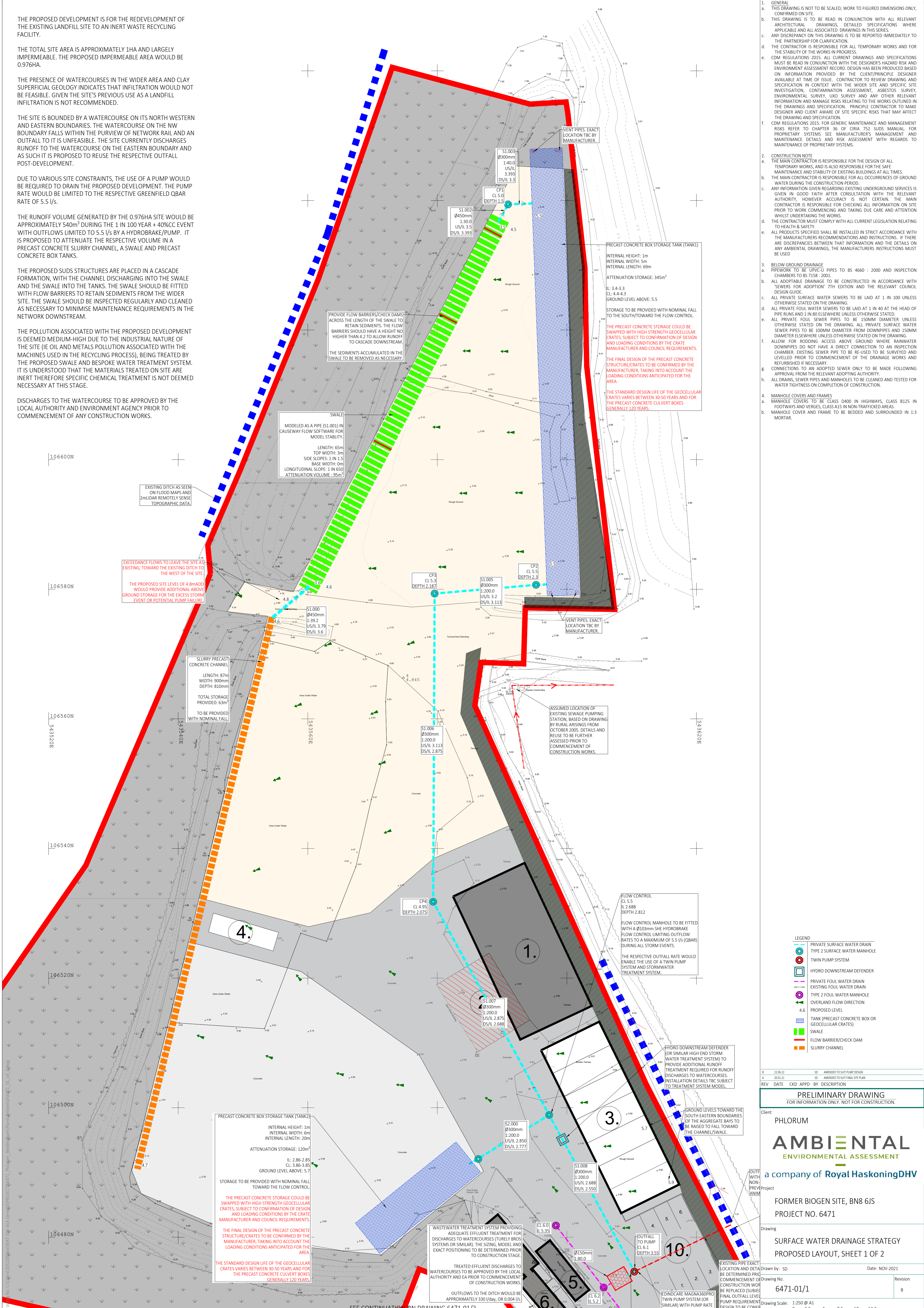
DUE TO VARIOUS SITE CONSTRAINTS, THE USE OF A PUMP WOULD BE REQUIRED TO DRAIN THE PROPOSED DEVELOPMENT. THE PUMP RATE WOULD BE LIMITED TO THE RESPECTIVE GREENFIELD QBAR RATE OF 5.5 l/s.

THE RUNOFF VOLUME GENERATED BY THE 0.976HA SITE WOULD BE APPROXIMATELY 540m³ DURING THE 1 IN 100 YEAR + 40%CC EVENT WITH OUTFLOWS LIMITED TO 5.5 l/s BY A HYDROBRAKE/PUMP. IT IS PROPOSED TO ATTENUATE THE RESPECTIVE VOLUME IN A PRECAST CONCRETE SLURRY CHANNEL, A SWALE AND PRECAST CONCRETE BOX TANKS.

THE PROPOSED SUDS STRUCTURES ARE PLACED IN A CASCADE FORMATION, WITH THE CHANNEL DISCHARGING INTO THE SWALE AND THE SWALE INTO THE TANKS. THE SWALE SHOULD BE FITTED WITH FLOW BARRIERS TO RETAIN SEDIMENTS FROM THE WIDER SITE. THE SWALE SHOULD BE INSPECTED REGULARLY AND CLEANED AS NECESSARY TO MINIMISE MAINTENANCE REQUIREMENTS IN THE NETWORK DOWNSTREAM.

THE POLLUTION ASSOCIATED WITH THE PROPOSED DEVELOPMENT IS DEEMED MEDIUM-HIGH DUE TO THE INDUSTRIAL NATURE OF THE SITE (IE OIL AND METALS POLLUTION ASSOCIATED WITH THE MACHINES USED IN THE RECYCLING PROCESS), BEING TREATED BY THE PROPOSED SWALE AND BESPOKE WATER TREATMENT SYSTEM. IT IS UNDERSTOOD THAT THE MATERIALS TREATED ON SITE ARE INERT THEREFORE SPECIFIC CHEMICAL TREATMENT IS NOT DEEMED NECESSARY AT THIS STAGE.

DISCHARGES TO THE WATERCOURSE TO BE APPROVED BY THE LOCAL AUTHORITY AND ENVIRONMENT AGENCY PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WORKS.



- GENERAL
 - THIS DRAWING IS NOT TO BE SCALED, WORK TO FIGURED DIMENSIONS ONLY, CONFIRMED ON SITE.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL DRAWINGS, DETAILED SPECIFICATIONS WHERE APPLICABLE AND ALL ASSOCIATED DRAWINGS IN THIS SERIES.
 - ANY DISCREPANCY ON THIS DRAWING IS TO BE REPORTED IMMEDIATELY TO THE PARTNERSHIP FOR CLARIFICATION.
 - THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY WORKS AND FOR THE STABILITY OF THE WORKS IN PROGRESS.
 - CDM REGULATIONS 2015. ALL CURRENT DRAWINGS AND SPECIFICATIONS MUST BE READ IN CONJUNCTION WITH THE DESIGNER'S HAZARD RISK AND ENVIRONMENTAL ASSESSMENT RECORD. DESIGN HAS BEEN PRODUCED BASED ON INFORMATION PROVIDED BY THE CLIENT/PRINCIPLE DESIGNER AVAILABLE AT TIME OF ISSUE. CONTRACTOR TO REVIEW DRAWING AND SPECIFICATION IN CONTEXT WITH THE WIDER SITE AND SPECIFIC SITE INVESTIGATION, CONTAMINATION ASSESSMENT, ASBESTOS SURVEY, ENVIRONMENTAL SURVEY, UXO SURVEY AND ANY OTHER RELEVANT INFORMATION AND MANAGE RISKS RELATING TO THE WORKS OUTLINED IN THE DRAWINGS AND SPECIFICATION. PRINCIPLE CONTRACTOR TO MAKE DESIGNER AND CLIENT AWARE OF SITE SPECIFIC RISKS THAT MAY AFFECT THE DRAWING AND SPECIFICATION.
 - CDM REGULATIONS 2015. FOR GENERIC MAINTENANCE AND MANAGEMENT RISKS REFER TO CHAPTER 36 OF CIRIA 752 SUDS MANUAL FOR PROPRIETARY SYSTEMS. SEE MANUFACTURER'S MANAGEMENT AND MAINTENANCE DETAILS AND RISK ASSESSMENT WITH REGARDS TO MAINTENANCE OF PROPRIETARY SYSTEMS.
- CONSTRUCTION NOTE
 - THE MAIN CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY WORKS, AND IS ALSO RESPONSIBLE FOR THE SAFE MAINTENANCE AND STABILITY OF EXISTING BUILDINGS AT ALL TIMES.
 - THE MAIN CONTRACTOR IS RESPONSIBLE FOR ALL OCCURRENCES OF GROUND WATER DURING THE CONSTRUCTION PERIOD.
 - ANY INFORMATION GIVEN REGARDING EXISTING UNDERGROUND SERVICES IS GIVEN IN GOOD FAITH AFTER CONSULTATION WITH THE RELEVANT AUTHORITY. HOWEVER ACCURACY IS NOT CERTAIN. THE MAIN CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL INFORMATION ON SITE PRIOR TO WORK COMMENCING AND TAKING DUE CARE AND ATTENTION WHILST UNDERTAKING THE WORKS.
 - THE CONTRACTOR MUST COMPLY WITH ALL CURRENT LEGISLATION RELATING TO HEALTH & SAFETY.
 - ALL PRODUCTS SPECIFIED SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS. IF THERE ARE DISCREPANCIES BETWEEN THAT INFORMATION AND THE DETAILS ON ANY AMBIENTAL DRAWINGS, THE MANUFACTURER'S INSTRUCTIONS MUST BE USED.
- BELOW GROUND DRAINAGE
 - PIPEWORK TO BE UPVC-U PIPES TO BS 4660 : 2000 AND INSPECTION CHAMBERS TO BS 7158 : 2001.
 - ALL ADAPTABLE DRAINAGE TO BE CONSTRUCTED IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION AND THE RELEVANT COUNCIL DESIGN GUIDE.
 - ALL PRIVATE SURFACE WATER SEWERS TO BE LAID AT 1 IN 100 UNLESS OTHERWISE STATED ON THE DRAWING.
 - ALL PRIVATE FOUL WATER SEWERS TO BE LAID AT 1 IN 40 AT THE HEAD OF PIPE RUNS AND 1 IN 80 ELSEWHERE UNLESS OTHERWISE STATED.
 - ALL PRIVATE FOUL SEWER PIPES TO BE 150MM DIAMETER UNLESS OTHERWISE STATED ON THE DRAWING. ALL PRIVATE SURFACE WATER SEWER PIPES TO BE 100MM DIAMETER FROM DOWNPIPES AND 150MM DIAMETER ELSEWHERE UNLESS OTHERWISE STATED ON THE DRAWING.
 - ALLOW FOR RODDING ACCESS ABOVE GROUND WHERE RAINWATER DOWNPIPES DO NOT HAVE A DIRECT CONNECTION TO AN INSPECTION CHAMBER. EXISTING SEWER PIPE TO BE RE-USED TO BE SURVEYED AND LEVELLED PRIOR TO COMMENCEMENT OF THE DRAINAGE WORKS AND RE-FURBISHED IF NECESSARY.
 - CONNECTIONS TO AN ADOPTED SEWER ONLY TO BE MADE FOLLOWING APPROVAL FROM THE RELEVANT ADOPTING AUTHORITY.
 - ALL DRAINS, SEWER PIPES AND MANHOLES TO BE CLEANED AND TESTED FOR TIGHTNESS ON COMPLETION OF CONSTRUCTION.
- MANHOLE COVERS AND FRAMES
 - MANHOLE COVERS TO BE CLASS D400 IN HIGHWAYS, CLASS B125 IN FOOTWAYS AND VERGES, CLASS A15 IN NON-TRAFFICKED AREAS.
 - MANHOLE COVER AND FRAME TO BE BEDDED AND SURROUNDED IN 1:3 MORTAR.

LEGEND

- PRIVATE SURFACE WATER DRAIN
- TYPE 2 SURFACE WATER MANHOLE
- TWIN PUMP SYSTEM
- HYDRO DOWNSTREAM DEFENDER
- PRIVATE FOUL WATER DRAIN
- EXISTING FOUL WATER DRAIN
- TYPE 2 FOUL WATER MANHOLE
- OVERLAND FLOW DIRECTION
- PROPOSED LEVEL
- TANK (PRECAST CONCRETE BOX OR GEOCELLULAR CRATES)
- SWALE
- FLOW BARRIER/CHECK DAM
- SLURRY CHANNEL

REV DATE CKD APPD BY DESCRIPTION

8 21.06.23 SD AMENDED TO OUP PUMP DESIGN

9 20.02.21 SD AMENDED TO SUIT FINAL SITE PLAN

REV DATE CKD APPD BY DESCRIPTION

PRELIMINARY DRAWING
FOR INFORMATION ONLY. NOT FOR CONSTRUCTION.

Client
PHLORUM

AMBIENTAL
ENVIRONMENTAL ASSESSMENT

a company of Royal HaskoningDHV

Project
FORMER BIOGEN SITE, BN8 6JS
PROJECT NO. 6471

Drawing
SURFACE WATER DRAINAGE STRATEGY
PROPOSED LAYOUT, SHEET 1 OF 2

Client
PHLORUM

Project
FORMER BIOGEN SITE, BN8 6JS
PROJECT NO. 6471

Drawing
SURFACE WATER DRAINAGE STRATEGY
PROPOSED LAYOUT, SHEET 1 OF 2

Client
PHLORUM

Project
FORMER BIOGEN SITE, BN8 6JS
PROJECT NO. 6471

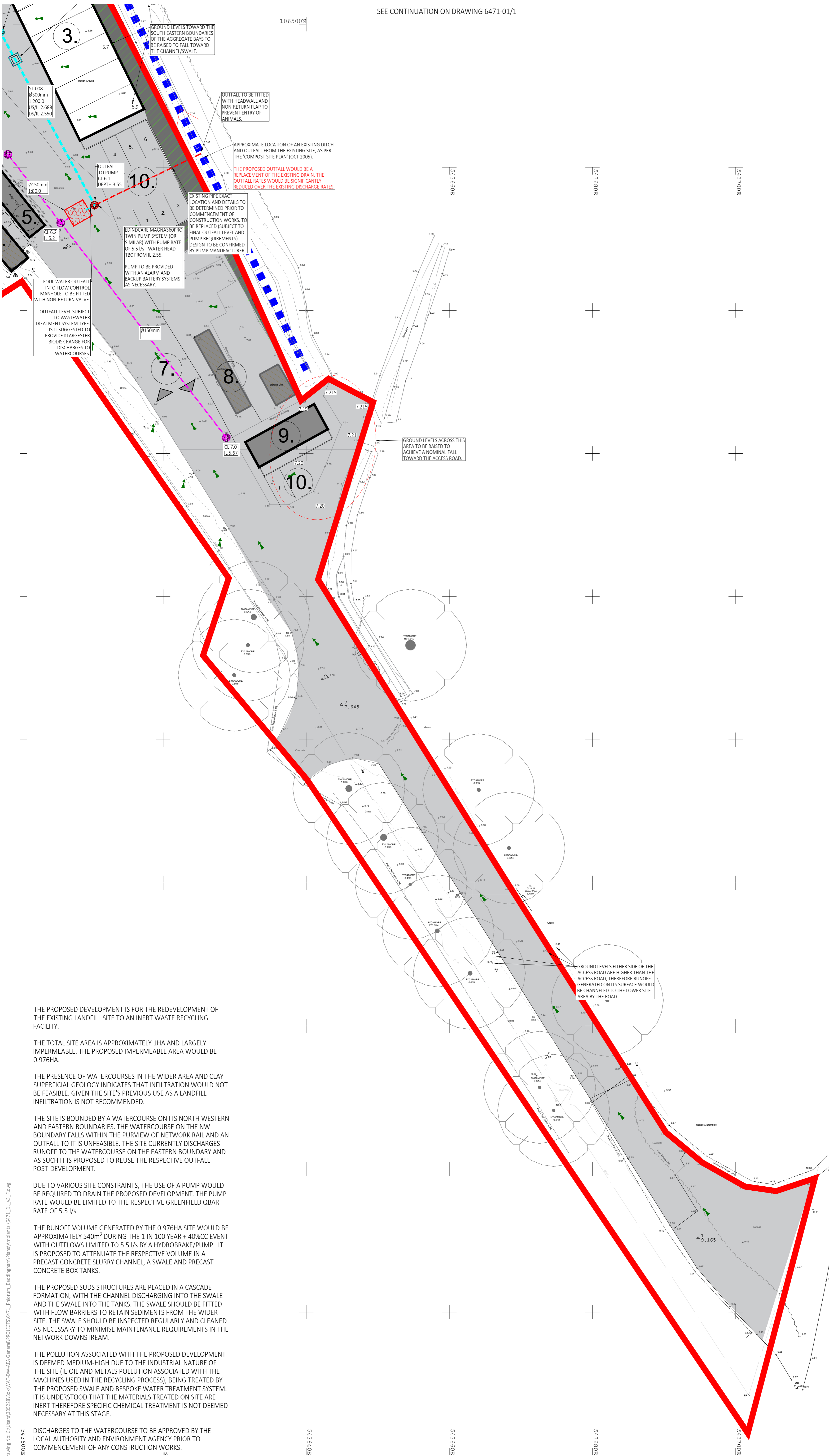
Drawing
SURFACE WATER DRAINAGE STRATEGY
PROPOSED LAYOUT, SHEET 1 OF 2

Drawn by: SD Date: NOV-2021

Drawing No: 6471-01/1

Revision
B

Drawing Scale: 1:250 @ A1
0 2.5m 5m 7.5m 10m 12.5m



1. GENERAL
 - a. THIS DRAWING IS NOT TO BE SCALED, WORK TO FIGURED DIMENSIONS ONLY, CONFIRMED ON SITE.
 - b. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL DRAWINGS, DETAILED SPECIFICATIONS WHERE APPLICABLE AND ALL ASSOCIATED DRAWINGS IN THIS SERIES.
 - c. ANY DISCREPANCY ON THIS DRAWING IS TO BE REPORTED IMMEDIATELY TO THE PARTNERSHIP FOR CLARIFICATION.
 - d. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY WORKS AND FOR THE STABILITY OF THE WORKS IN PROGRESS.
 - e. CDM REGULATIONS 2015. ALL CURRENT DRAWINGS AND SPECIFICATIONS MUST BE READ IN CONJUNCTION WITH THE DESIGNER'S HAZARD RISK AND ENVIRONMENTAL ASSESSMENT RECORD. DESIGN HAS BEEN PRODUCED BASED ON INFORMATION PROVIDED BY THE CLIENT/PRINCIPLE DESIGNER AVAILABLE AT TIME OF ISSUE. CONTRACTOR TO REVIEW DRAWING AND SPECIFICATION IN CONTEXT WITH THE WIDER SITE AND SPECIFIC SITE INVESTIGATION, CONTAMINATION ASSESSMENT, ASBESTOS SURVEY, ENVIRONMENTAL SURVEY, UXO SURVEY AND ANY OTHER RELEVANT INFORMATION AND MANAGE RISKS RELATING TO THE WORKS OUTLINED IN THE DRAWINGS AND SPECIFICATION. PRINCIPLE CONTRACTOR TO MAKE DESIGNER AND CLIENT AWARE OF SITE SPECIFIC RISKS THAT MAY AFFECT THE DRAWING AND SPECIFICATION.
 - f. CDM REGULATIONS 2015. FOR GENERIC MAINTENANCE AND MANAGEMENT RISKS REFER TO CHAPTER 36 OF CIRIA 752 SUDS MANUAL FOR PROPRIETARY SYSTEMS. SEE MANUFACTURER'S MANAGEMENT AND MAINTENANCE DETAILS AND RISK ASSESSMENT WITH REGARDS TO MAINTENANCE OF PROPRIETARY SYSTEMS.
2. CONSTRUCTION NOTE
 - a. THE MAIN CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY WORKS, AND IS ALSO RESPONSIBLE FOR THE SAFE MAINTENANCE AND STABILITY OF EXISTING BUILDINGS AT ALL TIMES.
 - b. THE MAIN CONTRACTOR IS RESPONSIBLE FOR ALL OCCURRENCES OF GROUND WATER DURING THE CONSTRUCTION PERIOD.
 - c. ANY INFORMATION GIVEN REGARDING EXISTING UNDERGROUND SERVICES IS GIVEN IN GOOD FAITH AFTER CONSULTATION WITH THE RELEVANT AUTHORITY. HOWEVER ACCURACY IS NOT CERTAIN. THE MAIN CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL INFORMATION ON SITE PRIOR TO WORK COMMENCING AND TAKING DUE CARE AND ATTENTION WHILST UNDERTAKING THE WORKS.
 - d. THE CONTRACTOR MUST COMPLY WITH ALL CURRENT LEGISLATION RELATING TO HEALTH & SAFETY.
 - e. ALL PRODUCTS SPECIFIED SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS. IF THERE ARE DISCREPANCIES BETWEEN THAT INFORMATION AND THE DETAILS ON ANY AMBIENTAL DRAWINGS, THE MANUFACTURER'S INSTRUCTIONS MUST BE USED.
3. BELOW GROUND DRAINAGE
 - a. PIPEWORK TO BE UPVC-U PIPES TO BS 4660 : 2000 AND INSPECTION CHAMBERS TO BS 7158 : 2001.
 - b. ALL ADAPTABLE DRAINAGE TO BE CONSTRUCTED IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION AND THE RELEVANT COUNCIL DESIGN GUIDE.
 - c. ALL PRIVATE SURFACE WATER SEWERS TO BE LAID AT 1 IN 100 UNLESS OTHERWISE STATED ON THE DRAWING.
 - d. ALL PRIVATE FOUL WATER SEWERS TO BE LAID AT 1 IN 40 AT THE HEAD OF PIPE RUNS AND 1 IN 80 ELSEWHERE UNLESS OTHERWISE STATED.
 - e. ALL PRIVATE FOUL SEWER PIPES TO BE 150MM DIAMETER UNLESS OTHERWISE STATED ON THE DRAWING. ALL PRIVATE SURFACE WATER SEWER PIPES TO BE 100MM DIAMETER FROM DOWNPIPES AND 150MM DIAMETER ELSEWHERE UNLESS OTHERWISE STATED ON THE DRAWING.
 - f. ALLOW FOR RODDING ACCESS ABOVE GROUND WHERE RAINWATER DOWNPIPES DO NOT HAVE A DIRECT CONNECTION TO AN INSPECTION CHAMBER. EXISTING SEWER PIPE TO BE RE-USED TO BE SURVEYED AND LEVELLED PRIOR TO COMMENCEMENT OF THE DRAINAGE WORKS AND REFURBISHED IF NECESSARY.
 - g. CONNECTIONS TO AN ADOPTED SEWER ONLY TO BE MADE FOLLOWING APPROVAL FROM THE RELEVANT ADOPTING AUTHORITY.
 - h. ALL DRAINS, SEWER PIPES AND MANHOLES TO BE CLEANED AND TESTED FOR WATER TIGHTNESS ON COMPLETION OF CONSTRUCTION.
4. MANHOLE COVERS AND FRAMES
 - a. MANHOLE COVERS TO BE CLASS D400 IN HIGHWAYS, CLASS B125 IN FOOTWAYS AND VERGES, CLASS A15 IN NON-TRAFFICED AREAS.
 - b. MANHOLE COVER AND FRAME TO BE BEDDED AND SURROUNDED IN 1:3 MORTAR.

THE PROPOSED DEVELOPMENT IS FOR THE REDEVELOPMENT OF THE EXISTING LANDFILL SITE TO AN INERT WASTE RECYCLING FACILITY.

THE TOTAL SITE AREA IS APPROXIMATELY 1HA AND LARGELY IMPERMEABLE. THE PROPOSED IMPERMEABLE AREA WOULD BE 0.976HA.

THE PRESENCE OF WATERCOURSES IN THE WIDER AREA AND CLAY SUPERFICIAL GEOLOGY INDICATES THAT INFILTRATION WOULD NOT BE FEASIBLE. GIVEN THE SITE'S PREVIOUS USE AS A LANDFILL INFILTRATION IS NOT RECOMMENDED.

THE SITE IS BOUNDED BY A WATERCOURSE ON ITS NORTH WESTERN AND EASTERN BOUNDARIES. THE WATERCOURSE ON THE NW BOUNDARY FALLS WITHIN THE PURVIEW OF NETWORK RAIL AND AN OUTFALL TO IT IS UNFEASIBLE. THE SITE CURRENTLY DISCHARGES RUNOFF TO THE WATERCOURSE ON THE EASTERN BOUNDARY AND AS SUCH IT IS PROPOSED TO REUSE THE RESPECTIVE OUTFALL POST-DEVELOPMENT.

DUE TO VARIOUS SITE CONSTRAINTS, THE USE OF A PUMP WOULD BE REQUIRED TO DRAIN THE PROPOSED DEVELOPMENT. THE PUMP RATE WOULD BE LIMITED TO THE RESPECTIVE GREENFIELD QBAR RATE OF 5.5 l/s.

THE RUNOFF VOLUME GENERATED BY THE 0.976HA SITE WOULD BE APPROXIMATELY 540m³ DURING THE 1 IN 100 YEAR + 40%CC EVENT WITH OUTFLOWS LIMITED TO 5.5 l/s BY A HYDROBRAKE/PUMP. IT IS PROPOSED TO ATTENUATE THE RESPECTIVE VOLUME IN A PRECAST CONCRETE SLURRY CHANNEL, A SWALE AND PRECAST CONCRETE BOX TANKS.

THE PROPOSED SUDS STRUCTURES ARE PLACED IN A CASCADE FORMATION, WITH THE CHANNEL DISCHARGING INTO THE SWALE AND THE SWALE INTO THE TANKS. THE SWALE SHOULD BE FITTED WITH FLOW BARRIERS TO RETAIN SEDIMENTS FROM THE WIDER SITE. THE SWALE SHOULD BE INSPECTED REGULARLY AND CLEANED AS NECESSARY TO MINIMISE MAINTENANCE REQUIREMENTS IN THE NETWORK DOWNSTREAM.

THE POLLUTION ASSOCIATED WITH THE PROPOSED DEVELOPMENT IS DEEMED MEDIUM-HIGH DUE TO THE INDUSTRIAL NATURE OF THE SITE (IE OIL AND METALS POLLUTION ASSOCIATED WITH THE MACHINES USED IN THE RECYCLING PROCESS), BEING TREATED BY THE PROPOSED SWALE AND BESPOKE WATER TREATMENT SYSTEM. IT IS UNDERSTOOD THAT THE MATERIALS TREATED ON SITE ARE INERT THEREFORE SPECIFIC CHEMICAL TREATMENT IS NOT DEEMED NECESSARY AT THIS STAGE.

DISCHARGES TO THE WATERCOURSE TO BE APPROVED BY THE LOCAL AUTHORITY AND ENVIRONMENT AGENCY PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WORKS.

- LEGEND
- PRIVATE SURFACE WATER DRAIN
 - TYPE 2 SURFACE WATER MANHOLE
 - TWIN PUMP SYSTEM
 - HYDRO DOWNSTREAM DEFENDER
 - PRIVATE FOUL WATER DRAIN
 - EXISTING FOUL WATER DRAIN
 - TYPE 2 FOUL WATER MANHOLE
 - OVERLAND FLOW DIRECTION
 - PROPOSED LEVEL
 - TANK (PRECAST CONCRETE BOX OR GEOCELLULAR CRATES)
 - SWALE
 - FLOW BARRIER/CHECK DAM
 - SLURRY CHANNEL

B	23.06.23	SD	AMENDED TO OUT PUMP DESIGN
A	20.02.21	SD	AMENDED TO SUIT FINAL SITE PLAN
REV	DATE	CKD	APPD BY DESCRIPTION

PRELIMINARY DRAWING
FOR INFORMATION ONLY. NOT FOR CONSTRUCTION.

Client
PHLORUM

AMBIENTAL
ENVIRONMENTAL ASSESSMENT

a company of Royal HaskoningDHV

Project
FORMER BIOGEN SITE, BN8 6JS
PROJECT NO. 6471

Drawing
SURFACE WATER DRAINAGE STRATEGY
PROPOSED LAYOUT, SHEET 2 OF 2

Drawn by: SD	Date: NOV-2021
Drawing No. 6471-01/2	Revision B

Drawing Scale: 1:250 @ A1
0 2.5m 5m 7.5m 10m 12.5m

Drawing No. C:\Users\305228\Box\WAT_DW-AREA-General\PROJECTS\6471_Phlorum_Beddingham\Plans\Ambiental\6471_D1_v3_f.dwg

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