

Construction Environment Management Plan
Revision 0

Job No. 27951

Proposed AD Plant
Land at Streetly Hall Farm
Webb's Road
West Wickham
Cambridgeshire
CB21 4RP

Client: Streetly Hall Estate

August 2023

REPORT CONTROL SHEET

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Issue		
Revision 0	August 2023	Report Prepared by: Jasmine Ayton Planning Coordinator
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CONDITIONS OF INVESTIGATION & REPORTING

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DRAWINGS APPENDIX

- Drawing No. 27951/007 - Proposed Site Layout
- Drawing No. 27951/SK20 - Proposed Contractor Site Set Up
- Drawing No. 27951/150 - Site Location Plan

1.0 INTRODUCTION

1.1 Background Information

The Applicant, Streetly Hall Estate, is seeking planning permission for the construction of an Anaerobic Digestion (AD) Plant at Streetly Hall Farm, Webb's Road, West Wickham, Cambridgeshire, CB21 4RP.

The application site is outlined in red on Plandescil Ltd Drawing No. 27951/150 – Site Location Plan in the **Drawings Appendix** (extract below). It is currently an arable crop field located on the Applicant's agricultural unit, adjacent to their main farm buildings. The immediate land surrounding the application site which forms part of the Applicant's agricultural unit is also outlined in blue.

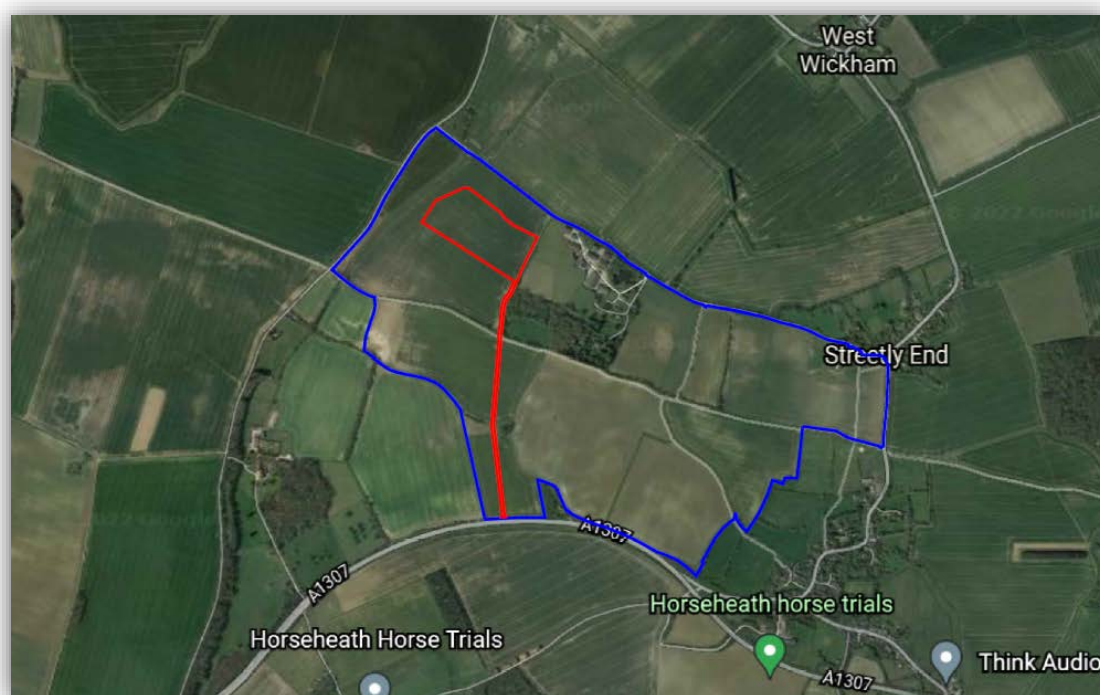


Image 1.1 Existing site

1.2 Proposal

The Applicant is applying to Cambridgeshire County Council for the erection of an Anaerobic Digestion (AD) Plant which aims to produce and collect gas through the breakdown of organic material for use as a renewable energy source. The proposed site layout of the AD Plant is shown on Plandescil Ltd Drawing No. 27951/007 – Proposed Site Plan in the **Drawings Appendix**.

1.3 Objectives

Plandescil Ltd. have been employed by Streetly Hall Estate (herein referred to as the Applicant) to produce this Construction Environment Management Plan (CEMP) in support of the planning application for the proposed development. If approved, this CEMP will be revised for construction purposes and any planning condition consideration with the chosen Contractor and reissued. The Applicant will ensure the construction process follows the procedures set out in this CEMP.

This CEMP should be read in conjunction with all other documents and drawings accompanying the planning application. It has been developed to avoid, minimise, and mitigate any effects to the environment caused by the execution of the construction works, and provide a management framework needed for the planning and implementation of the proposed construction activities.

The measures identified in the CEMP should be common practice on-site and embedded within the Contractor's policies and site procedures.

The purpose of the CEMP is to:

- Identify stakeholder requirements
- Ensure compliance with current legislation
- Effectively minimise any potential adverse environmental effects during construction including how site-specific method statements will be developed to avoid, minimise and/or mitigate construction effects on the environment
- Translate committed mitigation, set out in the assumed Planning Conditions, into committed site procedure

2.0 DESCRIPTION OF WORKS

The works comprise of the construction of an AD Plant, including the following items:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Silage Clamps (2No. 94.75m x 13.48m) • Silage Clamps (2No. 94.75m x 11.32m) • Feed Hopper (2No.) • Fermenter (3No. 30mØ) • Post Fermenter (1No. 30mØ) • Pre-Storage Tank (1No. 9mØ) • Filling Station • Ferric Chloride Tank • Pasteurisation • Containment Bund • External Desulphurisation • Gas Flare • Gas Technology • LV Board + Emergency Generator • GEU • CHP • Buffer Tank • Power to Heat Module | <ul style="list-style-type: none"> • CO2 Tanks • CO2 Recovering System • Gas Upgrading System • Propane Tanks • Weighbridge Office • Weighbridge • Digestate Storage Lagoon (15,260m³) • Surface Water Lagoon (1,100m³) • Dirty Lagoon (805m³) • Intake & Process Building (36.00m x 80.00m) • Straw Barn (20.00m x 50.00m) • Bund Gate (2No.) • Bund Ramp (2No.) • Condensate Pit • Car Parking Spaces (5No.) • Technical Building |
|--|--|

The project will be completed in a single phase and the main Construction Activities are:

- Site set up
- Access roads
- Topsoil stripping
- Bulk earthworks and site preparation
- Installation of foundations, drainage and utilities
- Lagoon construction
- Containment area and concrete apron construction
- Tank associated works
- Mechanical installation
- Construction of independent bases and structures
- Installation of gas upgrading equipment
- Construction of feed stock storage
- Seeding and boundary treatments
- Testing and commissioning
- Grid connection
- Finishes

3.0 PROJECT ROLES AND RESPONSIBILITIES

The table below shows project roles, responsibilities and contact details.

POSITION	RESPONSIBILITIES	COMPANY	CONTACT	CONTACT DETAILS*
Project Manager	Construction Project Manager			
Site Supervisor	Day to Day Project Management			
Environment Officer	Liaison with Environmental Groups and interaction with the Main Project			
HSE Representative	Overall Health and Safety			
Installation Engineer	Responsible for the Mechanical and Electrical Design and Installation			

As yet, a Contractor has not been appointed and therefore we are unable to confirm the roles and responsibilities above.

4.0 PROPOSED DURATION AND HOURS OF CONSTRUCTION

It is anticipated that construction work is to commence in Summer 2024 and be substantially complete by the Winter of 2025, taking approximately 62 weeks overall.

The general working hours for the construction of the scheme will be from 07:30 to 17:00 Monday to Friday with site access permitted from 07:00 to allow workers to arrive for work in good time, however, no site work is to commence until 07:30. All deliveries and collections should be after 08:00. Working hours are restricted to 09:00 until 13:00 on Saturdays and no work is permitted on Sundays and Bank Holidays.

5.0 TRAINING, AWARENESS AND COMPETENCY

Training will be provided to all team members and contractors. The Construction Environment Management Plan will form part of the contract documents. The contractor will be expected to fully understand the contents and ensure that all site workers fully comply. The contents of the documents will be discussed throughout the project in the following ways:

- Site environment induction
- Daily pre-start meetings
- Environmental and construction related toolbox talks
- Incident bulletins
- Contractor and client site kick-off meeting, as well as sub-contractors' kick-off meeting

All staff will be expected to demonstrate competency to perform tasks that have the potential to cause significant environmental impact. Competence is defined in terms of appropriate education, training and experience. All supervisory staff should be able to demonstrate attendance to specific training in the last 3 years dealing with Prevention of Pollution.

All managers involved in the project will be briefed on the CEMP and will be expected to engage environmental good practices on the project. Environmental awareness and training shall be achieved by:

- Site inductions that include relevant environmental issues
- Environmental posters and site notices
- Environmental method statements and risk assessments
- Toolbox talks, including instruction on incident response procedures
- Environmental aspects and impacts on the agenda of project progress meetings

Method statements will be prepared for specific activities prior to the works commencing and will include protection and mitigation measure in relation to environmental aspects.

6.0 COMMUNICATION

The CEMP will be distributed to the project team, including key sub-contractors, to ensure that the environmental objectives and targets are communicated effectively.

The Principal Contractor should define procedures for internal and external communication. The client may require that any communication to external parties is undertaken through a nominated client representative.

During construction, communication will be encouraged through site briefings, regular progress meetings. Any significant matters will be communicated in writing, generally by email.

Any external communications outside the project delivery team will be overseen by the client's project manager, for example, letter drops, liaison meetings with statutory authorities.

7.0 COMPLAINTS, COMPLIMENTS AND INQUIRIES

The Client's Project Manager will be made aware of all complaints or information requests and will be logged in a register promptly (normally on the same working day as the complaint has been received).

The log should include but not be limited to the following:

- Date and time
- Affected Party
- Person/Entity making the complaint
- Nature of the complaint
- Any other useful information that is provided
- Non-conformance and corrective/preventative action

The Site Manager will be required to carry out and record routine inspections in relation to environmental performance across the site. This will be periodically audited in accordance with the Principal Contractor's Environmental Management System.

Any incidents or non-conformance identified that could lead to an environmental incident will be addressed using a Non-Conformance Report (NCR).

The Client's Project Manager will be made aware of any NCR's that have been raised. NCR's will have an owner assigned to them who will be responsible for dealing with remedial actions in the agreed timescale.

All NCR's will be recorded during the regular progress meetings.

8.0 SITE ESTABLISHMENT

Facilities will be established to minimise risk to the environment and promote the efficient use of resources. The initial site establishment layout which includes the following elements:

- Temporary protective fencing to be erected to delineate the working areas, site boundaries, and protect sensitive features from disturbance.
- Temporary offices, welfare facilities and secure storage of equipment.
- Any necessary fuel and oil to be stored in accordance with the Control of Pollution (Oil Storage) (England) Regulations 2001. Refuelling will only be undertaken in a designated area, designed to contain contaminated run-off, and by trained personnel. Emergency spill kits are to be readily available.

- Materials storage areas will be set up and managed.
- Waste segregation areas will be established utilising containers of an appropriate design to ensure that no waste can escape.
- Sewerage effluent from the site office and welfare facilities will be removed from site using a vacuum tanker if no sewer connection is available.
- Temporary lighting will be designed to minimise spillage of light, and oriented away from any residential properties.
- The temporary site compound will be reinstated to its former condition, suitable for agricultural use, following completion of the project.

The construction site set-up is identified on Plandescil Ltd Drawing No. 27951/SK20 in the **Drawings Appendix** (extract below). The construction compound will comprise of containers for use as site offices, canteens, toilets, drying room which will be separated form the main material storage are and compound.

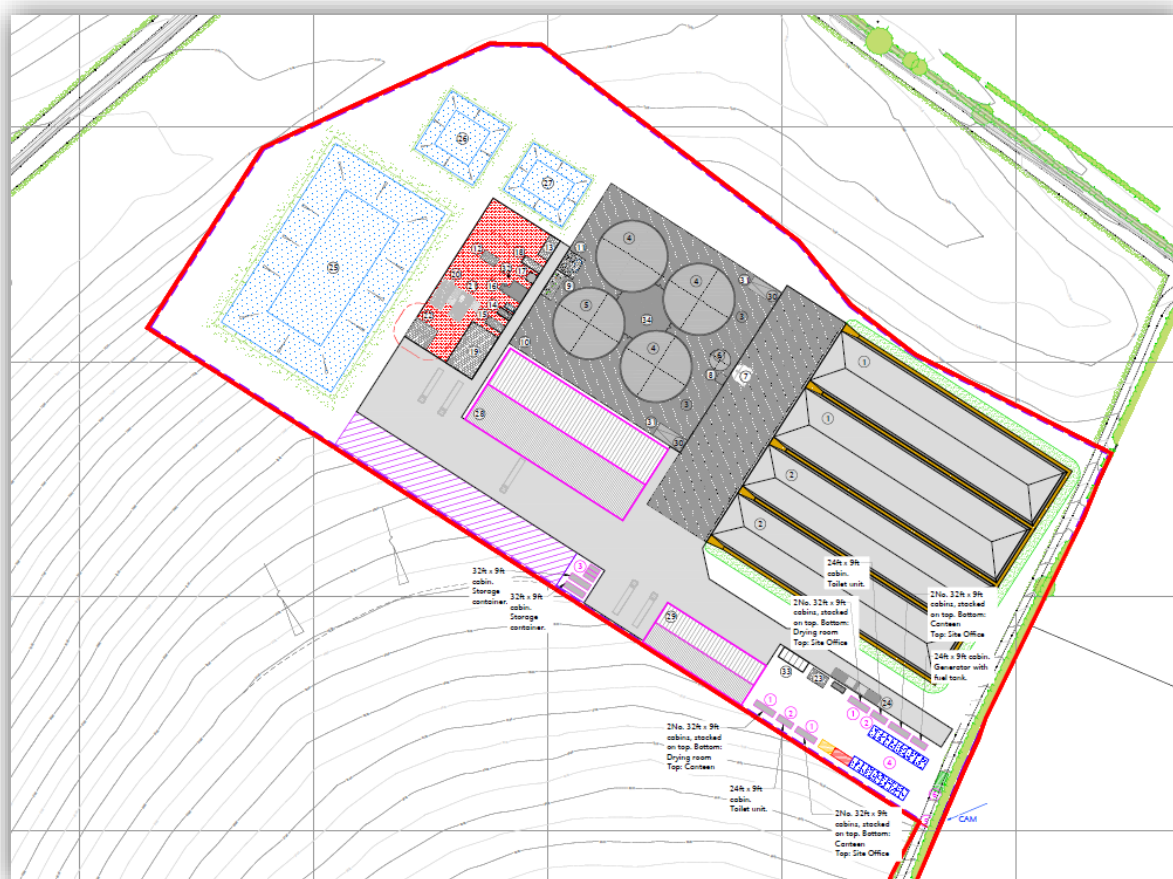


Image 8.0 contractor site set-up

9.0 CONTROL OF RECORDS

Waste management records and other environmental records will be kept in hard copy format on site for the duration of the project. They will then be stored for the required duration by the Principal Contractor.

10.0 MANAGEMENT REVIEW

The outputs from site auditing will be reviewed on an ongoing basis at regular progress meetings and periodically throughout the project as required.

The CEMP will be reviewed when there is any significant change to the agreed scope of works and at intervals not greater than 3 months.

The management review is to ensure compliance with and continual improvement of the Principal Contractor's environmental policy and procedures.

11.0 SITE HOUSEKEEPING

A 'good housekeeping' policy will be adopted across the site. This will include the following requirements:

- No fires on site
- Maintenance of staff welfare facilities
- Removal of food waste and other rubbish at frequent intervals
- Maintenance of road cleanliness surrounding the site

12.0 BOUNDARY FENCING

The site boundary will be fenced as necessary for security, to prevent windblown litter or waste from polluting the wider environment and to exclude any wildlife that could be harmed or become trapped in any of the works.

13.0 PROTECTION OF EXISTING ENVIRONMENTAL FEATURES

Temporary fencing will be provided if required to protect existing environmental features to be retained, including existing trees. The fencing will be established prior to the start of the construction works. The location will be agreed on site with the Client. The fencing will be of sufficient durability to be in place for the duration of the works.

The Arboricultural Impact Assessment (ref. 2022.095 date 20/07/2023) prepared by Norfolk Wildlife Services submitted as part of this planning application makes the following construction related recommendations:

- The positions of the CEZ fencing will be taken from the TSS in Appendix 1 (the positions are also displayed on the TPP), and shall extend to the edge of the calculated RPA radius or the edge of the canopy spread – whichever is the greatest.
- Any work within the RPA of tree T5 will be supervised by the project arboriculturist.
- The no-dig cellular confinement system for the upgrading of the farm track will be designed in conjunction with an engineer and arboriculturist.
- The material storage and contractors parking areas will be identified and constructed away from retained trees and hedges prior to plant and materials being delivered to site.

- A volume of water will be available at all times should a fuel/chemical/cement spill occur.
- Responsibilities and a method of arboricultural supervision and monitoring will be established to ensure there is minimal risk of adverse impact on the trees to be retained.

14.0 PROTECTION OF EXISTING FOOTPATHS

The proposed access will cross an existing Bridleway (ref. 131/21), however the necessary permissions will be obtained before any construction of the access at this intersection is undertaken and protective fencing installed as necessary. The below **Image 14.0** taken from Cambridge County Council's website identifies the Bridleway.

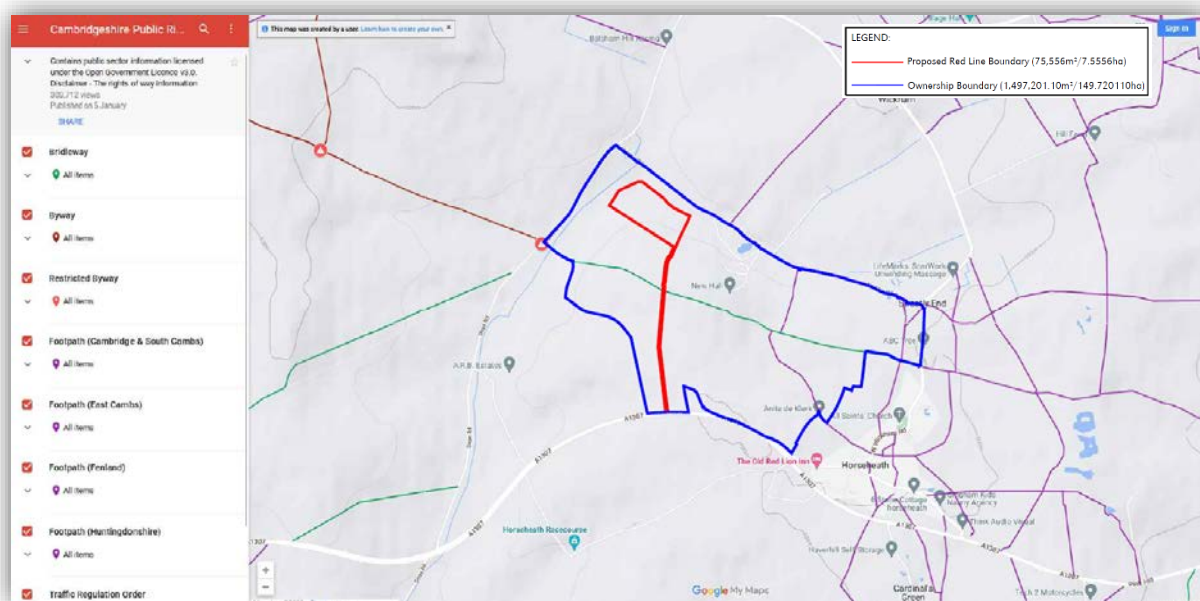


Image 14.0 PROW Map

15.0 ACCESS ROUTES/POINTS

A Construction Traffic Management Plan (CTMP) has also been prepared which addresses the construction access and accompanies this application.

16.0 CONSTRUCTION SITE SECURITY

Temporary fencing will be provided around the construction area. The fencing will be securely locked outside of construction hours. A CCTV camera tower will be installed at the main site gates to control access to the site. Installation of additional security features are subject to preference of the main contractor.

17.0 DRAINAGE

A management plan for the site's drainage during construction will be developed once the operational site drainage has been agreed at planning level.

18.0 ECOLOGY

Plans for managing any protected species are to be finalised, implemented and monitored. The Construction Manager is required to monitor ecological measures and ensure protected species are safeguarded. This will be carried out in conjunction with an appointed suitably qualified Ecologist by way of a pre-construction site inspection to confirm that all necessary measures have been put in place and the construction team is briefed on the local habitats and species within the area.

The Ecological Report (ref. 2022.095 date 18/07/2023) prepared by Norfolk Wildlife Services submitted as part of this planning application makes the following construction related recommendations:

- Suitable root protection zones to be implemented and adhered to surrounding all retained hedgerows. Building materials should not be stored within these zones nor should machinery be operated or stored within these zones. Likewise, no construction should occur within these zones.
- Any trenches dug for construction must be covered over at night or else should have a shallow graded end to prevent animals getting trapped. Building materials should be stored raised off of the ground by pallets.
- Any perimeter fencing erected surrounding the site should include 'hedgehog gaps' (13cm x 13cm) in numerous locations along its length; these are holes along the base which ensure that the fences are permeable to terrestrial wildlife.
- The site set-up and vegetation clearance of the proposal site is advised to avoid the main nesting bird season of March through August
- Alternatively, a qualified breeding bird survey of the site will be required to check for established territories and possible nesting activity. The ability to proceed with clearance would be dependent on the findings. Any identified active nests must be given a suitable works exclusion buffer (as determined by the ecologist) until the nesting attempt reaches a natural conclusion. Should the works be considered able to proceed, it is likely that this would be in small sections at a time, and further competent watching briefs would be required to determine if any nests were still present and active in the working area.

These recommendations are subject to change following further recommended survey works including for badger and water vole.

19.0 NOISE AND VIBRATION

The Contractor shall prepare a Construction Phase Plan which will include provisions for the control and monitoring of noise and vibration.

Noise and vibration will be controlled and limited so far as reasonably practicable so that sensitive receptors are protected from excessive noise and vibration arising from construction.

Certain activities may extend outside normal working hours to enable safe working or as a result of unforeseen events. The Environmental Health Team will be contacted to agree to the activities required.

Recommendations for the control of noise and vibration on construction sites are set out in BS 5228. The following measures will be used where appropriate:

- Hydraulic plant will be used in preference to pneumatic plant where possible.
- Plant and equipment will be maintained in good working order and fitted with silencers and acoustic panels where appropriate.
- All plant will be shut down or throttled back between periods of use
- Methods used for concrete breaking and demolition should be carefully considered, non-percussive means should be used where possible.
- Where sensitive locations, acoustic enclosures may be required for fixed plant such as generators.

'White noise' type reversing warnings should be used on mobile plant in preference to 'bleepers', in order to minimise intrusion.

20.0 EARTHWORKS/EXCAVATION

All necessary and practicable measures to control dust emissions through good housekeeping and site operational practices shall be carried out including:

- Sheeting of vehicles: all HGVs carrying loose material capable of spillage, or which has the potential to give rise to dusty emissions from the vehicles during transit shall be sheeted. This requirement shall be enforced by the Contractor and any transgressions shall be recorded.
- Compound: an area of hard standing of reasonable size shall be provided by the Contractor around site offices and over vehicle management areas, so that dust will be kept to a minimum by appropriate control methods. Drainage arrangements will be included where necessary. The area will be swept as required.
- Water bowsers/sprays: Water sprays shall be applied to any demolition operations as the Client Project Manager considers appropriate.
- Prevention of wind-blown dust arising from storage mounds: storage mounds shall be profiled to reduce erosion where the nature of the material could lead to it being rain washed or windblown.
- Mound surfaces shall be kept sufficiently damp to prevent wind blow unless and until the surface is sprayed, sealed or stabilised by means of vegetation. Materials that have the potential to give rise to dust emissions shall be stored as far away from the site boundaries as is reasonably practicable.
- Dust collection during cutting and grinding works; if this is not carried out in an enclosure, tools shall be used that are fitted with dust collection devices (excluding small tools which require a continuously wet working surface).
- The date and location of cleaning of paved areas and off-site roads.
- The date and vehicle registration number of any construction vehicle that is observed carrying material that has the potential to release dust during transit and is not covered. Details of measures taken to prevent further occurrence shall be included.

21.0 NOISE AND EMISSIONS

Fires will be prohibited on site.

Compliance by construction vehicles with emissions legislation, servicing, and MOT requirements. The Contractor is encouraged to use vehicles and plant that meet the latest emissions regulations.

Engine idling time: no construction plant or vehicle shall leave its engine running when not directly in use, except where the Client Project Manager considers that there are operational or other reasons to justify an exception.

The Contractor shall keep a logbook available for inspection by the local authorities.

Any complaint relating to emissions alleged to be due to construction activity received from a local resident or business, including the date and nature of the complaint and any measures taken as a result of that complaint.

22.0 WASTE

The Contractor shall, in order to reduce the need for waste disposal, minimise the generation and environmental impacts of wastes arising during the works and shall maximise opportunities for the re-use and recovery of wastes.

The Contractor shall make any necessary applications to the Local Authority and/or the Environment Agency, under the terms of the Environmental Permitting Regulations 2007, and the Town and Country Planning Act (1990) for the storage, treatment or disposal of wastes.

All waste materials are to be stored in an area designated prior to its removal and disposal off-site. Waste is to be securely stored in a way not to allow it to be disturbed or affected by site activities and weather condition.

23.0 MATERIALS

Timber used in permanent and temporary works is to be from sustainably managed sources with recognised timber labelling or from re-use.

Local materials will be sourced to minimise associated transportation, where possible.

Material procurement procedures are to be employed that involve purchasing materials based on their environmental impact.

All construction materials are to be stored in the area designated prior to their usage. Materials are to be securely stored in a way not to allow it to be disturbed or affected by site activities and weather conditions.

24.0 TRANSPORT

This will be identified in the CTMP referenced in **Section 18.0**.

25.0 Environmental Considerations

The construction of the proposed development will involve some earthworks which could result in mud being transported off-site and being deposited onto the local highway network.

Wheel wash facilities will be provided at the site entrance to prevent mud being carried onto the local highway network from the site during construction. The Contractor may be required to carry out additional road sweeping in order to reduce the environmental inconvenience and safety implications of mud being deposited on the immediate highway network in the vicinity of the Site. The wheel wash will comprise of a power wash located at the site access as shown on Plandescil Ltd Drawing No. 27951/SK20 in the **Drawings Appendix**.

Weekly inspections of the immediate highway network will be undertaken by the Site Manager during construction to assess any abnormal wear and tear caused by the construction traffic. If any abnormal wear and tear is identified the local highway street works manager will be notified and the due process adhered to.

26.0 Controlling Access Arrangements

The following measures will be adopted to ensure that HGVs arriving/departing the site do so using the approved access routing arrangements:

- Regular monitoring by the Site Manager to ensure all HGV drivers are using the approved access routing arrangements
- The date, time and frequency of any breaches of the approved arrangements, where known, will be recorded in a log, which will be made available for inspection on request to Monitoring and Control Officers of the District Council
- All drivers of HGVs under the control of the Site Manager will be made aware of the Site access routing arrangements. This will be done by written instructions being handed to drivers; the arrangements being placed on Notice Boards in facilities used by drivers and by verbal communication from the Site Manager
- Any driver(s) found not adhering to the approved arrangements will be subject to reasonable lawful action to ensure future compliance with the required routing arrangements prescribed in this CTMP.
- All Banksmen to be briefed at the start of each day of the likely traffic movements to ensure traffic is controlled during the timeframes adequately so as to not cause a disturbance on the A1307.

27.0 POLLUTION CONTROL AND CONTINGENCY PLAN

27.1 General

An 'environmental incident' is defined as any event, activity or condition that causes or has the potential to cause harm to people and/or wildlife, or damage to property or the environment.

Pollution is defined as any harmful impact on the local atmospheric, aquatic or the land environment caused by the release of hazardous or nuisance causing substances or excessive noise and vibration.

27.2 Pollution Prevention

Potential pollutants from the works include:

- Cement and Concrete
- Oils and Fuels
- Waste Materials
- Effluent/waste from site welfare.
- Slurry/leachate from existing pig buildings
- Plant Maintenance

27.3 Concrete and Cement Washout

Concrete and cement washout has the potential to cause severe pollution. Effluent produced from washing out concrete mixing plant or ready-mix concrete lorries must not be allowed to flow into any drain, watercourse or to ground.

Therefore, the site must have a designated wash out area constructed with an impermeable liner. The residual dirty water should be removed from the site by tanker or discharged to a foul sewer.

27.4 Oils and Fuels

Fuel bowsers should be fully bunded and all vessels and nozzles when not in use be stored within the bunded area. It is recommended that a designated area is constructed with an impermeable surface and suitable containment for the refuelling of plant and equipment. Fuel bowsers and tanks should be locked when not in use.

Static equipment will be integrally bunded or will be sited on drip trays.

Spill kits will be provided in close proximity to fuel and storage areas and operatives will be trained in their use.

27.5 Waste Materials

Care will be taken to design the plant to take standard sized materials to reduce the number of offcuts. Materials will be stored in designated storage areas to reduce the likelihood of damage. Waste materials will be segregated at source and placed in covered skips.

Waste will be disposed of by using a fully licensed waste operator, and all paperwork retained onsite in line with current guidelines.

27.6 Effluent/Waste from Site Welfare

The site welfare facilities should be connected to an existing foul sewer. If this is not possible then it must be connected to a temporary effluent tank and the contents emptied and disposed of by a licensed waste carrier.

27.7 Maintenance of Plant & Equipment

Any routine maintenance on plant and equipment will be carried out on impermeable surfaces. Spill kits will be available during all plant and maintenance operations and drip trays used to contain any leakage of oil.

Any plant or equipment that is considered to be a pollution risk will be repaired or removed from site.

27.8 Notification Procedure

Site operatives should be made aware of the project emergency procedures. Contact details that must be readily available in close proximity to spill kits should include:

- Client Project Manager
- Site Manager
- Construction Manager
- Environment Agency
- Fire, Police, Ambulance (including local hospital and routes to these)
- Skip Hire / Waste Disposal Contractors

28.0 ENVIRONMENT RISK MANAGEMENT

The purpose in a CEMP is to present a summary of the environmental risks and controls that have been identified for the proposed construction project.

Summarised in bullet point below and in the tables that follow are the risk management tables for the following environmental management areas:

- Areas to be protected
- Ecology Inspections
- Noise Management
- Dust Management
- Oil and Other Noxious Substances
- Housekeeping and Waste
- Boundary Protection

Template tables have been provided below to demonstrate the components required for each topic. The template could be used throughout the project if additional areas are raised.

TEMPLATE			
Objective(s)			
Management Strategy			
		Responsibility	Timing
Control(s)			
Performance Indicator(s)			
Monitoring			
Reporting			
Corrective Action(s)			

Table 1 – Noise Management

NOISE MANAGEMENT			
Objective(s)	<p>1. To minimise the impacts of noise on the amenity of the surrounding areas. Construction activities undertaken in accordance with <i>BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites</i>.</p> <p>2. Construction activities undertaken in accordance with <i>The Environmental Noise (England) Regulations 2006</i></p>		
Management Strategy	Noise to be managed primarily through administrative and equipment controls during the construction phase.		
		Responsibility	Timing
Control(s)	<p>All equipment used during the construction phase to be regularly maintained to ensure efficient operation; Pre-start checks and maintenance schedules to ensure equipment performance is as required; Noise-dampening equipment to be used on equipment with excessive noise generating characteristics; Construction activities in accordance with <i>BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites</i>.</p>	Site Manager	
Performance Indicator(s)	No complaints from adjacent commercial premises and/or community.		
Monitoring	<p>Daily inspection of works sites to occur Service logs for equipment/machinery used on site</p>		
Reporting	Any complaints or incidents to be reported to Project manager.		
Corrective Action(s)	<p>Investigate cause of excessive noise Implement corrective measures prior to the recommencement of site works Reschedule of noise-generating activities to reduce noise annoyance</p>		

Table 2 – Dust Management

DUST MANAGEMENT			
Objective(s)	1. To ensure the impacts of dust on adjacent areas and the community are minimised.		
Management Strategy	Dust issues managed principally by emission controls at source, and administrative controls during works.		
		Responsibility	Timing
Control(s)	<p>Area to be disturbed minimised. Clearance to be approved by Project Manager.</p> <p>Where dust is identified as an issue, dust control measures will be implemented. These will primarily be the use of water carts, but may include surface treatments.</p> <p>Vehicle movements controlled (Traffic Management Plan) and kept to established tracks and haul roads.</p> <p>Dust awareness issues in environmental induction process</p>	Project Manager	
Performance Indicator(s)	No complaints from adjacent commercial premises and/or community.		
Monitoring	<p>Daily inspection of works sites to occur, including:</p> <ul style="list-style-type: none"> visual check for dust crossing the site boundaries visual check of high potential dust areas, such as haul roads, stockpiles and operational areas. 		
Reporting	Any complaints or incidents to be reported to Project manager.		
Corrective Action(s)	<p>Investigate cause of excessive dust</p> <p>Implement controls immediately (e.g. water carts)</p> <p>Implement corrective measures prior to the recommencement of site works</p> <p>Implement administrative controls if required, such as rescheduling of dust generating activities to more favourable weather conditions.</p>		

Table 3 – Sediment and Erosion Control

SEDIMENT AND EROSION CONTROL			
Objective(s)	1. To ensure that the effects of erosion and sedimentation on the environment and biological communities are minimised. 2. Minimise soil disturbance, degradation and erosion.		
Management Strategy	Ensure that direct impacts (land disturbance) are limited to the works area, and that secondary impacts do not impact adjacent areas.		
		Responsibility (Role)	Timing
Control(s)	Disturbance area will be minimised and clearly demarcated. Works will only be conducted within the works zone. Vehicle movements will be restricted to the defined roads/tracks. Where possible, works area will be designed to ensure stormwater runoff drains into the site. Where runoff from the site is required, it will be via the longest flow path possible to ensure maximise sediment retention. Flows to undisturbed areas will be prioritised. Where required, sediment controls will be put in place. These will include, but not be limited to, rock check dams, sediment basins, sediment fences and silt socks. Sediment controls will be reviewed during site inspections and/or after significant rainfall (more than 10mm in 24hrs resulting in site runoff).		
Performance Indicator(s)	No evidence of significant sediment deposition outside the works area. No evidence of significant gullies or other instances of run-off erosion.		
Monitoring	Daily inspection of work site to occur. Sediment controls will be reviewed during site inspections and/or after significant rainfall (more than 10mm in 24hrs resulting in site runoff). Review will include removal of accumulated sediments as required.		
Reporting	Incident report for non-conformance of sediment control Logging of sediment control structures - location and condition during weekly site inspection		
Corrective Action(s)	Investigate cause of sediment control failure Review flow path and determine most appropriate controls are in place, additional controls which can be place in-stream and/or changes that can be made to flow path Review similar controls on-site (even though these may not have failed) for similarities		

Table 4 – Oil and Other Noxious Substances

OIL AND OTHER NOXIOUS SUBSTANCES			
Objective(s)	1. To minimise the potential for spills of oils and other noxious substances to as low as reasonably practicable.		
Management Strategy	Reduce quantity of hydrocarbons stored to that required, implement appropriate controls and provide appropriate training and resources for a spill response.		
		Responsibility (Role)	Timing
Control(s)	<p>All hydrocarbons to be stored in an appropriate bund that is capable of holding 110% of a spill from the largest container, or 10% of total volume of stored liquids, whichever is greater.</p> <p>Refuelling of vehicles/equipment will be undertaken on land (not over water), unless the task is not possible.</p> <p>To reduce the impact of a spill, the lowest volume of hydrocarbons required will be stored in proximity to the marine environment and in the onshore lay down areas.</p> <p>A copy of the current hydrocarbon Material Safety Data Sheet will be kept at an appropriate location on site.</p> <p>Drip trays shall be placed under mechanical stationary equipment such as gensets if such equipment is not internally banded.</p> <p>Onsite spill response training will be carried out on a periodic basis. All deficiencies identified through training and testing of the procedures will be documented and rectified immediately.</p> <p>All equipment will be regularly serviced to reduce emissions and reduce the chance of oil leaks on site and in marine environments. Appropriate controls in place to contain hydrocarbon leaks should they occur whilst servicing. Controls may include use of drip trays when changing oil and transporting waste oils in banded containers.</p> <p>Only qualified personnel are to carry out services on plant, equipment and vessels.</p> <p>A prescribed Isolation procedure must be followed prior to work on any plant or equipment.</p> <p>Training / awareness to be included in site induction (including all staff, contractors, sub-contractors etc.).</p> <p>Appropriate volume and type of spill response materials will be available at each work site</p> <p>Spill will be contained and cleaned-up immediately. Resultant wastes (soils, rags and absorbent material) appropriately stored and disposed of by an appropriately licenced waste contractor as controlled waste.</p> <p>All spills reported and investigated as required.</p>	Site Manager	
Performance Indicator(s)	<p>Minor spills (<10L) to land contained, controlled and all contamination removed / cleaned-up within 24 hours.</p> <p>Reporting within timeframes specified below</p> <p>No contamination of soil or surface / ground waters.</p>		

OIL AND OTHER NOXIOUS SUBSTANCES			
	No spills that require an emergency response		
Monitoring	Incident report outlining corrective actions taken and preventative measures to be implemented sent to Project Manager with 48 hours Statistics reported to Project team in weekly meetings and monthly reports.		
Reporting	The following incidents must be reported to Project manager <ul style="list-style-type: none"> • If there is less than 10L spilt, the spill is contained on site and it is able to be fully cleaned up. The following types of spill incidents must be reported to the Environment team immediately (including a follow-up incident investigation report within 48 hours): <ul style="list-style-type: none"> • Any spill greater than 10L; • Any spill which cannot be fully cleaned up / contained immediately; OR • Any spill which leaves the lease area (e.g. as liquid discharge or dust emission). 		
Corrective Action(s)	Stop work immediately, contain spill (if safe). Investigate cause of spill and assess. Implement improvements as required. Investigate and assess adequacy of response – implement improvements as required. Implement corrective measures prior to the recommencement of site works.		

Table 5 – Housekeeping and Wastes

HOUSEKEEPING AND WASTES			
Objective(s)	Reduce waste volume, maximise recycling, reuse and recovery, prevent any construction waste/litter entering the environment.		
Management Strategy	Minimise environmental impacts through appropriate controls and site inductions of employees and sub-contractors.		
		Responsibility (Role)	Timing
Control(s)	Provide appropriate waste bins, type, volume and service frequency to accommodate anticipated waste streams. All loads arriving or leaving the site will be appropriately secured. Provide information regarding waste management in site specific inductions, including waste separation and importance of securing vehicle loads. Ensure licensed contractors are used to collect controlled wastes		
Performance Indicator(s)	Hazardous materials all appropriately disposed. Recycling of all recyclable construction metal waste Records kept of waste leaving site.		
Monitoring	Daily inspection of work site to occur. Review of waste bins (% full, time to next service). Waste volumes leaving site from waste contractors		
Reporting	Environmental incident reports.	Project Manager	Throughout project
Corrective Action(s)	Investigate cause of inappropriate waste disposal Review cause of issue and develop response, such as variation to bin size, service schedule or waste separation awareness. Implement controls	Project Manager	Throughout project

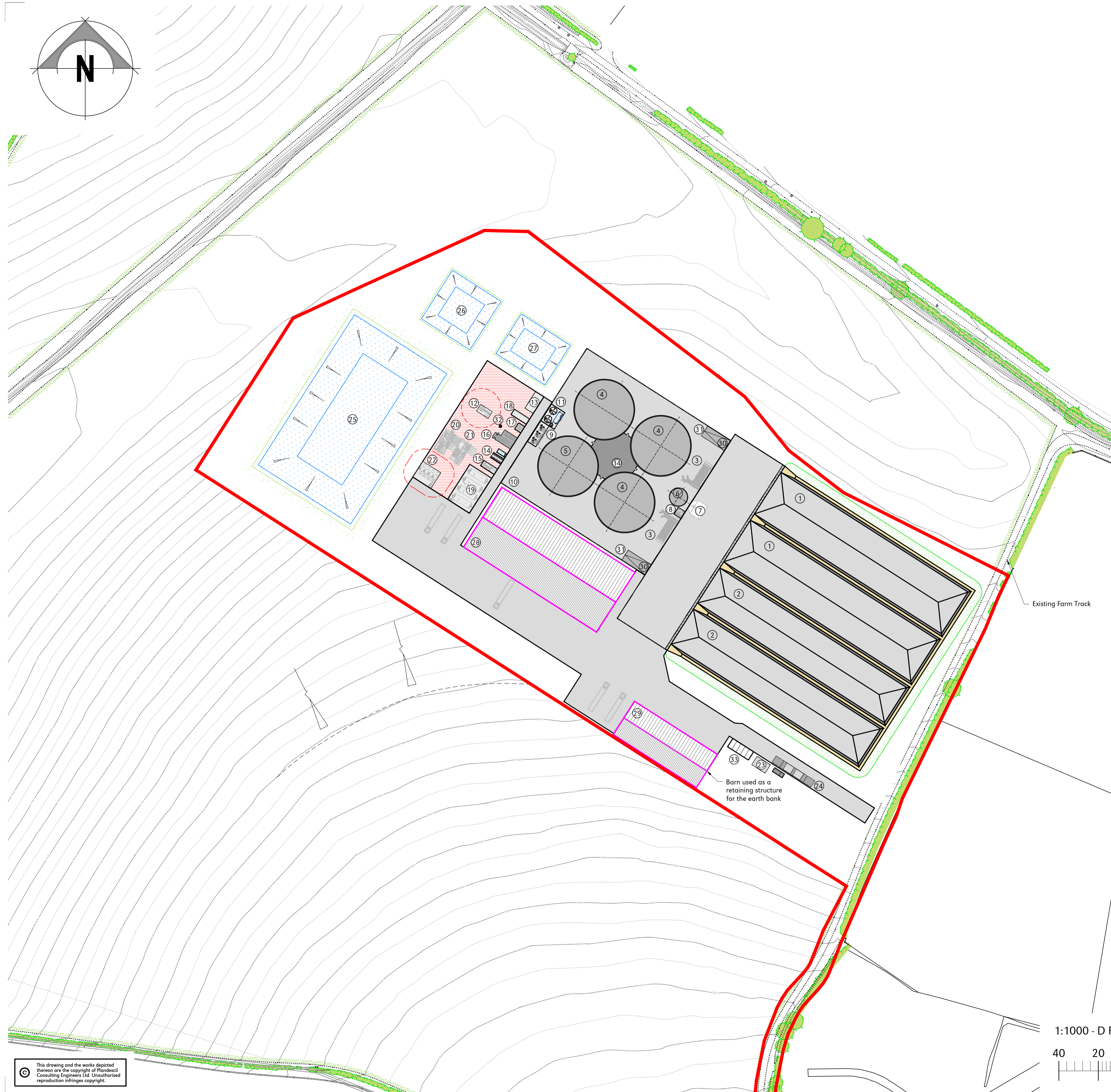
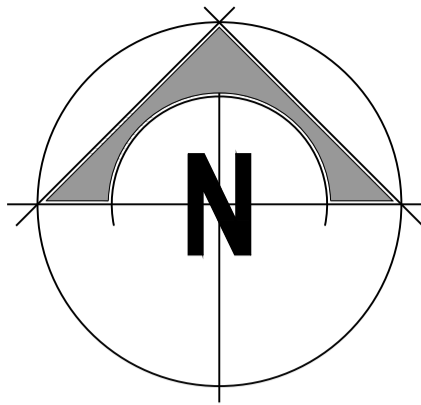
Table 6 – Native Vegetation and Weeds

NATIVE VEGETATION AND WEEDS			
Objective(s)	1. To minimise the disturbance to existing flora 2. To minimise the introduction and/or spread of weed species		
Management Strategy	Ensure impacts to native vegetation are minimised, impacts outside the disturbance zone are avoided and appropriate management is in place to control spread / introduction of weeds.		
		Responsibility (Role)	Timing
Control(s)	Provide site specific information on flora within the Environmental Induction Ensure that any native vegetation clearing occurs within the limits of an approved area under the planning permission whole or part native vegetation clearing permit. Ensure no activities outside the works zone through clear delineation of the works area, and communication in site inductions Ensure traffic is restricted to established tracks and roads, and speed limits observed. Ensure effective sediment and erosion control to reduce potential impacts to non-disturbance zone. Ensure all plant and equipment coming to site has been cleaned for site access (weeds and seeds). No fires on-site.		
Performance Indicator(s)	No disturbance of vegetation communities outside the disturbance zone No introduction of weed species		
Monitoring	Daily inspection of work site and boundary to occur.		
Reporting	Any accidental clearing of native vegetation to be reported to the PPA project representative and followed through with an incident report.		
Corrective Action(s)	Investigate cause of incident Implement corrective measures prior to the recommencement of site works Review opportunities/constraints for further minimisation of potential incidents given work procedure parameters.		

DRAWINGS APPENDIX

CONTENTS

- Drawing No. 27951/007 - Proposed Site Layout
- Drawing No. 27951/SK20 - Proposed Contractor Site Set Up
- Drawing No. 27951/150 - Site Location Plan



- GENERAL NOTES:**
- All dimensions noted are in meters unless stated otherwise.
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 - Layout based on received drawing from Bioconstruct. plant layout_Streety Hall AD_WS_230522

GENERAL KEY:

	Proposed Site Boundary (75,556m ² /7.5556ha)
	Proposed Concrete
	Proposed D.f.T Type 1
	Proposed Asphalt Surfacing
	Grassed Area
	Proposed Gravel Surface
	Proposed Building

FOR PLANNING

Rev	Date	Rev By	Chkd	Description
K	14-08-23	JA	OAJ	Area of Flooding Removed
J	27-07-23	MJP	OAJ	Amendments To Redline Boundary
H	21-07-23	MJP	OAJ	Proposed Site Levels Added
G	07-07-23	MJP	OAJ	Amendments To Redline Boundary
F	06-07-23	MJP	OAJ	Amendments Based on Client Comments
E	29-06-23	MJP	OAJ	Amendments to Site Layout Based on Received Drawing
D	14-12-22	MJP	OAJ	Amendments to Redline Boundary
C	06-12-22	MJP	OAJ	Site Layout Amended
B	03-11-22	JWD	OAJ	Amendments to Redline Boundary
A	21-10-22	MJP	OAJ	Proposed Site Levels Added
O	21-09-22	-	OAJ	First Issue

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Client
Streety Hall Estate

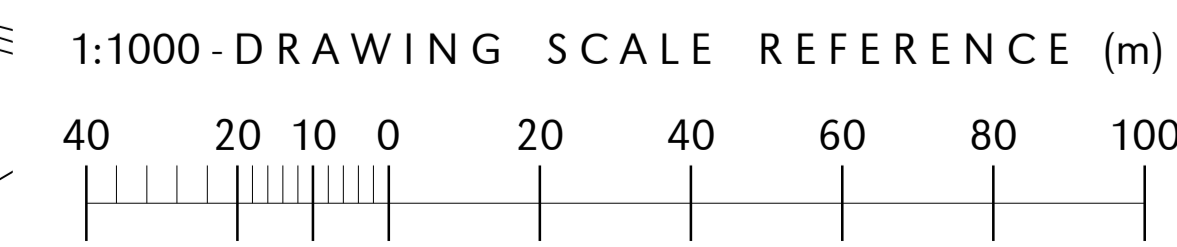
Project
**Streety Hall Estate,
West Wickham,
CB21 4RP**

Drawing Title
Proposed Site Layout

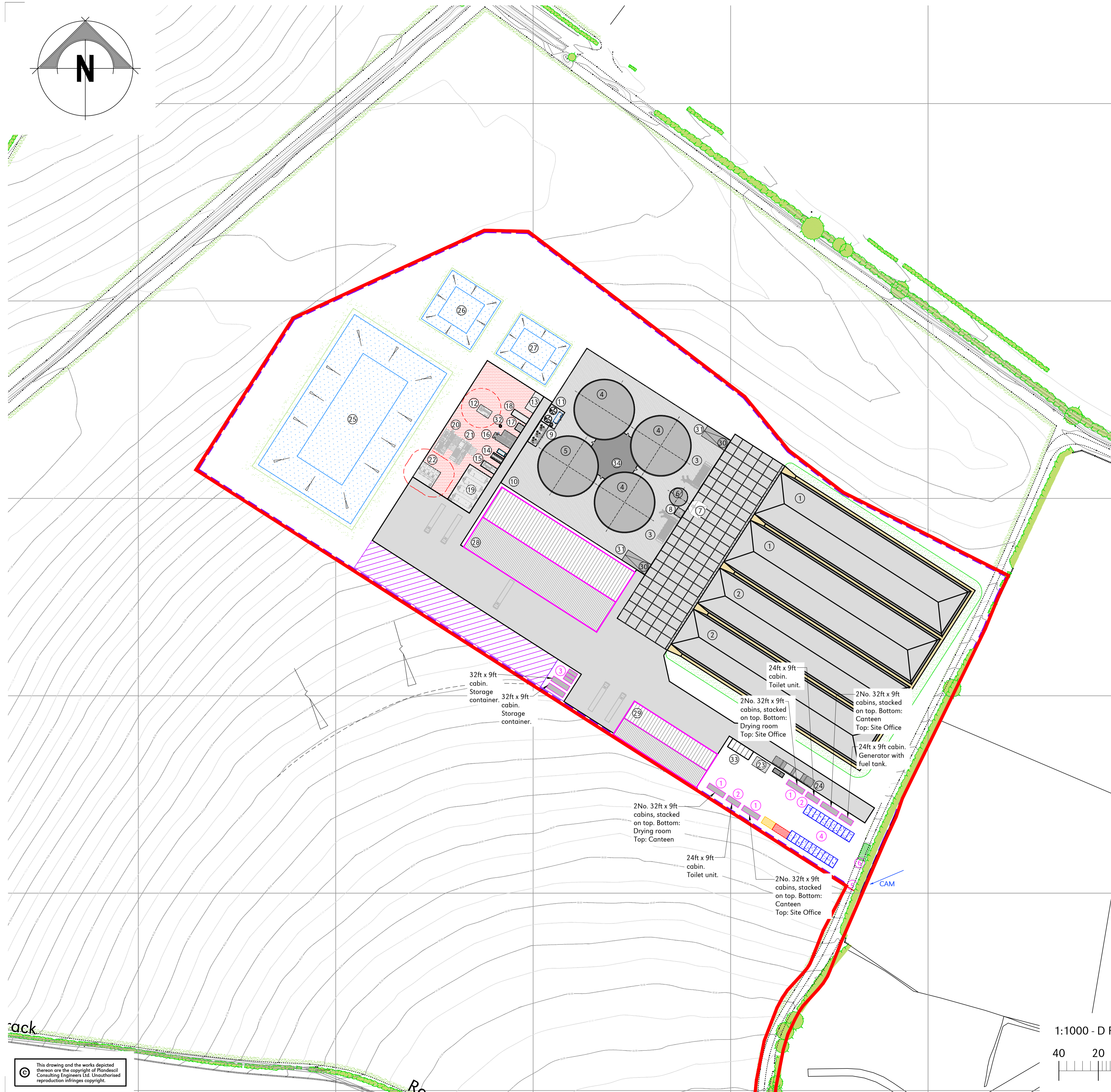
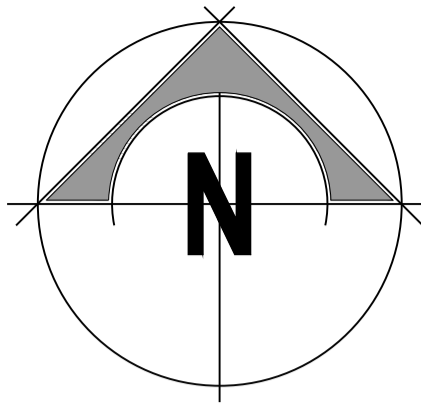
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Drawing No.	27951/007		Rev K

PLANT KEY

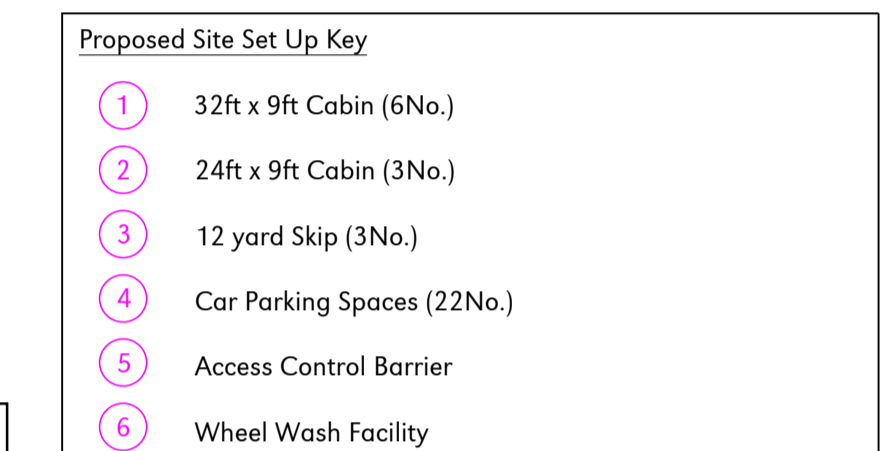
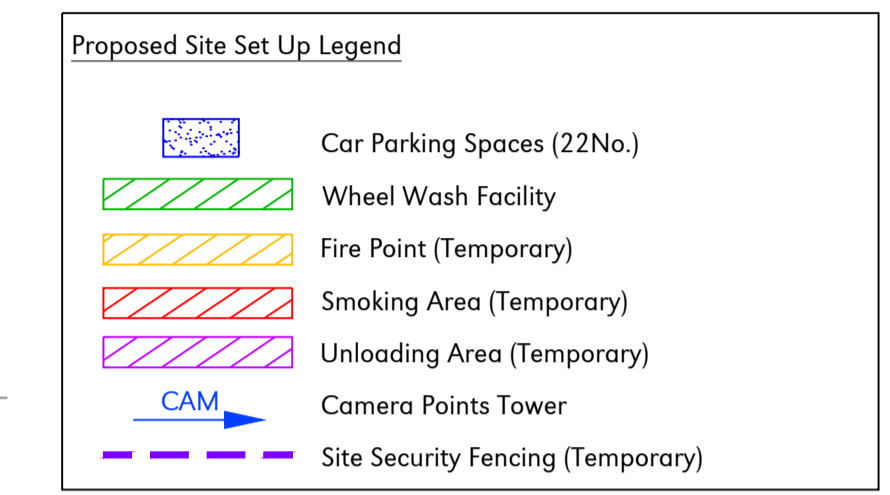
- Silage Clamps (2No. 94.75m x 13.48m)
- Silage Clamps (2No. 94.75m x 11.32m)
- Feed Hopper (2No.)
- Fermenter (3No. 30mØ)
- Post Fermenter (1No. 30mØ)
- Pre-Storage Tank (1No. 9mØ)
- Filling Station
- Ferric Chloride Tank
- Pasteurisation
- Containment Bund
- External Desulphurisation
- Gas Flare
- Gas Technology
- LV Board + Emergency Generator
- GEU
- CHP
- Buffer Tank
- Power to Heat Module
- CO₂ Tanks
- CO₂ Recovering System
- Gas Upgrading System
- Propane Tanks
- Weighbridge Office
- Weighbridge
- Digestate Storage Lagoon (15,260m³)
- Surface Water Lagoon (1,100m³)
- Dirty Lagoon (805m³)
- Intake & Process Building - Straw Briquetting & Feedhopper (36.00m x 80.00m)
- Straw Barn (20.00m x 50.00m)
- Bund Gate (2No.)
- Bund Ramp (2No.)
- Condensate Pit
- Car Parking Spaces (5No.)
- Technical Building



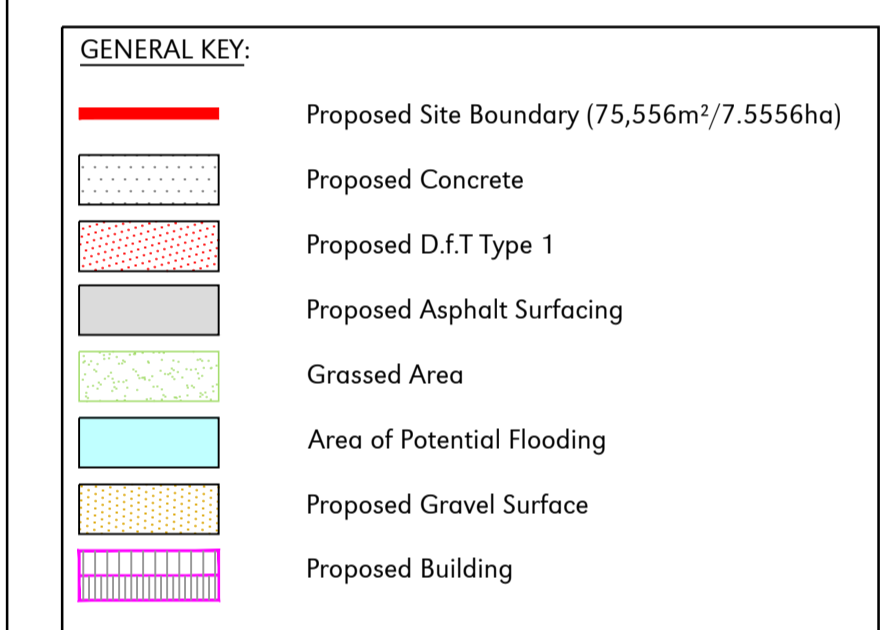
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- PLANT KEY**
- 1 Silage Clamps (2No. 94.75m x 13.48m)
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 - 30 Bund Gate (2No.)
 - 31 Bund Ramp (2No.)
 - 32 Condensate Pit
 - 33 Car Parking Spaces (5No.)
 - 34 Technical Building



FOR PLANNING

Rev	Date	Rev By	Chkd	Description
A	17-08-23	JA	OAJ	Area of Flooding Removed
0	03-08-23	-	OAJ	First Issue

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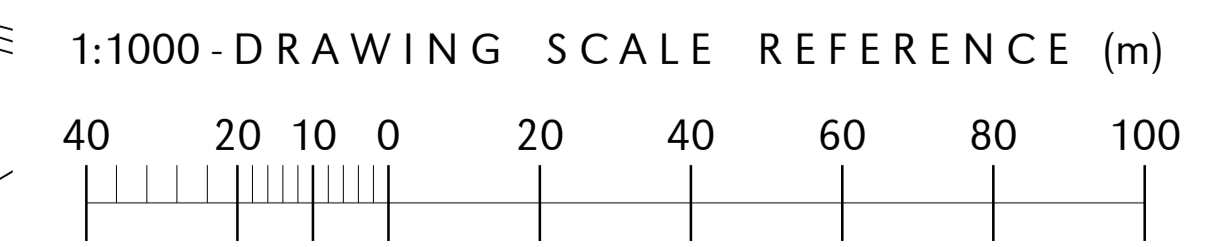
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Client
Streetly Hall Estate

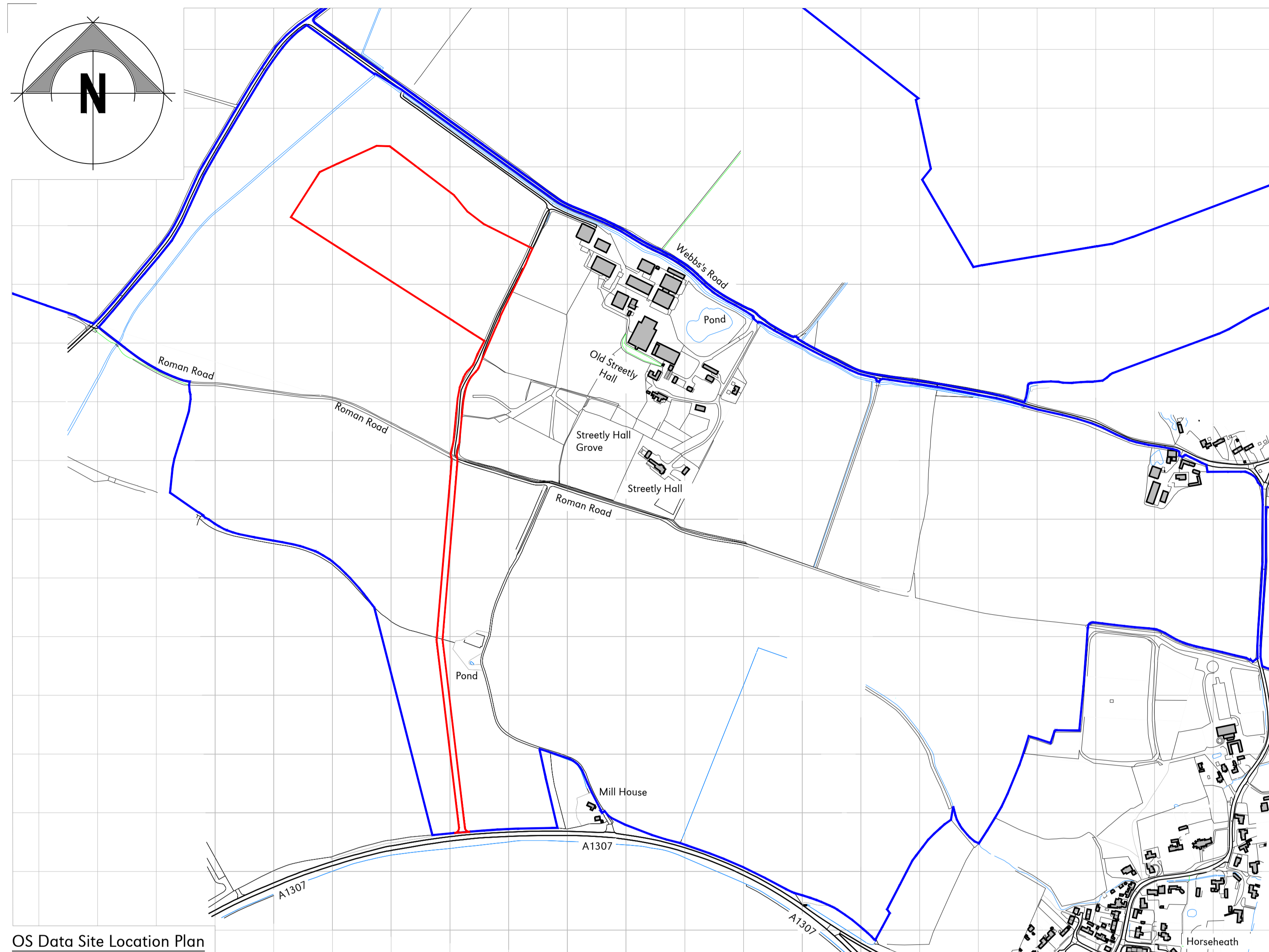
Project
**Streetly Hall Estate,
West Wickham,
CB21 4RP**

Drawing Title
**Proposed Contractor
Site Set Up**

Scale	U.N.O.	Date	Drawn By
1:1000 (A1)		August 2023	TDS
Drawing No.	27951/SK20	Rev	A



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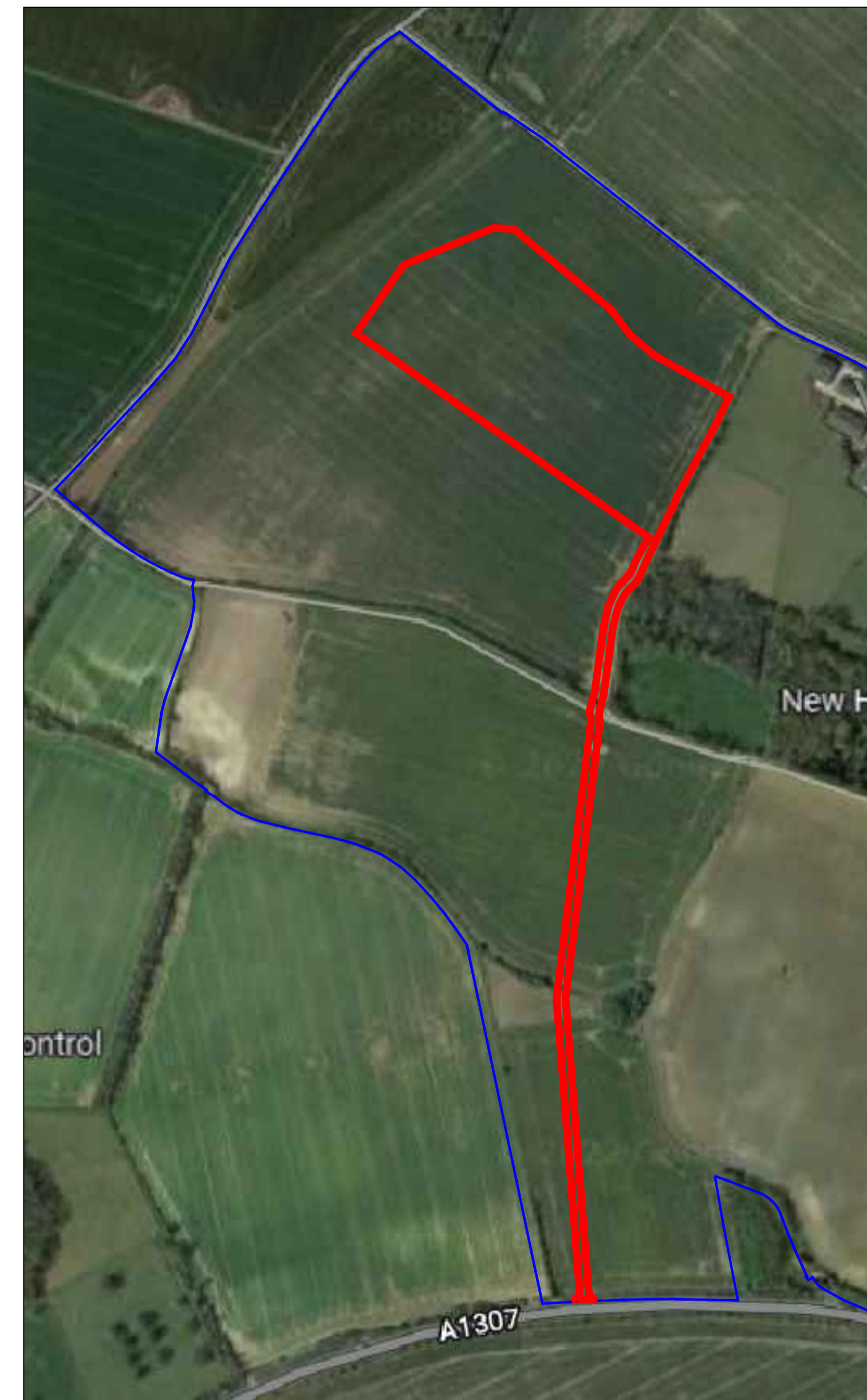


OS Data Site Location Plan
Scale 1:5000



Site Location Plan 2
Not To Scale

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Site Location Plan 1
Not To Scale

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LEGEND:	
—	Proposed Red Line Boundary (75,556m ² /7.5556ha)
—	Ownership Boundary (1,497,201.10m ² /149.720110ha)

FOR PLANNING

Rev	Date	Rev By	Chkd	Description
F	27-07-23	MJP	OAJ	Site Boundary Amended
E	13-07-23	MJP	OAJ	Site Boundary Amended
D	14-12-22	MJP	OAJ	Site Boundary Amended
C	20-10-22	RJG	OAJ	Site Boundary Amended
B	14-10-22	RJG	OAJ	Site Boundary Amended
A	07-10-22	RJG	OAJ	Site Boundary Amended
O	01-01-22	-	OAJ	First Issue

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Client

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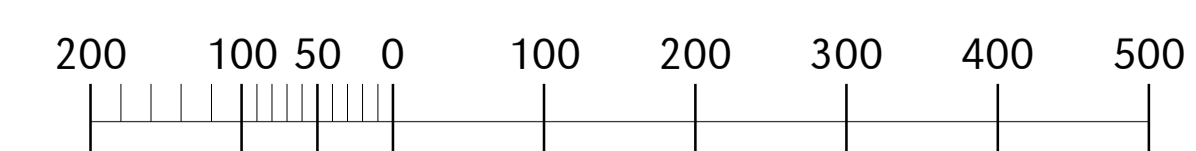
Project

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West Wickham,
CB21 4RP

Drawing Title

Site Location Plan

1:5000 - DRAWING SCALE REFERENCE (m)



Scale	U.N.O.	Date	Drawn By
As Noted (A1)		February 2022	JLB
Drawing No.	27951/150	Rev	F

civil engineering and building



- Industrial, Commercial, Agricultural and Domestic building design
- Foundation Design and ground improvements
- Highway Engineering including PDS/Civil 3D
- Retaining walls
- Sheet Piling
- Infrastructure planning and design
- Design of sustainable drainage system (SUDS)
- Soakaway design
- Architectural design of industrial buildings
- Planning and building regulation applications
- 3D conceptual models
- Renewable Energy Civil Engineering design and project management
- Anaerobic Digestion and Waste to Energy Project design and detail

environmental engineering



- Contaminated Land investigations (intrusive & non-intrusive)
- Land remediation verification
- Environmental impact assessments (EIA)
- Flood Risk Assessments
- Water supply, treatment, storage and distribution
- Foul and surface water & effluent/leachate drainage design
- Drainage network modelling
- 1D & 2D flood modelling
- Hydraulic river modelling
- Flood Alleviation
- Breach & overtopping analysis
- Reservoir flood inundation modelling
- Consent to discharge applications
- Landscaping design
- Tree surveys
- Environmental Permits

structural engineering



- Structural calculations for Commercial, Agricultural and Domestic building design
- Structural design using steel, stainless & carbon steel, concrete, timber, alloys and masonry
- Maritime and Hydraulic structures
- Structural surveys and structural suitability surveys
- Structural failure studies
- Subsidence claims
- Temporary works design
- 3D Finite Element Analysis
- Structural monitoring
- Structural enhancement/remedial work
- Historic building advice
- 3D Revit & Level 2 BIM structural design & modelling

surveying land and buildings



- Geomatic / topographical site surveys
- Building, Road, and Earthworks Setting out
- Engineering Setting out
- Establish precise site survey control
- 3D digital terrain modelling
- Volumetric analysis
- Site area computations
- Flood risk surveys using GPS active network
- Measured building floor plans and elevation surveys
- Land transfer plans to Land Registry requirements
- Drainage network surveys
- Assistance/Expert witness in land boundary disputes
- Deterioration monitoring
- Preparation of asset plans
- As built record surveys

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