

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN FOR LAPSTONE PLAYING FIELDS ENHANCEMENTS AT LAPSTONE PLAYING FIELDS, FAIR OAK SPORTS PAVILLION, PAVILLION CLOSE, HAMPSHIRE, SO50 7PS.

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1 Introduction

1.1 Background

A planning application for the conversion of the existing playing fields, erection of a single-storey cricket score-box & storage cabin with cricket nets and an extension to an existing culvert at the Fair Oaks Sports Pavilion was validated by Eastleigh Borough Council Local Planning Authority (LPA) on the 28 November 2022.

As part of the consultation (F/22/94174) a Construction Environmental Management Plan (CEMP) has been recommended.

The CEMP includes a water quality management scheme as well as the means to manage dust, noise, vibration and surface water management in accordance with best practice guidance and the relevant BS standards.

This CEMP document has been produced to support the application and aide the determination of the Habitat Regulations Assessment (HRA).

H2Ogeo was commissioned by Eastleigh Borough Council to produce the CEMP describing the techniques and controls required for successful environmental management during construction of the development.

It presents the mitigation measures to be adopted by the construction team to ensure compliance with the Local Planning Authority and meet the requirements of relevant Environmental Regulations.

The CEMP is divided into the following sections:

- General Site Information;
- Environmental & Site-Specific Sensitivities;
- Construction Environmental Management Plan, including Mitigation Measures; and
- Monitoring.

The CEMP is a dynamic live document and must be updated when additional site-specific information becomes available.

The CEMP must be kept on site during the development and undergo a review every three months during the project to identify any significant changes.

Table 1 CEMP Review Schedule

Next Review Date	Review Date Undertaken	Comments/Revisions to DCEMP
3 months from project start		

2 General Site Information

The following section outlines the site location, general overview and relevant contact details.

2.1 Site Setting & Location

The site is located at:

Fair Oak Sports Pavilion
Pavilion Close
Fair Oak
Eastleigh
SO50 7PS

The application site is located 6km east of Bishops Waltham and approximately 4km west of Southampton Airport in Hampshire.

The site is centred on National Grid Reference SU49408 17943, (Easting: 449408, Northing: 117943), presented in Figure 1, south of the village of Fair Oak.

2.2 Working Hours

Demolition, construction work and associated activities, other than internal works not audible outside the site boundary, will only to be carried out between 08:00 and 18:00 Monday to Friday and between 09:00 and 13:00 on Saturdays.

There will be no work on Sundays or public holidays without the prior written permission from the Local Planning Authority (LPA). If construction activities are required for reasons of engineering practicability, season, weather and/or safety, the associated extended working hours will be agreed with the LPA in advance.

Any works required in an emergency or, if not completed would be considered an environmental risk or unsafe, will be carried out with LPA being informed as soon as feasibly possible with the reasons for the unforeseen activity and anticipated duration of remedial works.

3 Contact Details

The following contact details relevant to the proposed development are shown below:

Main Contractor: TBC

Address: TBC

Site Supervisor/Foreman: TBC

Contact Details: TBC

Applicant: Mrs. Melanie Stephens

Address: Fair Oak & Horton Heath Parish Council, Knowle Park Lane, Fair Oak, Eastleigh, Hampshire, SO50 7GL

Planning Agent: Mr. Harry Lee

Address: Eastleigh Borough Council, Eastleigh House, Upper Market Street, SO50 9YN

Telephone: 023 8068 8000

Local Planning Authority: Eastleigh Borough Council,

Planning Case Officer: Rachael Morris

Address: Eastleigh House, Upper Market Street, SO50 9YN

Telephone: 023 8068 8264

Email: planning@eastleigh.gov.uk

Environmental Problems

Report a Problem: <https://www.eastleigh.gov.uk/environment/environmental-health>

Telephone: 023 8068 8000

Environment Agency Incident Hotline: 0800 80 70 60

4 Environmental & Site-Specific Sensitivities

The following section outlines environmental and site-specific sensitivities.

4.1 Geology and Hydrogeology

The site lies on the Wittering Formation bedrock consisting of greyish brown laminated clay; wavy- to lenticular-bedded sand interbedded with clay in equal proportions; and fine- to medium-grained sparsely glauconitic sand¹.

Based on the British Geological Survey (BGS) and Environment Agency's classification scheme the Wittering Formation is classified as a Secondary A Aquifer, presented below in Table 2:

Table 2 Aquifer Designations²

Designation	Definition	Geology on Site
Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.	Wittering Formation
Secondary B	Secondary B aquifers are mainly lower permeability layers that may store and yield limited amounts of groundwater through characteristics like thin cracks (called fissures) and openings or eroded layers.	NA
Secondary Undifferentiated	Secondary undifferentiated are aquifers where it is not possible to apply either a Secondary A or B definition because of the variable characteristics of the rock type.	NA
Unproductive Strata	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.	NA

The site is not located in a Source Protection Zone (SPZ) and it is likely groundwater is shallow, within 5m of the ground surface.

4.2 Surface Water Features

Based on a review of the Ordnance Survey Watercourse Link the nearest surface water body is a tributary of the River Itchen running east to west dissecting the southern portion of the proposed site. There are also surface water ditches present along the north western boundary and north eastern boundaries.

The site is located in the Itchen Operational Catchment and Figure 2 presents the surface water bodies and hydrological catchment.

4.3 Environmental Designations

There are no statutory environmental designations such as Sites of Specific Scientific Interest (SSSIs) on site or within 500m.

¹ <https://webapps.bgs.ac.uk/lexicon/lexicon.cfm?pub=WTT>

² <http://apps.environment-agency.gov.uk/wiyby/117020.aspx>

5 Construction Environmental Management Plan (CEMP)

The following section outlines the proposed approach to construction identifying the mitigation required to reduce and, where possible, remove the environmental impact of the construction and the impact on the amenities for neighbouring residents.

To address the environmental concerns this document is divided into the following sections:

- Housekeeping;
- Air Quality and Dust Management;
- Noise & Vibration; and
- Surface Water Management & Water Quality Management.

ALL STAFF WORKING ON SITE MUST BE MADE AWARE OF THE MITIGATION MEASURES IDENTIFIED IN THIS DCEMP.

It is recommended that the site is registered with the Considerate Constructors Scheme and advertised on boundary fences and laydown areas.

5.1 Housekeeping

5.1.1 Materials & Plant Storage

Good housekeeping and environmental management will reduce the risk of pollution incidents.

Bulk storage of chemicals and hydrocarbons (oils) must be carried out on impermeable surfaces in accordance with British Standards. Storage of fuels, oils and any other chemicals on site must be contained within bunded areas capable of holding 110% of the total capacity of fluids.

Bunds must be secure and capable of capturing and holding fugitive emissions in the event of attempted theft and or accidental spills. Regular maintenance of plant and machinery on site will ensure best practices are followed.

Where refuelling of plant and equipment is required on site it must take place using drip trays, with the operator present at all times. Where a secure, hardstanding area is not available then a temporary bunded and lined area must be used i.e. impermeable sheets, drip trays and sandbags.

On completion all fuels must be returned to permanently bunded storage areas. These bunded store areas will be made secure at the end of each working day.

Options for storage areas, away from surface water features, are presented in Figure 3.

5.1.2 Waste Management

Small quantities of waste may be derived during the development process. Re-use, reduction and recycling is encouraged to limit the amount of waste produced on site.

5.1.3 Waste Management Mitigation

Where required, waste arising from site will be removed by a licensed contractor and disposed of in line with duty of care.

Waste must be minimised by encouraging the reuse of materials where feasible.

Storage and segregation of waste will prevent harm to human health, amenity and the environment through nuisances such as dust, odour or pests.

Construction waste will be stored in suitable containers and appropriately maintained:

- Recyclable - recycled containers/wheelie bins;
- Reusable – salvage;
- Compactable - visiting compactors/wheelie bins;
- Non-compactable – skips;
- Hazardous – Specialist Licensed removal from site.

The waste storage area is presented in Figure 3.

Prior to collection, waste must be contained and covered using a suitable tarpaulin (or similar) to prevent fugitive emissions (dust) migrating off-site and protect the area from the elements and rodents.

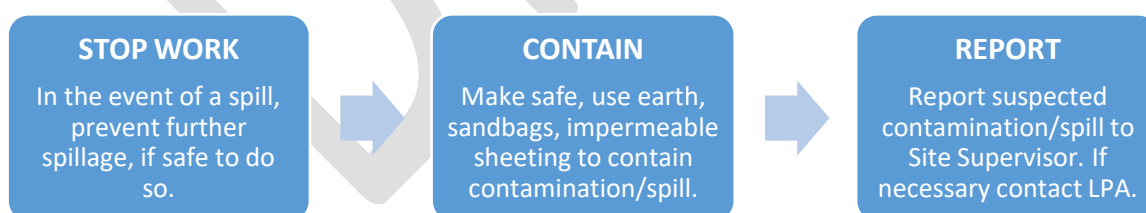
To reduce the potential for pests the waste areas will be kept tidy, clean and well maintained at all times. Daily inspections shall take place and any requirement for pest removal will be carried out by a professional pest control company who is a member of a recognised trade body.

5.1.4 Pollution Spills and Environmental Incidents

In the event of a fugitive emission the following mitigation is recommended:

- Spill kits must be present on site at all times, including absorbent mats, granules, shovels, gloves and temporary drain seals/covers;
- Refuelling of plant and machinery on site will take place using drip trays or in temporary bunded areas;
- All storage of hazardous liquids, for example hydrocarbons/fuels, will be carried out in a bunded area with an impervious base to prevent spillage and leaks;
- Maintenance of plant and machinery shall be carried out along with visual inspection to reduce the risk of catastrophic loss of product to the environment; and
- In the event of a significant leak/spill and/or discovery of contamination occurs the following procedure, presented in Chart 1, will be adopted:

Chart 1 Encountering Unexpected Contamination - Spill Response



If safe to do so, the spill kit on site must be used to clean up any spills and/or report to Local Authority. In the event of unanticipated contamination in the sub-surface contact with the Environment Agency, LPA and a qualified environmental consultant will be made.

5.1.5 Tool Box talks

All employees shall be provided with an appropriate induction and ongoing briefings through tool box talks regarding management of environmental issues and mitigation measures outlined in this CEMP.

5.1.6 Temporary Hoarding & Security

Areas of active works must be secured with Heras fencing and to prevent unauthorised access and fugitive emissions from the site.

Any hoarding used will be light in colour and inspected weekly for signs of graffiti and/or vandalism.

Maintenance of the fencing and any hoarding will take place during the development to ensure the construction site remains as pleasant as possible for neighbours, pedestrians and cyclists.

The laydown yard/clubhouse will host a signboard with the details of the Main Contractor and Site Supervisor/Foreman as well as the details of the local authority and progress of the development.

All tools and plant on site will be secured at the end of each working day and weekends with access gates locked to prevent unauthorised access.

5.1.7 Pedestrian Safety

The safety of pedestrians will be maintained using the following mitigation:

- Signage, Health & Safety and details of project progress;
- Members of staff, designated traffic marshalls and/or Banksmen to supervise deliveries and movement on/off site; and
- Control of vehicle movements to the site and deliveries.

5.2 Air Quality and Dust Management

5.2.1 Dust, Dirt and Emissions

Air quality can be temporarily impacted by extensive dust/exhaust fume inducing processes and Non-Road Mobile Machinery³ (NRMM).

The provisions of the Air Quality Standards Regulations 2010, the Environment Act 1995, Environmental Protection Act 1990 and all other pertinent legislation will be complied with.

The following mitigation methods on site are based on the following principles:

- Methods and materials will be used to ensure that dust generation is minimised;
- Prefabricated materials will be used wherever possible; and
- Dust generating activities are to be located away from sensitive receptors. An adequate supply of water for damping down dust with sufficient hoses to reach all parts of the site will be present. If possible, water supplies will be conveniently located, for example, near dust generating activities and site exits⁴.

5.2.2 Air Quality, Dust, Smoke & Odour Mitigation

Prior to the use of any NRMM on site registration will take place with an inventory being compiled.

³ Non-road mobile machinery refers to mobile machines, transportable industrial equipment or vehicles which are fitted with an internal combustion engine and not intended for transporting goods or passengers on roads.

⁴ [Document 12 - BRE - Control of Dust from Construction & Demolition Activities.pdf \(rbkc.gov.uk\)](#)

The following air quality and dust mitigation measures will be adopted, they have been divided into two work areas:

1. Practices in construction; and
2. Plant mitigation methods:

Table 3 Work Area Mitigation Methods

Work Area	Mitigation Method
Practices in Construction	Use of on-tool extraction units where feasible.
	Wetting down of ground and materials where dust is emitting.
	Scaffold wraps and hoarding at the gates will reduce dust emissions from the site.
	Hoarding to be cleaned using wet methods.
	Hand-cutting materials where feasible.
	No bonfires are permitted on site.
	Consideration of reducing dust emissions in the design and procurement phase through selecting the correct sized materials to reduce cutting on site.
	Where feasible carrying out dust emitting works off-site and getting materials delivered.
	All fuels, oils and other Volatile Organic Compounds (VOC's) will be stored in secure, sealed, labelled containers.
	Consideration will be made to using prefabricated materials where possible to reduce the potential for localised air pollution.
	Stockpiles shall be covered or seeded to prevent wind whipping and loose materials shall be removed as soon as possible.
	The design and layout of work areas will increase separation distances from potential sources of air pollution, i.e. No cutting close to ditches and surface water features and/or neighbouring properties.
	Mains electricity supply will be used in preference to generators and baffle boards to be used around cement mixers.
	Where required, bulk cement and other fine powder materials shall be delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of materials and overfilling during delivery. For construction, for smaller supplies of fine powder materials, bags shall be sealed after use and stored appropriately to prevent dust.
Plant Mitigation Methods	Switching off engines when not in use, no idling.
	Where possible plant and machinery exhausts should be directed up rather than down at the ground to prevent the mobilisation of dust particles from the ground.
	Reduce plant movements to a minimum during dry periods where soils are bare.
	Vehicles and plant must not be over-loaded to prevent labouring.
	All potentially dust emitting deliveries and, haulage leaving the site, must be covered and appropriately secured.

There will be no burning of materials on site.

5.3 Control of Noise and Vibration

5.3.1 Noise and Vibration

Any works associated with the generation of ground borne vibrations and/or excessive noise are only to be carried out between the permitted hours (08:00 to 18:00 Monday to Friday and 09:00 to 13:00 on Saturdays).

During works there is the requirement to ensure that all noise generated during works is controlled in compliance with British Standard Code of Practice for Noise & Vibration Control on Construction and Open Sites BS 5228:2009.

BS5228 refers to the need for the protection against noise and vibration of persons living and working in the vicinity of and those working on construction and open sites.

5.3.2 Noise & Vibration Mitigation

The effects of noise and vibration will be mitigated by using the following controls:

- No idling machinery, switch off engines when waiting or not in use;

- Hand-cutting materials where feasible, use of noise-reducing saw blades;
- Engineering controls to modify equipment or the work area to make it quieter such as substituting equipment with quieter equipment; retro-fitting equipment with damping materials, mufflers and erecting barriers;
- Noise reducing baffle boards to be erected around machinery such as cement mixer housings. Positioning of machinery away from boundaries, the Local Nature Reserve and neighbours;
- Designing less cuts/on-site alterations to materials, having work carried out off-site and delivered where possible;
- Eliminating noise or substituting a process for a less noisy process is the optimum mitigation. Consideration of a less noisy solutions on Saturdays will take place and, if technically feasible, adopted;
- Noise levels from power tools will be considered when procuring equipment. Manufacturer or supplier information will be used to choose the quietest tools that are effective for the job; and
- Consideration of noise and neighbours when communicating on site i.e. use of mobile phones and considerate use of radios during work hours only.

5.4 Surface Water Management

There is the potential for surface water runoff to cause pollution in the surrounding surface water features.

Good housekeeping measures will reduce the risk of chemical pollutants entering the environment and the following mitigation measures will reduce the risk from sediment runoff and suspended solids.

Locations of pollution prevention and mitigation measures are identified on Figure 3.

5.4.1 Wheel Washing

Where vehicles come on to site wheel washing will be made available using a jet washer near the egress of the site.

Runoff will be controlled on site using sand-bags (or similar) to prevent spoiling of public highways and pavements.

Figure 3 presents the location of the proposed wheel-washing facilities.

A street sweeper will be deployed by the Main Contractor in the event that highways are impacted by vehicles leaving the development.

5.4.2 Sediment Control

Sediment control is key, keeping sediment at source and preventing it entering water courses is essential during these works.

It is recommended to install physical barriers around work areas within 5m of the surface water courses identified in Figure 2. This can be hay-bales/sand-bags, or similar, designed to slow overland flow so sediments cannot enter the water course.

Any areas of surface water ponding/pooling within work compounds/enclosures must be contained and not allowed to spill over into surface water features or the culverted area in the north of the site.

It is recommended to have the catchpits and collection chambers sealed during earthworks to prevent sediment entering the environment, a sediment sock should be placed across the exit of the discharge and further down-stream of the tributaries identified in Figure 3.

These mitigation measures will be particularly important during cut and fill earthworks and earthworks should not take place on days with heavy rainfall forecasted or very dry days that would emit significant dust from the site.

5.5 Communications

5.5.1 Reporting & Communication

Communication and engagement is key including the Local Authority, residents and businesses in the area.

It is recommended that neighbours in the vicinity of the site are informed of activities that could produce excessive noise or dust in advance, keeping them advised of progress.

Appropriate communication and distribution of information to the local community will be achieved by a Site Contact Board positioned on the Pavillion and/or compound gates outlining the anticipated tasks to be carried out in the forthcoming month.

This should also include a brief summary of works completed to date and the following information:

- Name of the main contractor, address and person to whom correspondence should be addressed;
- Name of the Site Supervisor/Foreman and contact details; and
- Anticipated completion of phases/works.

Notification of access way, pavement and/or road closures will be undertaken as outlined in the Sections above.

5.5.2 Complaints Procedure

In the event of a complaint from the general public, neighbours and/or Local Planning Authority the incident will be recorded.

Following appropriate investigation, the results shall be communicated to the complainant and reported to the Local Authority if deemed necessary.

The site manager must be informed of any deviations from this CEMP as soon as possible following identification of such issues.

Deviations will be reported to the LPA within 24 hours.

It is the responsibility of the Contractor to ensure the appropriate mitigating measures have taken place.

6 Monitoring

Visual monitoring will take place on a daily (Monday to Saturday) and on an ad-hoc basis linked to the activities taking place.

Weekly visual dust inspections shall take place with daily inspections at the boundary when activities that have a high potential to produce dust and emissions are being carried out or during prolonged, dry or windy conditions.

Monitoring will be carried out by the appropriate member of staff and include observations of:

- Vehicle, tool and plant emissions – noise and exhaust;
- Nearby surface water features;
- Waste management controls such as ensuring containment of waste derived from demolition/construction;
- Notice boards and signs;
- Perimeter fencing, hoarding and security gates; and
- Complaints procedure – review of investigations and outcomes.

Where specific issues are noted the Site Supervisor, or appointed delegate, shall make the necessary arrangements to improve the operation and resolve the issue. Findings must be reported back to the complainant along with the mitigation measures deployed, if required, and logged on site.

In the event of non-compliance with obvious visual impacts and/or complaints, the following measures shall be implemented:

- Immediately undertake an investigation of activities on site to ascertain whether any visible dust is emanating from the site or activities are occurring that are not in line with dust control/runoff mitigation measures procedures;
- If on-site sources are identified, the relevant activities shall be rectified and/or suspended where practicable until remedial measures can be implemented;
- Actions shall be recorded in a site logbook;
- The activity shall then be monitored to ensure that the mitigation measures are working and that there is no repeat incident; and
- If the cause of the alert is not related to site operations, the outcome of any investigations shall be recorded in the site logbook.

7 Figures

Figure 1 Site Location

Figure 2 Hydrology

Figure 3 Site Layout

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Figure 1 Site Location

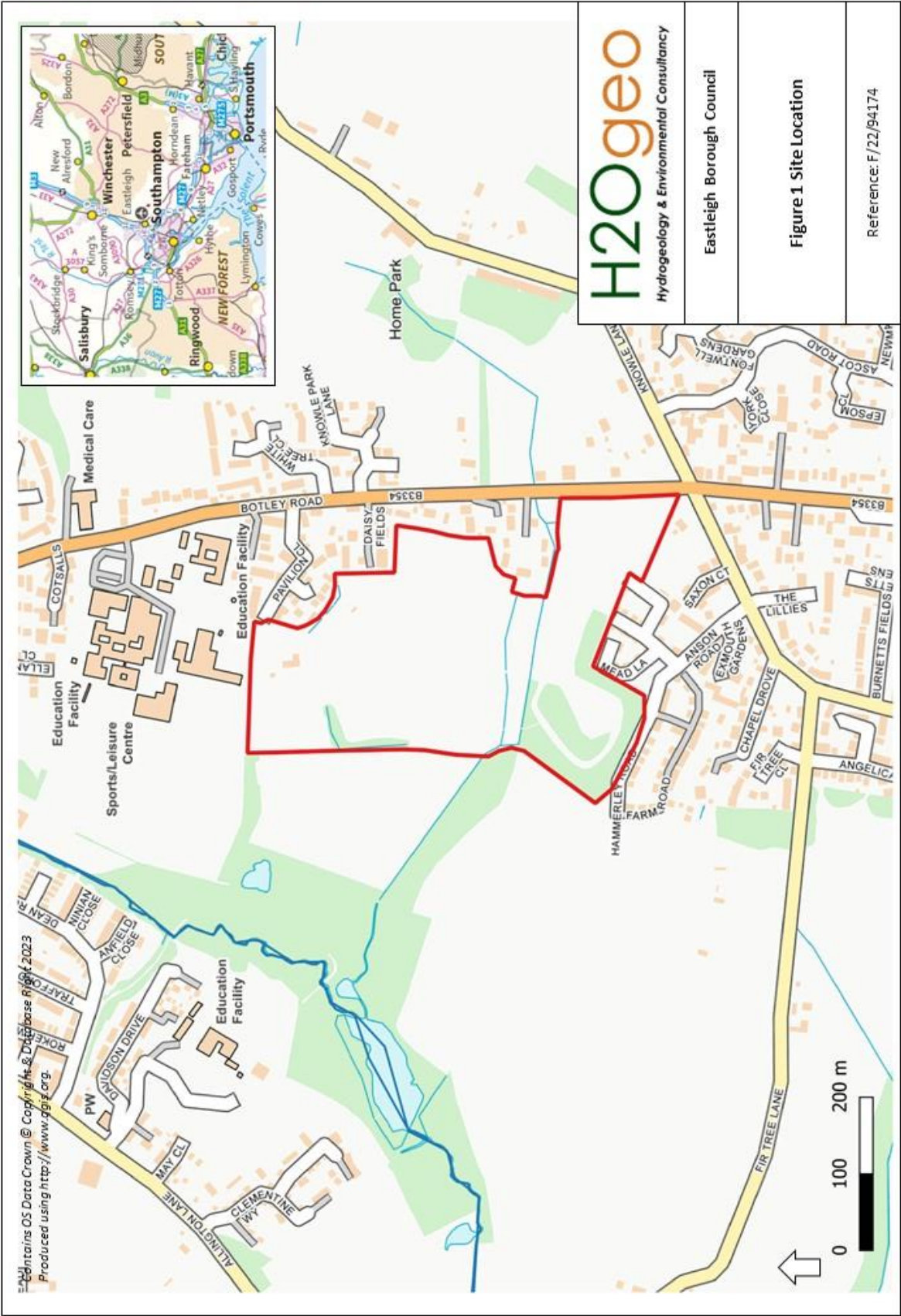


Figure 2 Hydrology

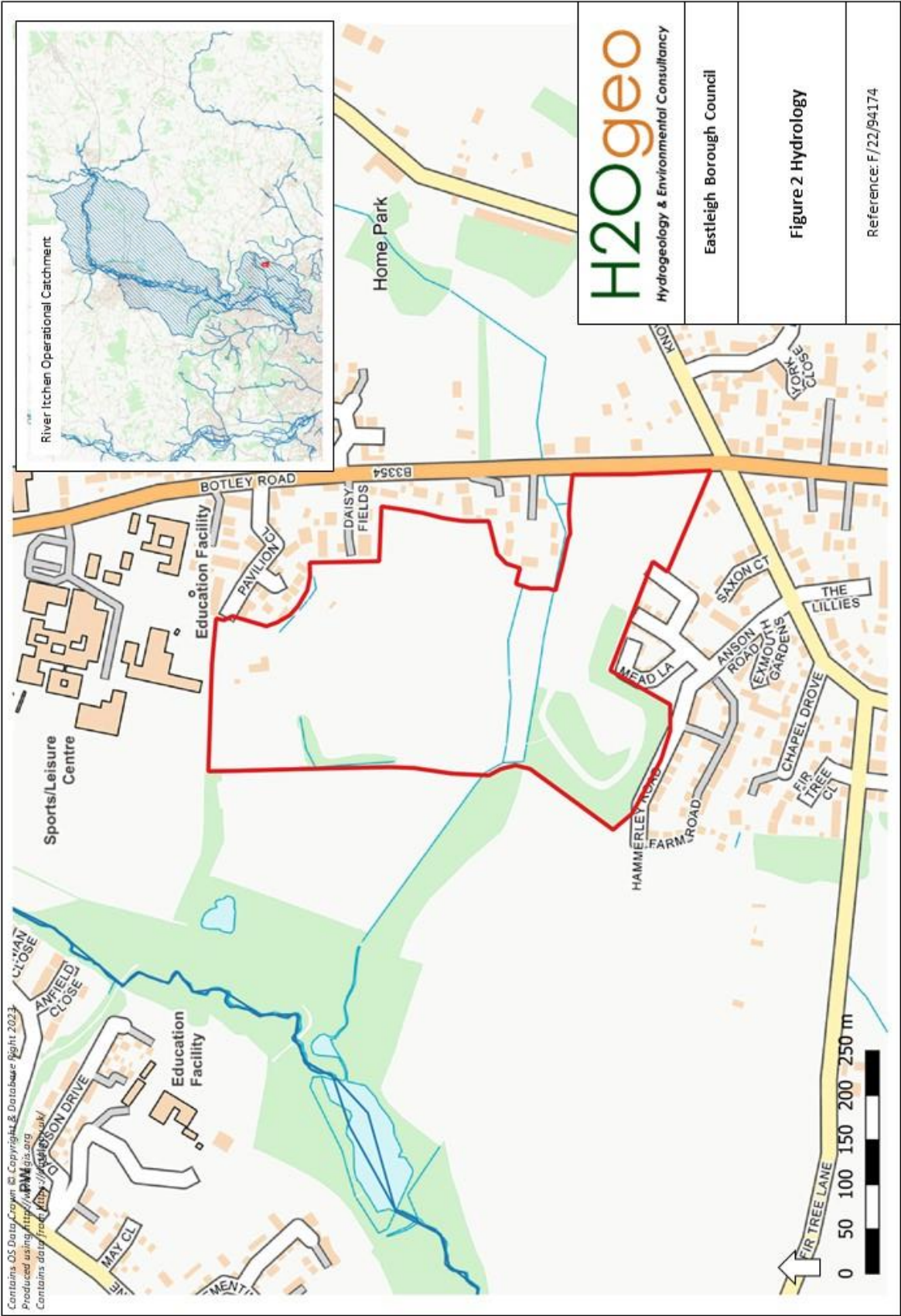


Figure 3 Site Layout

