



CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

REPLACEMENT SPORTS PAVILION & GROUNDSMAN FACILITIES

LONG LANE, BURSLEDON, SOUTHAMPTON, SO31 8DA

Planning Permission Reference: F/23/96488

BURSLEDON PARISH COUNCIL

TEMPLE FORD DESIGN architects

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1.0 Introduction

1.1 Overview

Planning permission has been granted, subject to conditions and notes, for the demolition of the existing old, unsightly & inefficient pavilion, and the construction of a replacement pavilion and associated works.

The new facilities will provide community users of the Long Lane Rec sports pitches with enhanced changing, toilet and kitchen facilities as well as providing adequate welfare provision for Parish ground staff and adequate storage and operational space for grounds equipment, tools and materials.

Bursledon Recreation Ground (also known as Long Lane Rec) is located off Long Lane, Bursledon, with residential properties to the north and east of the site, Great Down Park and Bursledon Junior School to the south and Bursledon Village Hall to the West.

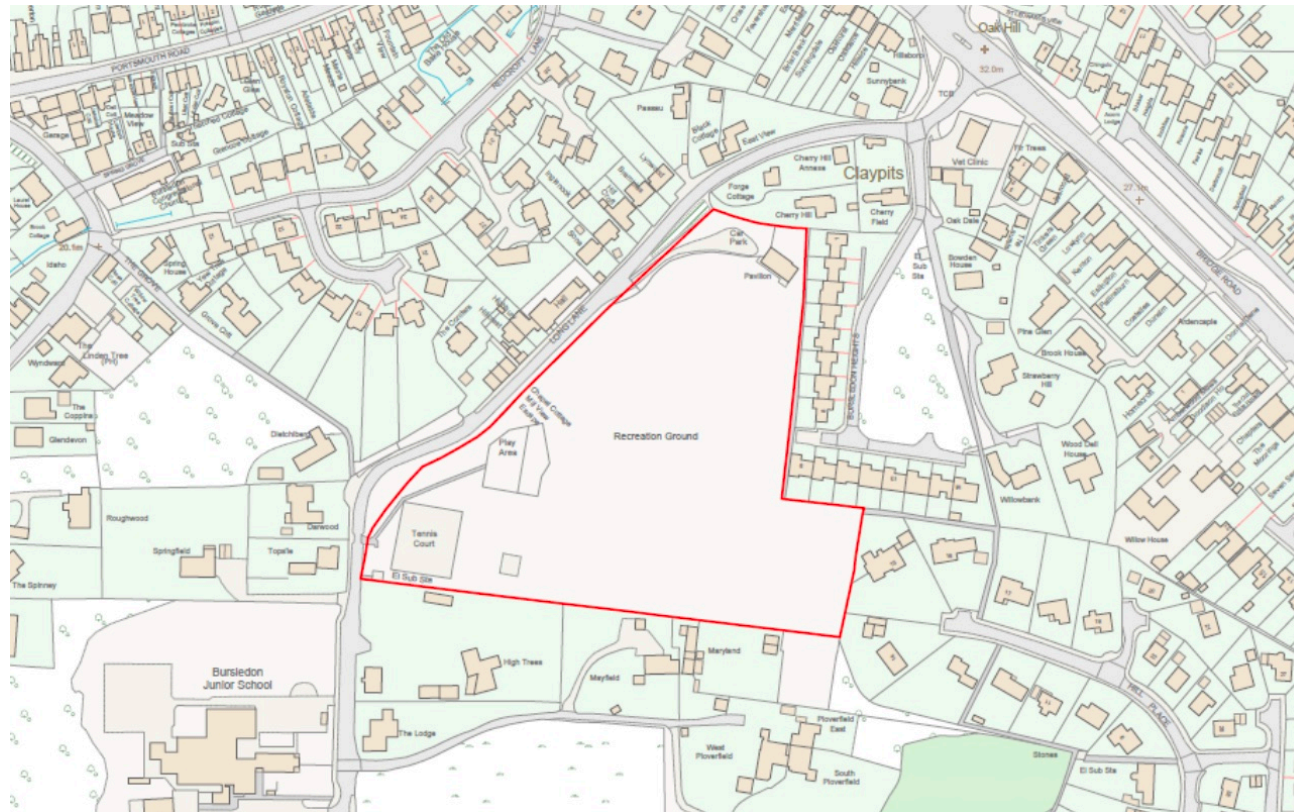


FIG 1 SITE PLAN OF DEVELOPMENT SITE

This Construction Environmental Management Plan (CEMP) incorporates the Management Systems for the project works. It sets out the policies and environmental controls required to ensure that the environmental impacts are minimised. It highlights the key activity specific risks, detail control measures, and makes reference to all associated forms and registers where required. All items specifically required by the client in the CEMP are covered.

1.2 Purpose and Scope

The purpose of this CEMP is to avoid, minimise or mitigate any construction effects on the environment and the surrounding community and:

- Ensure compliance with all applicable legislation & statutory controls; this includes planning conditions, Section agreements and landowner/client's environmental requirements;
- Ensure conformance with the Principal Contractor's Environmental Policy Statement;
- Deliver best practicable environmental performance – this means preventing pollution, minimising adverse environmental impacts and securing the potential benefits associated with higher standards of environmental performance.

1.3 Responsibilities

The Project Lead approves and supports this CEMP as the principal document demonstrating a planned and systematic approach to implementing environmental policy through an effective environmental management system.

The Project Lead is responsible for authorising and maintaining this document and ensuring it is implemented and is responsible in ensuring it complies with legal and contractual amendments and ensures that all project personnel are aware of the contents of this CEMP and understand their role in fulfilling the project's obligations. They are responsible for ensuring that the Client is informed of any amendments.

2.0 Regulatory Framework and Planning Conditions

2.1 Requirements

A primary requirement of the planning consent is the implementation of the Construction Environmental Management Plan (CEMP). The CEMP is required to encompass environmental controls when required with due consideration to relevant environmental legislation.

The CEMP provides the framework for which any requirements of the planning conditions can be realised and outlines the contractor's approach to environmental management throughout the construction phases with the primary aim of reducing any adverse impacts from construction on local sensitive receptors.

2.2 Planning Conditions

The Planning Permission conditions (ref: F/23/96488) with environmental implications applicable to this development are given below:

(Numbered as per planning confirmation letter)

3. *No development shall start on site until a construction method statement has been submitted to and approved in writing by the Planning Authority, which shall include:
(a) A programme of and phasing of demolition (which shall be undertaken by a specialist contractor, whereby if asbestos is found it shall be managed in accordance with 'Control of Asbestos Regulations CAR 2012') and construction work;
(b) The provision of long term facilities for contractor parking;
(c) The arrangements for deliveries associated with all construction works;
(d) Methods and phasing of construction works;
(e) Access and egress for plant and machinery;
(f) Protection of pedestrian routes during construction;
(g) Location of temporary site buildings, compounds, construction material, and plant storage areas;
(h) Details of the methodology for ensuring dirt is not transferred onto the highway from the site (i.e. wheel washers), and onwards mitigation should this fail, such as the employment of mechanical road sweepers, and the subsequent refresh of street lining (as and when required) should this be damaged during the process
(i) Details of noise mitigation measures
(j) Precautionary working methods (to protect hedgehogs and amphibians) Demolition and construction work shall only take place in accordance with the approved method statement.*

Reason: In order that the Planning Authority can properly consider the effect of the works on the amenity of the locality.

5. *The mitigation recommendations set out within Section 6 of the Preliminary Ecological Appraisal (March 2023) shall be implemented in full prior to commencement of development and shall be adhered to during the construction phase until the development is complete.*

Reason: In the interests of protection of wildlife and supporting habitat.

6. *The development shall accord with the Biodiversity Net Gain Assessment, Monitoring and Management Plan (November 2023). This sets out proposed created habitats and net gain assessment, as well as future habitat management which shall be implemented in full within the specified timeframes.*

Reason: In the interests of providing biodiversity net gain.

7. *The development must accord with the arboricultural report reference CBA11083LLRG v1A. No excavation, demolition or development related works shall commence until the appropriate tree protection measures have been installed as per the tree protection plans contained within the report. Once installed, no access by vehicles or placement of goods, chemicals, fuels, soil or other materials shall take place within the protected area. Tree protection measures shall be retained in their approved form for the duration of the work and may only be modified subject to written agreement from the Local Planning Authority.*

Reason: To retain and protect the existing trees which form an important part of the amenity of the locality.

3.0 CONSTRUCTION PROGRAMME

3.1 Dates

The detailed Construction programme will be made available for review in the site office.

The key dates are:

- Project start Date: *To be confirmed*
- Specific Protection Measures Set Up Date: *To be confirmed*
- Project completion Date: *To be confirmed*

4.0 Roles and Responsibilities

4.1 Contracts Manager

The Contracts Manager is responsible for:

- Ensuring that the CEMP is developed & held on site and that it is implemented throughout the project. Ensuring the CEMP details are updated as and when relevant information is provided by the stakeholders associated with each section of the CEMP; e.g. further consent conditions, pre-construction surveys, etc.
- Maintaining the CEMP and ensuring that all contractors and visitors comply with it.
- Ensuring that environmental issues identified within the Pre-Construction Information and the pre-construction site surveys and relevant information gathered from agencies, local councils etc, are addressed.
- Producing environmental project specific controls for all significant risks identified and implementing control measures to minimise the risk of damage to the environment.
- Communicating the CEMP and other related document to employees, contractors and client representatives.

4.2 Site Manager

The site manager is responsible for:

- Ensuring the site and all stored materials and chemicals are safe and secure;
- Ensuring the F10 notice, site notices, and signage indicating where and whom visitors should report to are clearly displayed;
- The site is kept in a tidy and orderly fashion;
- Controlling access arrangements so those entering site may avoid hazards;
- Emergency egress arrangement so those leaving site in the event of a pollution or spillage incident may do so safely;
- Ensuring that there are First Aid Facilities and appropriately trained First Aid staff, spill kits are available for use by appropriately trained staff.

Ensuring all those that work on site:

- Have Site Induction including briefing on environmental issues pertinent to the project and relevant toolbox talks;
- Understand and obey the Site Rules;
- Are made aware of the emergency egress arrangements, muster points, First Aid facilities and First Aiders, spill and clean up procedures;
- Read and understand the site hazard board;
- Have current certification for activities as required;
- Are aware of all environmental matters which arise on site.

Ensuring activities on site:

- When necessary are carried out under Client Operational Safety Rules;
- Have, task specific risk assessments and method statements (RAMS) in place identifying any environmental issue which may be applicable;
- Are carried out in accordance with the requirements of any associated RAMS.

4.3 Site Environmental Advisor

The environmental advisor shall ensure work is carried out:

- In accordance with legislation & consents, objectives, targets and the Construction Environmental Management Plan with regards to any Environmental activities on site;
- To ensure site staff operates in accordance with agreed Risk Assessments and Method Statement (RAMS) and in accordance with the induction and tool box talk training with regards to environmental risk.

Monitor/Report Environmental Issues by:

- Ensuring compliance with Environmental legislation & consents, objectives, targets and the Construction Environmental Management Plan;
- Carrying out Inspections, Audits and Non – conformance;
- Being responsible for delivering environmental training;
- Being the Environmental Advisor to liaise with Health and Safety advisor to complete the site waste management plan and ensure it is followed;
- Preparing environmental performance data reporting;
- Ensuring work is carried out in accordance with the Environmental Statement;
- Ensuring compliance with environmental legislation, consents, objectives, targets and other environmental commitments.

5.0 Environmental Restraints and Receptors

5.1 Working Hours

The site “core hours” will be Monday – Friday finishing no later than 18.00 and Saturday finishing no later than 14.00; there will be no works programmed for Sundays or Bank Holidays unless otherwise agreed. Prior approval will be sought from the Council for operations such as earthworks or concrete pouring which, can be seasonal and weather dependant.

No heavy goods vehicles shall enter or leave the site between 08.30-09.30 and 15.00-16.00 hours.

For certain types of activities (e.g. work that entails the possession of a road, works for reasons of public safety, site logistics operations or work within buildings) evening, night time, additional weekend Sunday and Bank Holiday working may be required. The Council will be engaged during the planning and operation of any such activities.

5.2 Noise Limits

In accordance with good practice, construction activities that elevate noise levels, measured as LAeq (1hr) by more than 1dB above ambient level at the front of any noise sensitive premises, may not take place outside of normal hours of work.

5.3 Construction Site Layout & Housekeeping

In planning the construction site layout, the Principal Contractor will ensure that a good housekeeping policy is applied at all times, and as far as reasonably practicable; that amongst other things:

- Existing hedges, tree screens and the topography will be utilised to screen construction sites; temporary earth mounding or other temporary screening will also be included where appropriate, within the confines of the construction site;
- All site hoardings will be regularly inspected and repaired as necessary to prevent vandalism and fly tipping;
- All working areas will be kept in a clean and tidy condition;
- Mechanical wheel washing is not provided on site but where soil/dirt is excessive the wheels will be brushed down and/or hosed down prior to leaving site;
- Adequate welfare facilities will be provided for all site staff;
- Rubbish will be removed at frequent intervals and the site kept clean and tidy;
- Food waste will be removed at frequent intervals;
- Any waste susceptible to spreading by wind or liable to cause litter will be stored in enclosed containers;
- Open fires will be prohibited at all times.

All necessary measures will be taken to minimise the risk of fire and the contractor will comply with the requirements of the local fire authority.

Storage sites, fixed plant and machinery, equipment and temporary buildings will be located to limit adverse environmental effects.

All external lighting and illumination associated with the construction process will be in accordance with the guidance issued by the Institution of Lighting Engineers: “Guidance Notes for the Reduction of Light Pollution” and the CIE (International Commission on Illumination) Report: “Guide on the Limitation of the Effects of Obtrusive light from Outdoor Lighting Installations”.

To ensure that construction lighting does not affect the amenity of residents or create a statutory nuisance under the Environmental Protection Act 1990 as amended, external lighting will be designed and positioned to provide the minimum levels necessary for safe working.

The construction lighting will:

- Avoid disturbance to adjoining residents and occupiers;
- Avoid creating dazzle or distraction for drivers using adjacent highways;
- Seek to minimise light spillage or pollution;
- Ensure that excess light does not fall on sensitive ecological habitats;
- Incorporate energy efficient options for site facilities wherever possible. They may include energy efficient light bulbs and automatic controls, which will supplement good housekeeping such as switching off equipment when not in use.

Adequate security will be exercised by the contractor to protect the public and prevent unauthorised entry to or exit from the site. Compound gates will be closed and locked when there is no site activity and site security measures will be implemented;

Any site cameras will be located and directed so that they do not intrude into occupied residential property.

5.4 Environmental Receptors

These are the environmental receptors that will be impacted by the following Environmental aspects from this project:

- Air quality will be impacted by:
 - Dust;
 - Fumes.
- Neighbours will be impacted by:
 - Noise;
 - Dust;
 - Fumes;
 - Litter;
 - Vibration.
- Ground and groundwater will be impacted by:
 - Pollution spills;

- Vibration;
 - Dust;
 - Litter.
- Water bodies, streams, reservoirs, rivers and lakes will be impacted by:
 - Pollution spills;
 - Litter;
 - Dust / silt.
- Ecology, animals, birds, aquatic life, trees and plants will be impacted by:
 - Pollution spills;
 - Lighting;
 - Litter;
 - Noise;
 - Vibration;
 - Dust.

6.0 Key Environmental Impacts

6.1 Ecological

6.1a Bats

Impact:

All bat species, their breeding sites and resting places are fully protected by law, namely the Conservation Regulations 2010 (as amended), Wildlife & Countryside Act 1981 (as amended), Natural Environment & Rural Communities Act 2006 (NERC).

Many bat species roost in buildings and are extremely vulnerable to the activities of humans. Bats using a building are directly threatened by building works if they are present while the work is underway or if a demolition is taking place. If bats disturbed at a particularly sensitive time of year (e.g. during hibernation in winter or when baby bats are born and raised in the summer), it can have hugely detrimental impacts on local bat populations.

The development may result in an increase in lighting within the general area from any additional external lights on the building. This can affect the behaviour, particularly foraging, of nocturnal wildlife. Therefore, an ***adverse impact is likely*** on nocturnal species at a ***local level***.

Mitigation:

A Bat Emergence Survey & Mitigation Report was undertaken by Ecosupport Ltd on 2nd May 2023 and submitted for planning permission. The recommendations stated in the '**Mitigation & Recommendations**' section of the report must be followed.

External lighting shall follow best practice guidelines outlined by the Bat conservation Trust and the Institute of Lighting Professionals (Guidance Note 08/18 Bats and Artificial Lighting UK).

The proposals will predominantly involve works to the areas of grassland, hard standing and building which were only considered to be of value at the ***Site*** level of significance. Therefore, the loss of habitat would have a ***minor adverse impact*** to habitats of ***Site*** value.

The building was noted as having low potential for roosting bats. During the Phase 2 survey, no bats were observed emerging from or re-entering the building and as such it is not considered a bat roost. Therefore, the works will not result in the destruction of bat roosts or death of bats. As such, ***no adverse impact*** is expected during the works on the roof and roof voids.

A European Protected Species licence for the works is not required.

6.1b Birds

Impact

The current legislation makes it a criminal offence to disturb nesting birds. The nesting season is generally assumed to be from 1st March to 31st July, however this can vary depending on species and location.

Mitigation

During these months a careful inspection must be made before work commences and works must be postponed if active nests are found.

6.1c Reptiles

Impact:

Reptiles are protected from killing or injury under the Wildlife and Countryside Act 1981 (as amended).

Legal protection makes it an offence to:

- intentionally or recklessly kill, injure or take reptiles from the wild;
- to damage, destroy or obstruct access to any structure or place which reptiles use for shelter or protection;
- to disturb reptiles while they are using such a place.

The longer grassland edges and scrub habitats as well as log and rubble piles are suitable for common reptiles.

Clearance of vegetation from the works site will be required prior to the start of construction - this work has the potential to impact reptiles.

Mitigation:

Maintain the open areas as a short sward and bare ground areas clear until works begin.

Tussocky grassland hedgerow buffers (it is recommended that where possible a minimum of a 5m strip of tussocky grassland will be retained as a buffer between the hedgerow and buildings/garden) will be retained to act as receptor sites and protected during the development by a high visibility or heras fence. Log piles will be constructed in corners to provide refuge habitat.

The vegetation clearance within the suitable areas will only be undertaken between March and October when the weather is sufficiently warm for reptile activity to occur, this is typically when night time temperatures are 8°C or greater.

Vegetation clearance will be undertaken directionally towards the retained boundary areas. The clearance will result in the vegetation being cut to a height of <5cm over two stages, the first cut to 10cm and the second cut at least a day later to ground level.

Immediately remove arisings from any vegetation clearance.

Carefully dismantle the affected log piles in temperatures above 10°C when reptiles are active.

Stop works and contact a suitably qualified ecologist if reptiles are encountered during works.

6.1d Hedgehogs

Impact:

West European hedgehogs are protected under Section 41 of the NERC Act (2006). The act recognises species of principle biodiversity importance.

The habitats on site have the potential to support hedgehogs. There is therefore a risk that harm could be caused to them, both passing through the site during the construction phase, and during any vegetation clearance. As such, consideration will be given to prevent any risk to the conservation status of hedgehogs.

Mitigation:

During the construction phase of the development, any excavations should not be left open overnight, these will require covering or a mammal ladder (planks) or a sloped edge to allow fauna to escape should they fall in. Any pipework should also be capped at the end of each day, night working should be avoided, and any security lighting should be placed away from hedgerows and the residential garden areas. Any chemicals on site should be stored in secure compounds and away from any access from animals.

A precautionary method of working should be followed as detailed below:

- Any log or brash piles should be removed by hand and the area to be cleared should be checked by a suitably qualified ecologist prior to works commencing.
- Vegetation should be cleared in a systematic manner, using hand tools only.
- Any hedgehogs sighted should be left to disperse of their own accord. If the animal does not disperse it should be moved by an ecologist to an area of scrub/vegetation which is to be retained.

6.2 Trees

Impact

If a tree is exposed to construction traffic and close to the footprint of a new building, it can be damaged in a variety of ways which can be permanent, and if extensive, fatal:

- Damage to the trunk and crown;
- Cutting roots;
- Soil compaction;
- Smothering roots;
- Exposure to the elements

Mitigation

An Arboricultural Impact Assessment was undertaken by CBA Trees in November 2023, ref: CBA11083LLRG v1A, and submitted for planning permission. The recommendations stated in section '**2 Arboricultural / Construction Method Statements**' of the report must be followed.

The trees have been inspected visually only. No investigation has been carried out into their internal condition.

The report does not concern the possible influence of tree root activity on the proposed final development. Further investigations can be made and will be recommended where necessary.

Tree 9A needs coppicing and tree 13 is proposed for removal.

Where trees are to be retained, tree protection areas will be fenced using an approved fencing system. Protective fences are to comply with BS 5837 2012 – Trees in relation to design, demolition and construction.

The fencing is to have all weather notices attached, marked as 'Tree Protection Area – Keep Out'.

No materials are to be stored in this area and no activity to take place.

Care should be taken storing materials whose accidental spillage could damage protected trees due to the topography of the site. Such materials should be stored and handled away from the root protection area.

If any roots over 25mm diameter are found outside the root protection area the arboriculturist should be contacted.

6.3 Transport

Impact

Traffic may cause the following impacts:

- Noise;
- Dust;
- Traffic congestion resulting in extra travel time for local residents;
- Vibration;
- Nuisance;
- Additional hazards to local residents of moving vehicles.

Mitigation

The Principal Contractor must understand the importance of safety to people both within the site and more importantly surrounding it. As such, site managers will ensure mitigation measures are put in place to improve clarity to local residents and site personnel of what impacts site traffic will have on roads.

All construction traffic will be monitored by the Principal Contractor's security and their details recorded. Monitoring of the local roads will be undertaken daily to ensure all construction staff are adhering to the Site Rules in relation to ensuring construction staff are not parking in the neighbouring roads.

Where necessary, the site management team will develop a Traffic Management Plan (TMP) which will incorporate the agreed working hours as agreed in the Local Authority Planning Consents and be displayed in the site office where inductions will take place. The TMP will show the location of the site traffic routes, site welfare, waste segregation compound, parking for site managers, lay down areas, wheel washing points.

Key contractors will provide nominated vehicle Banksman during the initial phase of the development in order to assist with the co-ordination and unloading of their deliveries, in particular, timber, steel reinforcement and concrete delivery vehicles.

All deliveries to site are to be pre-booked and a copy of the schedule will be issued.

No heavy goods vehicles shall enter or leave the site between 08.30-09.30 and 15.00-16.00 hours.

No deliveries will be permitted to site outside the hours of 08.00 and 18.00pm on Monday - Fridays and not before or after 09.00 and 14.00 on a Saturday; this will be in accordance with The Local Planning Authority Construction Guidance.

During construction, vehicles will be expected to give priority to members of the public and to be courteous at all times.

Vehicle reversing movements should be kept to a minimum but when they are required a Traffic Marshall must accompany all reversing vehicles. All delivery vehicles will be fitted with mirrors in accordance with SHE 55 and have an audible reversing alarm and hazard warning lights. Operatives assisting vehicles must wear high visibility clothing.

Drivers of site vehicles will, when required, be asked to demonstrate that they hold valid appropriate certification (CPCS card) applicable to the type of plant or equipment that they are operating. A register of certification will be kept and maintained on site.

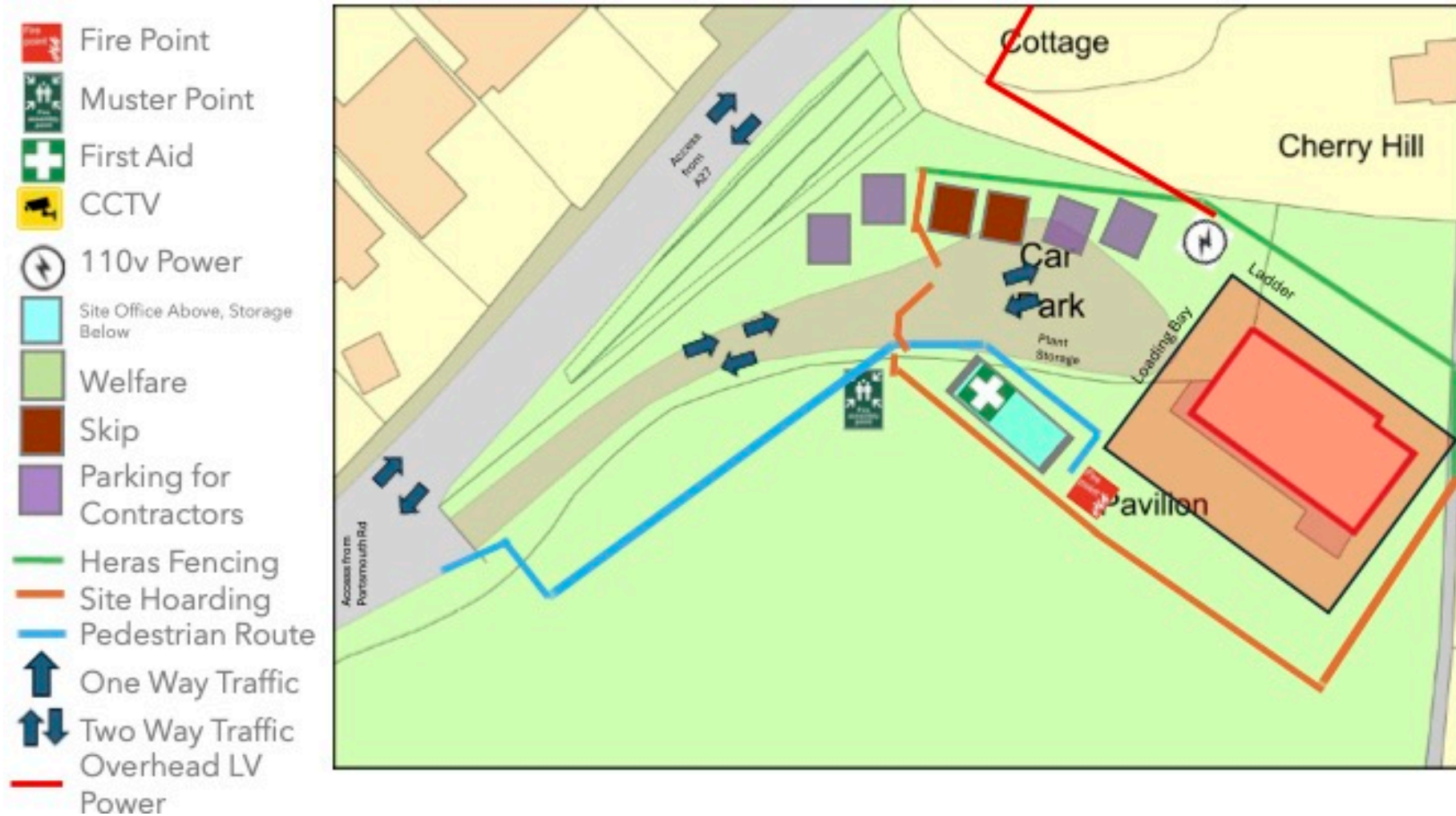
When leaving site, vehicles will have their wheels hosed and washed as required.

No deliveries outside their agreed allocated slot will be accepted and will be asked to return to their depot and will be required to reschedule.

Delivery vehicles will be encouraged to have signs warning cyclists of Left Hand Turns. Signs will be erected at the site access reminding drivers to leave in a safe manner. Where HGVs are required to turn left, signage will be erected highlighting the dangers of cyclists.

The Site Welfare, Canteen, Drying Rooms and Project Office will be located in a segregated area indicated on the site layout.

Materials will be off loaded in lay down areas highlighted on the Traffic Management Plan.



Site Set-up Plan and Deliveries

6.4 Noise and Vibration

Impact

Noise and vibration will be caused during construction activities by:

- Traffic movements;
- Plant movements;
- Demolition operations;
- Drilling and piling operations;
- Excavating operations;
- General construction activities; and
- Emergency sirens.

Mitigation

The Principal Contractor must proactively look to introduce noise control measures as part of a standard site set up, these include, hoarding installation, noise screens surrounding cutting equipment and considered positioning of noisier plant ensuring that, where possible, noise is further away from sensitive receptors. Regular checks will be undertaken to ensure that the plant is in good working order to and not running at a noisier than expected level.

Noise and vibration will be limited to the core working hours previously defined.

Contractors must use “best practicable means” (BPM) to minimise the nuisance from noise and vibration.

The maintenance and location of plant will be planned to minimise noise levels and screening will be used where necessary.

Adherence to noise limits should be included in contractual agreements with contractors.

General induction training for site operatives and specific training for staff having responsibility for particular aspects of controlling noise from the site.

Use of most environmentally acceptable and quietly operating plant and equipment appropriate to the works with emission levels limited to relevant EC Directive/UK Statutory Instrument levels and levels quoted in BS5228.

Intermittently operating plant will be shut down in the intervening periods between operations.

Any compressors brought on to site would be silenced or sound reduced models fitted with acoustic enclosures.

All pneumatic tools will be fitted with silencers or mufflers.

The excavation and demolition of existing structures will, wherever possible, be undertaken without the use of pneumatic breakers.

Wherever possible, the use of hydraulic attachments or other means of crushing concrete and hard materials will be used in preference to pneumatic breakers.

Where the use of impact hammers is necessary, their attachment to larger and heavier excavators will be employed to reduce the level of vibration.

Care will be taken when erecting or striking scaffolds to avoid impact noise from banging steel. All operatives undertaking such activities will be instructed on the importance of handling the scaffolds to reduce noise to a minimum.

Care will be taken when unloading vehicles to minimise noise. Delivery vehicles will be prohibited from waiting on the highway or within the site with their engines running.

6.5 Air Quality

Impact

Air quality will be impacted by fumes from vehicles and plant and the potential for dust created during periods of dry weather from the demolition activities and the earthworks.

Mitigation

The production of dust emissions will be minimised and/or controlled in order to reduce the impact on local residents, members of the public, construction personnel and ecological receptors. When making assessments the site management team will consider the Control of Pollution Act 1974, Planning Policy Guidance, The Local Planning Authority Environmental Health section Construction Site Guidelines, 2006, and the requirement of the Control of Substances Hazardous to Health (COSHH).

The following activities have been identified to have the potential for dust generation:

- Demolition – Dust screens will be used where necessary and, where reasonable, all operations will be positioned to ensure dust is retained within the development;
- Vehicle Movements – Wheel wash and Road Sweepers will be used when necessary. All loads entering and leaving the site to be covered;
- Brick / Concrete Cutting – A screened acoustic enclosure will be setup;
- Stockpiling – Dust screens will be used as a suppressant where material has the potential to be ‘wind whipped’.

All subcontractors will be responsible for ensuring method statements include monitoring and prevention methods.

The Principal Contractor will ensure that hoses will be able to reach all areas of dust creation prior to works commencing.

In accordance with Local Planning Authority Environmental Health construction site guidelines, no materials will be burned on site during any phase.

All machinery which burns fuel will be regularly checked to ensure that it does not emit dark smoke once at working temperature and that is well maintained. The Principal Contractor's site management team will control emissions from plant by undertaking a SHE 55 Plant Arrival Check Sheet in order to ensure that items of plant are in good order before being allowed to work on site.

The following measures will also be used to minimise impacts on air quality as a result of the construction works:

- All vehicles to switch off engines – no idling vehicles;
- All non-road mobile machinery to use ultra low sulphur tax exempt diesel (where available) and to be fitted with appropriate after-treatment from the approved list;
- Low carbon vehicles and plant fitted with catalysts will be used where possible;
- On-site cement and concrete batching (if required) will be undertaken in enclosed areas, with wind shielding measures applied as appropriate;
- Dust-suppressed tools will be used for all operations;
- Regular inspection of local highways and site boundaries to check for dust deposits (and road sweeping will be conducted if necessary);
- Visual inspection of the site perimeter to check for dust deposition (evident as soiling and marking) on vegetation, cars and other objects, and the implementation of remedial measures if necessary, would be carried out.

6.6 Ground Conditions

Impact

Ground conditions can be impacted by:

- Fuel and liquid spillages;
- Dust;
- Vibration;
- Windblown waste / litter;
- Contaminated land.

Mitigation

All fuel will be stored in a double skinned tank or a tank in a suitable bunded area in compliance with the Control of Pollution (Oil Storage) (England) Regulations 2001. Refuelling activities will only be undertaken by suitably qualified persons and spill kits will be available within the site compound. All hazardous liquids e.g. oils, lubricants, chemicals and tins of paint be stored in a segregated area in a suitable locked COSHH container. COSHH assessments will be available nearby for information in the event of a spillage.

6.7 Water Resources and Flood Risk

Impact

Surface water and ground water resources could be impacted from pollution, for example fuel spillages, dust and waste.

There is also potential for the creation of silt during periods of heavy rainfall which if not managed could cause silt pollution which could lead to:

- Flooding;
- Blocking drains causing nuisance issues.

Mitigation

Measures to manage spillages, dust and waste are detailed in other sections of this document. All the diesel tanks will be bunded and diesel spill response kits will be located in high-risk areas susceptible to spills. Fuel spill kits are stored in the site compound and at appropriate locations across the development site. Refuelling of machinery, will be carried out on level, hard surfaced designated areas where possible. Fuel will be transported in a mobile double skinned tank and a spill tray will be employed during refuelling operations.

All options are to be considered for occurrence of silt runoff. These include:

- Leaving grassy areas as catchment or settlement areas;
- Protection of drains;
- Use of grips and straw bales;
- Silt fencing;
- Dewatering.

All personnel from the site manager to engineers, foremen, plant operatives, sub-contractors, tradesmen and labourers have a part to play in preventing pollution and harm to the water environment during construction. It is crucial that each member of the site staff is aware of the potential impact of their activities and is equipped with the knowledge of how to eliminate or reduce that impact. Lack of training and awareness of environmental impact can often result in bad practices unwittingly being adopted. Bad practices can in turn lead to pollution or degradation of adjacent rivers.

At the project planning stage it is essential to consider the possible incidents and emergencies which could arise during construction works and plan accordingly. These may include:

- Pollution incidents – spillages, failure of temporary works, bank collapse, vandalism, fire, etc;
- Extreme weather events – heavy rainfall, flooding, severe frost and snow.

The Principal Contractor must put in place an emergency response plan on site with a procedure for dealing with emergencies and communicate this procedure to all site staff at site induction.

Site staff responsible for taking action in emergencies must be:

- Aware of their responsibilities;
- Trained to use the necessary equipment such as spill control equipment and shut-off valves.

Prior to undertaking any works in this area, work method statements, which will incorporate all the relevant mitigation measures identified in this CEMP, will be developed by the Principal Contractor and implemented for all relevant construction activities.

The Principal Contractor will establish an operational procedure / method statement for silt and pollution control measures during the construction period.

The Principal Contractor must prevent solid or liquid waste, sediment, soil or vegetation entering local watercourses. Escape of material held in tanks, receptacles and buried pipes must be prevented.

Excavated materials from construction works will be deposited within the works area where there is no significant risk of runoff into local watercourses. Weather conditions will be taken into account when planning construction activities to minimise risk of extreme run off from works areas.

Potential impacts caused by spillages during the construction phase will be reduced by the maintenance of an adequate supply of spill kits and hydrocarbon adsorbent packs at labelled stations at all working areas, with all vehicles on-site carrying spill kits. All personnel will be fully trained in the use of the equipment. Any used spill kits will be disposed of appropriately off-site.

A 24 hour, 7 day per week Emergency Response protocol for leaks / spill of hydrocarbons and / or chemicals will be drawn up and implemented. This must be implemented in the unlikely event of an accidental spillage of chemicals, hydrocarbons or release of protection aquatic ecology sediment to the surface or ground water system.

The storage of oil, petrol and other fuel containers will not be permitted in this area.

The storage of construction materials will not be permitted in this area.

Appropriate signage will be affixed to the temporary fencing to remind site staff of the access limitations for this area.

6.8 Waste

Impact

The construction works are likely to produce the following wastes:

- Inert waste;
- Non-hazardous mixed waste;
- Plasterboard;

- Wood;
- Paper, cardboard & plastics;
- Hazardous waste – small quantities of part full paint tins, mastic tubes and aerosols.

Contaminated soil – if unable to remediate onsite will be sent offsite for disposal.

Mitigation

The Principal Contractor will prepare a Site Waste Management Plan (SWMP) for the development.

The SWMP will detail how each waste stream will be managed; the projected waste volumes and the duty of care checks on all waste carriers and permitted disposal/ treatment sites.

The appointed SWMP contractors are to be confirmed. They will manage all waste issues to ensure compliance with legislation.

Waste will be segregated into individual skips (metal, hard-core, timber, inert etc.) and monitored in relation to type and weight, enabling the recycling of on-site materials to be maximised. Canteen waste, where applicable, will also be bagged and recycled, where appropriate.

A copy of the most up to date SWMP will be held within the site office.

6.9 Biosecurity

Impact

Non-native species are organisms that have been introduced outside of their natural range as a result of human mediated activities. They can threaten the balance of a local or regional ecosystem, and can displace indigenous species through competition for food, space and resources, by predation or the introduction of disease.

Mitigation

Measures that will be implemented by the Principal Contractor to avoid the transfer of invasive plants, disease or animal species across the site will include:

- The importance of ensuring biosecurity within site inductions for all operational staff
- Enforcing the 'check, clean, dry' procedure for all plant, machinery, equipment and site operatives PPE. This includes wheel and tool washing facilities.
- Ensuring that all tools, equipment and PPE are well maintained and are cleaned and disinfected prior to use.
- Any imported soils must be fully screened from a licenced source prior to delivery to ensure it is uncontaminated.

6.10 Biodiversity Net Gain:

Impact

There can be negative environmental impacts to development which can lead to the loss or damage to habitat, biodiversity and environmental benefits. The aim is to secure a measurable improvement in habitat for biodiversity through the development process.

Mitigation

The purpose of a BNG assessment is to quantify the biodiversity value of the site prior to its development, and the predicted value post development. This is measured in biodiversity units, calculated according to the habitats present based on their size, distinctiveness and condition. This enables the quantitative calculation of the predicted change in biodiversity value as a result of the proposed development, with the objective of achieving a net gain in biodiversity.

A Biodiversity Net Gain Assessment, Monitoring and Management Plan was undertaken by Ecosupport Ltd in November 2023, and submitted for planning permission. The recommendations stated in section '**4.0 Proposed Created Habitats & Net Gain Assessment**' and '**5.0 Habitat Management**' of the report must be followed.

6.11 Previously Unidentified Matters:

If one or more of the following is discovered, work in that location must stop immediately and the Project Environmental Co-ordinator (PEC) informed:

- Contaminated soils;
- Archaeological remains or features;
- Suspicious objects;
- Underground storage tanks;
- Invasive species, i.e. Japanese Knotweed;
- Protected species, i.e. badgers, amphibians, reptiles and plant life.

7.0 Emergency Response Plan

7.1 Construction Phase Health and Safety Plan

The Principal Contractor will produce a Construction Health and Safety Plan document for the project.

All operatives are informed at the induction stage of the First Aid procedures. Details of the Appointed First Aider will be displayed within site office.

A plan with directions to the nearest hospital must be noted on the muster / assembly point notice located in the site office.

8.0 Training and Competance

8.1 Procedures

Procedures for ensuring the correct levels of training and competence include:

- All operatives are informed at the induction stage of all sensitive ecological areas and are issued with an ecological document stating the reasons and locations of all the relevant areas;
- All operatives must be inducted by the Principal Contractor before work commences and informed that they are required to 'sign in' before the operative commences work;
- The Principal Contractor must work to a strict and managed Health & Safety and Procedures core document, where individual operatives have specific Induction Sheets. These documents are read to the relevant operatives, where a signature is required on completion and a record kept in the site file;
- There are also procedures in place that any issues raised in relation to Environmental Health & Safety and work ethics, whether highlighted by staff or site operatives, are relayed via 'Tool Box Talks' and are noted on an individual form, allowing site management to resolve the issues raised;
- A record of Tool Box Talks will be kept on site, stating date, description of non-conformance, potential implications, proposed corrective actions, individual responsible and target date.

9.0 Method Statements

9.1 Procedures

Method statements obtained by the contractor from their subcontractors should include, as a minimum:

- A description of the works being undertaken;
- Descriptions of the impacts to the environment caused by their works based on a review of surveys and information available for the development. The impacts should consider areas such as landscape and visual; transport, waste and noise and vibration;
- Details of the activities to be undertaken; equipment to be used; hours of operation; site access arrangements and likely vehicle movements and details of waste and emissions expected to be generated;
- Management and mitigation measures;
- Monitoring and measurement responsibilities;
- Emergency preparedness and response procedures.

The method statements will include the following environmental control measures:

- All waste to be segregated and placed in a suitable waste container;
- All fuel to be stored in suitable double skinned bowsers, tanks or within a bunded area;
- Drip trays or absorbent blankets to be placed under all static plant;
- All hazardous chemicals to have an up to date COSHH assessment, be appropriately labelled and be stored in a locked container;
- Emergency arrangements for spill response;
- Spillages to be reported immediately;
- Core working hours;
- Vehicle and plant engines to be turned off when not in use;
- Requirements for an ecology permit if working in an ecologically sensitive area;
- For excavations, works to stop immediately if unknown remains found.