Bloor Homes Ltd

Land to the south of Union Road, Onehouse, Stowmarket, Suffolk.

Construction Environmental Management Plan

422533

DECEMBER 2021

RSK

RSK GENERAL NOTES

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Revision No.	Revision Information	Date	Reviser
1.	First issue submitted to Bloor Homes for comment.		RSK
2.	Section 1.3: Works programme details changed Section 2: Timings checked Section 3.10: Timings checked Section 4.2: Contact details updated	20.12.21	Sam Burton RSK

1 INTRODUCTION

RSK have been commissioned by Bloor Homes to develop a Construction Environmental Management Plan (CEMP) for the development of Land to the south of, Union Road, Onehouse, Suffolk.

The aim of this CEMP is to ensure there are measures in place to prevent unacceptable environmental impacts from construction activities. In particular, the CEMP aims to:

- Provide a mechanism for ensuring that measures to mitigate potentially adverse environmental impacts are implemented;
- Provide assurance to third parties that there are measures that will ensure their requirements are met; and
- Provide a framework for compliance auditing and inspection to understand performance against the measures set out in this CEMP.

This CEMP contains the site-specific control measures that will be applied by the Principal Contractor and where relevant its sub-contractors during the construction stage(s).

A copy of this CEMP will be retained at the work site office for reference by the entire workforce. It will be accessible to all site personnel and representatives of the relevant enforcement authority, and all sub-contractors.

1.1 Project Description

For the purposes of the CEMP, the development assumes to include the following principal components:

- Development of up to 146 residential dwellings;
- Development of public open space with soft landscaping;
- Development of vehicular, pedestrian and cycling links; and
- Development of associated highways;
- Associated utility infrastructure will be installed (including gas, electricity, water sewerage, telecommunication).

During construction there will be a site compound located within the development that will provide a site office, meeting room, canteen, toilets and drying room. There will be a main site storage area for materials and wastes. There will also be a designated site parking area for site personnel and contractors. An indicative site layout plan for the development is shown in **Figure 1.**

Figure 1: Site Layout Plan

1.2 Site Location and Description

The proposed development site is situated 2.6km to the west of Stowmarket, to the south-east of Onehouse, roughly 23.6km east of Ipswich and is formed of approximately 7.61ha in size comprising arable farmland. The site is bound by Union Road to the north, Starhouse Lane to the west, the B115 (Finborough Road) to the south and a residential development that is currently under construction to the east (Planning Reference 4455/16).

The site surface is shallowly sloping with undulations locally. Ground levels fall steadily from 50m AOD in the north-east to 35 AOD in the south.

Figure 1 shows the site layout plan.

A site location plan is shown at **Figure 2**.

Figure 2: Site location

1.3 Works Programme

The enabling works programme are expected to last 12 weeks.

The construction activities shall commence following the completion of the enabling works and are expected to last 160 weeks.

The development phasing will generally be started in the North of the development and progress clockwise as the plots become occupied. The infrastructure construction will be in accordance with requirements set out under the Planning Schedule of Conditions set out by Mid Suffolk District Council.

1.4 Planning Requirements

The CEMP sets out the environmental commitments that are to be delivered by the Principal Contractor for the proposed development.

Bloor Homes specify the production of a CEMP as one of their internal requirements. This CEMP has been produced with reference to reports and assessments developed for the proposed project and planning requirements.

2 GENERAL SITE MANAGEMENT

Construction activities will always have an impact on the surrounding environment and neighbours. This section details the measures Bloor Homes will take to reduce the impact through the site layout and good housekeeping techniques.

Permitted hours of work

No construction work including site clearance and the delivery of materials will take place within the site outside of the following hours:

08.00 – 18.00 Monday to Friday

08.00 – 13.00 Saturdays

No construction work or deliveries to be carried out on Sundays or Bank Holidays.

There may be instances where Bloor Homes are required to work outside the permitted hours for noisy works. In this case, Bloor Homes will contact Mid Suffolk District Council's Environmental Health Officer to confirm what actions they would require.

2.1 Construction Site Layout and Good Housekeeping

In planning the construction site layout, Bloor Homes will ensure that good housekeeping is applied at all times, and as far as reasonably practicable, including but not limited to the following:

2.1.1 Construction Site Layout

- Natural features such as existing trees and hedges will be retained, where possible, to screen the construction site;
- Storage areas, fixed plant and machinery, equipment and temporary buildings will be located in areas to limit adverse environmental effects;
- All external lighting and illumination associated with construction will be installed in a manner to avoid light spillage;
- To ensure that construction lighting does not affect the amenity of residents or create a statutory nuisance, external lighting will be designed and positioned to:
  - Provide the minimum levels necessary for safe working;
  - Avoid disturbance to adjoining residents and occupiers;
  - Avoid creating dazzle or distraction for drivers using adjacent highways;
  - Seek to minimise light spillage or pollution; and
  - Ensure that excess light does not fall on sensitive ecological habitats.
- Any site cameras will be located and directed so that they do not intrude into occupied residential property;
- Site compounds will include site office, meeting room, canteen, toilets and drying room;
- There will be a main site storage area for materials and wastes;

- There will be a designated site parking area for site personnel and contractors; and
- The design and layout of the construction site will take into account the dimensions and turning circles of delivery vehicles and plant to ensure that they can manoeuvre safely in the areas they utilise.

2.1.2 Good Housekeeping

- All site hoardings will be regularly inspected, repaired and repainted as necessary;
- All working areas will be kept in a clean and tidy condition;
- Adequate toilet facilities will be provided for all site staff and the disposal of effluent will be disposed of according to waste duty of care regulations;
- Waste 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 and burning of waste 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;
- An Emergency Response Plan will be established and implemented throughout all phrases of construction;
- Adequate security will be provided by Bloor Homes to protect the public and prevent unauthorised entry to or exit from the site. Site gates will be closed and locked when there is no site activity and site security measures will be implemented.

3 KEY ENVIRONMENTAL IMPACTS AND MITIGATION METHODS

Environmental management measures have been developed to avoid or reduce environmental impacts associated with the construction works. Environmental management measures shall be incorporated into the Risk Assessments and Method Statements (RAMS) and will be communicated to the workforce.

3.1 Noise and Vibration

Construction works have the potential to generate noise and vibration disturbances that can affect nearby residences and local businesses. As the proposed development proceeds, the occupants of newly constructed properties in the completed development phases on this or adjacent sites may become sensitive receptors to the effects of construction of buildings in later phases.

A review of the likely noise and vibration effects from construction works can be undertaken once a detailed schedule of equipment, processes and durations are known. Mitigation measures can be planned onsite in accordance with BS 5228 2009+A1:2014 – Code of Practice for noise and vibration on construction and open sites (Part 1. Noise and Part 2. Vibration) as outlined below.

It is not expected that there will be any significant vibration effects resulting from the construction of the scheme or from the completed development.

Table 1: Noise & Vibration Mitigation and Control Measures

Mitigation & Control Measures	Responsibility
Compliance Obligation: To be a good neighbour - to minimise noise and vibration disturbances to nearby residences.	
The use of hoarding around the work site perimeter, where practicable, will be erected to assist in the screening of noise generated from low-level sources.	Site Manager
Vehicles and mechanical plant used for the works will be fitted with effective exhaust silencers, maintained in good and efficient working order and operated in such a manner as to minimise noise emissions. The contractor shall ensure that all plant complies with the relevant statutory requirements.	Site Manager/Ground Works Contractor

Mitigation & Control Measures	Responsibility
Site personnel must be instructed on Best Practical Means (BPM) to reduce noise and vibration as part of their induction onsite training and as required prior to specific works. All trade contractors will be made familiar with current noise legislation and the guidance contained in BS 5288-1:2009 which will form a prerequisite of their appointment.	Site Manager/Ground Works Contractor
Plant and equipment will be switched off when not in use (including during breaks and down time of more than 30 minutes). No idling vehicles or plant onsite.	Site Manager/Ground Works Contractor
Where practicable, noisy plant and/or equipment will not be used simultaneously and/or in close proximity together to avoid cumulative noise impacts.	Site Manager
Audible reversing warning systems on mobile plant and vehicles will be of a type which, whilst ensuring that they give proper warning, have a minimum noise impact on persons outside sites.	Site Manager/Ground Works Contractor
Ancillary plant such as generators, compressors and pumps will be positioned in a way that causes the minimum noise disturbance, i.e., away from sensitive receptors or behind noise barriers. If necessary, acoustic enclosures / shielding will be provided.	Site Manager
The use of impact tools will be avoided near to occupied premises, wherever possible.	Site Manager/Ground Works Contractor
Where practicable, pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers.	Site Manager/Ground Works Contractor
Where practicable. equipment which breaks concrete, brickwork or masonry by bending, bursting or “nibbling” will be used in preference to percussive tools.	Site Manager/Ground Works Contractor
Materials will be lowered and not dropped with drop heights minimised where practicable.	Site Manager/Ground Works Contractor

Mitigation & Control Measures	Responsibility
Residents will be approached in advance of potentially noisy disturbances. There will be a noise complaint handling procedure for the site, any complaints made will be responded to in a timely manner.	Site Manager
Should it be required, a programme for noise and vibration monitoring will be prepared and agreed with Mid Suffolk District Council.	Site Manager

3.2 Air Quality

Construction works will give rise to a risk of dust impacts during earthworks and construction, as well as from track-out of dust and dirt by vehicles onto the public highway. The IAQM (Institute of Air Quality Management, 2014) guidance recognises that, even with a rigorous dust management plan in place, it is not possible to guarantee that the dust mitigation measures will be effective all of the time, for instance under adverse weather conditions. The local community may therefore experience occasional, short-term dust annoyance.

Construction can also result in increases in vehicles, plant and equipment on and offsite, which can impact on the local air quality increasing particulate matter and nitrogen dioxide levels, which can have adverse effects on human health. There is also the potential for the construction activities to impact upon both existing and new properties.

Regular site inspections will be carried out to monitor dust management and air quality. These inspections will be supported with inspection records or an inspection log that is made available to the local authority when asked. The frequency of inspections can be increased when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.

To reduce emissions of dust and limit dispersion, the following mitigation measures must be followed.

Table 2: Air Quality Mitigation and Control Measures

Mitigation/Control	Responsibility
Compliance Obligations: To be a good neighbour – to minimise the generation of dust during the construction phase of the development. To protect the environment - to mitigate against the release of air emissions including gases and particulates which can have an adverse effect to human health.	
Preparing and Maintaining the Site	
Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.	Project Manager
Appropriate dust suppression e.g., water spray, will be used where there is a high potential of dust generation when preparing and maintaining the site.	Site Manager

Mitigation/Control	Responsibility
Avoid site runoff of water or mud, which can create dust issues once dried.	Site Manager/Ground Works Contractor
Keep site fencing, barriers and scaffolding clean using wet methods.	Site Manager
Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below.	Site Manager
Cover, seed or fence stockpiles to prevent wind whipping.	Site Manager/Ground Works Contractor
Operations	
Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.	Site Manager/Ground Works Contractor
Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.	Site Manager
Use enclosed chutes and conveyors and covered skips.	Site Manager
Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.	Site Manager
Operating Vehicle/Machinery	
Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on un-surfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate)	Site Manager

Mitigation/Control	Responsibility
Plant and equipment will be switched off when not in use (including during breaks and down time of more than 30 minutes). No idling vehicles or plant onsite.	Site Manager
Should emissions of dark smoke occur (except during start up) then the machinery will be stopped, and any problem rectified before being used.	Site Manager
Plant and equipment will be maintained, with routine servicing to be completed in accordance with the manufacturer's recommendations. Records will be retained.	Site Manager
Earthworks	
Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable.	Site Manager/Ground Works Contractor
During dry or windy weather, material stockpiles and exposed surfaces should be dampened down using a water spray to minimise the potential for wind pick-up.	Site Manager/ Ground Works Contractor
Avoid topsoil stripping areas that are not immediately required for works.	Site Manager/Ground Works Contractor
Stockpile surface areas to be minimised (subject to health and safety and visual constraints regarding slope gradients and visual intrusion) to reduce area of surfaces exposed to wind pick-up.	Site Manager/Ground Works Contractor
Where practicable, stockpiles of soils and materials should be located as far as possible from sensitive properties, taking account of the prevailing wind direction.	Site Manager/Ground Works Contractor
Construction	
Avoid scabbling (roughening of concrete surfaces) if possible.	Site Manager/Ground Works Contractor

Mitigation/Control	Responsibility
Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.	Site Manager/Ground Works Contractor
Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.	Site Manager/Ground Works Contractor
For smaller supplies of fine powder materials, ensure bags are sealed after use and stored appropriately to prevent dust.	Site Manager/Ground Works Contractor
All construction plant and equipment should be maintained in good working order.	Site Manager/Ground Works Contractor
Track-out	
Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use.	Site Manager
Avoid dry sweeping of large areas.	Site Manager
Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.	Site Manager
Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable) when the road sweeper is not in use.	Site Manager
Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned.	Site Manager
Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits.	Site Manager
Other	

Mitigation/Control	Responsibility
All plant and equipment should be maintained in good working order and not left running when not in use.	Site Manager
All plant and machinery should comply with appropriate permitting requirements (where applicable) and be operated in accordance with the relevant Process Guidance Notes and/or best practice.	Site Manager
Large-scale vehicle movements will be timed to avoid peak hours on the local road network as far as reasonably practicable.	Site Manager
Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods	Site Manager
Bonfires or burning of waste materials is prohibited.	Site Manager

3.3 Ecology and Nature Conservation

There are 10 designated sites of ecological importance identified within close proximity to the proposed development:

- One statutory designated conservation sites of national/local importance within 2.9 km of the site: Combs Wood Site of Special Scientific Interest (SSSI).
- Nine non-statutory wildlife sites (CWS) within 2km of the site: Dale Wood Country Wildlife Site (0.5km), Buxhall Fen Country Wildlife Site (within 2km), Combs Lane Cornflower Site Country Wildlife Site (within 2km), Fen Acre Meadows Country Wildlife Site (within 2km), Greens Meadow Country Wildlife Site (within 2km), Northfield Wood Country Wildlife Site (within 2km), Rat River Meadows Country Wildlife Site (within 2km), Temple Grove Country Wildlife Site (within 2km), Willow Farm Riverside Woodland Country Wildlife Site (within 2km).

None of the sites mentioned above will be directly impacted by the site preparation or construction works.

Evidence of bats, badgers and nesting birds of no particular conservational value was found during surveys conducted on behalf of Bloor Homes.

It is of note that 2016 data records contain previous evidence of Great Crested Newts (GCN). However, due to the isolated nature of the pond where evidence was present and the unsuitable nature of the arable land that makes up the site, the risk of GCN making significant use of the site is negligible. Therefore, significant impacts on GCN are unlikely to occur as consequence of future development within the site.

Table 3: Ecology & Nature Conservation Mitigation and Control Measures

Mitigation/Control	Responsibility
Mitigation to prevent harm to protected species e.g. badgers and bats **Compliance Obligation:** To prevent activities that intentionally or recklessly damages or obstructs a protected species breeding or resting place and/or disturbing a protected species	
Advice regarding Badger's presence within the development site is to be sought prior to any works to confirm requirements and ensure precautionary measures, are implemented.	Site Manager/ Groundworks and Ecological Clerk of Works
Pre works checks will be completed by a suitably competent person(s) to confirm no presence of any protected species.	Site Manager/ Groundworks and

Mitigation/Control	Responsibility
	Ecological Clerk of Works
Site personnel will be given site inductions providing information on the presence of any protected species and their legal obligations.	Site Manager/ Groundworks and Ecological Clerk of Works
If excavations and trenches are required to be left open overnight, measures will be put into place to ensure mammals cannot become trapped.	Site Manager/ Groundworks and Ecological Clerk of Works
Any trenches or pits will be inspected each morning to ensure no mammals have become trapped overnight. Should a trapped animal be encountered the Ecological Clerk of Works will be contacted immediately for further advice.	Site Manager/ Groundworks and Ecological Clerk of Works
Potentially poisonous/hazardous substances required on site during the construction phase should be stored securely in fenced areas.	Site Manager/ Groundworks and Ecological Clerk of Works
Consideration should be given to levels of lighting, particularly along the boundary hedgerows and woodland. On the basis of the current masterplan proposals, there is no reason why the boundary hedgerows would need to be illuminated at night, and the development of a nocturnal wildlife friendly lighting strategy seems entirely feasible to deliver.	Site Manager/ Groundworks and Ecological Clerk of Works
Mitigation to prevent disturbance of nesting birds The following section describes how Bloor Homes will mitigate against harm to nesting birds onsite. **Compliance Obligation:** To prevent activities that intentionally or recklessly, damage or destroy nests.	

Mitigation/Control	Responsibility
During the clearance works continuous checks will be made by contractors for nesting birds.	Ground Works Contractors
Removal of any hedgerows, trees or tall ruderal habitat must also be completed outside of the recognised bird nesting period i.e. removal should be undertaken within the months of September to February (avoiding March-August inclusive), or immediately following a check by a suitably experienced ecologist that verifies the absence of nesting birds and/or their dependent young.	Site Manager/ Groundworks and Ecological Clerk of Works
If nests are discovered, then works will cease until the Project Ecologist has determined the status of the nest.	Project Ecologist (Clerk of Works)
If an active nest is identified, works will only proceed within the exclusion zone once the Project Ecologist has confirmed the young have fledged.	Project Ecologist (Clerk of Works)
Large and/or structurally complex areas of vegetation will be subject to a careful inspection and where necessary may require an ecology watching brief to work alongside the contractors clearing and checking vegetation.	Site Manager/ Project Ecologist (Clerk of Works)
Where breeding bird activity cannot be established within structurally complex areas of vegetation, bow saw, and loppers will be used to carefully cut away small sections of vegetation, ensuring disturbance is localised.	Ground Works Contractor / Project Ecologist (Clerk of Works)
Tree Retention and Protection An arboricultural report is yet to be commissioned. Any mitigations required will be detailed in this section following publication of the report. **Compliance obligation: To protect trees and hedgerows from accidental damage from construction activities**	
All hedgerows, trees and scrub to be retained within the proposed development and adjacent to the site, shall be protected during construction in line with standard arboriculturalist best practice (BS5837:2012 - Trees in relation to design, demolition and construction) or as otherwise directed by a suitably competent arboriculturalist.)	Site Manager/Groundwork Contractor and Arboricultural Clerk of Works

Mitigation/Control	Responsibility
Should any works be considered as likely to impact upon trees scheduled for retention then specialist Arboricultural advice would be recommended.	Site Manager/Groundwork Contractor and Arboricultural Clerk of Works

3.4 Archaeology and Cultural Heritage

An archaeological trial trench evaluation on the site found evidence of later prehistoric and Romano-British periods. No remains have been identified which are of schedulable quality or are considered to be of a significance that would preclude development. There are no designated heritage assets (Scheduled Monuments, Conservation Areas, Listed Buildings, Registered Parks and Gardens, Registered Battlefields and World Heritage Sites) within the application site.

The analysis of the magnetic data in correlation with LiDAR derived terrain models, contours and satellite imagery has allowed for the identification of a possible bank-and-ditch enclosure of the hilltop of uncertain date. Within this, two probable ring ditches have been identified, with a further example outside the enclosure to the north east. The central area also contains numerous weaker anomalies interpreted as possible pits and ditches.

It is not anticipated that any works within development site will impact any heritage assets. If any situation or works activity arises which may impact any surrounding heritage areas, then suitable mitigation measures shall be implemented, and a detailed sequence of works shall be produced and included/appended to this document. Mid Suffolk District Council Local Planning Authority will be contacted and informed prior to the undertaking of any works.

Table 4: Archaeology and Cultural Heritage Mitigation and Control Measures

Mitigation/Control	Responsibility
Compliance Obligation: To prevent damage to buried archaeological features as a result of excavation activities.	
If archaeological remains are found after construction work has begun the Responsible Person will carry out the following: - Stop work immediately in the area; - Mark the area to avoid further disturbance - Protect the find by fencing/blocking it off; and - Inform the Project Lead immediately.	Site Manager/ Ground Works Contractor

3.5 Ground Conditions

The site is underlain by natural superficial deposits of Lowestoft Formation (glacial till, with outwash sands and gravels, silts and clays) are mapped across the northern part of the site with Alluvium (clay and silt) mapped across the remainder of the site. The solid geology of Crag Group sand is mapped across the entire site.

No potential on-site sources of contamination have been identified.

Several potential off-site sources of contamination have been identified within a 500m of the site and comprises Environmental Agency (EA) waste sites, unspecified works, infilled ground (associated with the infilling of various pond and pit features), agricultural activities, vehicle repair, testing and servicing, allotment gardens, medical institutions, EA pollution incidents, a burial ground, a windmill, historical tank features, a sewage tank and a rifle range.

Risk of encountering contamination during development has been assessed as low to medium.

Geo-environmental survey indicates that groundwater is likely to be more than 5 m below the ground surface throughout the year.

The construction works would be managed in accordance with CIRIA guidance 'C532 – Control of Pollution from Construction sites' to help ensure a well-managed operation which minimises potential environmental risks.

Table 5: Ground Conditions Mitigation and Control Measures

Mitigation/Control	Responsibilities
Compliance Obligation: To protect sensitive receptors by undertaking activities that reduce the risk of ground contamination	
All fuel will be stored in a double skinned tank, or a tank in a suitable bunded area. Containers will be in good condition and be bunded with secondary containment of 110% of the biggest container capacity or 25% of the total stored capacity, whichever is the greater.	Site Manager/ Ground Works Contractor
Re-fuelling activities will only be undertaken by suitably competent persons and spill kits will be available within the site compound.	Site Manager/ Ground Works Contractor
All refuelling, oiling and greasing will take place above drip trays or on an impermeable surface which provides protection to underground strata and watercourses and away from drains. Vehicles will not be left unattended during refuelling.	Site Manager/ Ground Works Contractor

Mitigation/Control	Responsibilities
All fuel deliveries on site will be supervised by a responsible person and storage tank levels will be checked before and during delivery to prevent overfilling and that the fuel that is delivered is to the correct storage tank.	Site Manager/ Ground Works Contractor
All hazardous liquids e.g., oils, lubricants, chemicals and tins of paint will 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.	Site Manager/ Ground Works Contractor
All static plant shall be placed with drip trays to prevent ground contamination as a result of oil spills and leaks. Plant and machinery will be kept within the compound and secure containers outside of working hours.	Site Manager/ Ground Works Contractor
During any excavation/enabling works those undertaking the works will observe the uncovered ground for any visual and odorous signs of contamination, as the release of noxious fumes, petrol, oils, solvents, chemical residues and smells may indicate contamination. When contamination is suspected the following will be carried out: - Work will be stopped immediately; - Suspected contamination reported to the site manager and further advice sought; - Area is to be sealed off and methods used (where possible) to prevent the spread of the contamination; - Clear the area to ensure there is nothing that could cause a fire; - Contact the Local Authority or Environment Agency; - Ensure that suspected contamination is tested, and characterised and remediation strategy is put into action; and - Follow good practice guidance to remediate the area.	Site Manager/Ground Works Contractor
Any imported topsoil and inert material intended for use within gardens shall require chemical testing to ensure it is suitable for use on residential developments.	Site Manager

3.6 Water Resources and Flood Risk

The application boundary includes an indicative connection to the Rattlesden River (or River Rat) to the south of the site.

The topography of the site broadly falls the north-east (from approximately 50.8 m AOD) to the south-west (to approximately 37.4 m AOD). Levels in the east of the site fall to the south-east (to approximately 36.1 m AOD). Ground levels to the south of Finborough Road fall towards the River Rat.

The Lowestoft Formation (natural superficial geology) is classed as a secondary undifferentiated aquifer and the Alluvium (natural superficial geology) is classed as a Secondary A aquifer across the remainder of the site, while the Crag Group sand is classed as a principal aquifer.

The majority of the site will be located within Zone 1 Flood Risk. Flood Risk Zone 1 comprises land assessed as having a less than 1 in 1000 annual probability of flooding (<0.1% in any year) and will a achieve standard of protection to flooding which is at or above the local policy requirement to respond to the 1 in 200 year plus climate change event. Flood Zones 3 and 2 (the high and medium probability flood areas respectively) are located at the southern extent of the application boundary to the south of Finborough Road.

Table 6: Water Resources & Flood Risk Control and Mitigation Measures

Mitigation/Control	Responsibilities
Compliance obligation: To prevent pollution to watercourses	
Silt Management Mitigation Measures Silt is made up of fine particles of soil carried by water giving it a muddy discolouration. When silt is washed off into nearby watercourses, silt pollution is highly visible and easily traceable back to the site.	
To minimise the amount of exposed ground and prevent silt laden surface water run-off, only the areas where work is to start will have vegetation removed and topsoil stripped.	Site Manager/Project Manager
Temporary dewatering from excavations to surface water may take place under the Environment Agency regulatory position statement (RPS) (link) providing the conditions of the RPS are met. The RPS is due to be reviewed by the EA on the 30th April 2022 so will need to be checked after this date.	Project Manager/Site Manager

Mitigation/Control	Responsibilities
Compliance obligation: To prevent pollution to watercourses	
Soil and aggregate stockpiles will be positioned away from watercourses and drains. These stockpiles will be sheeted or battened.	Site Manager
Grassy areas of vegetation will be left along surface water features to act as a natural barrier to filter silt from any surface water run-off.	Site Manager
Silt protection measures such as silt fencing should be considered where there is a risk of site run-off leaving site and potentially entering drains or ditches and watercourses. Such mitigation will be inspected at regular intervals during the construction phase to check their efficiency and determine when they need replacing.	Site Manager
Surface water drains will be protected with gully guards, these will be inspected at regular intervals during the construction phase to determine when they need replacing.	Site Manager
Other practices Bloor Homes will employ to mitigate against flood risk are listed below:	
Construction activities	
No plant/ equipment or COSHH materials will be stored overnight or at weekends in a flood zone 3 area.	
Refuelling activities within a flood zone 3 area will require authorisation from the Site Manager, and additional mitigation measures will be deployed to reduce the risk of spillages.	
Where possible, stockpiled material will not be stored in flood zone 3 areas. Where this is unavoidable, sufficient gaps will be left in stockpiles so as to not impede flood flow.	
Land Drain Clearance	

Mitigation/Control	Responsibilities
Compliance obligation: To prevent pollution to watercourses	
Regular maintenance including vegetation removal and silt removal, will enable the free-flowing movement of water, helping to minimise flood risk.	Site Manager/Project Manager
Vegetation clearance is best completed in late September/October when it has naturally died back and before the UK's winter storm season.	Site Manager/Project Manager
Unauthorised discharges into controlled waters or the local drainage network	
In the event of an unauthorised discharge into a watercourse the Environment Agency will be notified as soon as reasonably practicable.	Site Manager
In the event of an unauthorised discharge into the drainage network the sewerage provider will be notified as soon as reasonably practicable.	Site Manager

3.7 Oil and Fuel Storage

The following mitigation measures will be applied to prevent oil, lubricants, chemicals and fuel from entering surface water features during site preparation and construction:

Table 7: Oil And Fuel Storage Control And Mitigation Measures

Oil and Fuel Storage Mitigation Measures **Obligation: To correctly store oil and fuel to prevent spillage into the environment**	
All oil and fuel storage will be sited at least 10m from a surface water feature and 50m away from a borehole or well.	Site Manager
All oil and fuel storage will be stored within secondary containment with a capacity of at 110% of the largest containers or at least 25% of the total volume (whichever is greatest).	Site Manager
All valves, filters, sight gauges, vent pipes or other related equipment (not including a fill pipe or draw off pipe) will be situated within the Secondary containment.	Site Manager
All containers must be labelled with the contents and maximum volume and be of sufficient strength and structural integrity to ensure it is unlikely to burst or leak in its ordinary use.	Site Manager

3.8 Waste Management

The earthworks and construction work on the site are likely to produce the following wastes:

- Mixed construction waste;
- Mixed inert waste;
- Timber from construction;
- Plasterboard;
- Mixed metals from construction;
- Paper, cardboard & plastics; and
- Hazardous waste – small quantities of part full paint tins, mastic tubes and aerosols.

Table 8: Waste Management Mitigation and Control Measures

Mitigation/Control	Responsibilities
Compliance Obligation: To ensure waste is removed from site in line with the legal requirements of 'Duty of Care'.	
There will be a defined waste storage area to encourage the reuse and recycling of materials, this will include; - Segregating wastes using appropriate storage containers; - Using suitable containers for waste types and labelling containers appropriately (i.e. gypsum/plasterboard, timber, etc.); - Use covered skips to prevent spread of wind-blown wastes; - Hazardous wastes will be stored in suitable lockable containers away from sensitive receptors and site traffic; and - Avoiding the mixing of hazardous and non-hazardous materials.	Site Manager

Mitigation/Control	Responsibilities
Clear signage will be erected at each skip and waste container to facilitate the segregation of different waste streams.	All onsite Contractors
Facilitating effective segregation will require communication with contractors, sub-contractors and site operatives to ensure correct segregation of waste streams.	Site Manager / All onsite Contractors
A Site Waste Management Plan (SWMP) will be developed for the earthworks and construction phase. 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.	Project Manager
Waste will be segregated onsite into individual waste containers (metal, hardcore, timber, inert etc.) and monitored in relation to type and weight / volume, enabling the onsite recycling of materials to be maximised.	All onsite Contractors
Where practicable bricks/blocks and aggregates will be reused within hardstanding areas onsite.	Site Manager
Appoint appropriately registered waste management contractors for the development.	Project Manager
Site operatives shall undertake regular checks of the Waste Transfer Notes and Hazardous Waste Consignment Notes supplied against the details of the Waste Management Matrix (WMM) to ensure waste is being managed in line with current waste legislation.	Site Manager
The Site Waste Management Matrix will be maintained periodically throughout the construction phase.	Site Manager/ Ground Works Contractor/ Surveyor

3.9 Soil Management

Under the Waste Framework Directive naturally occurring soils are not considered waste if re-used on the site of origin. However, if it is proposed to import clean and naturally occurring soils direct from another site, a Materials Management Plan (MMP) would need to be in place at the receiving site.

Table 9: Soil Management Mitigation and Control Measures

Mitigation/Control	Responsibility
Compliance obligation: to protect soil resources and promote their reuse	
A Soil Resource Plan should be prepared showing the areas and type of topsoil and subsoil to be stripped, haul routes, the methods to be used, and the location, type and management of each soil stockpile.	Site Manager/ Ground Works Contractor
Where possible any stripping, stockpiling or placing of soil should be carried out under dry weather conditions and where possible using tracked equipment to reduce compaction.	Site Manager/Ground Works Contractor
Traffic movement will be confined to designated routes to avoid compaction of soil.	Onsite Contractors
Stripped soil should be stored for short periods of time to avoid resulting in significant detrimental impacts on the soils' physical, chemical and biological properties, including drainage characteristics.	Site Manager/Ground Works Contractor
Stockpiles of different soil materials should be clearly defined and signed where necessary to avoid the mixing of topsoil and subsoil.	Site Manager/Ground Works Contractor
Soil will not be mixed with construction waste or contaminated materials.	Onsite Contractors
Stripped soil should be utilised onsite where possible. If Bloor Homes imports soil, they must use a reputable supplier, establish the source of the soil and ensure it is suitable for the intended use.	Site Manager/ Ground Works Contractor

Mitigation/Control	Responsibility
When a Materials Management Plan (MMP) is required, it will be developed to manage arisings from excavations and services as per the CL:AIRE Code of Practice. It will include details of: 1. the materials in terms of potential use and relative quantities; 2. where and how these materials will be stored; 3. the intended final destination and use of these materials; and 4. how these materials are to be tracked and moved.	Site Manager/ Ground Works Contractor
Where off-site disposal is required a suitable chemical analysis will be performed to classify if the soil is hazardous or non-hazardous and Waste Acceptance Criteria [WAC] testing performed to determine a suitable disposal facility	Site Manager/ Ground Works Contractor

3.10 Transport

Traffic Management will be required for the duration of the work programme. Access to the site will only be via allocated, signed access point(s).

Traffic may cause the following environmental and social impacts:

- Noise;
- Dust;
- Traffic congestion resulting in extra travel time for residents;
- Vibration;
- Local air quality degradation;
- Nuisance; and
- Additional hazards to residents of moving vehicles.

Table 10: Transport Mitigation and Control Measures

Mitigation/Control	Responsibilities
Compliance obligation: Limit of vehicle movements as per planning conditions set out in WP/20/00314/FUL planning conditions	
The movement of heavy goods vehicles associated with the transportation of material to and from the site shall be restricted to the following hours: Mon – Friday: 08.00 – 18.00 Saturdays: 08.00 – 13:00 No delivery (or construction) activities will take place on Sundays or Bank Holidays.	Site Manager

Mitigation/Control	Responsibilities
Compliance obligation: Limit of vehicle movements as per planning conditions set out in WP/20/00314/FUL planning conditions	
The placement of orders for materials shall be carefully managed to ensure that vehicle movements to and from site are minimised. Opportunities to combine and consolidate deliveries (and use of initiatives such as reverse logistics) shall be explored.	Project Manager / Site Manager
The following traffic management measures to control any potential impacts arising from site traffic: - Use of speed limits on the access road and on site; - All engines will be switched off while waiting to unload; - Use of dust suppression methods (i.e. use of water bowser to dampen down haul route – site conditions will be monitored to minimise / mitigate against silt run off / protection of drainage); - Site conditions will be monitored to minimise and mitigate against dust and silt run off which can lead to pollution of local water courses. The use of dust suppression techniques will be employed (i.e. use of water bowser to dampen down haul route). - Retractable sheeted covers will be used to protect against wind-blown material; - Mud on roads from site clearance and muck shifting will be removed using road sweepers – any associated effluent or waste from the cleaning process will be removed taking due consideration of waste Duty of Care requirements, ensuring the contents of the road sweeper is not disposed of in onsite drains.	Project Manager / Site Manager

3.11 Site Inspections/Audits

Daily site inspections will be undertaken by the site manager or a designated member of staff to assess performance of environmental mitigations and identify any potential impacts to the environment or nearby receptors. These inspections may be combined with other non-environment based checks (i.e. Health and Safety) that need to be undertaken.

Any elements of the site management found to be in an unsatisfactory condition during the site inspection shall be addressed on the day. In the event it is not possible to address the matter on the day it is raised, a note of the reason why shall be made on the inspection record sheet.

On occasions, i.e., following an incident on site, if an issue is identified during the daily site inspection or to satisfy a planning requirement, targeted site inspections or audits may need to be undertaken by appropriately experienced staff or specialists. Examples of such inspections/audits include:

- Site inspections/audits carried out at regular intervals during the construction programme by a designated person to check that noise and vibration mitigation is being appropriately undertaken (i.e., plant and equipment are being operated with suitable acoustic covers in place).
- The investigation of any areas of potential contamination by a suitable specialist.

The results of any inspections / audits and subsequent investigation and corrective actions and audits should be recorded and retained on site.

4 COMMUNICATIONS AND COMPLAINTS

4.1 Community and Stakeholder Engagement

A stakeholder communications plan that includes community engagement before work commences on site will be developed and implemented. There are a number of methods that may be implemented. These could include:

- letters to key stakeholders;
- adverts and articles in local press;
- local authority public newsletters;
- website;
- social media;
- media appearance;
- electronic newsletters; or
- meetings.

The approach taken will depend upon the public interest, number and type of stakeholders to contact and any specific planning requirements.

Stakeholder communications has been completed at the planning stages of the development. Stakeholder consultations and agreements have been detailed in table 11.

Table 11: Stakeholder Consultations

Stakeholder	Consultation Method	Agreements	Record
Local Authority – Environmental Health	Email, letter, site meeting	e.g. nuisance complaints procedure	Site File
Local Authority - Highways	Email, letter, site meeting	e.g. Section 106 agreement	Site File
Local Authority - Drainage	Email, letter, site meeting	e.g. sustainable drainage design	Site File
Local Authority - Landscape / Tree Officer	Email, letter, site meeting	e.g. retained tree plan	Site File
Neighbouring residents	Letter drop, site meeting, local press	e.g. nuisance complaints procedure	Site File

4.2 Key Contacts

Bloor Homes and/or their appointed contractor shall be responsible for implementation of this CEMP. A list of contacts responsible for the environmental management of the development shall be compiled, utilising **Table 12** below.

Table 12: Key contacts under this CEMP

Name & Position:	Company	Contact no:	Email address:
Construction Director – Scott Wetherbed	Bloor Homes	01284 752 295	Details available upon request
Site Manager	TBC	TBC	Details available upon request
Technical Director – Alex Clark	Bloor Homes	01284 752 295	Details available upon request
Drainage Engineer – Jack Brill	Bloor Homes	01284 752 295	Details available upon request
Drainage Consultant – Ned Roach	Barter Hill	01603 300 360	Details available upon request
Roadway Engineer	TBC	TBC	Details available upon request

4.3 Complaints

Bloor Homes operate in accordance with their Complaints Policy.

Complaints are directed to the Customer Care team at the regional office. A standard procedure will be followed.

What we will do

a. Acknowledge receipt of a complaint

b. Gather any further information regarding the complaint

c. Resolve the complaint as soon as possible.

All responses to complaints will, where possible, be made by telephone. Failing this, the response will be made via the same medium as it was received.

All complaints will be logged and the complaints log will be made available to the local authority upon request.

5 EMERGENCY RESPONSE

All operatives are informed at the induction stage of the First Aid procedures. Details of the Appointed First Aider will be displayed within the site office. A plan with directions to the nearest hospital is on the muster / assembly point notice located in the site office.

In the event of Environmental Incidents, the following procedure should be followed:

1. Site operatives should prevent the continuation of the incident, where safe and possible to do so;
2. The incident must be reported to the Site Manager;
3. Irrespective of category and scale, some incidents require reporting to the Environment Agency or relevant Local/District Authority immediately (see Table 13 below). These include the following:
   - Unauthorised discharges to surface water features;
   - Unauthorised discharges to drainage systems, where not contained;
   - Unauthorised discharges to unmade ground or hard standing; and
   - Incidents requiring Fire Brigade attendance.
4. In the event of an emergency situation which requires the attendance of the Fire Brigade, Bloor Homes should supply the Fire Brigade with a copy of the site drainage plan to assist in the prevention of pollution from fire control water.

Table 13: Contact Details for Site Manager and Main Regulators

Name & Position:	Company	Contact no:	Email address:
Site Manager	Bloor Homes	Details available upon request	Details available upon request
Environment Agency Incident Hotline	Environment Agency	0800 807060	N/A
Local Authority Pollution Control Team (inc. contaminated land and nuisance issues)	Mid Suffolk District Council	0300 123 4000	customer.services@baberghmidsuffolk.gov.uk
Water Company	Anglian Water	03457 145 145	N/A

Reporting of an incident shall, where necessary, commence the incident investigation.

An investigation report shall be prepared for all environmental incidents. The report is to include:

- Summary of the environmental incident, describing the:
  - nature of the incident;
  - details of any pollutant released including the type and quantity of pollutant released;
  - location for the incident (e.g., grid reference);
- Receptors that were or could have been impacted;
- An analysis of what led to the incident occurring;
- Summary of immediate actions taken to mitigate the incident;
- Summary of any remedial action required; and
- Lessons learned and future measures or actions to be implemented.

Spill kits capable of dealing with hydrocarbon and chemical spills shall be available at all worksites. Each storage location shall be clearly visible to the workforce, for instance by deploying clear signage. If a construction compound, fuel storage point or COSHH store is provided then additional spill kits will need to be available at each separate location.

The spill kit contents shall include absorbent pads, absorbent booms, absorbent granules and hazardous waste disposal sacks as a minimum. Regular checks of the spill kits shall be completed to ensure they remain adequately stocked to deal with environmental incidents.

All pollution incidents should be managed through the **STOP - CONTAIN - NOTIFY** concept:

1. As soon as an incident is identified, the first action should be to **STOP** and prevent further discharge to drainage/river/ground.
2. **CONTAIN** may constitute control of discharge in the event of a spill, or cessation of works if it is the works that are resulting in the incident, e.g. halting excavations until silt runoff is contained. It is recognised that due to personal health and safety risks it may not always be safe to stop the source of the spill, for instance if a significant volume of an unidentified substance has been released.
3. **NOTIFICATION** should take place as soon as practicable, and frequently can take place while further release is being stopped or while a spill is being contained.

6 TRAINING & COMPETENCE

6.1 Inductions

Bloor Homes shall ensure that appropriate awareness and training is delivered to all site operatives and only appropriately qualified sub-contractors are appointed.

All project personnel and sub-contractors shall receive an Environmental Induction Presentation, prior to commencement of works onsite. No personnel, including subcontractors, shall be permitted to commence employment on site without prior attendance at an induction.

A record should be kept of all personnel, including sub-contractors, who have completed the inductions. This record should state time, date, name (& company if relevant) and signature to confirm attendance/completion. The name of the staff member providing the induction should also be included.

Environmental topics covered in the induction shall include but will not be limited to:

- Duties and responsibilities;
- Relevant site-specific procedures;
- Nuisance prevention;
- Pollution prevention;
- Waste management and housekeeping;
- Emergency response procedures; and
- General environmental best practice.

6.2 Toolbox Talks

A record of Toolbox Talks will be kept on site, stating date, description of non-conformance, potential implications, proposed corrective actions, individual responsible and target date. Toolbox Talks shall include, but will not be limited to, instances where:

- There is a change to existing legislation, which requires an operational change;
- Site inspections or audits have identified corrective actions which require communicating; and
- There are significant changes in environmental conditions, i.e. heavy rainfall.

The frequency and topics of the Toolbox Talks shall depend upon the phase of construction. They shall be provided as often as necessary to address site-specific environmental requirements.

6.3 Specialist training

Specialist training for specific individuals will be provided as required. This may include but will not be limited to:

- Emergency environmental crews;

- Waste representatives; and
- Fuel tanker drivers.

7 CHANGE MANAGEMENT

The CEMP may be reviewed and amended following:

- Following any project milestones that require different mitigation measures to be considered;
- A major environmental incident;
- A major change in the construction methods to be used on site;
- Change of environmental regulations that affect the works; and
- Change to the environmental aspects and impacts of the works.