CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN



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ERECTION OF NINETEEN HOLIDAY LODGES, RECEPTION BUILDING, FACILITY MANAGER'S ACCOMMODATION AND MAINTENANCE SHED. FORMATION OF TWO FISHING LAKES AND ASSOCIATED HARD AND SOFT LANDSCAPING. BLEU RAY FARM, MILL GATE, WHAPLODE PE12 6RY

CLIENT ; VMM PROPERTIES LIMITED

DATE ; APRIL 2022

PROJECT REF ; JDA/2022/885

This document is part and parcel of a Full Planning Application submitted to South Holland District Council

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Construction Environmental Management Plan

"A CEMP is the lead environmental management document that helps define and pull together the procedures for achieving the objectives set out in relevant environmental policy and best practice, and identified environmental performance targets for the project".

Health & Safety Executive
The F10 Form will be submitted to the HSE once planning is granted notifying them of the start date on site.

1.00 REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

This study has been undertaken in accordance with British Standard 42020:2013 "Biodiversity, Code of practice for planning and development".

The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

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2.00. CEMP IMPLEMENTATION

The contents of this report are the responsibility of John Dickie Associates Ltd. It should be noted that, whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

The CEMP ensures the environmental impact of the construction of the development is adequately mitigated, and in the interests of the amenity of nearby residents/occupiers.

This document provides a series of proposed measures and standards of work, which shall be applied by the nominated undertaker and its contractors throughout the construction period to:

- Provide effective planning, management and control during construction to control potential impacts upon people, businesses and the natural and historic environment; and

- Provide the mechanisms to engage with the local community and their representatives throughout the construction period.

In summary the objectives of this document are to:

- Minimise, (eliminating where practicable), the environmental effects of the construction of the Proposed Development;
- Document the environmental controls to be adopted during construction;
- Enable agreement with the relevant approval authorities on mitigation measures to be adopted during construction; and
- Provide a framework for contractors to manage construction impacts.

The CEMP should be reviewed periodically through the life of the project. Review will help ensure that the CEMP can be renewed and updated as necessary, adapting to changes.

The Principal Contractor will comply, as a minimum, with applicable environmental legislation at the time of construction. Further guidance on specific areas, such as soil handling and dust management, will be considered from industry best practice guidance documents as set out in each discipline section. The references to guidance documents within this document are not intended to be exhaustive.

John Dickie Associates Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

The overall aim of the CEMP is to minimise the potential impact of the construction phase of the development on the existing ecology of the site, and ensure works proceed in accordance with current wildlife legislation. It is designed specifically for implementation during the construction phase of the proposed development.

All contractors employed by the Client should be registered with the Considerate Constructors Scheme. The CCS recognises and rewards better than standard industry practice in the following sections:

- Care about appearance;
- Respect the community;
- Protect the environment;
- Secure everyone's safety; and
- Value their workforce.

Sub-contractors and suppliers will be obliged contractually to adhere to the requirements of the CEMP (based on this framework) and will ensure all their site personnel are inducted on the requirements of the CEMP and are aware of it prior to commencing any work on Site.

Materials suppliers will provide details to the Principal Contractor of the origin of all materials they supply to the development e.g. timber. Furthermore, suppliers could provide evidence of adhering to industry recognised responsible sourcing certification schemes such as the Sustainable Forestry Initiative and CARES Sustainable Constructional Steel Scheme.

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3.00 Site Context ;

The application site area is defined on the submitted OS based Location Plan. The site area is 22,780 sq m – 5.63 acres.

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4.0. ECOLOGICAL MANAGEMENT TEAM

The responsibility for ensuring construction works proceed in accordance with the CEMP will lie with the appointed contractor. Overall control will be held by the Project Manager.

An Ecological Manager will be appointed. The responsibilities of the Ecological Manager will include developing method statements and site protocols as required, providing guidance for the site team in dealing with environmental matters, and liaising with contractors/sub-contractors and any statutory or third party with an ecological interest in the scheme. The Ecological Manager will ensure that all site personnel are appropriately briefed on the ecological issues within the site. This will be undertaken through inclusion of ecological briefings within the 'toolbox' talks given to all staff as part of the site induction process.

A suitably qualified Ecological Clerk of Works will be appointed to advise and oversee construction activities where appropriate and ensure the site team and sub-contractors comply with site protocols

and control/ mitigation measures. Any failings will be reported to the Project Manager immediately, who will be responsible for ensuring that remedial action is implemented.
The Ecological Clerk of Works will be responsible to the Ecological Manager and will approve all method statements, in addition to ensuring that any relevant site environmental protocols and are appended and that these controls are adhered to.
The ecological management team for this project is summarised below ;

Role	Person Responsible
Project Manager / Site Manager	To be appointed by the contractor
Ecological Manager	To be confirmed,
Ecological Clerk of Works	To be confirmed,

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5.00 REVISIONS TO SCHEME
Should the need to amend any details of the scheme arise, such as the proposed methods of working or the extent of the works, the proposed changes will be approved in writing by the Ecological Clerk of Works prior to implementation, and also by the Local Planning Authority if required.

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6.00 PRACTICAL MEASURES TO AVOID/REDUCE CONSTRUCTION IMPACTS
This chapter details practical measures that will be implemented to ensure that biodiversity features on site are protected at all times throughout the construction process.

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7.00 USE OF PROTECTIVE FENCING / BARRIERS
Any retained trees or hedgerows will be protected during construction by the installation of protective fencing in accordance with the requirements of British Standard 5837: 2012 2012 "Trees in relation to design, demolition and construction - recommendations". Protection will be installed on site prior to the commencement of works.

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8.00. INDIVIDUAL SPECIES MITIGATION STRATEGIES
Refer to the ARBTECH PEA

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Birds
- In order to avoid any breach of legislation with regard to nesting birds, the following measures will be implemented: Clearance of vegetation, or pruning works will be timed to occur outside of the period March to September inclusive, if possible.
- Should any pruning or vegetation clearance works be required within this period, they will be subject to an inspection by a suitably qualified ecologist prior to works commencing. Should any active bird's nests be identified, an appropriate buffer zone will be implemented and maintained until the young have fledged and the nest has been abandoned naturally.

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9.00. CONTINGENCY MEASURES
Should any unexpected events occur, e.g. the discovery of unexpected species on site, work will cease and the Ecological Manager / Clerk of Works will be contacted to determine the most appropriate way to proceed.

Health & Safety Executive
The F10 Form will be submitted to the HSE once planning is granted notifying them of the start date on site.

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10.00 General
The CEMP is critical to the successful management of construction and environmental issues throughout the construction phase of the project. All site works will be undertaken in compliance with the CEMP. The provisions of the CEMP will be agreed with the relevant statutory authorities prior to the commencement of construction activities.

Subject to the procurement of Full Planning Permission work is due to start in Q4 2023 with a program duration of 22 months.

The sub contractors engaged to undertake the works have not yet been appointed but will be expected to submit to the contact their Health and Safety documentation which will be added to this CEMP over time to create a complete project management plan.

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11.00 SPECIFIC PROVISIONS OF THE CEMP

11.1 Hours of working
Working hours for the site will be from 8am to 1700hrs - no plant or machinery is to be used prior to 8:30am. The working of overtime will not be permitted without written permission from the clients representative.

Construction activities are expected to be carried out on a single shift basis during the hours set out above. The normal weekly working hours could, on occasion, be augmented as required where an activity extends beyond them for reasons of continuity, for example a concrete pour or plant commissioning exercise. Work will not take place on any Sunday or Bank Holidays, unless such work is associated with an emergency or does not cause existing ambient noise levels to be exceeded.

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11.2 Wheel Cleaning
The proposed temporary compound areas as shown on the site layout plan (Temporary Works) are where the developer proposes to carry out wheel washing. These areas will be formed of suitable hardstanding materials with a 25 mm gravel bed.
Construction and delivery vehicles will comprise of HGVS & smaller van type vehicles.
A small catch pit will be dug in the vicinity of the parking/ wheel washing area to act as a soakaway.
The wheel wash will be conducted before a vehicle leaves the site and takes place on the gravel hardstanding. An operative from the site personnel will be designated to ensure a wheel wash and chassis clean is carried out for all vehicles that have been visually inspected and deemed to require cleaning.
The wheel and chassis of all vehicles will be thoroughly cleaned and brushed using a Hilta 3000 PSI diesel pressure washer (or equivalent) - see details below ;

Diesel & Bowser Power Washers

HILTA

Diesel Power Washer

Heavy duty industrial diesel driven power washers ideal for construction site use and general cleaning.





Features:

- 2:1 reduction gear box fitted to pump – machine longevity
- Hose reel facility – eliminates trailing hose and subsequent damage to hose
- Complete with 12m high pressure hose, lance and gun
- Heavy duty two wheel chassis with vertical hose reel facility
- Close coupled pump and motor – no drive belts to replace
- Can be used in conjunction with cleaning chemicals

MODEL	2500psi	3000psi	3000psi BOWSER
HILTA REF	TW0001HR	TW0002HR	TW0003HR
ENGINE TYPE	Yanmar L100LN 10bhp 7.5kW 3200rpm		
AVERAGE SOUND PRESSURE LEVEL @ 7m	82dB(A)		
MAXIMUM PRESSURE	2500 psi /170 bar	3000 psi/200 bar	
MAXIMUM FLOW	15 litres / min		
FUEL TANK CAPACITY (LITRES)	5.5		
DIMENSIONS (LxWxH) mm	1200 x 520 x 730		950 x 370 x 555
WEIGHT	120kg		93kg

Specifications are subject to change without prior notice

MORRIS SITE MACHINERY

11.3 Parking/turning/loading and unloading ;

Temporary parking and turning and loading and offloading arrangements are shown on the CMP Site Plan - the entire 'shared surface' private drive area will be formed with a hardstanding/sub-base to facilitate access for construction and for all vehicles to manoeuvre and park safely.

Delivery vehicles will reverse towards the designated area and then drive forwards to exit the site and before leaving the site a wheel wash will be carried out as previously described.

Dedicated and designated areas for site personnel and visitors are indicated on the CMP Site Plan.

Unapproved parking on public roads will not be allowed. Any local traffic management measures (if required) for site access will be agreed with the local highway authority.

There will be no on-street loading or unloading.

All trucks leaving site with waste or rubble etc. will be required to be fully sheeted to minimise the risk of dust/debris on the highway.

All plant shall be fitted with the statutory exhaust systems and where reasonably practicable the most up to date equipment shall be used to prevent excessive noise levels. Stationary plant such as compressors and generators will be located away from sensitive locations. Any generators or pumps required on site shall be the 'super silent' type. On site, temporary stockpiles of materials shall be positioned in such a way as to provide temporary noise barriers. Regular and effective maintenance of machinery, such as lubrication, balancing and best use of damping effects, will be undertaken to minimise operational noise. Modifications of plant / equipment will be carried out to achieve noise reduction if the problems persist.

Whilst waiting all vehicles should switch of their engines and not leave them idling.

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11.4 Site Compound/offices/welfare ;
The management of the construction of this project will require a site set-up comprising offices, toilet and changing facilities.

All of the above temporary facilities will be removed at the end of the construction period.

'Heras' fencing shall be utilised to securely enclose the Site Compound, delineate the perimeter of the Site and ensure that the Members of the Public are segregated from the construction works.

Care shall be taken to ensure that the 'Heras' fencing is adequately supported.
Signage attached to the perimeter 'Heras' fence at no greater than 10.0M centres shall warn members of the public of "Construction Works – Danger Keep Out"

There will be controlled access to the site, for both security and safety reasons.
At night the site compound and offices will be kept locked, and the offices alarmed.
The developers are very aware that construction sites are a "magnet" for children. The developers will install physical barriers, hoardings and screens to ensure that the site is kept secure.

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11.5 Haul Routes ;
Details of agreed access and egress routes will be discussed with the developer's subcontractors and suppliers. All deliveries to site should be on a just in time basis with no waiting for construction vehicles on the public roadway, this will be monitored by the Site Manager.

There will be no on-street loading or unloading

Temporary traffic management orders are not envisaged to be necessary for this project. Should this alter to accommodate deliveries of large materials or plant we shall promptly coordinate with the Council Highways Department to discuss requirements and solutions.

In order to avoid disruption to local residents all operatives and subcontractors will be advised that street parking around the site is not permitted. This will be monitored by the Site Manager.

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11.6 Site Lighting ;

Site lighting shall be designed, positioned and directed so as not to unnecessarily intrude on passing drivers on public highways and so as not to direct light into any windows of properties outside the site.

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11.7 Site safety ;
Safety during construction is paramount to the developers and a Construction Site Safety Plan will be prepared by qualified safety personnel. This safety plan will also be subject to regular safety inspections.

Fundamental to this Construction Site Safety Plan will be the preparation of a full Health & Safety Risk assessments for key activities and risk minimization measures and, where appropriate, staff training.

The requirements of the Construction Regulations (CDM) 2015 will be fully complied with. These regulations came into effect in 1995 under the Health & Safety at Work Act 1975 and were introduced to make major improvements in the communication of health and safety aspects of projects at all stages in the project lifecycle from inception to demolition.

Through the above activities, levels of responsibility and prescribed documents the CDM Regulations lead to the safer design, construction and use of complex multi-disciplinary installations such as that proposed.

A Permit to Work system will be introduced during construction to ensure that only authorised construction personnel are on site and that an accurate record of site based personnel is available in case of emergency at all times.

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11.8 Control of Dust, Noise and Emissions ;
All available techniques (best practicable means) shall be used to minimise, as far as is necessary, the level of dust generation to which neighbouring properties will be exposed.

Given that there is no demolition phase to this project the creation of dust during construction should be minimal

Best practicable means of preventing, reducing and minimising dust, noise and emissions will be adopted. It is expected that the Proposed Development will adhere to the relevant Code of Practice during construction.

Specifically ;

- The contractor will ensure that - All vehicles will be required to should switch off engines – no idling vehicles
- The contractor will plan the site layout–machinery and dust causing activities to be located away from existing houses
- The contractor will ensure that water is available to be used as a dust suppressant
- The contractor will ensure that cutting equipment uses water as suppressant or has suitable local exhaust ventilation systems
- The contractor will securely cover skips and minimise drop heights.
- The contractor will ensure that dust generating activities are minimised.
- The contractor will ensure that stockpiles are kept for the shortest possible time
- The contractor will minimise dust generating activities
- Hydraulic construction to be used in preference to percussive techniques where practical;
- Off-site pre-fabrication to be used, where practical

- All plant and equipment to be used for the works to be properly maintained, silenced where appropriate, and operated to prevent excessive noise and switched off when not in use and where practicable;
- Loading and unloading of vehicles, dismantling of site equipment such as scaffolding or moving equipment or materials around site will be conducted in such a manner as to minimise noise generation. Where practical these will be conducted away from noise sensitive areas
- All plant and equipment to be used for the works to be properly maintained, silenced where appropriate, and operated to prevent excessive noise and switched off when not in use and where practicable
- Noise complaints, or exceeding of action levels, will be reported to the Contractor and immediately investigated
- The control of noise from plant and machinery will be dealt with by carrying out a suitable and sufficient assessment of the risks to employees and the public and to ensure that it identifies the measures required to control the level of noise at work
- During the assessment consideration will be given to the possibility of using alternative and less noisy equipment
- Provide employees with adequate information in training so their exposure and exposure to the public is appropriately limited
- Any Masonry cutting will be done with tools with water spray attachments to minimise dust arising
- If any particularly dusty waste such as bags of plaster or cement are to be kept in skips for any period of time skips are to be covered to prevent dust from the debris escaping into the air
- Concrete will be ready mix and so there will be no dust from site mixed concrete. Mortar may be brought to site ready spread but in the event that it is site mixed the creation of dust will be minimal and should not affect the air outside the mixing area bags of cement ready for mortar mixing to be kept covered at all times
- Dust bags are to be fitted to timber cutting tools where appropriate

Where possible material will be brought to site pre-cut to prevent any additional noise arising.

All vibration generating tools shall be used in line with the manufacturers' guidelines and where reasonably practicable the most up to date equipment shall be used.

Monitoring

Due to the 'low-risk' identified and the minimal anticipated effects of dust and air borne pollution on the site we would propose that only visual monitoring on a daily basis is required if the above control measures are adhered to. Records of both dust prevention measures and daily visual reports will be maintained.

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11.9 Water consumption policy ;

Water usage on site will be monitored by installing a temporary water check meter on the water source being used for the development site. If water is brought to site by storage tank then it's quantity of water delivered is to be recorded by the site manager.

The quantity of water used each month will be displayed on the site office or welfare facility where no sight of this is present in graphical format. The graph will show actual water consumption as well is targeted water consumption.

The contracts manager will be responsible for collecting the data and will delegate this to the site manager or foreman as required.

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11.10 Water pollution policy ;

There are no sustainable storm water drainage features that would be affected by the development of the site and the operation of the developer's compound. The temporary operational compound and the associated hard standing areas will allow any storm water to infiltrate into the sub-strata - no membranes to be used.

Site waste must be stored in a designated area or directly into the skip away from surface water drainage.

Special care is to be taken during deliveries of any liquid and all toxic products so that there is no risk of spillage into surface water drainage systems.

Concrete washing and cement mixing areas are to be cited at least 10 m away from any surface water drainage.

Concrete wash water should be collected in a sealed area and disposed off site. Any storage of fuel is to be on an impervious bass well away from any surface water drainage and with sand spill kits close at hand in case of any spillage.

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12.0 Waste Management ;

12.1 Waste Reduction

The following techniques will be used to REDUCE the type and amount of waste generate on this project:
Measurement and ordering of materials with no waste factor to reduce the risk of over-ordering of materials. Delivered materials clearly identified for a specific plot or work area. Plan and Order materials with off site cutting to minimise waste.
Organising materials to be delivered on a Just-in-time basis to reduce the amount of time materials are stored on site.
Careful and appropriate storage of materials on site to protect against accidental damage or adverse weather conditions.
Good Inventory control to avoid re-ordering of materials already delivered or losing materials
Engaging with suppliers to reduce the amount of packaging included with deliveries.
Include in Sub-contract orders – the requirement to employ waste reduction techniques with their own materials.

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12.2 Waste Re-use

Once all practical measures have been used to reduce the amount of waste produced, then the following techniques will be used to further reduce the amount of material turning into waste:
Brick, Concrete and rubble can be re-used as backfill, temporary haul roads, up fill, etc.
Re-use of subsoil in landscaping areas.
Re-use of timber off-cuts for forming bulkheads, radiator pads, electrical distribution backing boards, temporary formwork, framing, etc.
Re-use of plasterboard off cuts for bulkheads, small areas, etc.
Pallets can be re-used or can be returned to the supplier.
Excess/damaged facing brick can be used in Sub-structure brickwork.

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12.3 Waste Recycling

If the reduction and re-use techniques have been used but waste material has still been generated, the opportunity remains to turn some of this material into something useful by segregating it into different waste that can be recycled.

Segregation can be carried out in two ways, **Source Segregation on site** or **Segregation by a Waste Contractor off site**.

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12.4 Waste Segregation

A waste disposal area will be set up on site that will include dedicated skips. The default skip size is as follows. These can be altered depending on site constraints. This decision is taken by the Site Manager. Each skip shall be clearly identified with signage. All skips must be packed in such a way to eliminate/reduce space and voids.

Timber Waste 40 yard open

Gypsum Waste 14 yard skip (covered on site)

Rubble Waste (If there is no scope to re-use on site). 8 yard open

Mixed Waste (Active) 20 yard open

Packaging (Cardboard/Polythene) 8 yard enclosed

Scrap Metal 20 yard open or retained on site in a safe location for uplift.

Pallets retained in good working use on site for uplift/reuse and not placed in timber skip.

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13.5 Public Relations / Complaints Procedures

A designated Project Team member will deal with complaints and enquiries. This individual will be named at the site entrance, with a contact number, and will be identified prior to the start of construction, and whenever a change of responsibility occurs.

Any complaints will be logged on-site, fully investigated and reported to the Client as soon as possible. The complainant will be informed as to what action has been taken. In the event of unusual activities or events, Client and other relevant third parties (i.e. statutory and non-statutory bodies) will be notified in advance of the work being carried out.

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14.0 CDM Regulations

The Client must abide by the Construction Design and Management Regulations 2015.

It is the client's responsibility to appoint an appropriate CDM 2015 Consultation all projects that require compliance with the CDM 2015 Regulations.

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14.1 Health and Safety General

The contractor is reminded of their liability to ensure due care, attention and consideration is given in regard to safe practice in compliance with the Health and Safety at Work Act 1974.

The contractor shall ensure that all health, safety and welfare measures required under or by virtue of the provisions of any enactment or regulations, or the working rules of any industry are strictly complied with.

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15.0 Hazardous Substances

When hazardous substances are identified as being either flammable, toxic, corrosive and explosive, arrangements must be made to ensure that the use, handling, storage and transport of such substances is safe and without risk to health. a written assessment must be made and if the substance is identified as hazardous, necessary control methods, protective clothing and monitoring established.
The employees working with hazardous substances must be fully informed on the hazard and suitably instructed on safe handling/use of the substance.

Safe systems of work ;
Safe systems of work need to be established for all operations of work by relevant supervisors and management. risk assessments will need to be undertaken and where significant, a method statement completed. these need to be reviewed to ensure that they reflect the hazards, bearing in mind the constantly changing nature of a construction site.
Should there be any changes to established safe systems of work, these require to be referred to the originator, whereby revised risk assessments and method statements can be produced.

Adequate arrangements must be made to keep workplaces in a clean, orderly and safe condition. provide and maintain safe means of access to and from all working areas and keep clearly marked as appropriate.

The environment of the workplace shall be safe and without risk to health. satisfactory levels of lighting, temperature, dust, noise, etc., must be maintained.

The requirements of the health and safety at work etc. act 1974 and all duties and obligations imposed by the act, management of health and safety at work regulations 1992 and the construction (design and management) regulations 1994; and all other acts and regulations are to be complied with.

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16.0 Wheel Washing Facility
A Wheel Wash zone as shown will be set up close to the site entrance the area will be levelled / surfaced, it will be located permanently on site during construction works, please refer to the Construction Environment Management Plan for the exact location.

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17.0 Damping Down
During dry and / or windy conditions or as otherwise required the on-site haul roads shall be damped down to prevent dust arising. Dust will be controlled via towable spray bowsers during periods of dry weather and any excavation works will be monitored and sprayed if required to prevent PFA blowing over the site. The same method of dust control will be applied to completed hard finished areas on site as the works progress.

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18.0 Vehicles
In order to reduce dust created from vehicles all traffic will observe the 5mph site speed limit.
Any vehicles entering and exiting the site will ensure all loads / materials are covered over where required.

The loading of vehicles will be monitored by a banksman to ensure in the unlikely event that overloading, loading and dropping materials from height will be prevented where practicable. The banksmen will also make the final checks on site.

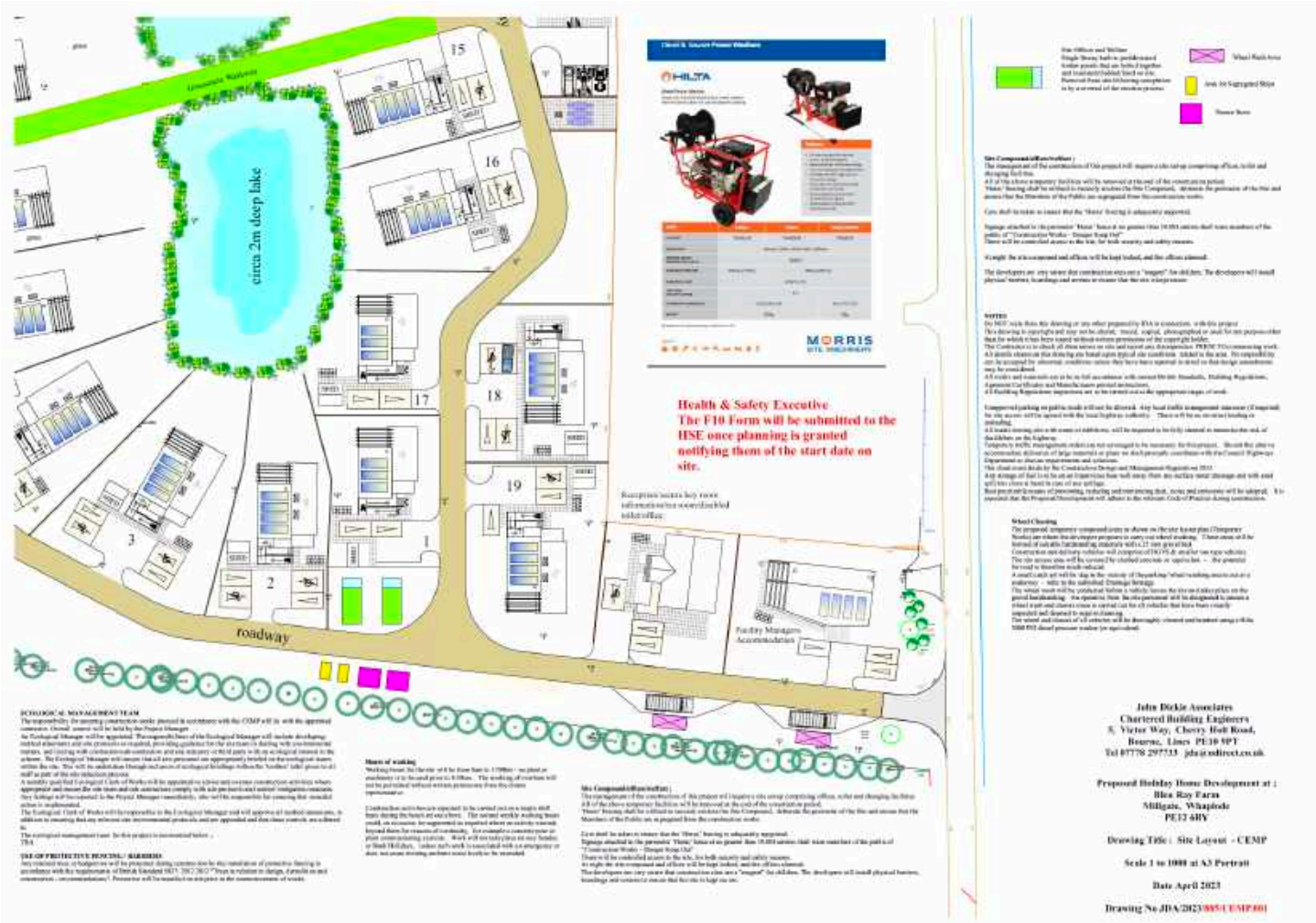
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19.0 Excavation and Earthworks

Dusty activities on site will be damped down as detailed above and where practicable the areas following cutting and excavation operations will be covered over. These operations will be carried out in small areas where practicable to minimise the production of dust.

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19.0 CEMP Site Plan



The contents within this CEMP will be complied with unless agreed otherwise with the LPA

Health & Safety Executive
The F10 Form will be submitted to the HSE once planning is granted notifying them of the start date on site.



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This report has been prepared by John Dickie Associates on behalf of its client to whom this report is addressed ('Client') in connection with the project described in this report and takes into account the Client's particular instructions and requirements. This report was prepared in accordance with the professional services appointment under which John Dickie Associates was appointed by its Client. This report is not intended for and should not be relied on by any third party (i.e. parties other than the Client). John Dickie Associates accepts no duty or responsibility (including in negligence) to any party other than the Client and disclaims all liability of any nature whatsoever to any such party in respect of this report.

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