

ENVIRONMENTAL MANAGEMENT PLAN



Bartlett Arboretum Project AC1214

**White House Lane,
Spencers Wood,
Reading
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DATE: Jan 2025

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REVISION SHEET

<u>REVISION</u>	<u>DATE</u>	<u>CHANGES MADE</u>
0	Jan 2024	First Edition

Abbreviations:

PD	–	Principal Designer
PC	–	Principal Contractor
CDM	–	Construction (Design and Management) Regulations 2015
CPP	–	Construction Phase Plan
HSE	–	The Health & Safety Executive
AMIRI	–	Amiri Construction Ltd

PROJECT INFORMATION

1.0 INTRODUCTION, PROJECT DETAILS & WORKING HOURS

Project Title	Bartlett Arboretum
Introduction	
This Construction Environmental Management Plan (CEMP) is written based on the information provided by the client team during the tender process and a site visit by our tender team. The information has been pulled from the following information sources ➤ Pre-construction Information Package ➤ Employers Requirements The CEMP is and will remain a live dynamic document and will be developed and reviewed in line with the project progression and as the site environmental aspects change. The plan provides a framework to manage the environmental issues associated with the project, to ensure compliance with relevant environmental contractual and legal obligations. It is a bespoke plan designed to minimise the impact of project works to the existing environment and ensure that the best practices are implemented for the construction of the new building from commencement to completion of the project works. The CEMP incorporates the Environmental Management Systems for the project works. It sets out the policies and environmental controls required to ensure that the environmental impacts of project works are minimised. It highlights the key activity specific risks, details control measures and makes reference to all associated forms and registers where required, including the Construction Insurance Risk Engineers Group (CIREG) “Best Practice Guide” document – Managing Escape of Water Risk on Construction Sites. All items specifically required by the client in the CEMP are covered. Our CEMP is not a standalone document and should be read in conjunction with the construction phase plan, the Aspects & Impacts Risk Assessment, Site water management document and our environmental inspection sheets. Amiri Construction shall be responsible for safeguarding the environment and for mitigating the effects of the scheme and its construction throughout the works in line with the Contract’s requirements.	
Project Description	
Our appointment is to develop the plot on White House Farm, an area of approximately 25 acres near Spencer’s Wood just outside of Reading. It currently contains a residential property and curtilage to the North with some other minor buildings, a protected wood in the Northwest corner and a large open field to the south which forms the majority of the site. The development is the construction of research and office buildings and a maintenance wing with associated landscaping and vehicle parking spaces. The project will comply with all current environmental legislation and the Clients Environmental Policy. The project shall ensure that the policies and their requirements are made known to all relevant personnel. This will be undertaken through a number of methods including site inductions, method statements and risk assessment briefings and toolbox talks.	

All subcontractors will be provided with a copy of the Environmental Policy and HS&E Terms & Conditions for Subcontractors that set out the minimum environmental requirements.

The CEMP considers the likely environmental impacts from activities being carried out on the project with respect to:

- Air Pollution
- Archaeology
- Contaminated land
- Ecology - General
- Flora – Trees and hedgerows
- Energy Use
- Fuel storage
- Noise and Vibration
- Nuisance
- Material Use
- Waste
- Water
- Wildlife

The CEMP considers those activities that are likely to arise because of both normal construction activities and emergency incidents or accidents.

Site Specific Construction Overview

Construction of research and office building, and maintenance wing, with associated landscaping and vehicle parking spaces.

Scope Includes:

- Clearance of the site
- Removal of hard standings
- Grubbing out and removal of foundations
- Removal of septic tank and below ground drainage
- Highway and access alterations.
- Groundworks
- Substructure works (including screw pile foundations)
- Superstructure works (timber frame, larch trusses, timber floors, metal pitched roofs, GRP flat roof, colonnade, glazed link, windows & doors)
- External works (Hard/Soft landscaping, board walks, fire fighting pond)
- Below ground foul and surface water drainage.
- Main services (Electric/Water/Internet).
- Installation of Fire Alarm System.
- Installation of CCTV and Security Systems including access.
- Internal finishes & decoration (floors/walls/ceilings).
- Heating & Plumbing installations.
- FF&E items.

Summary of Arboricultural and Ecological findings and considerations.

4Woods ecology Ltd have produced an Ecological Permeability and Enhancements report from which it is clear that there are some protected/notable species recorded at the site or known to occur locally. The details are listed below:

- Great Crested Newt (populations recorded to the north and south of the site, with nearest record at 300m to the north).
- Common Reptiles (e.g. Grass Snake/Slow-worm occur locally – there is potential for colonisation within the site where suitable habitat becomes available in future).
- [REDACTED]
- [REDACTED]
- [REDACTED]
- Hedgehog (reported in close proximity to the site in 2019).
- Bats (Common Pipistrelle day roosts were present within the two buildings within the site, which have since been demolished under NE license (BMCL). Records indicate presence of at least x7 bat species locally: *Common Pipistrelle*, *Soprano Pipistrelle*, *Nathusius' Pipistrelle*, *Brown Long-eared Bat*, *Myotis sp.*, *Daubenton's bat*, *Noctule*, *Serotine*)
- Dormouse (recorded in local woodlands, with nearest record at 680m to south and 1.5km to north, with habitat connectivity to the site).
- Birds (various notable bird species recorded locally, including: Barn Owl, Greenfinch, House Martin, Kestrel, Red Kite, Starling, Swift, Wren).
- Invertebrates (various species recorded locally, including: Stag Beetle, Grayling, White Admiral, Cinnabar, Adonis Ladybird, White Letter Hairstreak butterfly).

Barlett Consulting have produced an Arboricultural Method Statement which outlines the requirement for protection of particular trees and for particular construction methods which will be adhered to for the construction period. There are two drawings appended to the Arboricultural Method Statement, JH - 220720 - AMS(2) - TPP – 1 & also JH - 220720 - AMS(2) - TPP – 2 which show the trees that are to be retained and also delineates the Vertical Tree Protection Barrier locations as well as areas requiring Site Specific Working Methods at the base of retained trees. Also marked on the plans are Non-Dig Hard Surfacing areas and Tree Health Care & Soil Amelioration areas. The new entrance at the north of site onto White House Lane is the subject of specific working procedures and tree protection requirement. Below is the drawing pertaining to this area of works. The Arboricultural Method Statement will be used to produce working Risk Assessments and Method Statements for working in this area initially.



Key Programme dates & Milestones

Early works/ Enabling works

During our first week onsite, we will set up the site perimeter heras fencing, along with demarcation and height clearance safety barriers to the overhead electric cables. We will bring in a temporary welfare unit, and place this just inside the site boundary.

The first groundworks operation will be to form the stone access road, to enable clean access to the site area. We propose to lay the as designed road, with the geocell system, and then top it with a temporary type stone aggregate (to protect the geocell). We can then run our heavy lorries and deliveries across this. Alterations to the road connection and bell-mouth will also be early on the agenda.

We will also look to set up our temporary service supplies to the main site accommodation during the initial works. We were shown an existing temporary water supply that we can tap into (adjacent to the farmhouse), as

well as a 63amp supply in the existing garden shed (within the farmhouse grounds), that we can utilise to run our site setup.

Groundworks and Piling

Once the access roadway has been formed, the groundworkers will proceed with the reduce dig excavation of the building areas. We will be laying the proposed design stone make-up beneath each building footprint area, so

that it acts as a piling mat area. The groundworkers will also be forming temporary stone surrounds to each

building (for scaffold to be setup on), as well as a designated designed stone hardstanding for the crane location, and stone access routes to each building area. Formation of these stone running surfaces will ensure that we keep a clean and tidy site, and do not venture outside of the building works area, and cause any undue damage to the surrounding ground/soils.

The steel screw piling works are programmed to commence from week 6. These specialist piles will be installed using an 8t excavator, which will work off of the stone pile mat surfaces that the groundworker previously set up.

These piling works are anticipated to take around 2 weeks to complete. Whilst the piling works are underway, the groundworker will remain onsite to commence works to the mains services routes and new surface

water attenuation drainage. It is anticipated that the groundworker will stay onsite for the entire duration

of the build period, due to the extent and diversity of the works involved.

Superstructure and Shell

The steelworker will start onsite from week 9, setting up the steel grillage bases to the Research & Office structures, followed by the erecting of the steel frame to the Maintenance building. These works will take around 2 weeks to complete, and will then be followed by the setup of perimeter working scaffolds to each building.

Once we have completed the scaffold works, the timber frame contractor can start their operations. Our proposed timber structure is a 'Passivhaus' system, which means that the floors, walls and roof structures can be

brought onto site in pre-formed sections, meaning erection times onsite are greatly improved, giving an overall 3 week programme period to setup both the Research and Office buildings.

Whilst the timber frames are being erected, we will have a cladding contractor working on the single skin steel sheeting works to the Maintenance building.

The buildings are linked with covered structures, which are to be formed from accoya timber. These works will be a separate specialist joinery contractor, who will follow on from the timber frame contractor, working in conjunction with the site carpenters, who will be prepping and installing timber cladding, as well as setting up support timber works for the zinc façade cladding works.

We will have the carpenters onsite working on the facades until around week 24 of the build.

The zinc facing works to the sloping roofs and vertical facades will be able to start from around week 19, and are expected to take around 7 weeks to complete.

Windows installation will need to link in with the timber and zinc facades works, so will start from week 20, with a target date of early March (week 22), to have the buildings substantially weathertight & secure. This then enables

internal elements to commence early.

Internal Works

The initial internal works will be the fixing of inner timber frameworks to build out the walling make-ups. The 'Passivhaus' system requires an additional internal insulation layer to ensure the whole make-up achieves the designed u-values. This will be set with a timber stud framing.

The M&E contractor will start from around week 24, with their 1st fix operations, and work in tandem with the carpenters, and dryliners. There is minimal traditional plaster boarding works involved in the finishes,

as most walls are mdf lined, which the carpenters will undertake. The floor make-ups will require specific co-ordination, as some areas have an underfloor heating system incorporated.

The sloped ceilings have a feature acoustic 'wood wool' type finish (Trokdekt), which needs to be carefully designed and co-ordinated with the electrical contractor, ensuring that light fittings / sounders etc are correctly

set out (a system we had a great deal of experience of when building EBC).

Decoration and flooring works will follow the walling and ceiling works, along with 2nd fix electrical, and general fit-out finishing operations.

Our programme allows for a sensible 17 week overall period to accommodate the unique internal finishing works.

General External Works

We plan to install the perimeter deer fencing early in the build, so that it will act as a means of security fencing to the site as a whole (we do have separate heras fencing to the main build works areas). This will then link in with the groundworker starting the extensive surface water drainage works to the fields to the east of the site.

These works should hopefully run parallel with the formation and laying of the new incoming mains electric, and water supply works. We have sequenced these operations at the same time, to minimise potential surface degrading to the soils in fields area. We will look to complete the attenuation drainage basin and associated works by mid-January. When these works are finished, the groundworker will then turn their attention to the formation works of the west side carpark, within the protected woodland area.

Prior to starting, we will be setting up tree protection (in line with the arboricultural statement), as well as segregation fencing.

The new carpark will be formed by 'hand dig' only, in order to protect the trees and root systems. We have earmarked a 6 week period to undertake these works. The groundworker will work their way out from the carpark

area, forming the new boardwalk access structure, working with the carpenters.

The aim is then to be able to use this new west side carpark as additional site parking during the final months of the build. The groundworker will be able to re-start the finals around the new buildings from around week 27 (following removal of the scaffolding). They will proceed with the drainage finals, foul drainage tanked unit and uplift and removal of temporary stone access surfaces.

The designed footpaths will be laid, along with fencing works, and the final formation of the main access roadway surfacing, laying the plastic bodpave topping build-up.

Mains Services

The tender schedule outlines that the existing overhead SSEN cable (supplying the farmhouse), is to be removed and then buried below ground to enable high sided vehicles to access the site. These works are denoted as 'by the client'. We have shown these works potentially taking place prior to Amiri commencing their main works onsite, but at present, the sequencing for this is unclear. If the cables remain, then this will affect our access to the site, although we would expect these works to have taken place to enable the demolition of the existing bungalow to happen. No quote for these works was provided in the tender pack. The new mains electric supply will be laid across the site from the NE boundary of White House Lane / Beech Hill Road. Our programme shows these works potentially taking place through November / December, although it's currently unknown what the timeframe is for SSE. It is understood that the client has already actioned and paid for the new mains electric works.

The new incoming mains water services do not involve the statutory authorities, as the new supply pipework will be connecting to existing meters on the boundary of Beech Hill Road.

Client Fit Out Works

At present there are no details of the proposed fit-out works for the facility. We have identified a potential early access period on our programme, and will liaise directly with the client to work around their specific requirements.

Working Times

The site will be open from 7.30am for operatives to arrive and get them set for work.

The permitted working hours will be 0800 to 1700 hrs daily (Monday to Friday) with weekend working (Saturdays Only) by arrangement only with Amiri Site Management but restricted to 0900 to 1300 hrs. Working on Sundays and Bank Holidays is prohibited. Personnel will be notified if this changes.

The client will be consulted prior to any changes in this agreement, ensuring that no noisy work is carried out at weekends or in the evenings that could be a nuisance to local neighbours.

Geology, ACMS and Excavations

Geology and soils for the location.

☐ The geology is classified as 'London Clay' – a mix of clay/silt/sand. (www.geologyviewer.bgs.ac.uk).

☐ The soils are described as '711h Wickham 4': *slowly permeable seasonally waterlogged fine loamy over clayey and fine silty over clayey soils associated with similar clayey soils, often with brown subsoils.* (Soil

Survey of England & Wales, Sheet 6). These soils are described as slightly acid but with base-rich loamy and clayey soils, pH 5-7 (UK Soil Observatory, www.bgs.ac.uk).

The site will hold an emergency spill kit (located within main project work area or close to any work area/bunded fuel tanks location). This enable any accidental spillages of fuel etc. to be immediately controlled and prevented from entering the ground generally.

- **All work on site must at all times strictly adhere to the work procedures, operations, risk assessments and method statements as detailed within all Amiri Construction Safety documentation.**

Prior to the commencement of any groundworks all existing ground investigation reports or surveys will be studied in detail prior to the commencement of any excavation. The ground conditions of the site will be taken into account at all times when carrying out any project works to ensure all works are carried out in a safe and correct manner during the project.

Normal standard protective measures will be adopted when undertaking any excavation works or remedial works with regard to supporting the sides of the excavation or foundations. Details of this will be contained within the contractor's RAMS.

Potential asbestos containing materials (ACM) could exist in the ground within the site. All groundworkers will be requested to be vigilant while excavating.

Should any ACM or contamination be encountered, all work must stop immediately and Amiri Site Management to be informed. Any contaminated soil found will be handled in strict accordance with approved risk assessments and method statements and the following procedures:

1. **From a material handling perspective, stockpiles of asbestos impacted soils should be covered to prevent dust generation.**
2. **ACM will be hand-picked from shallow soils. The works are considered non-licensable and considered to be low risk with airborne fibres unlikely to exceed the Control Limit or Short-Term Exposure Limit, in accordance with Regulation 3(2) of CAR2012. On that basis it is considered that there is not a requirement to notify the HSE. This will be reviewed as the work is undertaken and may result in Notifiable Non-Licensed Work Notification to the HSE if the amount found increases from what had been found.**
3. **A competent contractor trained in managing hand picking of ACM from soil is to be appointed (in this case, the one that had removed the asbestos from the demolished structures will be engaged) to carefully and safely remove the ACM, as far as possible, under controlled conditions thereby reducing risks of exposure and spread of asbestos to the lowest possible level.**
4. **Whilst the hand-picking works are undertaken, the requirement for reassurance air monitoring to demonstrate effectiveness of mitigation measures will be considered, particularly if works take place in dry weather conditions. Site-based monitoring and analysis should be undertaken by an independent specialist using phase contrast optical microscopy.**
5. **Effective dust suppression measures will be available at all times (e.g., ability to damp down exposed surfaces) and implemented on an as required basis until such time as groundworks are completed. In addition, all vehicles leaving the site will be inspected and if required pass through a jet wash to prevent material being tracked off-Site.**
6. **From a personal safety perspective, all groundworkers will be made aware of the unexpected finds protocol and banksmen working in areas where asbestos fibres have been identified provided with appropriate PPE including disposable hand protection and disposable overalls whenever undertaking works in these areas. Groundworkers will undertake asbestos awareness training in the event that any potential ACM is uncovered and will be trained in the correct procedure should any ACMs be found.**

Should any hazardous waste be discovered during the project works then a specialist disposal company will be utilised to remove it from site following testing of the product.

Amiri will proceed with caution and maintain a watching brief with all excavation works and stop work if any suspect material is found. The Amiri Site Management will then take action to have the material tested before work can re-commence.

All contractors will have to comply with the HSE Booklet HSG 47 (third edition) "Avoiding Danger from Underground Services." The Construction Environmental Management Plan only defines the minimum requirements that have to be met.

2.0 PROJECT CONTACTS

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2.1 DUTIES & RESPONSIBILITIES

Work Element	Duties	Personnel Responsible	Additional Notes
Compilation of the Plan and Checklists at Pre-contract Stage	Ensure that the plan is compiled and all checklists are completed prior to commencing on site.	- Contracts Manager/ Director - Appointed Project / Site Manager	At tender stage the checklists should be referred to by the estimators when pricing projects but the plan can be compiled once the project has been awarded.
Updating and reviewing the Plan during the course of the Project	- Ensure weekly meetings include a review of the plan and report on any incidents or near misses. - Review any incidents or near misses and implement an action plan to prevent a repeat of the incident.	- Contracts Manager - Project / Site Manager - Quantity Surveyor	On larger projects the senior personnel representing the sub-contractors should attend the review sessions. Minutes of Meetings Corrective Actions
Dissemination of the Plan and Procedures on Site to all involved parties	During site induction the contents of this plan is delivered to all personnel as a summary with clear indication of duties and responsibilities.	Project / Site Manager	Initial Site Induction Toolbox / Briefing Records/ Updates

Work Element	Duties	Personnel Responsible	Additional Notes
Checking of Spill control equipment/ Inventory	- Ensure daily inspections are carried out - Carry out monthly inspections and enter into register	Project / Site Manager or appointed deputy on site	Site labourer can be provided with the training to check all equipment is in order and complete checklist/ inventory.
Incident Response	Procedures as detailed in the incident response section should any potential pollution incident occur.	Project / Site Manager or appointed deputy on site	Replacement equipment / materials must be ordered after incident is reported.
Reporting to authorities or Senior Managers/ Directors	- Immediate contact is made with the emergency services where required. - Immediate contact is made with the company Construction Director to report the incident. Immediate contact is made with the company safety advisor to provide advice and support.	Project / Site Manager	
Bio-diversity Champion	Ensure company procedures are implemented with regard to Bio-Diversity on the project.	Project / Site Manager	

3.0 ENVIRONMENTAL CHECKLISTS

- 3.1 General
- 3.2 Drainage
- 3.3 Excavations
- 3.4 Materials Storage & Exposed Ground
- 3.5 Oil use & Storage
- 3.6 Nuisance
- 3.7 Cement, Concrete & Grout
- 3.8 Land Contamination & Invasive Plants
- 3.9 Chemicals & Hazardous Substances
- 3.10 Waste Management

3.1 GENERAL CHECKLIST

ITEM	YES/NO	COMMENTS/ ACTION
Have you identified the environmental legislation that applies to your site?	Yes	Water management plan to be implemented
Do you have all the relevant permissions and authorisations in place before you start work?	Yes	
Have you consulted with your environmental advisor / manager?	Yes	This plan has been prepared with the company SHEQ Manager
Have you reviewed your EMS if you have one?	Yes	The EMS is incorporated into the overall company procedures manual and policy.
Are you diverting water on site? If yes, have you received permission to do so?	No	
Have you identified: - - The potential pollutants - The potential to cause pollution on site - Any historical contamination? If so, where is risk management documented?	Yes	No historical pollution. Main hazards are from diesel fuels, concrete spillages/ wash out and mud from excavations.
Are pollution prevention methods recorded? If so, where?	Yes	This checklist is incorporated into the overall EMP which also contains the incident response plan.
Have pollution prevention requirements been communicated to those working on site?	Yes	At induction and updated at toolbox talks.

ITEM	YES/NO	COMMENTS/ ACTION
Have you identified existing drainage on site?	Yes	All are marked on existing site drainage drawings and colour coded.
Has the drainage been colour coded?	No	This will be done as required to the construction work area.
Have you identified all surface water and groundwater on, and around the site?	Yes	Following the preconstruction information, the water table should be below our excavation works, surface water drainage to the main road has been installed

Have you contacted all regulators?	N/A	
Have you invited them to visit site if appropriate?	N/A	
Have pollution incidents been planned for and do you have an incident plan?	Yes	Part of this plan.
Have you nominated 'a responsible person' for pollution prevention on site?	Yes	Ian Johnson Project Manager
Have site personnel been trained to use spill kits?	Yes	And trades supervisors will either already have training or will be trained up
Have you considered how to minimise and manage waste on site?	Yes	Site Waste Management Plan and the company's policy and commitment to SDG (United Nations Sustainability Development Goals)
Have you identified local weather conditions and the means to keep updated throughout the project?	Yes	Project / Site Manager looks at week ahead forecasts for work in any case.
Have you developed a site inspection routine to check for pollution incidents or potential problems?	Yes	Part of the weekly site safety inspection checklists and there is a monthly environmental inspection checklist
Vehicles and Deliveries		
Is a traffic management plan in place?	Yes	Held on site and accompanies the layout plan.
Has a location for deliveries been identified?	Yes	As logistic details
Is the delivery point located away from watercourses, drains and hazards?	Yes	Some drains still exist in the nearby roadway but spill kits are available if required.
Have times for deliveries been identified to avoid disruption to operations or neighbours?	Yes	Strict delivery times are detailed in tender documents.
Have suppliers and staff been informed of the delivery point and delivery times?	Yes	All orders are placed with the details included.
Has a designated responsible person been identified to supervise deliveries?	Yes	Site banks persons
Has the conditions of drums or tanks been inspected and verified fit for purpose before accepting the delivery?	Yes	Bunded tanks only.

ITEM	YES/NO	COMMENTS/ ACTION
Are emergency response plans and spill kits located at delivery points?	Yes	
Have you planned how you will prevent mud being taken off site by delivery vehicles?	Yes	As detailed in RAMS.
Silty Water		
Can you avoid exposing areas of bare ground until you need them?	No	Due to ground stabilisation needed.
Have you got vegetation corridors along the watercourse or drain to act as a buffer to help prevent silt entering them?	No	Silt busters will need to be used if excavation fills with water.
Have you identified all potential sources of silty water on site?	Yes	
Have you the necessary permissions in place if you plan to dispose of water to a drain or watercourse?	N/A	Any water drained off site will run through silt busters or witches' hats will be used and clean water will dispose into storm drains.
Are silt controls in place to prevent silt entering watercourses or drains?	Yes	Silt buster if required.
Have you installed cut-off trenches or other features to minimise the amount of run off site?	No	The perimeter of the site is raised so will stop any run off.
Are you required to have considered SUDS?	No	No requirement
Do you have an inspection and maintenance programme for all silt treatment systems?	Yes	When required as part of weekly site inspections.

3.2 DRAINAGE CHECKLIST

ITEM	YES/NO	COMMENTS/ ACTION
Have all drains on site been located, and identified as either surface or foul?	Yes	As detailed within the preconstruction information
Have drains been checked for existing protection?	Yes	No existing protection.
Have pollution risks to the drains been identified?	Yes	
If anything will be discharged to drains, have you applied for permission?	N/A	Nothing will be discharged to drains
Have plans been put in place to prevent pollution entering watercourses in emergencies?	Yes	Spill Kits
Are spill kits located near drains?	Yes	Overall, any equipment that has the potential to cause environmental issue will be located away from drains.
Are you required to use or have you considered using SUDS?	No	No requirement
Have silt traps and oil separators been identified/ Installed?	No	Not required at this time.
Has an inspection & maintenance schedule for drains and protection measures been established?	Yes	Part of weekly checks.

3.3 EXCAVATION CHECKLIST

ITEM	YES/NO	COMMENTS/ ACTION
Has the site been investigated for contamination?	Yes	No contamination recorded.
If there is contaminated soil, do you have procedures in place to manage it?	Yes	As site method statements and risk assessments.
Have you checked with the EA if you need permission for extraction, dewatering or discharge?	N/A	
Do you have any necessary permissions in place before you start work?	Yes	
Have you taken measures to prevent water entering excavations?	Yes	
Have the staff working on excavations been made aware of the risks and control measures?	Yes	This will in the site induction and further established through tool box talks and supervisor communications
Have you identified all watercourses, culverts and drains on or close to the site?	Yes	
Have you got vegetation corridors alongside the watercourse or drain to act as a buffer to help prevent silt entering them?	N/A	
Have you the necessary permissions if you plan to dispose of water to a drain or watercourse?	N/A	
Are controls (to capture, contain and treat) in place to prevent silt entering watercourses or drains?	Yes	All drains that could be affected will have witches' hats inserted and will form part of the weekly checks to ensure they are still effective and working. They will need to be changes throughout the project to ensure we are not polluting the drain system.
Have you installed cut-off trenches or other features to minimise the amount of run off on site?	N/A	

3.4 MATERIALS STORAGE, STOCKPILES AND OPEN GROUND CHECKLIST

ITEM	YES/NO	COMMENTS/ ACTION
Are stockpiles located to minimise the risk of pollution?	Yes	In the event of heavy rains, a robust bund will be formed around the piles to prevent water runoff.
Are they located away from watercourses, ditches and drains?	Yes	
Have you considered ways to minimise stockpiling on site (such as phasing works)?	Yes	The works will be phased with the intention to re-use the excavated arisings as back fill and levelling
Are stockpiles protected or damped to reduce dust?	Yes	We will not be damping the stock piles as this goes against our water wastage policy but if dust is being generated from the piles, they will be covered with a large sheet to contain air borne debris
Are stockpiles covered and/ or protected to reduce or intercept silt run off?	Yes	
Are contaminated stockpiles located in an appropriate area? (e.g., impermeable surface, bunded, covered to prevent run-off, at least 10m from a watercourse)?	N/A	
Have you considered and made arrangements for containing packaging waste?	Yes	Limited space but packaging in separate skips and compacted on site with mechanical means.

3.5 OIL USE, STORAGE & REFUELLING CHECKLIST

ITEM	YES/NO	COMMENTS/ ACTION
Are oil storage areas away from high-risk locations?	Yes	Company ide procedure and Standard Practice
Are oil storage areas on an impermeable surface?	Yes	Companywide procedure and Standard Practice
Are tanks, drums or containers suitable for use?	Yes	Companywide procedure and Standard Practice
Are tanks, drums or containers in good condition with no sign of damage or corrosion?	Yes	Companywide procedure and Standard Practice
Have oil stores and containers got secondary containment? e.g., bund, drip trays?	Yes	Companywide procedure and Standard Practice
Is secondary containment sufficient to contain contents of containers?	Yes	Companywide procedure and Standard Practice
Have you produced a maintenance and inspection schedule for containers and secondary containment?	Yes	Weekly checks on plant register.
Are bunds/ drip trays frequently checked for oil and rainwater levels?	Yes	Everyday
Are oil use records being kept up to date to help you detect leaks?	Yes	Only small quantities kept on site
Are oil store maintenance and inspection records being kept up to date?	Yes	Companywide procedure and Standard Practice
Is refuelling equipment (e.g., nozzles, couplings, funnels, etc) stored within secondary containment when not in use?	Yes	Companywide procedure and Standard Practice
Are oil storage containers and stores secure e.g., kept locked shut when not in use?	Yes	Locked
Are emergency plans and spill equipment available at oil storage areas?	Yes	Local to the storage area.
Are emergency plans and spill equipment available at refuelling areas?	Yes	Companywide procedure and Standard Practice
Have staff been trained in the use of spill kits and I emergency procedures?	Yes	Companywide procedure and Standard Practice
Has a responsible person been designated to oversee implementation of the emergency plan?	Yes	Project / Site Manager, his deputy and the banksperson.

3.6 NUISANCE CHECKLIST

ITEM	YES/NO	COMMENTS/ ACTION
Have you identified potential nuisances before starting work?	Yes	Overall environmental risk assessment
Have you put in place a control measure to minimise nuisance that you have identified?	Yes	Limited times of working, solid hoarding.
Have you found out and complied with any restrictions such as working hours or noise levels?	Yes	Detailed in the tender documents and transposed into the CPP
Is a procedure in place for dealing with complaints from neighbours?	Yes	Complaints procedure and register as Considerate Constructors process
Have you made site workers and sub-contractors aware of nuisance restrictions?	Yes	Induction and toolbox talks
Is nuisance monitoring required? If so, do you have monitoring equipment and a programme in place? If your monitoring shows you have a problem, put it right!	No	However, it is good practice to monitor noise.

3.7 CEMENT, CONCRETE & GROUT CHECKLIST

ITEM	YES/NO	COMMENTS/ ACTION
Have control measures been put in place to prevent cement, grout or concrete wash off entering watercourses or drains?	Yes	Any wash outs will be done in a propriety system and removed from site as hardcore. All live drains will have witches' hats to catch any slippage.
Are staff aware that they shouldn't let cement, grout or concrete washings enter surface water drains?	Yes	This will be included with the site induction, included in the method statements and disused with the supervises
Are designated wash off areas provided?	Yes	As above
Are wash areas contained and sited away from surface waters and surface water drains?	Yes	
Has the treatment and disposal of wash off effluent been considered?	Yes	
Is cement powder stored carefully on site to prevent leaks and dust?	Yes	Locked stores
Have you considered the products ordered, quantities and timing?	Yes	

3.8 LAND CONTAMINATION & INVASIVE PLANT CHECKLIST

ITEM	YES/NO	COMMENTS/ ACTION
Have you investigated the site history to check for potential land contamination?	Yes	Client surveys have not identified any
Have areas of land contamination or invasive plants been identified before starting work?	Yes	The client's survey report confirmed that there is none site
Are all areas of land contamination and/ or invasive species marked on the site drawings?	N/A	
If there are contaminants, have you contacted us to discuss how you will deal with them?	N/A	
If there are invasive plants on site, are you confident you can manage them effectively and comply with your duty of care?	N/A	
If you plan to treat invasive plants in or near water with herbicides, have you contacted the EA for permission?	N/A	
Is it necessary to gain expert advice to deal with any land contamination?	N/A	
Is there a remediation strategy for dealing with any contamination?	N/A	
Are control measures in place to ensure contaminants or invasive plants are not spread within or outside the site?	N/A	
Are staff aware of how to recognise land contamination, and what to do if they find any?	Yes	Toolbox talk briefing.
Are staff aware of how to recognise invasive plants, and what to do if they find any?	Yes	Toolbox talk briefing.
Have you planned for stockpiling contaminated materials carefully to prevent spread of pollution? e.g., more than 10m away from watercourses, on impermeable surface, bunded and covered.	N/A	
If contaminated soil needs to be removed from site or treated on site it may be considered waste.	N/A	

3.9 CHEMICALS AND HAZARDOUS SUBSTANCES POLLUTION CHECKLIST

ITEM	YES/NO	COMMENTS/ ACTION
Do you only order and store the quantities you need?	Yes	We encourage all our contractors to plan their works and arrange delivers based on a MMP (Material Management Plan)
Are chemicals and hazardous substances stored in bunded areas away from watercourses and drains?	Yes	Companywide procedure and Standard Practice
Are storage facilities located to avoid damage from site traffic or vandalism?	Yes	Companywide procedure and Standard Practice
Are the storage facilities locked when not in use?	Yes	Locked
Are all chemicals and hazardous substances clearly labelled?	Yes	Kept in COSHH Store
Is a spill kit or emergency response equipment kept at the storage point?	Yes	All the time
Have you produced an emergency plan for the site?	Yes	Chemicals stored are not high hazard and small quantities only.
Are all staff trained in how to deal with chemicals or hazardous substances they use as part of their job? Do they know how to prevent pollution in an emergency?	Yes	Companywide procedure and Standard Practice
Are the safety data sheets provided by the supplier stored with the emergency plans? (Ideally a COSHH assessments also).	Yes	Also, has to be included with the work RAMS

3.10 WASTE MANAGEMENT CHECKLIST

ITEM	YES/NO	COMMENTS/ ACTION
Do you have copies of all waste carrier's registration certificates?	Yes	Recorded in Site Waste Management Plan
Are waste carrier's registrations in date?	Yes	To be checked as required on site
Have you identified your most common European waste catalogue (EWC) codes/ list of waste codes (in England and Wales) to help people on site complete waste transfer notes and consignment notes correctly?	Yes	Discussed with waste company and dealt with at depot when separation taking place.
Do you have a system for keeping waste transfer notes and consignment notes?	Yes	Site Waste Management Plan
Have you made plans to secure all waste in vehicles leaving site and skips are covered where appropriate?	Yes	All our waste collection providers are vetted to ensure that they have the correct policies in place to manage this efficiently
Is waste contained securely and safely on site to prevent escape?	Yes	Metal skips
Are waste containers (skips, bins) impermeable to prevent liquid wastes leaching?	Yes	Metal skips are checked for any damage underneath on delivery
Have you allocated sufficient space on site for waste storage and segregation?	Yes	Very limited space.
Are skips and bins on site labelled for different waste types to help segregation, and checked regularly?	Yes	Only limited as space is small but the majority is separated at depot by waste company.
Are there separate facilities for hazardous waste?	Yes	Small quantities of old paint tins etc only.
Are there separate facilities for different types of hazardous waste?	N/A	If known, then different facilities for storage would be provided.
Do you need to register with the EA as a hazardous waste producer?	No	The site has been assessed as hazardous free.

4.0 Emergency Contacts:

In the event of an emergency situation please use the contact details provided below:

SITE EMERGENCY CONTACT NUMBERS:

Project Manager:

Jim Dudley 07553198434

First Aiders:

Jim Dudley 07553198434

Site Address:

White House Lane,
Spencers Wood,
Reading
RG7 1HR

[what3words /// fine.ledge.rivers](http://what3words:///fine.ledge.rivers)

Head Office Address:

Amir Group
Eagle Point
Little Park Farm Road
Segensworth, Fareham
Hampshire
PO15 5TD
Tel: 01489557700
www.amirigroup.co.uk

EMERGENCY SERVICES:

AMBULANCE, FIRE & NPOLICE: 999

LOCAL HSE: 0300001747

ENVIRONMENT AGENCY: 0870506506

GAS: SGN 0800111999

ELECTRICITY: Call 105 (or) SSEN 0800 072 7282

WATER [Thames Water]: 0800 9808 800

WOKINGHAM BOROUGH COUNCIL: 01189 746 000

CONTRACTS MANAGER:

Richard Batterson
Tel: 07551279174

SHEQ MANAGER:

Simon Starks
Tel: 01489557700

CONSTRUCTION DIRECTOR:

Dave Gee
Tel: 07920536955

CONSTRUCTION MANAGING DIRECTOR:

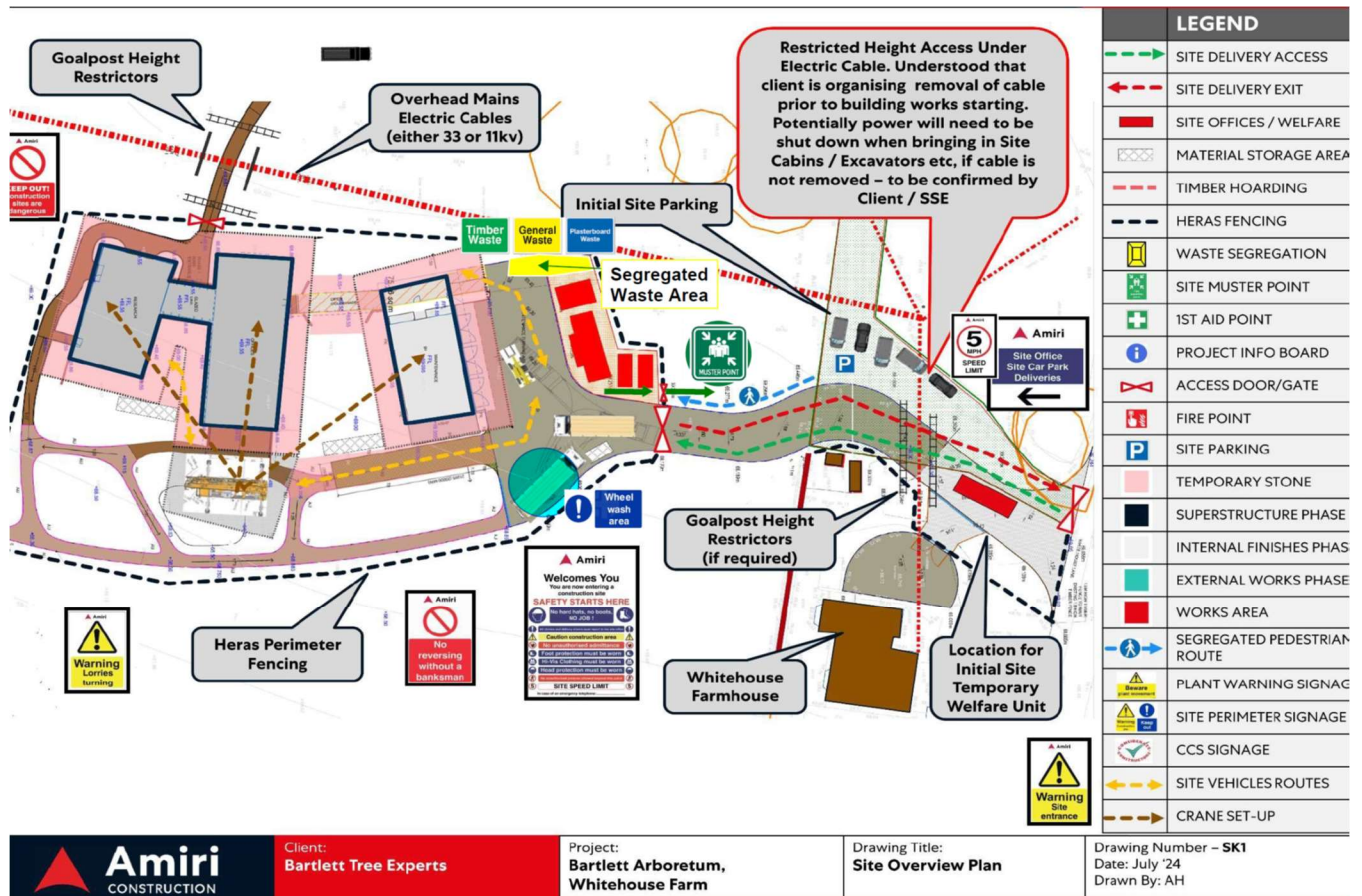
Jon Daines
Tel: 01489557700

5.0 Site Layout & Logistics Plan

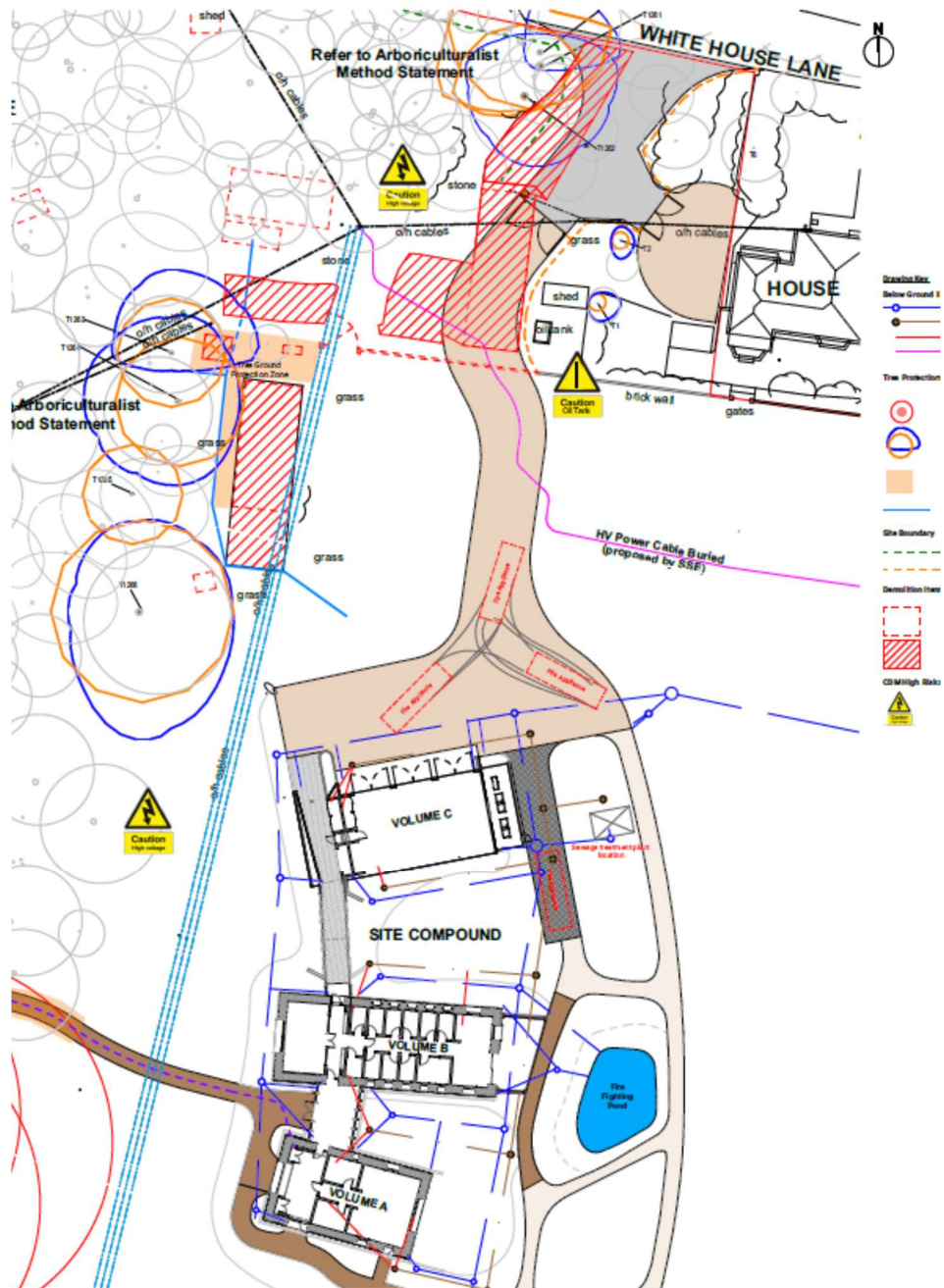
The site set-up will follow the tender stage site layout design including vehicle parking and welfare locations.

As with all projects due to site logistics changes may occur during the works.

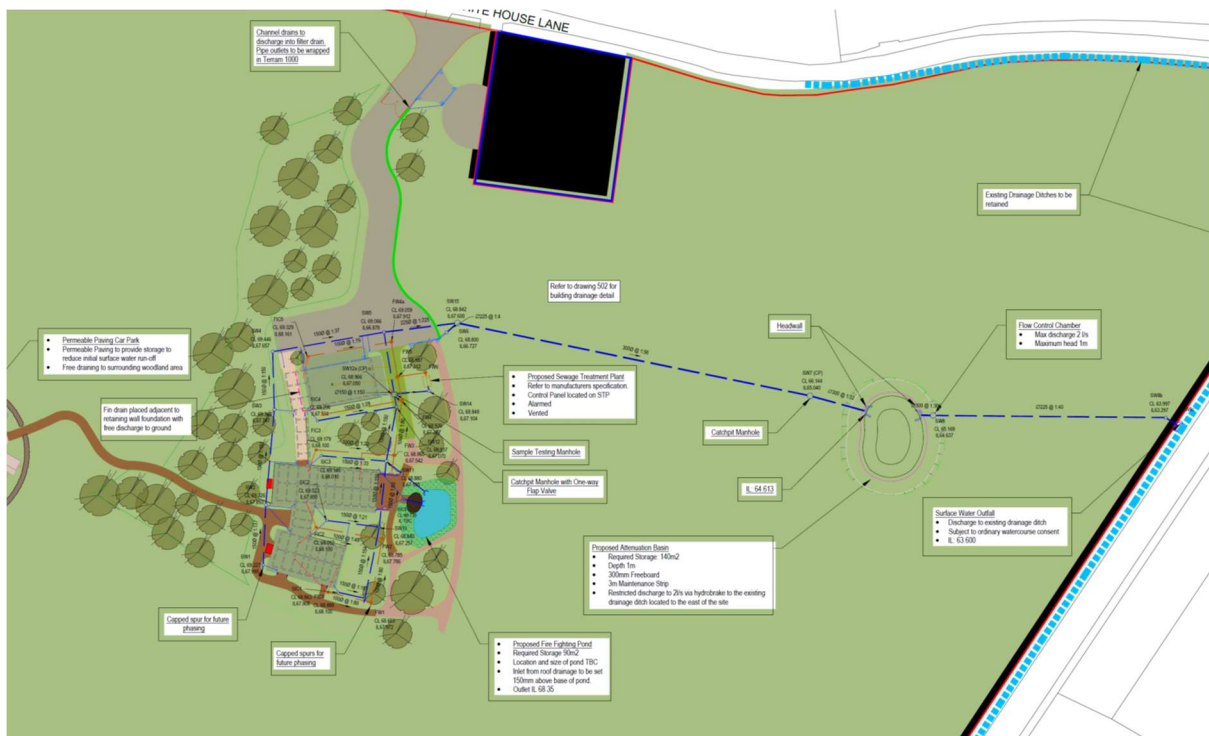
Any changes to the site plans will be incorporated in the construction phase plan and this plan as a revision.



6.0 Existing Incoming Utilities Services Layout Plan



PROPOSED DRAINAGE LAYOUT PLANS



7.0 Incident Response Procedure



Site Pollution Incident Response Procedure

STOP – CONTAIN – NOTIFY

STOP: work immediately and prevent any more material spilling.
Cut any sources of ignition.

CONTAIN: the spillage using bunds of earth or sand, drip tray or spill kit contents immediately.
Check the spill has not reached any nearby watercourses, ponds or any other sensitive areas.
Bund drains/ manholes to stop the substance entering the drainage system.
Ensure that any contents of a spill kit are replaced.

NOTIFY: the Project/ Site Manager immediately giving the following information:-
Whether the substance has entered the drain/ watercourse or is affecting the environment.

- Substance involved
- Location
- Reason for incident
- Quantity involved

SPILLAGE TYPE:

MAJOR – Cannot be controlled. Pollution has entered or could enter a drain or watercourse. Report to Project/ Site Manager immediately.

MINOR – Can be controlled. Pollution has not entered and cannot enter a drain or watercourse. Report to Project/ Site Manager immediately.

USE SPILL KIT IF TRAINED.

SITE MANAGER INSTRUCTIONS:

MAJOR – Contain and report immediately to emergency contacts on Emergency Contacts list.

MINOR – Clean up immediately using appropriate materials (granules, pads, socks etc).

REPORT:

Write up a report of the incident to be retained on site records that should include the following:-

- Date, time and location of spillage
- Substances involved
- Action taken to contain
- Lessons learnt

S29.6.3 (Rev B)

8.0 Archaeology and Cultural Heritage

The site has not been required to be investigated for evidence of archaeological significance. Obviously, during the groundworks activities there is a requirement on the project to maintain a watching brief for any archaeological finds.

All excavation works to be undertaken on the site will be carried out in a safe and correct manner at all times and a strict procedure will be implemented by Amiri Site Management and obeyed by all site personnel should any unknown objects or materials be discovered or encountered in the ground.

Regular morning briefings will take place prior to starting the day's work. Regular toolbox talks on groundworks will be provided that focus on noise and dust generation and control.

All ground investigation survey reports that exist will be studied in detail prior to the commencement of any excavation works. Groundworks will be carried out with caution and care and work will cease if any unknown objects are discovered.

9.0 Air Quality

The location of the site and the planned construction activities do not give rise to a serious risk to air quality. However, contractors will be expected to take measures to minimise the presence of air borne dust during the demolition works and the construction phase.

It is anticipated that dust will travel a maximum of 20m from where it is generated to the surrounding properties. The principal mitigation measure to avoid contamination to neighbouring properties and infrastructure is to install wetting down facilities like dust cannons for the demolition phase and during any excavation to maintain a clean and tidy site at all time.

All contractors will be expected to take measures to minimise the presence of air borne dust during the construction works. The guidance provided by the Institute of Air Quality Management will be used and adopted.



Air pollution, arising from odour, fumes and smoke, may arise from the following activities:

- Use of heavy plant and machinery
- Road vehicles, particularly HGVs

Pollution to air will be managed in order to reduce impacts to a minimum, and to eliminate where practicable. Management will be achieved through:

- No fires are permitted on site at any time.
- All fuels, oils and other Volatile Organic Compounds (VOC's) will be stored in secure, sealed, labelled containers.
- Consideration will be made to using prefabricated materials where possible so that localised air pollution is minimised, such as the cassettes being fabricated off-site by Eden.
- Vehicles and plant will be switched off when not in use.

- Ensure vehicles and plant are not overloaded to prevent labouring.
- Modern, well-maintained plant and equipment is used.
- Mains electricity supply will be used in preference to generators where practicable.

The following additional measures are also to be taken:

- Design controls are to be implemented for construction equipment and vehicles, and appropriately designed vehicles are to be used for materials handling.
- The site is to be regularly inspected and site boundaries checked for dust deposits and removed as necessary. In addition, local roads are to be checked and cleaned when necessary.
- The Groundworks Sub-Contract Order will include provision to ensure there is no depositing on the Highway.
- There is to be no burning of materials or vegetation on site or adjacent land at any time.
- Lorries carrying dry materials to or from site are sheeted over.
- In order to minimise dust generation site speed limits will be strictly adhered to (the speed limit on site will be 5mph). This will be clearly signed and enforced on site.
- Fine dry materials will be stored and protected from the wind but wetted.
- Cutting and grinding operations are adequately shielded and wetted.
- Drop heights into hoppers, haulage vehicles, rubbish skips etc. are minimised.
- Clean up or damp down any spillage of dry dusty materials.
- Ensure small material bags containing fine materials are correctly sealed and stored after use.

Standard plant and equipment will be used on site for the project works. During the project works all muck away lorries or delivery vehicles will access / egress site using the main site entrance, which will be at White House Lane.

There is no ground stabilisation taking place that could cause dust migration during the construction phase. Any ground being excavated or run on by vehicles that could cause dust will be wetted down if they become dry. This will be closely monitored on site daily by the project team and all supervisors using the environmental site inspection checklist (please refer to appendix 1). Amiri will provide, maintain and use a supply of water and means of dispensing it, to dampen dust in order to minimise its emission from the premises.

All access around the new build will be stoned up and damped down during dusty periods.

During the early stages of the project works a jet wash facility will be located on site (10m away from any drains) and in close proximity to the site entrance to ensure mud debris is not spread and taken onto the Estate or public roads.

Amiri will provide and use suitably covered skips or take other suitable measures in order to minimise dust emission to the atmosphere when materials and waste are removed from the site.

10.0 Tree Protection

It is imperative that the Bartlett Tree Experts Arboricultural Method Statement is followed closely. All matters pertaining to the trees should be checked, and liaison made with the project arboriculturist – including a site visit and inspection when and where necessary. Regular and continued communication between the appointed contractor and Bartlett Tree Experts will be essential, so that there is adequate time for phasing site supervision and tree compensation and

mitigation, as well as reviewing tree protection and working methods. The sequence of works outlined in the Bartlett Tree Experts Arboricultural Method statement must be combined with the CPHSP and reviewed by the appointed contractor. Any perceived conflicts must be followed-up by the appointed contractor, through consultation and discussion with Bartlett Tree Experts with mutually agreeable amendments made by both parties (as necessary) so that there is no conflict and impairment of site operations and planning requirements.

A combination of vertical barriers, tree protection boxes and ground protection will be required to safeguard the trees against damage which may be sustained through redevelopment of the site, site logistics, as well as the requirement for a working zone within and adjacent to tree root protection areas. Once erected and established, both methods of tree protection will be sacrosanct, and must not be moved or adjusted during any stage of site operations without the prior written consent of Wokingham Borough Council.

The protected areas shall not be used for the storage of materials or spoil, nor for the mixing of substances or the disposal of any residues. Materials, equipment and arising debris will not be stacked against the vertical barrier, even temporarily. As discussed above, the TPP has been annotated to show indicative locations where, from an Arboricultural perspective, there is free space for site logistics outside of the zone of influence for tree protection.

The specific methods for protecting the trees which has been extensively covered in the Arboricultural Method Statement are to be followed closely and cover the following works: Vertical Barriers, Tree Protection Boxes, Ground Protection and Ground Protection suitable for Mixing of Concrete.

Monitoring and Supervision

Regular Arboricultural input and periodic site monitoring will be required to ensure that the implemented tree protection and associated works are being undertaken correctly.

An arborist must be involved in the following phases of development, with all site visits completed in-person and on-site (as opposed to video calls or other forms of remote working).

At the commencement of each site visit, Bartlett Tree Experts | Bartlett Consulting will have a conversation with the site operatives about the careful working practices and sensitivity required for working within and adjacent to tree root protection areas.

The project arboriculturist will visit site during the following phases of redevelopment:

- 1 – Pre-commencement site meeting
- 2 – Breaking up and lifting of existing hard surfacing (White House Lane)
- 3 – Excavations & root pruning new foundations (Yew Tree Lane Gates)
- 4 – Pouring of concrete new foundations (Yew Tree Lane Gates)
- 5 – Breaking up and lifting of existing hard surfacing (White House Lane)
- 6 – Soft scrape throughout woodland (Woodland Parking)
- 7 – Installation of cellular confinement system (Woodland Parking)
- 8 – Installation of EV charging posts (Woodland Parking)
- 9 – Routing and position of post holes (Woodland Boardwalk)
- 10 – Creating of guide hole & installation of screw-pile (Woodland Boardwalk)
- 11 – Post holes for deer fencing (Woodland)

Amiri Responsibilities

It will be the responsibility of the appointed contractor to ensure that the requirements set out within this Arboricultural Method Statement are known and understood by all direct employees,

employed sub-contractors, and all other site personnel working under the engagement of Amiri Construction.

The designated site manager will brief all personnel involved with the particular elements of this report pertaining to their appointment, and make sure they review the relevant tree protection plan. It is Amiri Constructions responsibility to ensure all tree protection measures are to the specifications and details provided within this report, as well as in accordance with the positions and locations shown on the Tree Protection Plan.

The following pertinent points will be explained to all personnel:

- a) The specification of vertical barriers & ground protection
- b) The requirements and reasons for tree protection measures
- c) Damage which can be sustained to trees and soil through site operations
- d) What a construction exclusion zone is and how to maintain one
- e) Consequences of breaching tree protection zones and causing damage to protected trees

Amiri Construction will ensure that a copy of the Arboricultural Method Statement and Tree Protection Plan are kept in the site office in an easily accessible location for all members of staff and site operatives.

11.0 Transport/ Site Access Information/ Control of Noise, Dust and Vibration

The site layout plan must be referred to which details the site compound, welfare areas and access points for deliveries. The main site entrance which will be at the north side of the site off White House Lane will be used for all major deliveries to site and this information will be provided to all suppliers at order stage. Large deliveries from sub-contractors and major fabricators will be subject to pre-delivery site visits to assess the approaching roads and site entrance to ensure that any busy periods and minor roads leading to the site are avoided and disruption is kept to an absolute minimum.

The speed limit on site for all site vehicles will be 5 mph.

All delivery vehicles will be marshalled into the site compound area and the site entrance gates will be closed to prevent unauthorised access by any members of the public and to create a safety barrier between the surrounding buildings and site activities.

No vehicle will be permitted to reverse anywhere on or near the site without a banksman.

No deliveries to the project will take place without prior consultation with Amiri Site Management.

Weekly delivery schedules will be compiled, where necessary, and daily discussions will be undertaken with the client to co-ordinate safe times for the delivery of materials and movement of plant and equipment.

All contractors' and visitors' vehicles must reach the site using the same access / egress roadways and routes as delivery vehicles and park their vehicles in the designated temporary contractor's car park area which will be located within the main site compound area. (Detailed on layout plan).

Access / Egress routes for pedestrians, site personnel and visitors will be set up around site to ensure all pedestrians and members of the public are kept separated and segregated from site vehicle and plant movements and ongoing project works and activities throughout the entire duration of the project.

All contractors and visitors must use the designated access/ egress routes leading from the car parking location to the site compound area and to the main project work area when entering or exiting the site.

All existing buildings, footpaths and roadways around the project work areas will remain fully active and in full use for the entire duration of the project. Traffic management will be required when carrying out the project works and this will be discussed in daily site meetings with subcontractors so it is fully understood. A full traffic management plan and layout with signage will be produced and explained in every site induction.

There will be a main site compound area set up in north west corner of the site that houses the site offices, canteen and welfare units and toilets. The site offices, canteen, welfare and toilet facilities like all the construction work areas will be separated and segregated from all ongoing surrounding activities.

The best practicable means, as defined in section 72 of the Control of Pollution Act 1974, to reduce noise to a minimum shall be employed at all times.

Amiri Construction shall at all times have regard to the Recommendations given in B.S.5228 Noise Control on Construction and Open Sites and shall ensure that these are brought to the attention of all contractors on site. In particular all contractors will comply with the following requirements:-

- I. All vehicles and mechanical plant used for the purpose of the Works shall be fitted with effective exhaust silencers.
- II. All compressors shall be "sound reduced" models fitted with properly-lined and sealed acoustic covers which shall be kept closed whenever the machines are in use, and all ancillary pneumatic percussion tools shall be fitted with mufflers or silencers of a type recommended by the manufacturers.
- III. Machines in intermittent use shall be shut down in the intervening periods between work or, where this is impractical, shall be throttled to a minimum.
- IV. All plant and machinery shall be maintained in good and efficient working order.
- V. Stationary plant is to be sited away from any noise-sensitive areas where practicable and any plant known to emit noise strongly in one direction shall be orientated so that the noise is directed away from such areas.
- VI. No plant shall be left running outside the normal working hours specified in paragraph (1) above.

Amiri will provide, fix and maintain suitable screens or awnings to screen the building works and scaffold so as to effectively minimise dust and debris from falling or being blown over the boundaries. Provide, maintain and use a supply of water and means of dispensing it, to dampen dust in order to minimise its emission from the premises.

Amiri have banned and will not permit the sweeping of any dust or dusty material without effectively treating it with water or other substance in order to minimise its emission from the premises.

12.0 Site Lighting

Site lighting shall be kept to a minimum brightness for adequate security and safety. On the building being constructed, site welfare/accommodation, equipment and lighting shall be sited so as to minimise visual intrusion and light spillage at nearby properties, consistent with the efficient operation of the work site.

Site lighting shall also be positioned and directed so as to avoid complaints from the neighbouring residential properties. This provision will apply particularly where comes early while the site is still working. Appropriate lighting shall be provided for these instances.

13.0 Prevention, Containment and Cleaning Up Spillages

Liquid storage:

Best practicable means will be employed to prevent polluting materials from entering the hydrological systems. This will include specific measures to prevent silt from escaping from excavations.

All oils and fuels will be stored in compliance with the Control of Pollution (Oil Storage) Regulations 2001.

- Fuel shall be stored in dedicated bunded, impervious storage areas, away from drains and watercourses. Spill trays/ mats will be in place under the bunded tanks.
- Drums over 200 litres shall be stored on drip trays capable of holding 25% of the drum's maximum capacity.
- Fuel tanks shall be stored within a bund capable of holding 110% of their capacity. All pipes and gauges shall be within the wall of the bund.
- Bowsers shall be double skinned and shall be stored in a bund capable of holding 110% of the volume of the bowser. (Spill mats below).
- Small mobile plant shall be placed on drip trays.
- Spill kits will be available at various points around the site and located next to bowsers and drums.



Consideration will be given to any required surface coatings which contain bitumen or related materials as being delivered in a hot and ready to lay format. This will avoid the bituminous materials being heated on site.

Silt and run off

Drains and gullies near the site will be visually monitored to check for any changes during the weekly environmental checks. If any significant changes are identified, the cause will be investigated and clean up measures will be implemented.

Solids

Spillages of dry and dusty materials will be avoided by good housekeeping methods including storing undercover and on hardstanding. Skips will be covered where there is a risk of material becoming airborne.

Wheels of site vehicles will be cleaned before they leave site (using jet wash located near main site entrance gates that feed into a bunded area for removal and cleaning). This will be supplemented by a road brush to clean roads as required; this will prevent tracking of mud and debris onto surrounding routes.

Dealing with spills

Spill kits will be available at various points around the site and located next to bowzers and drums.

Should a spill occur, the following will be implemented:

- Work will be stopped immediately.
- Amiri Site Management will be immediately informed of the spill.
- The area or whole site will be evacuated.
- All possible ignitions will be extinguished if the spilt material is flammable.
- The spill will be contained using spill kits on land and booms on the stream.
- The source will be identified and sealed as practical.
- Granules / pads will be used to mop up as much spill as possible.
- If the spill enters the stream the environment & sustainability manager must be contacted immediately who will contact the Environment Agency and British Waterways.
- Immediately notify the Emergency Services relevant to this type of accident.
- Immediately notify the relevant Health and Safety Services.
- Adhere to all specialist advice given.
- Amiri will establish contact with a major Spill Contractor so they can be contacted if the need arises or the spill breaches a Watercourse.
- The granular material and pads and any containment items will be treated as hazardous waste and disposed of accordingly.

The site C.O.S.H.H. co-ordinator will be responsible for ensuring company procedures have been correctly followed and implemented and all relevant parties have been informed and all

items have been correctly actioned and satisfactorily closed out and records have been collated after the event.

An incident report form will be produced and sent to the HS&E department within 24 hours of the incident occurring. If the incident is significant a full investigation will be carried out by the HS&E Advisor.

The Amiri standard spill incident response procedure will be adopted (please refer to section 7.0 above) and strictly adhere to and will be displayed on all Amiri Site noticeboards.

Any fuel oil / diesel brought to site must be in bunded tanks or on bunded pallets if small quantities.

The site will hold a basic emergency oil and chemical spill kit (located within main project area or close to any work area/ bunded fuel tanks location). This will enable any accidental spillages of fuel etc. to be immediately controlled and prevented from entering the existing drains or ground generally.

An assessment has to be carried out prior to commencing the project as to whether the standard size spill kit will be sufficient or whether specific equipment is required. Training in the use of the kit will be required.

An emergency situation may arise from one of the following:

- Leakage or spillage of a substance on site, which has the potential to cause serious or imminent danger to those directly or indirectly involved third parties or the environment
- Acute exposure to a substance being used on site which resulted in immediate ill affects to a person(s).
- A chemical incident not involving site activities directly but which affects us because of our location, for example if the site was within the boundary of a chemical plant or factory.

15.0 Housekeeping

A 'good housekeeping' policy shall be implemented and followed at all times by Amiri and all site personnel during the project works. This shall include, but not necessarily be limited to, the following requirements:

- A Smoking area shall be provided at a suitable location at ground level away from the project works.
- Open fires are prohibited at all times.
- Rubbish shall be removed at frequent intervals (on a daily basis where possible) and the site kept clean and tidy.
- Adequate welfare and toilet facilities shall be provided for all staff. Welfare and Toilet facilities shall be kept clean.
- Food waste shall be contained and removed at least daily.
- The wheel washing facilities area shall be brushed clean at frequent intervals.
- Fencing / Hoardings shall be frequently inspected, repaired and re-painted as necessary.

- Environmental inspection registers will be correctly completed in accordance with strict procedures and guidelines.
- Surface water or waste water arising from project work operations will be frequently monitored and checked.
- Surrounding watercourses will be checked daily and records kept for any possible contamination by Amiri site management (refer to appendix 1).
- Dust, Noise and Vibration generated from project work operations will be monitored at all times by Amiri site management (refer to appendix 1).
- All site personnel will be given a site-specific induction by Amiri site management in which they will be informed of the strict environmental control measures that are to be enforced and strictly followed at all times during the project works.
- All deliveries and waste removal to and from site will be strictly monitored and controlled.

16.0 Waste

Amiri will nominate a suitably qualified project team member to hold the delegated duty of Waste Manager, on this project, it will be the Project Manager. He will ensure that waste registers are kept up to date and ensure including any changes to methods of handling wastes and amendments to destination recycling or landfill sites are legal and audited. Copies of waste transfer notes shall be collated for the duration of the works and shall be scanned uploaded on PROCORE within the Site Safety Folders. This information is needed as part of BREEAM that is OUTSTANDING for this project.

All waste will be handled and disposed of in line with current “Duty of Care” Regulations. It is the responsibility of all persons on site to dispose of waste in the correct receptacles and to report any waste being stored incorrectly or escaping from the site area. This will be made abundantly clear at the induction and during Tool BoxTalks.

Waste on site will be controlled, managed and identified considering the following points:

- The wastes, and their category, that will be generated by the project.
- Opportunities for reuse and / or recycling.
- Proposed methods of storage, segregation, handling and transportation of waste.
- Means of disposal including licensing requirements of carriers and destination sites.
- Recording of all waste movements from the site.
- Reporting and monitoring process.

Opportunities to minimise waste through the design process (where applicable) will be considered and actions taken where identified and cost effective.

Waste Minimisation

It is the Project’s policy to minimise the amount of waste generated and sent to landfill.

Amiri will provide and use suitably covered skips and enclosed chutes (if required), or take other suitable measures in order to minimise dust emission to the atmosphere when materials and waste are removed from the premises.

All skips used for the storage of waste shall be kept covered so far as is reasonably practicable.

All waste will be segregated where space permits to reduce the amount taken to landfill and reduce the regularity of collections. The Amiri site management team will appoint a waste



champion to ensure that the waste generated is placed in skips sensibly using all space available to avoid skips be collected partially filled. By doing this we are avoiding additional collections which reduces our carbon foot print, our greenhouse gas emissions and financially we will use less skips.

Amiri construction strongly believes and supports the United Nations Sustainable Development Goals commonly known as SDG which has replaced the corporate social values.

17.0 Managing Concrete and Cement

The table below details site management control procedures for concrete and cement that will be implemented on site:

Potential Pollution Source	Control Measures
Washing out and cleaning of concrete batching plant or ready-mix lorries.	- Carried out in a contained area as far from the watercourse as practical – referred to as the wash-down area. - All wash-down areas to be signed. - All plants contaminated with concrete to be clean in designated wash-down areas. - Washout shall not be allowed to flow into any drain or watercourse.
Concrete spills during site transportation	Loads managed to avoid spillages – load dependent on vehicle, slump of concrete and prevalent ground conditions.

A Wash down area will be created on site which will encompass a small trench lined with polythene (that is removed and replaced each day) to ensure water used to wash down concrete vehicles is controlled within a specified area and does not spread from project work areas to watercourses or contaminate plants etc.

18.0 Treatment of Effluents

The site's effluent waste from the toilets will be contained in an effluent tank stored under the temporary toilet cabin. A company will be employed on the contract to empty this on regular basis as when it is needed. Any connections or discharges to drains and/or controlled waters will not be permitted.

In order to protect drainage systems, they will be drawn up on the Site Plan showing the nature and course of the drainage on site. Surface water drainage will be marked BLUE and foul water drainage will be marked RED. Measures will also be taken to prevent silting of such waters and pollution spill kits made available on site in case of emergency or accidental spillage.

Discharges will only be made to drains and sewers with appropriate consents providers and regulators.

19.0 Fire Control

General



The project will ensure that operations are carried out in compliance with the Regulatory Reform (Fire Safety) Order 2005 “Joint Code of Practice on the Protection from Fire on Construction Sites and Buildings Undergoing Renovation”.

A full fire management plan has been produced in conjunction with the nominated Responsible Person and relevant parties as appropriate. This plan will be in accordance with the Fire Prevention on Construction Sites, 9th Edition (Joint Code of Practice on the Protection from Fire of Construction Sites and Buildings Undergoing Renovation) and HSE guidance HSG 168 Fire Safety in Construction Work and a site layout plan indicating exit route, fire points and wireless fire alarm locations will be developed and displayed on the noticeboards and at the fire point locations. The plan identifies duty holders, defines responsibilities and establishes procedures on fire prevention. This information will be conveyed to all personnel at the site induction.

There are basic rules that apply to all of our construction sites which aid in the prevention and control of fires.

A Site Fire Safety Co-ordinator will be appointed to ensure adherence to the Site Fire Safety Plan. In addition, they will co-ordinate the issues below:

- General Housekeeping.
- Fire extinguishers, fire detection and alarms.
- Hot Work Permit regime.
- Fire escapes and communications (evacuation plans and procedures for calling the fire brigade).
- Fire brigade access, facilities and coordination.
- Fire drills and training.
- Effective security measures to minimise the risk of arson.
- Materials storage and waste control regime.

An initial fire risk assessment of each area will be undertaken and updated as the risks change. In addition, weekly inspections of all areas will be carried out and the findings recorded on a weekly inspection report.

All areas will be kept clean and tidy and stored materials will be properly coordinated and controlled.

Waste Management and Storage of Materials

During the construction phase the building will be kept free from the build-up of combustible materials.

Pedestrian routes through the building will be kept clear of stored materials. Offending contractors will be issued with Clean up and obstruction notices. PROCORE will be used as the quickest means

Storage of Materials

A ‘just in time’ delivery system will be strictly implemented with all deliveries needing to be booked in one week prior to the week of the delivery. These will ensure that there will be minimal storage within the building, especially on this project where space constraints is an issue.

Fire Station Points

Fire Station Points will be located throughout the building at key strategic positions for example stairwells, main corridors and open / communal areas.

Each Fire Station will consist of:

- Water extinguisher
- Powder extinguisher
- You Are Here plan
- Alarm sounder / Wireless Alarm

The Fire Station Points will be checked daily by appointed persons and weekly by the Site Fire Safety Co-ordinator.

Evacuation signage is installed and maintained by the Fire Wardens as the build process progresses.

Fire Drills & Training

The evacuation sounders will be tested once a week by Amiri Site Management. Periodic toolbox talks will be issued to contractor's managers by Amiri Site Management in order that their personnel are aware of the fire evacuation procedure. Signed acceptances of these briefings will be returned to the project. All site personnel prior to starting work will undergo an Amiri Site specific induction which will detail site fire plan procedures.

Risk of fire water run off

In the case of a fire being attended by the Fire service, significant volumes of water, foam and burnt matter may be washed onto the ground. There is a risk that this may run off into drainage and the watercourses.

In this case, the site management will monitor fire water runoff and ensure that contaminants are prevented from entering water systems by use of booms, bunds and sluice gate.

APPENDIX 1 – Environmental Site Inspection Checklist



ENVIRONMENTAL SITE INSPECTION CHECKLIST

Project:					Inspection Date:				
					Inspection Time:				
Inspection carried out by:						Signature:			
Weather Conditions:									
Inspection Item		Control Measure Adequate (✓)			Action Required	Action Completed Date	Photo Ref.		
		YES	NO	N/A					
1.	Water Course								
2.	Roadways								
3.	Noise Pollution								
4.	Air Pollution								
5.	Drainage								
6.	Tree Protection								
7.	Ecology								
8.	Historical Heritage Areas								
9.	Plant								
10.	Fuel Storage								
11.	Chemical Storage								
12.	Spill Kits								
13.	Waste								
14.	Compound & Cabins								
15.	Signage								
16.	Lighting								
17.	Environmental Toolbox Talks								
18.	Emergency Procedures / Reporting								

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