

**S&T (UK) Ltd**

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**Site Environmental Management Plan**

|  |  |
| --- | --- |
| Project Number: | STCUK0157 |
| Site Name: | 18-20 Elsworthy Road |
| Site Address: | 15 Elsworthy Rise London NW3 3QY |

|  |  |  |
| --- | --- | --- |
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# Introduction

S&T’s aim is to protect the environment and minimise the potential impacts of our activities. Environmental strategies have been integrated into all our processes and procedures from design to construction.

The Site Environmental Management Plan (SEMP) sets out the arrangements for the identification, management, monitoring and control of the environmental impacts of this project.

The Project team is responsible for working in a manner that can reduce, so far as it is practical, the negative environmental impact of the project, in accordance with our Environmental Policy and the client’s requirements.

As part of the order process, subcontractors shall receive the S&T(UK) HSE Subcontractor Code. This sets out the environmental requirements set by S&T prior to works starting. The SEMP will be communicated to our supply chain to ensure that any potential environmental issues, which may be caused by their activities on site, can be addressed and eliminated where possible or relevant controls put in place in order to minimise their impact.

The SEMP is communicated to the workforce through the induction and is referred to as part of the internal environmental visits on site carried out by S&T’s HSE Team.

## 1.1 Environmental Policy

S&T’s environmental policy has been developed in accordance with the nature, scale and environmental impacts of the company’s activities. This policy provides a broad framework for setting environmental objectives and targets and delivering sustainable development and has the full support and commitment of the Board of Directors.

S&T’s environmental policy includes a commitment to continual improvement in the prevention of pollution and to compliance with the relevant environmental legislation, regulations and requirements. The Policy is updated annually.

S&T’s Environmental Policy Statement is displayed on the site Safety Notice Board (see Appendix A).

## 1.2 Environmental Compliance

In accordance with our Environmental Policy, the Project team will ensure that all elements of the project fully comply with relevant environmental legislation as well as any other legal contractual requirements.

In addition to the above, the Project team is responsible for ensuring that any additional local by-laws or special preservation requirements, e.g. protection for any endangered species, flora and fauna, protected building or heritage site, etc. are fully complied with and adhered to.

To ensure full and ongoing compliance with all applicable environmental legislation, a site based environmental legal and other register is maintained by the project site team within this document (see appendix e). S&T group register is maintained by the S&T’s Health, Safety and Environmental Department.

### 1.2.1 Environmental Contractual Requirements

The table below shows the site environmental obligations:

|  |  |
| --- | --- |
| **Client Requirements** | * Utility meter readings will be taken on the 1st working day of the month by the site manager. This is being carried out because of the client’s requirements as well as S&T’s internal KPI’s. We are actively promoting reducing energy on site. This means: * External lighting will be on a timer. If the lighting is on, please report to site manager * Battery powered tools are actively promoted * Tools, lights, vehicles etc. will be turned off when not in use. * Site has a requirement to employ local labour and procure from local suppliers * All compressors, percussion tools and vehicles must have silencers. * No noisy works outside of working hours * No radios / audio equipment that can cause disturbances * No smoking on site * Care must be taken at all times to ensure paths, roads and retained trees are kept in good order. If damage does occur it must be reported to the site manager * S&T’s internal KPI’s to drive the quantity of waste being diverted from landfill. Targets are:   + 93% diversion from landfill in 2017   + 95% in 2018   + This will mean waste companies used by S&T or subcontractors on site will be required to meet these targets. Where this cannot be carried out, please report to the site manager including providing plans to becoming compliant.   + Elsworthy Road project is Code for Sustainable Homes at level 4 |
| **Specific local authority agreements** | * No parking permitted on site * Working House Deliveries accepted 08.00 – 18.00 and 08.00 – 1300 on Saturday, deliveries will be prearranged. Loading and unloading to be carried out at Elsworthy Rise. Roads and pathways to be kept clear from mud and debris. * Site is within a Conservation Area * All retained trees to be protected. * Noisy works are permitted at 5db(A) over normal sound levels.  Loud distinguishable, discrete continuous noise such as whine, hiss, screech, hum or bang clicks clatters thumps are permitted at 10db(A) over normal levels. Noise levels will be monitored. This will mean silencers and low noise equipment permitted for use only on site. |
| **Requirements from previous studies and / or reports** | * The site has 2 tree root protection zones which can be found at the front of the site and at the far back of the site. * No storage is permitted in these tree protection zones. * Reduce storage of materials as no materials can be stored within the RPA, no mixing of concrete and no diesel storage in RPA. * Cranes, rigs and booms shall be made aware of the trees specifically * New services shall not touch roots, when digging trenches ensure an Airspade or similar is used so as not to damage roots * Arboriculturalist is to visit:   + On erection of protective fencing   + Demolition of building   + Random inspections of site * No fires or spillages permitted on site. Fuels, oils or substances shall not be stored in the RPA. * Cutting down or back trees during nesting season is not permitted unless under direction of an ecologist. * Dismantled and removed protection can only be carried out when all machinery and equipment has left the project at the end of the project. Where any protection is removed / damaged, this must be reported to S&T site management immediately. * Patrick Kenny is the responsible person for ecology / protected tree issues on site.   He will be:   + Present on site the majority of time   + Be aware of arboricultural responsibilities   + Have the authority to stop works if there’s the potential for trees to be damaged in any way   + Ensure everyone knows their responsibilities through inductions, TBT, training, RAMS, environmental plans etc.   + Where subcontractor’s works might be affected by the trees and the RPA, the survey and requirements shall be communicated to them prior to starting   Soil Analysis Report is due to be carried out prior to Groundworks phases |

## 1.3 Regulatory Agencies and Interested Parties

The Site Team will ensure that any communications from or with any enforcement agencies in relation to this project are dealt with in a correct manner and actions are taken as recommended.

The following enforcement agencies have been identified as having an interest in this particular project:

|  |  |  |
| --- | --- | --- |
| **Enforcement Agency** | **Contact Details** | **Interest** |
| Environment Agency | 08708 506 506  (General Enquires)  0800 807 060  (Emergency Only) | * Pollution, waste management. * Protection of protected flora and fauna * Protection of protected species * Protection of listed properties * Protection of heritage sites and site of special interest |
| HSE | 0845 345 0055  (General Enquires) | * Site management * COSHH * Waste management and the removal of any substances that are harmful to the environment/health. |
| Thames Water | 0800 316 9800  (General Enquires) | * Uncontrolled pollution to drainage systems * Uncontrolled pollution of local water courses and ponds |
| Camden Borough Council | 020 7974 4444 | * Noise pollution * Planning permission * Management of public (pedestrian) thoroughfares * Traffic management |
| Police | 999 | * Breaches of legislation |

## 1.4 Public Relations and Complaints

There will be regular and proactive liaison regarding environmental issues with Local Authority and other relevant stakeholders as appropriate throughout the duration of the project. S&T will also register with the Considerate Contractors Scheme for this project.

S&T will manage public relations proactively through liaison with neighbours via newsletters and letters. Contact details will be provided on the safety site board for the public to directly contact us. Any complaints will be logged and investigated by S&T. In the event of a complaint, the person should be directed to the most senior member of the Project team on site. The following details should be taken:

* Name
* Address
* Contact Number
* Date/Time
* Nature of the complaint
* Location of complaint
* Date/time issue occurred.

If possible, the cause of the complaint will be dealt with immediately. Actions taken and confirmation of responses will be recorded on the Environmental Incident Report.

# Nature of Project

## 2.1 Scope of Work

Demolition 2 houses and removal of asbestos and build a 6-bedroom house, 3 bedroom maisonette and 2no 2 bedroom flats including a basement.

The basement up to ground floor level will be a reinforced concrete structure. Ground floor to roof level will be constructed of a traditional masonry structure with steelworks.

## 2.2 Site Location and history

# The site is on Elsworthy Road adjoining Elsworthy Rise. Situated close to a church and a primary school. There’s a park close by.

# The past use of this building was a pair of semi-detached residential houses which were split into apartments. It was abandoned for a number of months beforehand. A fire had broken out prior to handover from the client.

# There are 2 protected trees.

See Appendix B for Site layout.

## 2.3 Site Team Organization Chart

## 2.4 Project team Roles and Responsibilities

All members of the site team are responsible for the effective planning, implementation, management, monitoring and review of all environmental control measures identified in this plan.

As and when applicable, assigned members of the site team will be given the responsibility for the timely and effective communication of any environmental data and information to all interested parties, e.g. client, subcontractor and members of the professional team, e.g. architect and designers etc.

It is the responsibility of the Project Manager to ensure that team members are aware of their environmental responsibilities and that they are suitably trained as necessary.

Overall responsibilities for the environmental management system are detailed on the following table:

| **Position** | **Responsibilities** |
| --- | --- |
| Pre-Construction Team | It shall be the responsibility of the pre-construction team to identify:   * Any client surveys or actions which need to be taken, identified as part of planning consents, BREEAM, or required by S&T’s standards. * Outputs from the above shall then be added to the identification of significant aspects table by the Pre Construction Team so the team can identify risks, mitigate those risks, and consider the potential on-cost of the controls needed for those mitigation measures in both the pre-construction and construction phase parts of the project. * It shall be the responsibility of the pre-construction team to carry out a local environmental impact assessment, as early as possible in the project, to identify the interested parties, their needs and expectations, activity that may pose risk, together with the opportunities to control the risks to the project, and the surrounding environment, not already identified by the client, S&T, Planning, or surveys. * This should identify any additional aspects (something we do or have to do) to control additional risks (at a local level) which may have a cost implication during the pre-construction or construction phases of the project. This information will be recorded by the pre-construction team on the Local Environmental Impact Form. * The purpose of this is to take a “holistic” view (big picture) to ensure all aspects and controls are identified and any costs which may arise as a result of working in the local environment and may affect the construction phase have been adequately considered. * This information will be transferred from the Local Environment Impact Assessment by the pre-construction team and added to the identification of significant aspects form. * When this is complete, the form will be handed over to the Environment Team in a pre-construction meeting at the earliest opportunity, so that controls can be discussed and agreed, and so that a local aspects and impacts (risk assessment) register can be drawn up by the Environmental Team and the adequacy of controls properly considered. * In addition any controls which may have a legal or compliance obligation shall be written into a local legal register, by the Environment Team which will identify legal and “other” obligations over and above the company legal registers. |
| Operations Manager | * Responsible for ensuring that the construction programme is carried out with effective and efficient consideration of the environment. |
| Site manager / Project Team | * Ensuring all aspects of work on site are carried out with effective and efficient consideration of the environment. * Liaising with the S&T Board of Directors to ensure suitably experienced and qualified personnel are assigned to the project. * Ensure that suitable project and trade contractor resources are applied to environmental protection. * Produce and maintain SEMP, SWMP and Emergency Preparedness Plan and ensure the site follow and respect the plans during the project. * Ensure the review of Trade Contractor Risk Assessments and Method Statements (RAMS) and COSHH Assessments and Safety Data Sheets (SDS) to ensure adequate measures are taken to limit construction impacts. * Any S&T procured products are accompanied with Safety Data Sheet (SDS) and COSHH Assessments from the used chemicals and substances on site. * Ensure that workforce dealing with COSHH substances must have access to the COSHH Assessment prior the commencement of works and are aware of the hazards present. * To inform subcontractors and suppliers of significant environmental impacts and control measures required to minimise them. * Receive waste carriers licenses, waste analysis reports, environmental permits, and environmental exemption and landfill licenses. Chase and escalate if not received in a timely manner. * Ensuring that the necessary environmental licenses, permits or exemptions are in place and filed appropriately. * Make sure an appropriate spill kit procedure is in place. Carry out spill drills as well as ensuring subcontractors who are responsible for COSHH products also have a suitable spillage response / spillage clearing equipment. * Maintain the permanent primary and secondary containment areas. * Provide input into the Environmental Site induction provided to all site staff and visitors (waste management, chemicals and substances storage; use of spill-kits). * Checks/collates waste transfer notes, hazardous waste consignment notes & waste analysis monthly returns. * Establish waste targets produced during the construction phase and liaise with relevant subcontractors to work to maintain these. * Provide Environmental Calculator to HSE team related with energy use, water use and gas, by the 3rd working day of the month. * S&T and subcontractors to provide monthly toolbox talks on environmental subjects (see appendix c) * Enforce the waste hierarchy in all areas of the project. * Work to environmental procedures set by S&T and ensure subcontractors are working to their RAMS and HSE Subcontractor Code of Practice. |
| HSE Manager | * Ensure appropriate processes required for the Integrated Management System are established, implemented and maintained integrating business, safety and environmental philosophy into the business needs of the S&T(UK) Limited. * To advise senior management on all environmental management system matters, to keep them appraised of the performance of the environmental management system and to advise Management where improvements can be made. * To update Management on changes in Legislation, Regulations, Codes of Practice and requirements from interested parties. * Ensure all site locations have developed a Construction Phase Health, Safety and Environmental Plan and the contents of the Plan are disseminated to all employees at the location. * To conduct regular site inspections and more detailed audits periodically. * Ensure the co-ordination of safety and environmental activities. |
| Environmental Advisor | * To advise the Project Team in producing and maintaining the SEMP & Environmental Aspects and Impacts Register. * To advise the Project Team in producing and maintaining the SWMP * To advise the Project Team in producing and maintaining the Emergency Plan. * Receive Environmental Calculator by the 3rd working day of the month from the Project Team. * To carry out fortnightly/monthly environmental inspections and ensure that the action tracker is up to date. Monitors site activities and ensures control measures are in place including emergency equipment. * To ensure a suitable procedure is in place for completion of site based environmental documentation produced on this project as well as to ensure compliance. |
| Contractors | * Provide all the documentation related with duty of care waste documentation (waste transfer notes consignment notes; waste analysis report; waste carrier licenses, etc.). * Provide all the figures related with energy use (fuel used, such as storage or mobile bowser). * Provide a copy of all licenses, permits and consents where is applicable. * Provide a copy of timber delivery notes and invoices (if applicable), as FSC/PEFC certificate. * Provide spill kits and drip trays/plant nappies, where necessary and ensure that the sizes are adequate and are kept in good conditions. * Respect all the Health & Safety and Environment control measures implemented and requested by the Site Team and HSE Team. * Environmental Toolbox Talk carried out on a monthly basis, evidence to be kept on site. See Appendix C “S&T Environmental Toolbox Talk Schedule”, as a guidance to follow up throughout the project. |

This is not an exhaustive list of duties. These may change due to many reasons

# 3. Site Environmental Management

## 3.1 Site interested parties, Legal & other requirements and Environmental Risk Assessment and Method of Works Registers

In order to reduce the environmental impact of our activities, the project team in conjunction with the HSE team, have considered all the affected interested parties, including the obligations, risks and opportunities that can arise from this project (see Appendix D). The legal and other requirements connected with the site activities can be consulted in the Site Legal & Other register (see Appendix E).

The Environmental Risk Assessment and Method Assessment it’s also part of this document and highlights the most significant environmental aspects and impacts that can occur on site, as adequate control measures to be implemented on site to prevent and minimise the environmental risk (see Appendix F).

The Site Manager is responsible for ensuring the control measures are fully implemented and monitored.

In addition to all identified environmental information detailed above, a number of other documents also include environmental aspects, impacts and mitigation measures, as follows:

* Method statements & associated risk assessments for specific activities (e.g. foundation piling) will detail specific environmental impacts and relevant control measures.
* The Construction phase plan outlines additional engineering measures that will be utilised to minimize / mitigate environmental impacts.
* The Traffic Management Plan, Construction Phase Plan and Delivery Considerations & Instructions document outline the proposed approach to delivering to and servicing the site.

## 3.2 Waste Management

### 3.2.1 Pre-Construction Phase Waste Production Targets

The Site Manager will establish the waste production targets during the pre-construction phase, as planned actions to reduce those figures and communicated them to site team and contractors (see Appendix G).

All duty of care waste documentation, such as waste transfer notes, consignment notes, waste analysis reports, waste carrier licenses, environmental permits, and waste exemptions will be gathered throughout construction phase and a copy sent over to S&T’s HSE team.

The comparison between the established targets and actual waste production results on site will be done at post-construction phase and will be communicated to all relevant parties.

### 3.2.2 Site Waste Management Plan

The site team will manage the waste on site and record the waste details.This plan will set up how resources will be managed and waste controlled at all stages during the construction project.

Waste Reports will be provided by the waste management companies on a monthly basis which will include:

* European Waste Catalogue (EWC) Code (See Appendix G.1)
* Waste description
* Weight in tonnes
* Percentage of waste recycled

Table below informs the waste management companies removing the waste produced by S&T on site:

|  |  |
| --- | --- |
| The details of waste carrier hired to transport non-hazardous waste are: | |
| Waste Carrier Name | Ron Smith |
| Carrier License Number | CBDU114502 |
| The details of waste carrier hired to transport hazardous waste are: | |
| Waste Carrier Name | Windsor Waste |
| Carrier License Number | CBDU63545 |
| The details of the transfer stations are: | |
| Transfer Station Name | J&J Franks Ltd |
| Waste Management License Number and/or Pollution Prevention and Control Permit Number | EAWML 83667 |

Table below informs the waste management companies removing the waste produced by different subcontractors working on site:

|  |  |  |
| --- | --- | --- |
| The details of waste carrier hired to transport non-hazardous waste are: | | |
|  | HPC FRAMES |  |
| Waste Carrier Name | J&R HAULAGE LTD |  |
| Carrier License Number | CBDU146504 |  |
| The details of waste carrier hired to transport hazardous waste are: | | |
|  | Via S&T (UK) Ltd |  |
| Waste Carrier Name | Windsor Waste |  |
| Carrier License Number | CBDU63545 |  |
| The details of the transfer stations are: | | |
|  | HPC FRAMES | |
| Transfer Station Name | Sir John Cook | O’Donovan |
| Waste Management Licence Number and/or Pollution Prevention and Control Permit Number | 71323 | 80413 |

Details of the project waste management performance will be reported to the client at project meetings, where required. The initial SWMP will include targets for re-use, recycling and disposal of waste expressed as percentage. The client waste monthly report will include as a minimum:

* Comparison of waste management targets and actual performance.
* Analysis of waste produced on site per month.

The Site Manager is fully responsible for ensuring compliance with current waste management legislation.

In order to comply with current legislation/S&T policy the Site Manager will:

* Identify the types and quantities of waste that the project will produce liaising with subcontractors as and when waste is under the control of the subcontractor.
* Ensure that the SWMP is updated on a monthly basis, to reference all waste that has been produced at site and removed from site.
* Ideally a member of the team on site will be nominated as a “waste champion”, e.g. site manager, site supervisor. The waste champion will report regularly to the person responsible for the SWMP.
* Ensure that waste management/reduction of waste awareness is communicated to the workforce
* Ensure that waste management companies responsible for removing the waste provide copies of their carrier licences and environmental permits. Copies of these licences and permits will be uploaded onto S&T’s system.
* Ensure that copies of all relevant hazardous waste consignment notes and duty of care waste transfer notes are readily available on site for reference and review and are kept available for 3 years.
* Ensure that the SWMP is subject to a comprehensive review at least 3 months prior to completion of the project.
* Ensure that the SWMP is subject to a final review at project handover.

### 3.2.3 The Waste Hierarchy

S&T recognises that waste management starts with resource efficiency, using the raw goods purchased wisely. Our waste management incorporates The Waste Hierarchy and prioritises all such measures to:

* Minimise the generation of waste and achieve Zero Waste to Landfill.
* Reuse materials on site, wherever possible.
* Increase the use of recycled and recovered materials.
* Segregate non-hazardous waste for recycling, wherever possible.
* Segregate hazardous waste.
* Ensure the waste collected on site is efficiently managed to enable recycling, recovery or the best disposal option.

In order to manage waste effectively on site we also will:

* Order the correct amount of materials to be delivered when needed.
* Ensure that materials delivered to site are not damaged or unusable.
* Avoid keeping materials in storage for too long as this as this may lead to damage, spoilage and pilfering
* Reduce the amount of packaging, wherever possible.
* Ensure that waste is handled and stored correctly.

### 3.2.4 Segregation on site

Where possible, the site team will segregate non-hazardous waste material into separate waste streams on site. When segregating waste, the site team will:

* Use appropriate containers.
* Label containers clearly using appropriate signage.
* Allocate designated areas for container in suitable locations.
* Empty containers regularly to prevent lack of space and possible contamination.
* Monitor waste containers to ensure that contamination of segregated waste does not occur.
* Train site personnel via toolbox talks and the site induction programme.
* Enforce the segregation scheme using appropriate personnel, waste champion.

Where there is a lack of space on site to segregate non-hazardous waste, the site team will order mixed waste skips which will then be segregated at the waste facility. This will ensure adequate recycling is carried out. The waste management company will then be required to provide S&T(UK) or subcontractors with a waste analysis report.

Plasterboard waste is classified as non-hazardous, non-inert waste but is not permitted at landfill sites so segregation of plasterboard on site is essential for recycling. Where waste is mixed with other waste streams it will then mean waste is contaminated. The plasterboard waste container must be covered at all times to prevent escape and dry plasterboard is much easier and more cost-effective to reprocess. Also ensure that the skip is clearly identified and locked to prevent contamination from dumping by others.

Where possible, timber is to be segregated from other waste to promote reuse and recycling. Otherwise it will added to the mixed waste skips. S&T also use Community Wood Recycling Project where possible.

The table below will specify the prevention measures in place adopted on Beaverbrook Hotel and Spa to reduce the amount of waste produced on site:

|  |  |
| --- | --- |
| **Description of waste** | **Prevention measures in place** |
|  | See Smartwaste / Site Waste Management Plan within the Waste File |

### 3.2.5 Hazardous Waste

Where a transfer of hazardous waste is a required by a producer to a waste carrier a Consignment Note is required. This document asks the producer to detail the waste they want collected, the quantity, the chemical/biological components and the physical form of the product, e.g. liquid, solid, etc.

As a producer the first six letters of the business name and five numbers as determined by the producer will be used as the premises code on all hazardous waste consignment notes.

Before the commencement of the works the subcontractors must provide detailed risk assessments and method of works how to handle with COSHH substances/chemicals safely and in manner to prevent any ground and water contamination. Safety Data Sheets and COSHH Assessments of all COSHH products must be attached to the RAMS and all these must be submitted to approval of S&T’s site team.

An updated COSHH register must be provided to S&T’s site team when there is a significant change of COSHH products quantities on site, or on a monthly basis.

The Site Manager will ensure that the hazardous waste (e.g. COSHH waste, WEEE, among others) is segregated from non-hazardous waste, and hazardous waste with different characteristics must also be kept separated to prevent any chemical reaction (e.g. aerosols with expanding foam).

All skips must be identified, stored safely and preventive measures are in place to avoid contamination of other waste.

A consignment note in Word format in line with the amendments issued by The Hazardous Waste (England and Wales) Amendment Regulations 2016 can be provided by the HSE Team. It is also recommended for the hazardous waste specialist to use their own hazardous waste consignment notes.

Removal of hazardous waste must be carried out by a licensed waste management company and all duty of care waste documentation must be completed correctly and a copy provided to S&T’s site team. All the information must be stored within site documentation (on site / electronic).

### 3.2.6 Duty of Care, EPA 90

The Duty of Care is set out in section 34 of the Environmental Protection Act 1990 and associated regulations. It applies to anyone who is the holder of controlled waste.

In order to ensure compliance with the Duty of Care the following practices will be followed:

* Obtain copy of the waste carrier licence of the waste carrier company.
* Obtain copy of the environmental permit or waste management licence of the Waste Transfer Stations (WTS) where the waste is segregated.
* Obtain copy of the environmental permit of the landfills where the waste from the WTS is finally disposed.
* Ensure that waste transfer notes and hazardous consignments notes are completed, signed and include:
* Producer of the waste.
* Name, address and postcode where the waste is going to be taken to (Consignment Notes).
* Description of the waste.
* The appropriate 6-digit European Waste Code (EWC), e.g. Construction Mixed Waste 17 09 04
* Quantity (total weight) in kilograms.
* The chemical/biological components of the waste (Consignment Notes).
* Physical form (gas, liquid, solid, powder, etc.) (Consignment Notes).
* Container type, number and size.
* SIC Code.
* Time, date and place site address of collection.
* Keep copies of waste transfer notes for 2 years and hazardous consignment notes for 3 years.
* Ensure staff receives appropriate training.
* Make subcontractors aware of the waste site procedures through site induction.
* Waste Carrier Licences will be of higher tier unless otherwise required e.g. charity, office waste.
* Waste Exemptions will also be received for low risk waste storage e.g. storing small quantities of waste at depot.

### 3.2.7 Prevention of pollution to sewers & watercourses

Many of the materials used in construction operations, such as oil, chemicals, cement, cleaning materials and paint have the potential to cause serious pollution. To prevent the pollution of sewers our Site Team will implement the following best practice:

* In developed areas where there are two types of drainage on site, manholes will be colour coded, for example using blue for surface water and red for foul.
* Measures will be implemented on site to prevent discharge into surface water drains. This starts with ensuring surface water drains are closed as well as diverting run off from the drains
* The boundary of the site will be highlighted on a drawing and show all drains crossing the site boundary.
* All fuel, oil and chemical storage will be sited on an impervious base within a bund and secured. The bund will be oil-tight secondary containment system such as a bund or interceptor drip tray. As a minimum, this containment system shall be large enough to contain 110% of its volume, when the container is over 200 litres, and when more than one container in a bund, the bund must be able to hold whichever of the following is greater:
  + 25% of the total storage capacity.
  + 110% of the largest container’s volume.

Where runoff enters a drainage system it is a requirement to seek permission from the drainage system owner e.g. the local water sewerage company. Where water is to be pumped out of excavations etc. or where discharge is carried out into a local watercourse, permission will need to be sought from the Environment Agency prior to works commencing.

This is carried out by obtaining consent to discharge from the Regulator to discharge trade effluent or groundwater to public foul sewer, when required. Controls will need to be put in place to ensure water is pollutant free. These would be:

* Ensure that washings from concrete vehicles, mixers or pumps do not flow into any drain or watercourse.
* Members of the site team shall be trained in spill response to be prepared in the event of an incident as detailed in the site’s emergency preparedness plan.
* Build roads first to prevent mud and other debris escaping the site.
* Review which type of filtration will be required prior to water entering the drainage system.

### 3.2.8 Washing down plant and machinery

Prior to the commencement of the project a designated controlled wash down area on site must be planned for and put in place. Washing down plant and machinery, hosing down concrete truck mixers, or degreasing engines can all lead to serious pollution incidents, if it is not properly carried out and controlled.

Its location must take into account the receptors on site that may be affected by pollutants, such as local streams, rivers, or drainages. If any receptors will be affected by the location of the wash down area, mitigation measures must be undertaken to prevent an environmental incident, as follows:

* Carried out in a designated area with a hard standing and be at least 10 meters from any surface waters / watercourses.
* Run-off should be collected in a sump, with settled solids removed regularly and water recycled and reused where possible. Any excess water, if not contaminated should be discharged to foul sewer with prior permission from your local sewerage provider or tankered off site for authorised disposal.
* A copy of all relevant documentation as prior permission, duty of care waste documentation must be kept on site either electronically or on file within S&T’s system.

## 3.2 Dust and Emissions

Dust and emissions arising from site may annoy our neighbours and can cause air pollution. Dust blowing onto watercourses can also damage the ecology, affecting plant growth and light levels. To avoid these impacts our sites will:

* Identify sensitive receptors and inform the authorities of any likely nuisance that could occur and agree to remedy the impacts, as record and report the findings to S&T’ site team.
* Implement speed limits on haul routes approaching and within the site. The Traffic Management Plan must be consulted and followed at all times.
* Damp down the areas with water to suppress the dust, ensuring that the application does not create excessive mud that could runoff into watercourses.
* Use dust screening when dust-generating activities cannot be avoided and other measures do not guarantee the reduction of dust in the air.
* Carry out daily visual inspections to mechanical plant on site to ensure that they are in good working order. S&T’s site team will undertake a weekly inspection reporting all the findings on site.
* Monitor the dust on site and put controls in place when necessary e.g. damping down site during dry windy days, using road sweepers when the access roads / site is dusty / muddy.
* Take account of the wind conditions when arranging activities that are likely to emit aerosols, fumes, odours and smoke.
* When contractually required use dust monitoring techniques such as exposing microscope slides, sticky pads and taking samples.
* Provide wheel washers for vehicles leaving the site, where practicable, so the mud is not spread on the highways.
* Minimise cutting and grinding on site where possible.
* Use equipment and techniques such as dust extractors to minimise dust when using cutters and saws.
* Ensure that engines are switched off when they are not in use.

## 3.3 Depletion of Natural Resources

During the preconstruction and construction phase activities, our project will increase the local and global pollution associated with the production of energy from fossil fuels. The use of non-renewable materials also contributes to the depletion of the natural resources. To minimise this impact our Project Manager will implement the following best practices on site:

* Switch off the site and office equipment and lights when not in used.
* Switch off the tasks lights on site.
* Minimise the use of printers.
* Maximise the use of natural light.
* Where possible, propose and use alternative materials to non-renewable materials.
* Promote the use of sustainable materials.
* Where possible, use of more sustainable sources of energy.

Energy consumption (e.g. Electricity, Gas, Diesel, Petrol, LPG, Fuel Oils, etc.), as miles traveled associated with deliveries to site must be recorded and passed over to S&T’s site team on a monthly basis and then it will be fed onto Smartwaste.

## 3.4 Contaminated land

Prior to working on any site, a recent soil conditions / geotechnical survey will be carried out which will determine presence of contaminants. Breaking of the ground is not permitted until the results have been evaluated by a competent person. The survey will be used when determining the soil management plan / site waste management plan.

A risk assessment and safe method of work which identifies the key hazards, risks and control measures to protect the workforce against the risks to their health specific to the geotechnical survey shall be put in place which will be made available to all relevant parties (e.g. principal contractor, contractors and engineers).

Where contaminated land is found during works, works must stop and notification be made to the S&T(UK) site management immediately for further investigation.

No contaminated land has been found.

In addition to the above our management team will ensure that the site:

* If the site has insufficient room to stockpile soil it may be more appropriate to find a sustainable off-site use for the temporary surpluses and then import suitable soil later.
* When stripping, stockpiling or placing soil, do so in the driest condition possible and use tracked equipment where possible to reduce compaction.
* Areas of soil to be protected from construction activities (e.g. retained trees, protected habitats, archaeology, invasive species) should be clearly marked out by suitable and sufficient barriers and exclusion signs. Haul routes should be no wider than necessary to accommodate two passing vehicles and should be stripped of soil down to a firm base. Indiscriminate vehicle movements across soil should be avoided.
* Changes to the Soil Resource Plan, such as changed haul routes or different than intended stockpiling locations, should be clearly marked on plans readily accessible by relevant site personnel.
* Confine traffic movement to designated routes.
* Keep soil storage periods as short as possible.
* Clearly define stockpiles of different soil materials.
* When the excavated material is not reused on site, and is removed from site, duty of care waste documentation must be completed and a copy sent over to S&T’s site team.
* In case the land is contaminated and is removed from site, this must occur through a licenced waste management company and accompanied by consignment note. All documents must be provided to site team and kept on site.

Please see attached WAC Test

No contaminants have been found all soil is inert waste.

### Landscape, habitat or garden creation

* + Ensure that the entire soil profile is in a condition to promote sufficient aeration, drainage and root growth.
  + Safeguard and utilise on-site soil resources where possible. If importing soils, use a reputable supplier, establish the source of the soil and ensure it is suitable for the intended use.

## 3.5 Noise and Vibration

Excessive noise on site can represent a major impact to site workers, neighbours and adjacent wildlife. To avoid these impacts our sites will:

* Carefully select equipment, construction methods and programming to reduce noise and vibration as demonstrable by the selection of the piling rig (Giken 700 eco silent reaction press piling rig) specified to drive piles with minimum impact on local receptors.
* Maintain all plant to comply with relevant national or international standard.
* Use of hoardings or screens as noise barriers where appropriate
* Locate plant as far as reasonable practicable from sensitive receptors.
* Ensure that plant is shut down when it is not in use.
* Construct temporary infrastructure (e.g. haul roads) of materials that minimise noise and vibration.
* With agreement from the client, and for projects in residential areas, make an application for consent under Section 61 of CoPA 1974 to the relevant local authority before works begin.
* Include noise minimisation practice in induction.
* Liaise with the community to provide information of the noise work activities and their durations.
* Arrange delivery times to suit the area, for example for residential areas.
* Reduce the need for noise assembly on site wherever possible.
* Noise, PM10 and vibration are being constantly monitored.

## 3.6 Traffic Management

Traffic must be managed efficiently on site to avoid causing nuisance to local residents in terms of noise, dust, congestion and road closures. Most of the best practices that must be followed to minimise these impacts have been already covered in the previous sections, however there are some actions that are directly related to traffic management such as:

* Schedule site deliveries outside times of peak traffic volume.
* Ensuring that deliveries to site are kept to their allocated time slots.
* No parking in residential streets surrounding the site.
* While on site, the drivers will be asked to remain in their cabs at all times, unless operating vehicle sheeting mechanism or using the welfare facilities.
* All loaded vehicles leaving site must be sheeted.
* Ensure that pedestrians and vehicles are segregated at all times by using designated walkways on and around site.
* Utilise public transport or vehicle sharing when commuting to site.
  + Restrictions on parking of the Contractor's and employees' vehicles: Parking is provided adjacent to the Main House (within the site demise and to the main car park up the hill from the Main House). No further parking space will be provided.
  + While on site, the drivers will be asked to remain in their cabs at all times, unless operating vehicle sheeting mechanism or using the welfare facilities.
* All loaded vehicles leaving site must be sheeted.
* Ensure that there are designated walkways on and around site.
  + Mitigation measures to control construction traffic will be discussed and agreed with the local Borough.
  + A delivery consideration and instructions document that outlines site rules and driver’s responsibilities has been produced. This document will be distributed to all delivery drivers for their review and acceptance prior to them being allowed to undertake deliveries to site.
  + A wheel wash shall be sited just before the exit to prevent the spread of muck from site onto the footpath and public highway.
  + A traffic management plan that outlines site rules and driver’s responsibilities has been produced. This document will be distributed to all delivery drivers for their review and acceptance prior to them being allowed to undertake deliveries to site.

Further detail and clarification for the traffic management decisions taken and implemented can be found on the site’s Traffic Management Plan and Control of Significant Hazards section of the construction management plan.

## 3.7 Biodiversity

Construction work (such as demolition, site clearing and dewatering) potentially impact on plants and wildlife in the following ways:

* Disturbance of birds, bats, badgers and other protected species
* Removal and fragmentation of habitats
* Disturbance to aquatic wildlife and water quality
* Disturbance to wildlife from noise and vibration
* Damage to trees and hedgerows
* Changes in lightning conditions

S&T is aware that there is a high level of protection given to wildlife through legal controls and contract conditions.

The protection of the wildlife and natural features will be adopted on site to ensure that construction activities cause the least damage to the surrounding natural environment.

Our Site Team will:

Before work starts

* The client appoints a SQE (Suitably Qualified Ecologist) to carry out an Ecology Report prior to the commencement of works. Ecology Report will be communicated to S&T site team to enable the team to act according with the recommendations proposed on the report.
* If the client does not provide any ecology instruction and if it is known, or that it is very likely the presence of protected species, TPO, wildlife and habitat conservation on that specific area, S&T(UK) Ltd must contact a competent person to undertake an ecology survey. All the findings and necessary actions must be discussed and implemented before and throughout the job.
* Liaise with statutory bodies and local groups to explain any mitigation measures to be used, where is applicable.
* Where there is a need to take, disturb and relocate protected species, consents should be obtained from the relevant regulatory body and this job must be carried out by competent company and qualified person.
* Plan site clearance/demolition works to avoid any nesting, hibernation or breeding seasons.
* Inform and explain to personnel the drastic environmental consequences of damaging protected species and destroying ecologically areas. This will be communicated during site induction and Toolbox Talks.

During construction

* Regularly check the condition of fencing of any designated protected areas.
* Refer to the ecology year planner to be aware of differing seasons and constraints.
* Ensure watercourses are free from contaminated run-off or any other forms of pollution.
* Confirm compliance against method statements, the site environmental management plan and any environmental contractual requirements.
* In the event of any unexpected ecological finds, stop work and then consult with the S&T’s site team and the SQE appointed and statutory bodies.
* When trees are found on site, the controls associated with Tree Preservation Orders (TPO) will be implemented respecting the SQE recommendations. Where applicable, the trees noted as adjacent to the site boundary will be subject to preservation protocols.
* No storage of equipment and materials is permitted in protection zones.

Protected species found on this site:

* Small populations of common lizard, slow worm, grass snake and adder;
* The species of bat positively identified as using the study site were: common pipistrelle (Pipistrelles pipistrelles), and soprano pipistrelle (Pipistrelles pygmaeus);
* Confirmed presence of badgers;
* No amphibians of note have been observed on site;
* High diversity and large number of rare and BoCC species within the wider area. no ground-nesting species have been recorded. The surrounding woodland/ scrub support typical species associated with these habitats including scrub warblers (e.g. common whitethroat and blackcap), and woodland edge (“garden birds”) species such as robin and blackbird;
* Among others.

## 3.8 Archaeology and built heritage

Archaeological remains and built heritage are an irreplaceable and valuable part of our national heritage; therefore efforts must be made to preserve these important assets.

The Client has undertaken archaeological studies previously and there is no remaining archaeological interest.

The Site Team will:

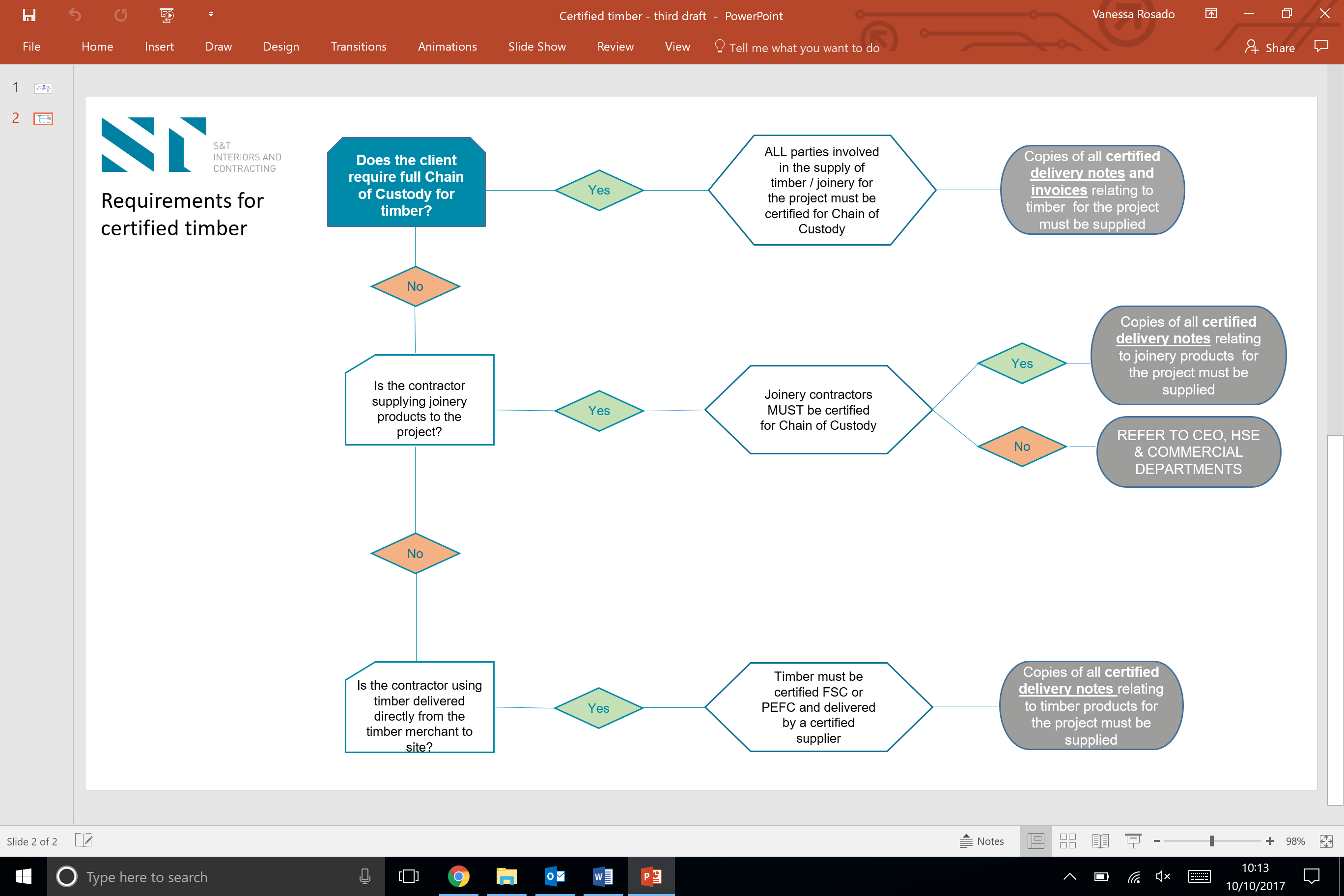
* Read and follow the archaeological watching brief providing access and support to the archaeological team as required and report any finds arising during construction.
* Protect known archaeological and heritage areas.
* If any unexpected finds are encountered, stop the works and report to S&T’s site team, as contact the local archaeological officer at the local authority.

# 4. Chain of Custody (CoC)

The CoC scheme enables timber produced in certified forests to be tracked all the way from the forest to end of use, preventing the possibility that non-certified material might be replaced at some stage.

Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC) schemes are the two-independent international chain of custody certification programmes, both dedicated to sustainable forest management. However, the schemes operating independently from each other, therefore S&T is certified by both.

As a user of timber and wood-based products, S&T(UK) Ltd recognises that it has a responsibility to current and future generations and will therefore strive to promote sustainable forest management, in line with the flow chart below.



*Elsworthy Road is a Code for Sustainable Home project and one of the requirements is the use of certified timber throughout the project. All sub-contractors supplying timber to the project have to provide a copy of validated timber delivery notes, at a timescale agreed with S&T’s site team.*

# 

# 5. Water Consumption

S&T has committed to minimise the use of water wherever is possible, putting simple measures in place, as small adjustments can have a big impact.

During the project, S&T will implement the following measures on site:

* Only use water when need it to. Record the water usage to understand the demands.
* Educate staff about implementing water-efficiency measures, e.g. to report leaking taps straight away.
* Buy water efficient new equipment, wherever possible.
* Protect against cold weather-related leaks by insulating pipes and checking them regularly.
* Fit water-minimising controls, e.g. push taps, low-flush toilets, flow regulators or restrictors.
* Fix drips and leaks as quickly as possible.

Any water that is brought to the project via bowsers and containers, as all water supplies (hydrants and mains) will be metered and read and all this information will be entered onto Smartwaste by the site team, on a monthly basis.

# 6. Subcontractors Environmental Considerations

S&T works with subcontractors who are approved on our subcontractor database as a result of a detailed health, safety & environmental assessment. As part of this assessment, each sub-contractor must commit to our health, safety and environmental standards as detailed within ‘Sub-Contractors HSE Code of Practice’ and complete a Sub-Contractors Health, Safety & Environmental Competency Questionnaire.

Each sub-contractor will also provide documentary evidence of their environmental impacts as a result of operational activities and what environmental controls will be implemented on site to manage this e.g. environmental plan, environmental assessments, method statements and risk assessments.

Our subcontractors will be issued with the SEMP and the SWMP for the project, to ensure that specific environmental requirements are understood.

Each subcontractor is required to provide evidence to verify their level of environmental training, qualification, awareness and competence to support their activities on site.

All subcontractors will be responsible for using designated waste bins or alternatively, where it has been contractually agreed to do so, the contractor will remove their own waste from their workplace. In this situation, they will require to provide details of volumes and types of waste that have been removed to support periodic updates to the SWMP, as a copy of waste transfer notes, hazardous waste consignment notes, waste carriers licences, environmental permit, environmental exemptions, etc.

Subcontractors shall provide pollution prevention measures especially in regards to oil storage and the storage of hazardous materials, such as provision of suitable drip tray and adequate spill kit. Fuel Spills procedures must be communicated to workforce through toolbox talks, evidences of attendance must be kept on site.

# 7. Environmental Training Needs

Specific training requirements will be identified and recorded by Human Resources, in line with the company’s Training Procedure.

Site-specific Inductions, Toolbox Talks and Internal Environmental Inspections reports will include environmental risks and associated precautions identified in the Environmental Aspects and Impacts Register.

As a minimum, the induction will include details of:

* Considerate Constructor Scheme
* Noise management including working hours and quiet times
* Waste management including segregation on site
* Control of environmental incidents
* Chain of Custody Requirements

Environmental Toolbox talks will be carried out on monthly basis. Records of the specific environmental training will be kept in the HSE file. A TBT schedule can be found in appendix c.

# 8. Environmental Monitoring

## 8.1. Monthly Environmental Inspection and Monitoring

S&T’s site team will carry out weekly inspections where an Environmental section has to be completed. All environmental findings will be raised and addressed to the person responsible to immediately take the necessary actions.

Completed environmental reports will be held in the Site Environment File.

## 8.2 Site Environmental Visits

S&T’s HSE Team will visit site on a regular basis, accompanied by S&T’s construction manager to whom all the environmental issues will be raised and immediately closed out, if possible.

An Internal Environmental Report will be undertaken afterwards and communicated to the site team, all the environmental findings during the visit, as corrective and preventive measures to be implemented, as timelines agreed and person responsible.

These corrective and preventive actions, as all the relevant details will be entered on to the Action Tracker.

# 9. Document and Data Management

The Project Manager will develop a site safety filing system to contain all the Health & Safety and Environmental documentation to be retained on site. Electronic documents will be filed on the internal server – m: drive.

Typical examples of environmental records and data include:

* Site Environmental Management Plan
* Environmental Aspects and Impacts Register
* Site Waste Management Plan
* Waste Reports
* Copy of carriers licences
* Copy of waste management licences
* Copy of waste transfer notes/ consignments notes
* Environmental Incidents records
* Environmental complaints
* Monthly Environmental Inspections
* Internal Audit Reports

On completion of the contract all of the HSE Files will be archived with the site files.

# 10. Incident Response and Emergency Preparedness Plan

## 10.1 Incident Response and Investigation

An investigation will be carried out if an incident occurs in order to ascertain the cause and to ensure that the likelihood of it reoccurring is minimised, e.g. by amending the Emergency Preparedness Response Plan, notifying all staff of incident/lessons learnt.

The Site Team will follow S&T’s Environmental Procedure in the event of an incident.

Incidents will be recorded on the Incident Report Form.

## 10.2 Emergency Preparedness Response Plan

The Site Manager will liaise with the HSE Team to prepare the Emergency Preparedness Plan ensuring that all emergency environmental aspects and impacts are included in the plan. Emergency Preparedness shall be communicated to all parties. The following information belongs to the Emergency Preparedness Plan and it is essential to be aware of any emergency situations that may arise on site in line with our activities.

### 10.2.1 Emergency Contact Numbers

In the event of a pollution incident, the Site Manager will control the situation and direct the immediate response through delegation, as necessary.

|  |  |  |  |
| --- | --- | --- | --- |
| SITE MANAGER | |  | | --- | | **Patrick Kenny** | | **07720 085203** | |
| EMERGENCY SERVICES | **999** |
| ENVIRONMENT AGENCY (EMERGENCY SERVICES) | **0800 807 060** |
| THAMES WATER | **0800 316 9800** |
| HSE MANAGER | **Maria Busa** |
| **07525 210 863** |
| ENVIRONMENTAL ADVISOR | |  | | --- | | **Maria Busa** | | **07525 210 863** | |

### 10.2.2 Location of sensitive receptors

Nearby the sensitive receptors a spill kit must be placed and its provision kept in good conditions:

|  |  |  |
| --- | --- | --- |
| **Sensitive receptors** | **Location** | **Spill kit is located nearby Y/N** |
| Surface water drain 1 | Elsworthy Rise | No this is outside the site boundary this will be in the site office |
| Watercourses | N/A |  |
| Mobile bowser | N/A | N/A |
| Diesel storage | COSHH cabinet | Yes |
| COSHH storage | In enclosed area, next to the stairs | Yes |
| COSHH waste area | No COSHH waste at the moment |  |
| Bottle Gas Storage | N/A |  |

### 

### 10.2.3 Emergency Spillage Control Team

The following personnel have been trained in the use of spillage control kits and clean-up operations and comprised the Emergency Spillage Control Team:

|  |  |
| --- | --- |
| Name / Position | Responsibilities |
| Patrick Kenny | Take immediate remedial actions – block spill; place booms and absorbent materials to help soak up the spill and use the advice in the oil spill response kit.  Remove oil spill response materials and dispose of in accordance with the site waste management plan |
| Patrick Kenny | Remove and exclude persons from danger area where appropriate. |
| Patrick Kenny | Isolate sources of ignition. |
| Patrick Kenny | Inform the Health, Safety & Environmental manager to identify more detailed required actions. |

In the event of a spill incident contact one of the members of the Emergency Spillage Control Team specified above.

### 10.2.4 Spillage procedure

S&T Spillage Procedure poster will be displayed wherever a hazardous liquid is routinely being handled. This includes diesel storage tanks and fixed plant containing a significant quantity of fuel or oil.

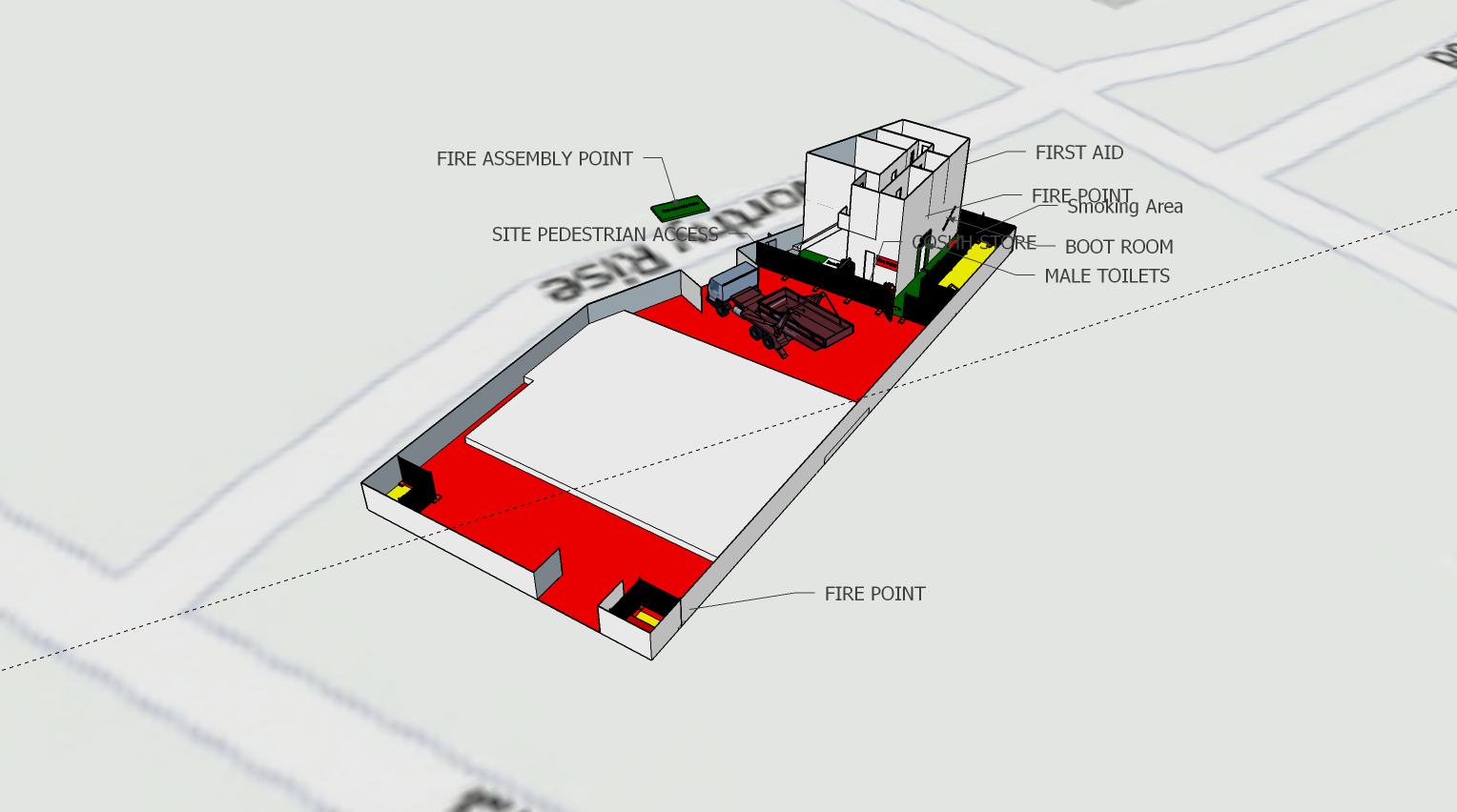
See Appendix H.

# Appendices

## Appendix A – S&T’s Environmental Policy Statement

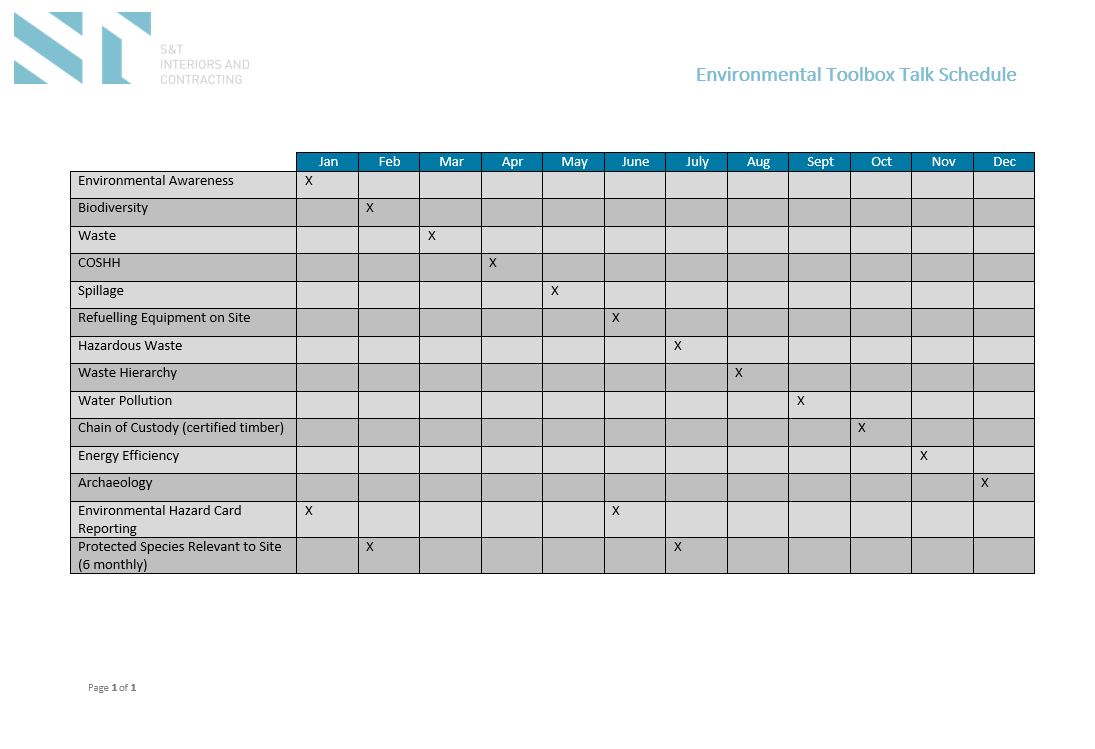


## Appendix B – Site layout



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## Appendix C – Environmental Toolbox Talk Schedule



## Appendix D – Local Environmental Impact Assessment (Obligations, Risks and Opportunities Register)

**Procedure**: Highlight interested parties that are affected by works being carried out. Describe their needs and expectations and the risks and opportunities.

| **Interested Parties** | **Needs and Expectations** | **Aspects and Risks** | **Opportunities to control the risk** |
| --- | --- | --- | --- |
| School – School is in the close vicinity but is in the local town | Protect children from noise, dust  Prevent children entering site  Roads are kept clear and clean for parents and children | Fail to protect children from noise and dust  Children enter site without permission  Mud on the roads  Poor management of deliveries | Monitor noise and dust  Put up hoarding, vision panels, signage  Engage with school  Wheel wash and Traffic Management Plan  Timed Deliveries |
| Local Businesses | We will not affect businesses through:  Traffic  Noise  Dust  Infestations of species such as rats etc. | Mud on the roads,  Poor management of deliveries  Complaints  Fines and prosecutions | Monitor noise and dust  Noise and dust suppression  Wheel wash  Traffic Management Plan / Timed Deliveries |
| Local Residents | Protect neighbours from noise, dust, vibrations  Prevent infestations of species such as rats etc.  Prevent disruption from delivery vehicles and those commuting to site. | Failure to protect neighbours from statutory nuisances  Poor management of deliveries  Mud on roads  Health issues | Monitor noise, dust and vibrations  Noise and dust suppression  Reduced vibration piling equipment being used  Wheel wash and Traffic Management Plan  Engage with the local residents through newsletters  Engage with pest control where required |
| Local Authority | Do not carry out works without the improper licences and permits  Be respectful while working  Carry out any planning requirements such as S106 etc.  Not cause pollution and nuisances | Failure to comply with statutory nuisance regulations  Failure to comply with waste regulations  Failure to comply with planning consent | Monitor noise, dust and vibrations  Noise and dust suppression  Reduced vibration piling equipment being used  Receive licence |
| Client | Reduction and prevention of environmental impacts caused by the construction site | Loss of new clients & projects  Decrease of profit  Cost of compliance;  Time frames to complete project | Gain of reputation in the market  Opportunity for new clients &projects Increased profits through improvements in environmental management  Compliance with the planning conditions |
| Contractors | We will protect them from being able to damage biodiversity on site.  We will prevent contractors from working outside of environmental regulation concerning our activities  Prevent excess deliveries from being carried out  Use of sustainable sourcing materials, such as timber | Failure to protect biodiversity  Poor management of deliveries  Fly tip waste controlled by contractors  Discharge water without following controls required and prior consent in place | Ensure trees are being protected at all times  Raise awareness of tree protection measures through induction and 6 monthly toolbox talks  Subcontractors complete the environmental calculator which includes deliveries and waste mileage  Subcontractors work in accordance with the HSE Subcontractor Code.  Ensure all subcontractors are approved  Provision of validated timber delivery notes |
| Suppliers | We will procure sustainably where possible in line with BREEAM and company standards for timber | Use suppliers who don’t procure sustainable timber, metal etc. | Ensure all subcontractors / suppliers are approved  Procure materials in line with client, BREEAM, Sustainable Timber standard requirements. |
| Licensed Asbestos Removal Company / Accredited Laboratory | Full asbestos removal in order to avoid health issues and environmental contamination | Asbestos removal not being carried out correctly and high risk of health issue related and ground, water, air pollution | Workforce are trained and aware how to identify asbestos, if they suspect of the existence of more asbestos, they stop the works and report to S&T’s site team for further information.  Disposing of hazardous waste in a safely and legally manner |

## Appendix E – Site Legal & Other Register

**Procedure**: Highlight the positive and negative aspects that are affected by works being carried out. Describe the legal and other obligations, as the objectives and targets established by the client, or in line with S&T’s objectives. Then highlight any actions that are required to be carried out.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Aspects** | **Legal & other** | **Site Objectives & Targets** | **S&T Objectives & Targets 2017** | **Monitor / Action taken by site team** | **Name of Responsible Person** |
| Failing the control of dust and noise emission, vibration (i.e. Statutory Nuisances | Section 61  Planning conditions.  BREEAM  Considerate Constructors  Induction | Reduce impact on the environment as a result from our activities  Work to S&T procedures  Carry out 1 construction managers inspection per week  Subcontractor provide 1 inspection from their HSE Advisor per month  HSE Advisors provide 1 inspection per month  All new starters receive an induction | Reduce impact on the environment as a result from our activities  Work to S&T procedures  Carry out 1 construction managers inspection per week  Subcontractor provide 1 inspection from their HSE Advisor per month  HSE Advisors provide 1 inspection per month  All new starters receive an induction | Monitoring noise, vibration and dust emitted by site activities  Liaise with local neighborhood and kept them informed of noisy activities  Carry out construction manager inspections  Project Manager construction manager processes are being carried out.  Monitor complaints | Patrick Kenny |
| General public entering on site without permission | HSE Regulations  Considerate Constructors  CDM  Biometric System  Local residents | All those inducted will have their finger print taken for the biometric system.  Near zero accidents and near zero environment impacts | Near zero accidents and near zero environment impacts | Security of site being reviewed regularly  Site inspections carried out frequently | Patrick Kenny |
| Poor management of deliveries & contractor parking blocking neighbours entering the road | Traffic Management Plan  Planning conditions.  BREEAM  Considerate Constructors  Local residents | Subcontractors and suppliers will receive a copy of the TMP | Suppliers will be FORS registered | Construction Manager Site Inspection  Project Manager construction manager processes are being carried out.  TMP must fit for purposes and be adhered at all times | Patrick Kenny |
| Mud on the road | Control of pollution act  BREEAM  Considerate Constructors  Local residents | A weekly road sweeper will attend site | Reduce impact on the environment as a result from our activities  Work to S&T procedures  Carry out 1 construction managers inspection per week  Subcontractor provide 1 inspection from their HSE Advisor per month  HSE Advisors provide 1 inspection per month  All new starters receive an induction | Construction Manager Site Inspection  Project Manager construction manager processes are being carried out. | Patrick Kenny |
| Complaints – noise, smell, dust, Rubbish, Light and Smoke | Control of pollution act  Considerate Constructors | Where complaints are received, these will be reported as soon as reasonably practicable to environmental advisor. | Where complaints are received, these will be reported as soon as reasonably practicable to environmental advisor.  Immediate control measures will be put in place | Construction Manager Site Inspection  Project Manager construction manager processes are being carried out. | Patrick Kenny |
| Reuse of timber on site | Compliance with Waste regulations and waste hierarchy | 95% of existing timber reused on site | 93% waste diverted from landfill  Joinery companies to be CoC certified  All temporary and permanent timber to be certified | Ensure that existing timber is reused on site where possible | Patrick Kenny |
| Groundwater / Trade Effluent Discharge | Water Resources Act  Water Industry Act | Groundwater has not been found as yet.  Sewage goes to a septic tank that it’s emptied through a vacuum truck  Oily water must be stored and disposed of as hazardous waste | Disposal of hazardous waste through licenced waste management company and accompanied by consignment note | Discharge licence in place before discharge any water into the drainage  Hazardous liquid waste stored correctly and disposed of accordingly | Patrick Kenny |
| Waste | Waste Regulations | Duty of care documentation received and accurately completed  Divert at least 93% waste from landfill  Reduce waste by managing offcuts and storage of materials | Divert 93% waste from landfill  Waste hierarchy  Reduce waste | Construction Manager monitors waste and storage areas  Ensuring materials are suitably stored on site.  Liaise with subcontractors | Patrick Kenny |

## Appendix F – Environmental RAMS

Environmental Risk Assessment and Method Statement

**(Project Aspects and Impacts)**

The Construction Manager is to identify relevant Works Package and its Aspect and Impact that’s relevant. They are to then identify its R/A/G status to show compliance to control measures and mitigation measures.

**Definition**: An Environmental Hazard or Aspect is an element of an organisation’s activities, or products, or services, or substance that interacts or can interact with the environment, which has the potential to threaten or to improve the surrounding natural environment and / or adversely affect people's health.

Environmental Impact / Risk is actual or potential threat of adverse effects on living organisms and the environment by effluents, emissions, wastes, resource depletion, etc., arising out of an organization’s activities. This could be a positive or a negative effect, positive effect is the gain of better public transports, negative effect is loss of temporary amenity and pedestrians’ routes.

1. The Environmental Risk Assessment carried out should consider Normal **(N)** and Abnormal **(Ab)** operating conditions, such as shut-down and start-up conditions, as well as the emergency **(E )** situations.
2. Classification of Risk

|  |  |  |
| --- | --- | --- |
| Green | Improbably, unlikely | No harm to the environment, no breach of legislation and/or company standards, no significant environmental gains |
| Amber | Occasional chance | Limited short term harm to the environment, breach of legislation or company standards, moderate environmental gains |
| Red | Likely or certain | Immediate long term or severe harm to the environment, major breach of legislation or company standards, immediate long term environmental gains |

| 1. **TYPE OF SITUATION**   **N/Ab/E** | **ASPECT** | **IMPACT** | **(2)RISK**  **R/A/G** | **CONTROL MEASURES & MITIGATION**  **(AMEND TO SUIT PROJECT REQUIREMENTS)** | **RESIDUAL RISK**  **R/A/G** |
| --- | --- | --- | --- | --- | --- |
| N | Statutory Nuisances (e.g. environmental dust, noise vibration etc.) | Local Health issues  Disturbance of local resident’s life  Disturbance of local wildlife  Air pollution  Noise and vibration effects | **R** | * Undertake environmental dust and noise monitoring * Section 61 notices * Acoustic barriers * Liaise with neighbourhood (i.e. provision of electronical newsletters with scope of works, duration of project, date of noisy activities, etc.) * Use of dust extraction at all times * Noise, vibration PM10 particles are being monitored in “real-time” | **A** |
| E | Noise, Dust etc complaints | Local Health issues  Disturbance of local resident’s life  Disturbance of local wildlife  Air pollution  Noise and vibration effects | **R** | * Report the incident / complaint to the HSEQ department * Investigate the root cause and look at preventative actions preventing reoccurrence * Implement any actions * Notify relevant third parties * Training | **G** |
| N | Asbestos | Possible pollution factors / harm to biodiversity / disruption to neighbours /delays to programme | **R** | * Complete Environmental Management Plan * Asbestos Register and surveys * Issue to all subcontractors * Keeps survey results and records accessible on file. * Issue to BREEAM Assessor where necessary | **G** |
| E | Asbestos Release | Possible pollution factors / harm to biodiversity / disruption to neighbours /delays to programme | **R** | * Prepare emergency plan. * Test emergency procedures on a regular basis * Have emergency controls in place * Contact HSE department and make report | **G** |
| N | Checking the construction site for archaeology and existing built heritage. | Damage to existing archaeology and existing built heritage | **R** | * Watching brief during all excavation works * Fence off built heritage which could be damaged during the works * Use of low vibration plant and equipment when working near built heritage * Call the Local Authority Archaeology Officer in the event of finds * Report all finds of Treasure to local police station | **G** |
| N | Protected trees, wildlife, flora or fauna, Surrounding structures, Risk of nuisance | Damage & pollution to local environment / loss of ecology | **R** | * Ecology / Arboricultural Survey * Communicate survey findings to those working on site * Plan to protect trees, wildlife, flora or fauna * Physical protection and signage to trees and wildlife areas * Issue Toolbox Talks for wildlife, nesting birds etc 6 monthly. * Display appropriate awareness posters | **A** |
| E | Damage / Killing / Harming trees, wildlife, flora or fauna, surrounding structures | Damage & pollution to local environment / loss of ecology | **R** | * Prepare emergency plan. * Test emergency procedures on a regular basis * Have emergency controls in place * Contact HSE department and make report | **G** |
| N | Formation or provision of temporary offices and welfare facilities | Damage to local environment / pollution / energy usage / water usage / use of materials / loss of ecology | **R** | * Specification to S&T minimum standards * Low energy and water specifications * Consider location of cabins to ensure the best sunlight. | **A** |
| N | Removal of controlled and hazardous waste caused by the construction works | Waste to landfill / pollution of land / Illegally tipping waste | **R** | * Follow S&T Waste Management Procedure * Complete S&T Site Waste Management Plan * Separate segregation for gypsum waste and hazardous Waste * Explore opportunities for reusable packaging and offsite fabrication * Reuse off cuts and materials wherever possible * Provide sufficient storage space, signage and opportunity for segregation (plan this using the SWMP) * Ensure stored waste cannot leach into ground or blow away * Cover plasterboard skips * Encourage good standards of housekeeping | **A** |
| E | Flytipping Waste come from S&T Site | Waste to landfill / pollution of land / Illegally tipping waste / air emissions | **R** | * Prepare emergency plan. * Test emergency procedures on a regular basis * Have emergency controls in place * Contact HSE department and make report | **G** |
| N | Breaking, cutting, crushing, welding, fire | Vibration / dust / noise / hazardous waste / waste to landfill / water pollution / silt / damage to flora & fauna | **R** | * Restrict hours of noisy operations and monitor noise in accordance with Section 61 agreement * Damp down dusty operations * No fires on site * Undertake regular dust monitoring * Site hoarding or fencing to restrict dust movement * Regularly check hoarding to ensure its viability | **A** |
| E | Fire | Air emissions / pollution to watercourses / pollution to land | **R** | * Prepare emergency plan. * Test emergency procedures on a regular basis * Have emergency controls in place * Contact HSE department and make report * Protect drainage and watercourses where possible | **G** |
| A | Excavations / plant / bored piles / driven piles / sheet piles / welding / concrete / reinforcing | Vibration / dust / noise / waste to landfill / damage to aquifers / silt / run off / damage to flora / fauna | **R** | * Restrict hours of noisy operations and monitor noise in accordance with Section 61 agreement * Damp down dusty operations * No fires on site * Undertake regular dust monitoring * Site hoarding or fencing to restrict dust movement | **G** |
| N | Excavation, plant movements, diggers, dumpers, Waste Removal | Vibration / dust / noise / waste to landfill / silt / run off / damage to flora / fauna | **R** | * Restrict hours of noisy operations and monitor noise in accordance with Section 61 agreement * Site hoarding or fencing to restrict dust movement * Pave haulage roads and storage areas where feasible and enforce a site speed limit * Use wheel wash at site exit * Water used as dust suppressant for dusty works. * Cover stored materials, chutes & skips * Cover skips and wagons leaving site. * Undertake regular dust monitoring * Seed or cover soil & aggregate stockpiles | **A** |
| N | Drainage connections to existing / foundations / concrete / steel reinforcing / dewatering | Use of natural resources / dust / noise / vibrations, / silt / run off & water pollution / damage to ecosystem / ground contamination / waste to landfill | **R** | * Restrict hours of noisy operations and monitor noise in accordance with Section 61 agreement * Encourage use of recycled aggregates and GGBS or PFA cement substitute * Encourage use of high recycled content steelwork & reinforcement * Plan concrete washout * Obtain Trade Effluent Consent if disposing of any liquids down foul drains * Water used as dust suppressant for dusty works. * Cover stored materials, chutes & skips * Cover skips and wagons leaving site. * Undertake regular dust monitoring | **A** |
| E | Dewater without consent / no trade water discharge consent in place | Pollution to watercourse / pollution to land / damage to flora and fauna | **R** | * Prepare emergency plan. * Test emergency procedures on a regular basis * Have emergency controls in place * Contact HSE department and make report * Protect drainage and watercourses where possible * Provision of a SuDS | **G** |
| N | Structure - Concrete frame / reinforcing / aggregates / steel frame / metal decking / scaffolding | Use of natural resources / dust / noise / vibrations / water pollution / ground contamination / waste to landfill | **R** | * Restrict hours of noisy operations and monitor noise in accordance with Section 61 agreement * Encourage use of recycled aggregates and GGBS or PFA cement substitute * Encourage use of high recycled content steelwork & reinforcement * Plan concrete washout * Obtain Trade Effluent Consent if disposing of any liquids down foul drains * Water used as dust suppressant for dusty works. * Cover stored materials, chutes & skips * Cover skips and wagons leaving site. * Undertake regular dust monitoring | **A** |
| N | Metal / slate / clay tiles / timber / felt / bitumen / asphalt / plastics, protection materials / insulation / packaging / protection materials / paints / coatings | Use of materials, hazardous waste, waste to landfill, hydrocarbons, air & land pollution, damage to flora & fauna | **R** | * Use low VOC adhesives * Minimise use of PVC * Use sustainable materials * Restrict hours of noisy operations and monitor noise in accordance with Section 61 agreement * Encourage use of recycled content in glass and insulation materials | **A** |
| N | Timber / metals / felt, transportation / packaging | Use of natural resource / use of materials / waste packaging / waste to landfill / air & land pollution / traffic | **R** | * Sustainable Timber to be specified * Maintain records of sustainable sourcing / Chain of Custody * Reuse timber on site or donate to charity | **A** |
| N | Clays / concrete / cement / sands / lime / metals / insulation / transportation / packaging | Use of natural resource / use of materials / waste packaging / waste to landfill / air & land pollution / traffic | **R** | * Encourage use of recycled content in blocks and insulation materials * Encourage use of GGBS / PFA cement substitute * Plan to reduce mortar & block waste | **A** |
| N | Stone / granite / marble / cleaning fluids / metals / water usage / transportation / packaging | Use of natural resource / use of materials / waste packaging / waste to landfill / air & land pollution / traffic | **R** | * Restrict hours of noisy operations and monitor noise in accordance with Section 61 agreement * Plan to reduce wastage | **A** |
| N | Silicone / plastics / packaging | Waste / packaging / hazardous waste / waste to landfill | **R** | * Plan to use non-hazardous materials * Use segregated hazardous waste storage | **A** |
| N | Plasterboard / gypsum / adhesives & coatings / metals | Waste materials, packaging, waste to landfill | **R** | * Plan plasterboard cuts to reduce waste * Reuse off cuts * Plan tool and equipment washing to avoid discharge into drainage * Segregation of gypsum waste * Cover plasterboard skip | **A** |
| N | Paints / solvents / adhesives / plastics / paper | Hazardous waste / waste to landfill / VOC / air & land & water pollution | **R** | * Specify low VOC paints and decorative finishes * Plan brush & roller washing to avoid discharge down drains or watercourses | **A** |
| N | Invasive weeds / weeds/grass cutting/ soil certification/ Choosing species  / waste removal | Contamination / loss of biodiversity / land pollution / water pollution | **R** | * Review Ecology Surveys / Arboriculture Survey / Species Surveys implement recommendations * Receive evidence confirming soil type * Review chemical storage * Receive training certificates for those using herbicides * Biodiversity method statements are to be issued to subcontractor carrying out works. | **G** |
| N | Fire / Spillages / Contaminated Soils / Nuisances Complaints / Biodiversity / Flytipping | Loss of biodiversity/land pollution / water pollution / contamination | **R** | * Complete Emergency Plan * Spill kit checklist * Emergency poster * COSHH storage / waste * Waste management plan * Soil Analysis Report * WAC test * Noise / Vibration monitoring * Asbestos survey / register / management plan * Fire Risk Assessment including management of fire water * Test Emergency Plan | **A** |

## Appendix F1 – Risk RAG List

|  |  |
| --- | --- |
| Red  (High Level) | * Asbestos Risk |
| * Hazardous waste; e.g. aerosol cans, oil, solvent base paint tins, fridges, fluorescent tubes, etc. |
| * Solvent based paints |
| * Contaminated Land; e.g. mercury, lead, etc. |
| * Presence of contaminated groundwater |
| * Fuel storage over 50 litres |
| * Flammable, highly and extremely gases and liquids used and stored on site |
| * Spillage or leakage from a vehicle/machinery/tools or from chemical products used on site |
| * Discharges without prior consent in place |
| * Emissions of VOC’s and CFC’s (air conditioning, fridges, etc.) |
| * Mud on the road / traffic disruption / uncontrolled deliveries |
| * Protected species on site, e.g. Bats, nesting birds |
| * Tree Preservation Order (i.e. protected trees) |
| * Invasive species (Japanese knotweed, signal crayfish etc.) |
| * Soil Contamination |
| * Flood risk – table and surface water |
| * UXO/UXB – Unexploded bombs and ordinance |
| * Heritage and Archaeology |
| * Radon Gas |
| * Any pollution to a controlled water, river, FWS, SWS, or ground water |
| * Flights and air transport |
| * Purchase and use of unsustainable activities or products |
| * Import of illegal or dubious timber imported in finished or timber products |
| * Systems which promote or do not reduce risk of legionella |
| * Use of hot works which increases the risk of fire or explosion |
| * Designs which reflect light or heat |
| * Designs which do not allow adequate drainage |
| * Lack of adequate pre-construction information (such as asbestos surveys, details of geology, obstructions, services, ground contamination and so on). |
| * Processes giving rise to large quantities of dust (such as dry cutting, blasting and so on). |
| * On-site spraying of harmful substances. |
| * Design of environments involving adverse lighting, noise, vibration, temperature, wetness, humidity and draughts or chemical and/or biological conditions during use and maintenance operations. |
| * Designs of structures that do not allow for fire containment during construction. |
| Amber  (Medium Level) | * Emission of dust, noise, lighting and vibration disturbing local neighbourhood, businesses, biodiversity |
| * Birds on site |
| * Fuel storage less than 50litres |
| * Non-hazardous waste; e.g. metal, demolition and construction |
| * Landfilled waste |
| * Presence of uncontaminated groundwater |
| * Oil rags & Filters |
| * Hard Landscaping |
| * Use of single occupancy vehicles |
| * Activities with low ethical values |
| * All flora and fauna – protect what you can |
| * Poorly planned deliveries or empty returning vehicles |
| * Poor control of waste – storage and segregations |
| * Lack of engagement with environmental issues – training |
| * Installation of appliances and equipment with less than ‘A’ rated energy use |
| * Use of low VOC paints and adhesives |
| * Poor housekeeping promoting vermin, risk of leptospirosis etc. |
| * Designs with no soft landscaping or incorporation of trees or flora |
| * External manholes in heavily used vehicle access zones. |
| * Large and heavy glass panels. |
| * Specification of heavy lintels. (Slim metal of hollow concrete lintels are better alternatives.) |
| * Specification of solvent-based paints and thinners, or isocyanates, particularly for use in confined areas. |
| * Site layout that does not allow adequate room for delivery and/or storage of materials, including site-specific components. |
| * On-site welding, in particular for new structures. |
|  |  |

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| --- | --- |
|  |  |
| Green  (Low Level) | * Materials from responsible sourcing; e.g. FSC and PEFC timber |
| * Low level of electricity usage; e.g. Eco cabins |
| * Sustainable procurement; i.e. ordering accurately to avoid wastage |
| * Use of water based paints |
| * Reusing and recycling waste |
| * Careful storage and use of materials |
| * Reuse of materials timber brick etc. |
| * Cycling to work and use of public transport |
| * Low water use |
| * Protection of vulnerable and protected species |
| * Education, signage and poster to inform the workforce and public of environmental issues |
| * Designs which are low power use, well insulated and consider the environment |
| * Activities with high ethical values – support of wildlife and community schemes |
| * Apprentices and community engagement |
| * Installation of appliances and equipment with A or A+ Rated energy use |
| * Computerised energy control systems PIR’s and LED lamps |
| * Use of push / compression fit or non-brazing based systems for installation of air con and other equipment |
| * Designs which include refuge or habitat for species – Bat and bird boxes, etc. |
| * Off-site fabrication and prefabricated elements to minimise on site hazards. |
| * Adequate access for construction vehicles to minimise reversing requirements (one-way systems and turning radii). |
| * Thoughtful location of mechanical and electrical equipment, light fittings, security devices and so on to facilitate access, and placed away from crowded areas. |
| * Specification of concrete products with pre-cast fixings to avoid drilling. |
| * Specification of half board sizes for plasterboard sheets to make handling easier. |
| * Appointment of a temporary works co-ordinator (BS 5975). |
| * Off-site timber treatment if PPA- and CCA-based preservatives are used (boron or copper salts can be used for cut ends on site). |

Appendix G – Pre-Construction Phase Waste Production Targets (to be carried out when not using Smartwaste) – **Project is on Smartwaste**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Pre-Construction Phase** | | | **Target (%)** | | | **Estimated** | |
| **European Waste Code (EWC) (1)** | **Description of waste** | **Waste Category** | **Re-use on site** | **Recycle off site** | **Disposal off site** | **Weight (kg)** | **Volume**  **(m3)** |
| **17 01 01** | Concrete | Inert |  |  |  |  |  |
| **17 01 02** | Bricks | Inert |  |  |  |  |  |
| **17 01 06\*** | Concrete, bricks, tiles and ceramics (alone or in mixtures) containing hazardous substances | Mixed hazardous |  |  |  |  |  |
| **17 01 07** | Concrete, bricks, tiles and ceramics in mixtures, containing no hazardous substances | Active |  |  |  |  |  |
| **17 02 01** | Wood (untreated) | Active |  |  |  |  |  |
| **17 02 02** | Glass (uncontaminated) | Inert |  |  |  |  |  |
| **17 02 03** | Plastic (excludes packaging waste) | Active |  |  |  |  |  |
| **17 02 04\*** | Treated wood, glass, plastic (alone or in mixtures) containing hazardous substances | Mixed hazardous |  |  |  |  |  |
| **17 04 04** | Mixed metals | Inert |  |  |  |  |  |
| **17 04 09\*** | Metals containing hazardous substances | Hazardous |  |  |  |  |  |
| **17 05 03\*** | Soil and stones containing hazardous substances | Hazardous |  |  |  |  |  |
| **17 05 04** | Other soil and stones | Inert |  |  |  |  |  |
| **17 05 05\*** | Dredging spoil containing hazardous substances | Hazardous |  |  |  |  |  |
| **17 05 06** | Other dredging spoil | Inert |  |  |  |  |  |
| **17 08 01\*** | Gypsum materials containing hazardous substances | Hazardous |  |  |  |  |  |
| **17 08 02** | Gypsum-based construction materials not contaminated | Active |  |  |  |  |  |
| **17 09 03\*** | Un-used or un-set cement | Hazardous |  |  |  |  |  |
| **08-01-11\* (20-01-27\*)** | Paints and varnishes containing organic solvents or other hazardous substances | Hazardous |  |  |  |  |  |
| **17 06 01\*** | Insulation containing asbestos | Hazardous |  |  |  |  |  |
| **17 06 03\*** | Other Insulation containing asbestos | Hazardous |  |  |  |  |  |
| **17 06 05\*** | Construction material containing asbestos | Hazardous |  |  |  |  |  |
| **16 06 01\*** | Lead batteries | Hazardous |  |  |  |  |  |
| **16 06 02\*** | Ni-Cd batteries | Hazardous |  |  |  |  |  |
| **13 05 03\*** | Insulating and transmission oils | Hazardous |  |  |  |  |  |
| **others** |  |  |  |  |  |  |  |

## Appendix G.1. – European Waste Code

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Construction and Demolition Waste** | **Waste Type** | **EWC Code** |  | **Waste Type** | **EWC Code** |
| **HAZARDOUS** | | **NON HAZARDOUS** | |
| Un-used, un-set cement | 17 09 03\* | Bricks | 17 01 02 |
|  | | Concrete | 17 01 01 |
| Insulation materials containing asbestos | 17 06 01\* | Tiles, ceramics | 17 01 03 |
|  | | Un-contaminated mixtures of bricks, tiles ceramic, concrete | 17 01 07 |
| Insulation materials containing Ozone depleting substances (ODS) | 17 06 03\* | Gypsum and plasterboard | 17 08 02 |
|  | | Wood | 17 02 01 |
| Construction materials containing asbestos e.g. asbestos tiles | 17 06 05\* | Plastic | 17 02 03 |
|  | | Glass | 17 02 02 |
| Treated wood, contaminated glass, contaminated plastic | 17 02 04\* | Clean soil and stones | 17 05 04 |
|  | | **Clean Metals:** | |
| Coal tar and tarred products | 17 03 03\* | Copper | 17 04 01 |
|  | | Aluminium | 17 04 02 |
| Metals contaminated with oil, asbestos, hazardous coatings | 17 04 09\* | Lead | 17 04 03 |
|  | | Iron and steel | 17 04 05 |
| Contaminated soils | Seek specialist help | Mixed metals | 17 04 07 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Chemicals** | Solvents | 20 01 13\* |  | **Most chemical products are hazardous – you should check the data sheets and the labelling for the chemicals you use to check whether they are hazardous or not.** |  |
| Acids | 20 01 14\* |
| Alkalines | 20 01 15\* |
| Adhesives, glues | 20 01 27\* | Some chemicals are non-hazardous: |  |
| Toner | 16 02 15\* | **Toner that does not have a danger symbol or hazard pictogram on the label** | 16 02 16 |
| Detergent | 20 01 29\* |
| Pesticides and Herbicides | 20 01 19\* | Powder paints and coatings | 20 01 28 |
| Fertiliser | 06 10 02\* | Aerosols, as bottles and cylinders that do not have a danger symbol or hazard pictogram on the label | 16 05 05 |
| Solvent or oil based paints | 08 01 11\* |
| Paint remover or varnish remover (for example, white spirit) | 08 01 21\* |  | |
| Aerosols, gas bottles and cylinders with a danger symbol or hazard pictogram on the label | 16 05 04\* |
| Lab chemicals, wood preservatives and unidentifiable chemicals or gas bottles and cylinders | Seek specialist help |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **General Canteen, Office, Toilet Waste** | **Waste Type** | **EWC Code** |  | **Waste Type** | **EWC Code** |
| **HAZARDOUS** | | **NON HAZARDOUS** | |
| Interceptor sludge | 13 05 03\* | Gully washings not containing oil, diesel, fuel | 20 03 03 |
| Oily water from interceptor | 13 05 07\* | Food | 20 01 08 |
| Solids and grit from interceptor | 13 05 01\* | Vegetable oil and other edible fats and oils | 20 01 25 |
|  | | Clothes | 20 01 10 |
| Furniture | 20 03 07 |
| General rubbish not mixed with hazardous materials | 20 03 01 |
| Feminine hygiene, nappy, incontinence, and dog faeces collection bin wastes (other than those from healthcare. | 20 01 99 |
| **Packaging** | **Waste Type** | **EWC Code** | **Waste Type** | **EWC Code** |
| **HAZARDOUS** | | **NON HAZARDOUS** | |
| Un-rinsed packaging contaminated with traces of hazardous chemicals or non-edible oils | 15 01 10\* | Empty, uncontaminated packaging: | |
| For a waste container to be classed as a packaging waste it must be effectively “empty”. This means that all reasonable efforts must have been made to remove any left-over contents from the container. This may involve for example physical or mechanical means such as draining or scraping. The method of emptying will depend upon the container and the substances involved. |  | Paper and cardboard | 15 01 01 |
|  | Plastic | 15 01 02 |
|  |  | Wooden | 15 01 03 |
|  |  | Metallic | 15 01 04 |
|  |  | Composite | 15 01 05 |
|  |  | Mixed | 15 01 06 |
| Cloths, rags, absorbents contaminated with traces of chemicals or non-edible oils | 15 02 02\* |  | Glass | 15 01 07 |
|  | Textiles | 15 01 09 |
|  | |  | Cloths, rags, absorbents not contaminated with traces of chemicals or non-edible oils | 15 02 03 |
|  | |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Waste from Vehicles** | **Waste Type** | **EWC Code** |  | **Waste Type** | **EWC Code** |
| **HAZARDOUS** | | **NON HAZARDOUS** | |
| Waste vehicles | 16 01 04\* | Tyres | 16 01 03 |
| Lead acid batteries | 16 06 01\* |  |  |
| Waste fuel oil or diesel | 13 07 01\* |  |  |
| Waste petrol | 13 07 02\* |  |  |
| Mixed diesel / petrol (miss-fuelled) | 13 07 03\* |  |  |
| Oil filters | 16 01 07\* |  |  |
| Anti-freeze | 16 01 14\* |  |  |
| Brake fluid | 16 01 13\* |  |  |
| Lamps and bulbs of the following types:  • fluorescent tubes  • energy saving | 20 01 21\* | Lamps and bulbs of the following types:   * Incandescent * LED * halogen | 20 01 36 |
| Lead acid batteries | 16 06 01 |
| Ni-Cd batteries | 20 01 33 or 16 06 02 | Alkaline batteries | 20 01 34 or 16 06 04 |
| Fridge freezers, chillers, air conditioning units | 20 01 23\* or 16 02 11\* |  | |
| Monitors, notebooks, laptops and TV’s of the following types:   * CRT (cathode ray tube) * LC LCD (liquid crystal display) * Plasma | 20 01 35\* or 16 02 13\* |
| Flat screen TV’s, laptops, notebooks, monitors with LED backlights | 20 01 36 or 16 02 14 |
| Electrical devices containing:  • oils or fuel  • lead acid battery  • Ni-Cd battery  • fluorescent tube  • asbestos  such as:  cameras  mobile phones  smoke detectors  power tools  lawn movers  chain saws  hedge trimmers  photocopiers  projectors  computer tower | 20 01 35\* or 16 02 13\* |  | |
| Small electrical items not containing:  • oils or fuel  • lead acid battery  • Ni-Cd battery  • fluorescent tube  • asbestos  such as:  vacuum cleaners  desk phones  kettles  toasters  keyboards  mice | 20 01 36 or 16 02 14 |
|  | **Removal of all hazardous components will make the item non-hazardous.** | |  |  | |

## Appendix H – Spillage Procedure

**