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**1. PURPOSE: managing environmental threats and mitigating risk**

- a) We are committed at our company to delivering high standards of environmental protection and performance for all our customers and the communities in which we operate, and all Sub-contractors are expected to support us in delivering this objective. This commitment is reflected in company's Environmental Policy, reviewed annually and signed by the Chief Executive.
- b) This document is designed to specify the Environmental Conditions expected and to promote a positive and responsible attitude towards environmental issues, the threats that we face from environmental changes, as well as the actions needed to mitigate risks associated with our direct or indirect impact upon the environment.
- c) These Environmental Conditions are not intended to be exhaustive, but must be considered as the minimum standard acceptable for the contracts in our control.
- d) We have attempted to make the contents specific to our requirements rather than based on legislative rules and regulations, as we feel you should already be aware of your statutory duties under UK Law within your management systems. If you need further help or guidance in this area, we recommend that you contact your designated individual / organisation appointed to provide you with environmental advice.
- e) We are committed to supporting Sub-Contractors towards ISO14001 standards (or an equivalent Environmental Management System EMS) under procurement policy as a duty to our Category A Sub-Contractors to become Category A+.
- f) These Environmental Conditions underline our commitment to the Considerate Constructors Scheme (CCS) and an active CCS Partner member. We encourage all Sub-Contractors to consider the benefits of Company Registration.
- g) Sub-Contractors must bring the content of this document and policies to the attention of all personnel employed or under your control on our projects and ensure they are actively complied with. All organisations appointed to work on our behalf are required to work in accordance with these Environmental Conditions.
- h) We are committed to minimising the environmental impact of construction activities. We adopt and continually seek to implement, with your input, improved standards for good practice in resource and material efficiency, reducing waste, avoiding pollution, and increasing the use of recycled and recovered materials.
- i) We seek your help deliver this commitment; we expect all our Supply Chain Partners to support our aims and to meet the minimum requirements set out in these Conditions. We are committed to partnering and continued improvement through collaboration; we welcome suggestion(s) on opportunities for more efficient approaches in programme delivery, innovative options, design improvements and risk/value managed alternatives with environmental and product betterment.

**2. APPLICATION.**

- a) The use of the "Sub-Contractor Environmental Conditions" is mandatory on all our projects and must be complied with. Failure to do so may result in the termination of the contract.
- b) The contents of this document are in line with statutory duties. Where we have imposed conditions, which may appear more stringent than those implied by statute (often due to client or planning condition need), these will have been brought to the attention of prospective Sub-Contractors as part of the prequalification and tender process. This document must therefore be recognised as a condition of contract.
- c) Guidance has been provided to steer focus on the trade specific applicability of these contents and may be found appended.

**3. ENVIRONMENTAL LEGISLATION.**

- a) The Sub-Contractor has a statutory obligation to conduct their undertakings in compliance with United Kingdom legislation and must further ensure that all works are carried out in accordance with relevant Codes of Practice and Guidance issued by the Health and Safety Executive (HSE), the Environment Agency (EA), Natural Resources Wales (NRW), the Scottish Environmental Protection Agency (SEPA) and other regulatory authorities (Local Authority, National Measurement Office, et al).
- b) In addition, we recognise the ISO14001:2015 commitment to Compliance Obligations for the company and Sector to which we expect Sub-Contractors to work.

**4. CONTRACT AWARD.**

- a) We shall award contracts only to those Sub-Contractors upon which we have successfully completed Stage 1 Competency checks.
- b) Please be clear that environmental issues are considered to be a priority and integral to our Values. You are expected to be prepared and manage the risks and issues detailed in this document with due consideration in context of your risk assessment and method statements (RAMS).
- c) Contractors who are prepared to align their own policies and procedures with our own, and are prepared to ensure their work is conducted properly and professionally on site, will be given every opportunity to tender for further work.

**5. MANAGEMENT, SUPERVISION AND CONTINUOUS IMPROVEMENT**

- a) The quality and sufficiency of the management and supervisors provided within the sub-contract package are seen as the differentiating factor in delivering the environmental standards required on our projects.
- b) We recognise that the contractor's site supervisors are of paramount importance in controlling site Environmental issues, on the front line. We expect the quality of Sub-Contractor's supervisors to be qualified, by the end October 2018, to a nationally recognised standard with the Construction Skills (formally CITB) Site Environmental Awareness Training Scheme (SEATS), or an equivalent recognised by Build UK Environment group, as well as Site Safety for Supervisors Training Scheme (SSSTS).

- c) Contractor's site supervisors are expected to take a team leadership role in ensuring work is properly controlled onsite and will be considered as part of the project's site management team, in order to reinforce standards and behaviour expected, as well as to promote positive environmental culture on site (reporting all observations and incidents, however minor) and interface with the community.
- d) Notwithstanding any of the above, the Sub-Contractor is required to co-operate proactively with our project management teams in ensuring high standards of environmental management are maintained on the project at all times.
- e) Sub-Contractors shall actively demonstrate a process of continuous improvement. In this, the sub-contractor shall:
  - Carry out internal inspections and audits as appropriate to the work carried out for us and implement improvements where necessary.
  - Provide and implement an environmental improvement plan as appropriate upon self-identification of action needed or the request of the company.
  - Promote and report environmental observations (near misses) identified on site or working in the community (nuisance avoidance).

## **6. CONSULTATION AND COMMUNICATION.**

- a) Sub-Contractors are required to comply with and make their employees aware of these Environmental Consultation arrangements which operate on all our projects.
  - Everyone will complete Pre-Enrolment and receive a site specific orientation followed by a task specific briefing.
  - All Sub-contractors will receive details of project specific environmental risks and other relevant environmental information in the form of a project environmental plan within their Sub-contract order.
  - Employee Environmental Reps will be acknowledged and consulted.
  - Environmental matters will be discussed at All Safe meetings to assure project activities and controls are safe for the environmental.
  - Supervisors and managers from our company and Sub-Contractors, assisted by their respective advisor where necessary, will conduct regular inspections, with project phase specific briefings and risk awareness sessions.
  - Everyone will be informed on the environmental risks that they face.
  - Supervisors will conduct regular team briefings and toolbox talks.
  - There will be an open door policy whereby the workforce is invited to raise any environmental concern with the Building management team.

## **7. SUB-SUB-CONTRACTING.**

- a) Where a package includes for the provision of Sub-Sub-Contractor, or the Sub-Contractor wishes to sub-let work, the Sub-Contractor will be required to demonstrate that all environmental arrangements are back-to-back with this document.
- b) The Sub-Contractor is to ensure that Sub-Sub-Contractors are capable to adequately manage and control operations throughout the entire package in accordance with these conditions and to operate to the same standards.
- c) The Sub-Contractor is required to include, and will be deemed to have included, copies of these "Sub-Contractor Environmental Conditions" in any Sub-Sub-Contract that they

may award and ensure that compliance with these conditions are met in all Sub-Sub-Contract.

### **8. INCIDENT AND OBSERVATION REPORTING.**

- a) Any environmental incidents (and risk observations) occurring on site, such as spillages, adverse effects on wildlife or significant dust, noise or vibration emissions, must be contained, controlled and then immediately reported to our project site team.
- b) All incidents must be investigated and positive action taken to prevent a recurrence. The first response to an incident where environmental risk still exists must be the implementation of prompt remedial action to control immediate risks.
- c) Any complaint, nuisance or disturbance to or reported by a member of the public must be reported immediately to our project's site management team.
- d) The Sub-Contractor must provide copies of their internal environmental investigation report to the project's site management team within a reasonable timescale and co-operate fully in any investigation conducted by the company.
- e) We are committed to continually improve and actively encourage environmental observations (near misses) to be identified so that we can swiftly rectify, avoid incident and actively learn from the event. All environmental risk observations should be reported to the our project's site management team and are positively encouraged.

### **9. EMERGENCY PROCEDURES & INCIDENTS**

- a) Sub-Contractors are to be fully aware of the site environmental emergency procedures in the event of an incident. All our project sites have issued an emergency folder which details the combined SHE emergency procedures, escalation levels and contingency arrangements for accidents, fire, gas leaks, environmental pollution or releases (COSHH, asbestos zone breach etc), summoning emergency services and evacuation, etc.
- b) These procedures will be brought to the attention of Sub-Contract management and will be displayed on site. Sub-Contractors must ensure that all persons under their control are informed of the emergency procedures applicable to site.
- c) Where small spillages have occurred, the Company's spillage procedure, posted on the Environmental Noticeboard, and in diesel and chemical storage areas on site, should be followed.
- d) "Trial Runs" or "Drills" may be conducted at intervals to test project incident preparedness by construction phase; all Sub-Contract personnel will be required to participate as directed.

**10. ENVIRONMENTAL ASPECTS**

- a) We operate an Environmental Management System certified to ISO 14001, which provides a framework for managing and controlling the environmental aspects (activities that may cause environmental harm) applicable to its works. Sub-Contractors are required to either have their own environmental management system (EMS) or to manage their project operations in accordance with our Company's EMS.
- b) We will consult Sub-Contractor partners on the threats facing our industry and how to address these risks collaboratively, to mitigate impact on our mutual business commitments, as well as support mutual business resilience opportunities, in event of impact on our activities in built environment product and service delivery.
- c) Sub-Contractors' own environmental aspects and impacts specific to each project must be identified and managed, and the risk of impact on the environment reduced. This must be documented within method statements and risk assessments, which are subject to consent through the project's approval process. Sub-Contractor work will not commence work until the project team is satisfied and have approved the risk assessments/method statements (RAMS). Environmental aspects must be considered and impact mitigated within the RAMS statement.
- d) All Sub-Contractors working on our sites will be subject to Environmental Inductions and will be expected to undertake toolbox talks (TBT's) covering our requirements and any site specific controls that are pertinent to the construction phase risks.

**11. AIR POLLUTION**

- a) Dust suppression systems must be utilised for all activities which may produce significant levels of dust. The use of misters (fan assisted and directional units preferred) is mandatory due to effectiveness for the task and water efficiency. Open hoses are not permitted as these are ineffective and waste water consumption, as well as increase site silt runoff risk.
- b) Where demolition materials are to be crushed (screened) on site, a copy of the mobile plant Permit or details of the Permit Exemption for the crusher must be provided prior to the activity commencing. The permit conditions must be adhered to on site.
- c) Evidence of prior notification of Local Authorities for relocation of a Permitted crusher, will also be required prior to use on site.
- d) Lorries carrying wet or dry soil and spoil from site, as well as waste, which may be susceptible to wind-blown particulates or fibres from the load, must be sheeted or fine mesh netted to ensure control of materials.
- e) All vehicles and plant on site must have a current certification and be regularly serviced to minimise exhaust emissions. Vehicles and plant engines must not be left running when not in use and keys removed.
- f) All containers of volatile organic compound (VOC) chemicals and solvents (e.g. solvent-based adhesives, paint thinners) must be sealed and stored in suitable storage facilities for such materials provided by the contractor, unless in active use.

- g) All decommissioning, removal and installation work of refrigeration systems containing fluorinated gases must be undertaken by workers qualified under the Fluorinated Gas and Qualification Regulations and their registration with Refcom (or similar Registration body) checked and forwarded to our site team before works commence.
- h) All construction plant must be efficiently-sized for the task, serviced and maintained to ensure optimal performance, and in line with the Sustainable Procurement Policy requirements. Maintenance records must be kept and made available on request before plant is used on our project sites. Plant must comply, or be retrofitted to ensure compliance, with the Non-Road Mobile Machinery (NRMM) standards to reduce particulate matter. With effect from 1st September 2015 NRMM plant used on major developments in Greater London must achieve Stage IIIA (increasing to IIIB in 2020), and in the Central Activity Zone and Canary Wharf Stage IIIB (increasing to stage IV in 2020). Plant operated in the Greater London Area (GLA) and within M25 boundary (and future Low Carbon Emission Zones with emission restrictions) must be registered with the Local Authority for compliance with air emission controls.
- i) We have ambitious carbon reduction targets to make us a more efficient business. We need our supply chain to help us achieve our targets through: the use of modern efficient serviced plant which is efficiently-sized for the task, switching off all equipment and plant when not in use to reduce energy consumption, identifying to the site management team areas of inefficient energy use, and identifying less energy intensive methods of working.

## **12. NOISE AND VIBRATION**

- a) Work is only permitted within the agreed site operating hours and every effort must be made to minimise the generation of noise at all times.
- b) Vehicles must only arrive at and leave the site during hours specified by our site team, in accordance with Planning Permission or agreed with the client/local residents.
- c) Low noise working methods should be used where practicable and all noisy plant must be shut down/switched off when not in immediate use.
- d) All silencers and other noise attenuation equipment should be in good working order on all equipment in use.
- e) Noisy operations should be carried out away from site boundaries and sensitive receptors, as far as reasonably practicable.
- f) For works in noise sensitive areas, there will be a requirement to supply information on working methods, plant to be used, noise output and screening. This will be required to support Method Statements, for compliance with Nuisance legislation and statutory consents.

**13. WATER POLLUTION AND WATER CONSERVATION**

- a) Any subcontractor with works in or near water must include specific controls for the activity within their Method Statements and Risk Assessments.
- b) Nothing other than clean rainwater must be discharged to storm drains, soakaways or unsealed ground, watercourses or sewers and will need prior consent and approval of our project's site management team.
- c) Where dewatering of excavations is expected, silty water must not be discharged directly into storm systems but discharged over the ground, via settlement lagoons, settlement tanks with interceptor baffles or over grassed areas, to prevent watercourse silt pollution. The disposal method must be approved. The use of pumps for dewatering of excavations or accumulations of water must not commence before issue of a Permit to Pump issued by the site management team.
- d) All measures must be taken to avoid making wrong connections on storm and foul sewer drainage systems. Plans and records of connection checks must be made.
- e) No trade effluents (e.g. contaminated wash water) must be discharged to the foul sewer without the approval of the site management team.
- f) Chemicals such as solvents from washing out paintbrushes must not be discharged into sinks, drainage or on the ground on sites. They must be contained and disposed of as hazardous waste, using a dedicated washout station.
- g) Screed, render and plaster waste and wash-waters must be dealt with correctly to prevent pollution to ground or water, nor pose risk of blocked drain flooding.
- h) Mud and debris must not be tracked onto the public roads or highways. Where vehicles require washing they will be washed down onto un-surfaced ground or into an area draining to a settlement pit. Water from washing down vehicles must not be allowed to enter storm water drains. The Method must be approved by the Building Manager before activity commences.
- i) Contaminated water from washing out concrete mixer vehicle chutes, concrete pumps and mortar mixers must be contained on site in designated pits, skips or mortar tubs, to prevent mortar or concrete leachate pollution to ground or runoff to drain, as well as avoid unnecessary material wastage (settled washout may be reused). Method must be approved by the Building Manager before activity commences.
- j) All hosepipes, taps and other equipment using water must be turned off when not in active use and checked regularly for leaks. Extended hosepipe runs are prohibited. All taps or hoses should have a drop or a proprietary fitting to prevent backflow. Any leaks on plant or equipment must be reported and repaired as soon as possible.
- k) Where dust suppression is a requirement for a work package, a water standpipe license shall be obtained by the Trade Contractor from the water company or their appointed provider (for example, Aquam Water Services). This shall be fitted with a non-return valve or other device specified by the utility and a water meter to provide our project team with meter readings of water used. The meter reading to be provided on the last day of each month at close of business.



Only 'Calm Network' trained and competent users will operate the water standpipe to protect water networks from pipe burst and prevent nuisance with water discolouration for neighbours and water customers in the vicinity of the project.

- l) Use of harvested rainwater is preferred for boot, tool, vehicle and welfare area wash-down, as well as for track-way dust suppression. Alternatives to use of potable water are encouraged, including alternative approaches to avoid all water use; use of non-potable sources where appropriate and safe to do so, are encouraged to reduce water use and conserve potable water demand. Use of potable supply is essential where health, hygiene and product aesthetic quality is critical to activity and water use.

#### **14. STORAGE AND MANAGEMENT OF FUEL & COSHH**

- a) All oil and diesel storage over 200 litres must comply with each of the UK's devolved government's oil storage regulations (i.e. Control of Pollution (Oil Storage) (England) Regulations 2001 or Oil Storage (Wales) Regulations 2016).
- b) Oil or diesel tanks or drums of 205 litre capacity or greater stored on site must be contained within a sound, watertight bund (or fuel cube/double-skinned bowser) with a capacity not less than 110% of that of the tank or drum and protected from collisions and damage by impacts. The bunds or containment shall be proprietary equipment only, not storage areas constructed from readily available materials on site. 'Open' bunds for drums/containers must be weather protected, to prevent rainwater ingress and reduction of bund capacity. The fill points of all tanks must be contained within the bund walls and delivery hoses on tanks kept within the bund walls unless in use. All tanks must be labelled with their capacity and contents.
- c) A "nappy pad" type containment pads (more effective site alternative for refuelling in preference to traditional drip trays) must be used at all times to prevent the potential spillage of materials from hoses or secondary containers used to fill equipment. Where required, nappy pads must also be placed under compressors and other equipment which are not integrally banded but may discharge oil or oily water whilst in operation.
- d) All other drums and containers must be sound and correctly labelled with their contents and any relevant hazard information. When stored on site, they must be kept within a secondary or drum bund, and the bund weather protected. Rainwater caught in drum bunds must be disposed as hazardous waste, not direct to ground, hence policy preference for nappy pad containment as above.
- e) All oil and chemical storage on site must be located on an impermeable surface where possible, more than 10 metres from any watercourse or storm drain and not under the canopy area of any tree. These are legal requirements.
- f) Suitable and sufficient spill control materials must be provided with all tanks and stored near to fuel, oil or chemical storage areas and kept replenished. The minimum standard for a bowser would be a 120 litre spill kit.
- g) Diesel powered MEWPs used inside buildings should have a spill kit available, with a 20 litre spill kit as a minimum. This also applies for hydraulically operated MEWPs. The spill shall be provided by the MEWP operator.
- h) Connection and reconnection of diesel pipe-work for pressurised fuel systems may be the subject of Permit to Work procedures, as this is a high risk activity.

**15. WILDLIFE AND TREE PROTECTION**

- a) Sub-Contractors must identify the environmental aspects of their works which have the potential to damage, disturb or endanger wildlife, plants and habitats. Controls must be implemented to minimise disturbance, including identifying sensitive locations where access of plant and persons is restricted; fencing and signage to be erected.
- b) Where protected animals are identified on site, including bats and nesting birds, all work in the area must stop immediately and the Building Manager must be informed.
- c) Trees and hedgerows to be retained on sites will be protected and Tree Protection Area signs erected. Fencing must not be moved and all works within the Tree Protection Area will be subject to permit to enter/work discipline. No materials must be stored within the fenced areas to prevent damage or root ball compression. Refer to BS5837:2012 for detail on standard of protection measures / practice expected.
- d) Where ground-works are required close to protected trees or hedgerows, mechanical dig must be avoided to prevent damage to roots; air-pick or hand-dig techniques will be expected as part of safe systems of work for all activities in these vicinities.
- e) All tree roots exposed by excavations will be reported to the Building Manager, for appropriate action. Exposed root tissue should be covered with damp hessian. Branches, trunks or roots must not be cut without prior permission from the Building Manager. Unexpected damage caused must be rectified to prevent disease or decay.
- f) Sub-Contractors will obey all site rules on the protection or preservation of wildlife on site. Sub-Contractors must report any instances where wildlife may be affected by site activity, or where wildlife has come to site, eg nesting birds.
- g) Invasive Non-Native Species (INNS) are those species that are not indigenous to the United Kingdom; our duty is to prevent their spread and to eradicate if instructed. INNS, such as Japanese Knotweed, will be identified during site familiarisation briefings and will be fenced. Permit to Enter these areas is necessary to prevent spread. Suspected INNS found outside controlled areas will require works in that area to be stopped and find report immediately to the Building Management team.

**16. ARCHAEOLOGY & BUILT HERITAGE PROTECTION**

- a) Sub-Contractors engaged on projects where there are known, or suspected archaeological remains, must establish and implement systems of work for all activities to ensure any archaeological finds are not disturbed and are reported to our project's site team immediately.
- b) On projects where there are no known archaeological remains, any unexpected finds which could be of archaeological interest must be reported to the Building Manager for further investigation and activities in the area stopped immediately.
- c) Where working on, above or around scheduled ancient monuments (SAMs), protected or listed buildings, Sub-Contractors must establish and implement RAMS that will ensure all activities prevent damage or disturbance. Any disturbance or damage must be reported immediately to the Build Manager and works in the area stopped.

**17. CONTAMINATED LAND**

- a) Sub-Contractors employed on sites where there are known or suspected contaminants, must establish and implement safe systems of work designed to prevent the contamination spreading and to protect the workforce, the public and the environment from its effects.
- b) On projects where there are no known contaminants, any unexpected materials, smells or spills which could indicate contamination must be reported to building's management for further investigation and activities in the area stopped immediately.
- c) Operatives with complaints of headaches and runny eyes or nose, having been working in trenches or earthworks, could be an indication of ground contamination; works in such areas must cease, concern reported directly to the project's site team and no works recommence until investigation of ground soils has been concluded.

**18. SUSTAINABLE MATERIALS**

- a) Any materials for the site procured on behalf of the project must comply with our Sustainable Procurement Policy, which is an appended to the contract documents (Appendix C7)
- b) All timber used on site, whether permanent or temporary, must be from a legal and sustainable source. To ensure compliance, all timber, plywood and timber products supplied to or used in implementing the work package must be either FSC or PEFC certified with Chain of Custody (CoC) documentation. This documentation shall be provided to the project team prior to delivery to site and the Delivery Note to detail the required evidence for legal compliance.
- c) Material delivered to site that does not comply will be quarantined at the Sub-Contractors cost. Any material used that cannot be supported with CoC evidence will be removed at the Sub-Contractors cost and replaced with legally compliant material.
- d) Any exceptions shall be approved by the Building Manager or the Environment Manager.
  - Where practicable the timber should be stamped with the FSC or PEFC logo and Chain of Custody (CoC) reference number.
  - Unless otherwise approved by the site, where a subcontractor has no CoC accreditation, timber will be delivered directly from the site of a certified supplier.
  - CoC documentation with copy delivery notes from the supplier are to be handed to the Building manager for prior approval before commencing deliveries/works.

**19. HOUSEKEEPING & MATERIAL PROTECTION**

- a) Pollution, nuisance mitigation and waste can all be avoided through effective housekeeping, which supports an All Safe working environment whilst also ensuring that sites are managed as All Safe for the environment.
- b) Housekeeping is a recognised indicator of project environmental, safety and financial performance. We expect well-kept sites as a result, and clear-up orders will be issued

if required. The “Polluter Pays Principle” applies and failure to redress housekeeping deficiencies will result in cost recovery for clean-up costs.

- c) Good material storage and protection practice will be expected, with *durable materials* to front-of-house or closer to high movement areas (benefits reduced carbon of moving heavier materials after delivery); and *fragile materials* (insulation, cement bags) set to rear of materials zone or within building frame, weather protected and with reduced risk of damage.
- d) Materials will be secured from point of delivery to site and throughout use in build, to prevent wind-blown debris on or off site. Waste producer control principle applies and clean-up costs of unsecured material or waste debris will be recovered.
- e) Materials will be secured to prevent damage from sun damage, prevailing and extreme weather events, as well as prevent direct pollutant or indirect aesthetic nuisance damage to the environment.
- f) Bags of cement and other moisture sensitive materials must be stored undercover or covered to protect from rainwater ingress and open bags must be sealed.
- g) Ensure optimal materials ordering to avoid excess delivery to site that would result in risk of damage, natural wastage and increased waste skip costs.
- h) Materials segregation and production to quality standards are covered in Excavation and Demolition sections 21.4 and 21.5 that follow.

## **20. RESOURCE EFFICIENCY MANAGEMENT PLAN (REMP)**

- a) Despite the repeal of the Site Waste Management Plan (SWMP) Regulations 2008 in Dec-13, the efficiency benefits for the company and industry of working with designers, suppliers and sub-contractors on Resource Efficiency Management Planning (REMP) remain evident.
- b) We are committed to continued improvement and sustaining its work on waste avoidance hierarchy by collaborating with all parties to avoid/prevent waste, reusing and recycling materials through open planning.
- c) It is recognised that we will work with efficient Sub-Contractors that will support our resource efficiency and waste avoidance commitments.

### **20.1 DESIGNERS/CONSULTANTS (& Subcontractors with Design responsibilities)**

Designer/Consultant shall apply the Designing Out Waste (DoW) principles, specifically:

- a) through the development of a commercially and technically viable design:
  - I. Identify methods to optimise material efficiency and reduce waste;
  - II. Identify opportunities for off-site manufacture and to avoid onsite waste (Lean)
  - III. Identify opportunities to increase reused and recycled content (where there is no impact on cost or performance); and
  - IV. Report to our project team on the opportunities identified in I, II and III and the financial savings and practical implications of implementing the recommended actions.

- b) Work with the project team to ensure that design actions to reduce construction waste are implemented; and
- c) Where requested, support the development of the Resource Efficiency Management Plan (REMP) from an early design stage, including site waste forecasts and data on reduction actions.
- d) Provide our project team with Design Decisions for inclusion in project REMP.

Designers should refer to the WRAP Designing out Waste (DoW) guidance for support in identification, prioritisation and implementing ways of meeting project targets for waste.

## **20.2 SUB-CONTRACTORS and MATERIAL SUPPLIERS**

When requested, Sub-Contractors and Material Suppliers are required to:

- a) Work with our project team to identify methods to eliminate, reuse, recycle and recover high volume wastes or those difficult to divert from landfill (including packaging waste), providing additional costs or savings achieved by these methods.
  - I. Where inert ground and inert demo materials are to be removed from site, ensure that they go to treatment facilities or reuse, rather than landfill.
  - II. Consideration of disposal or appropriate treatment for reuse of contaminated materials will need to be made, discussed and agreed with the Company prior to works commencing.
  - III. Disposal routes for demolition and excavation wastes to be provided in a plan, to be discussed and agreed with the project's site team, prior to waste removal, to ensure that waste removal supports the team to meet the Company target of diverting waste from landfill.
- b) support the development of the REMP and:
  - I. Provide an accurate forecast of the types and m<sup>3</sup> of waste that will be produced by your contract (inclusive of packaging waste);
  - II. Identify the wastage rate applied to each material, explaining the need for this level of wastage allowance;
  - III. Participate in site operative briefings on materials handling and waste disposal;
  - IV. Advise on the level of recycled content in major materials to be supplied by the Subcontractor, and supply materials with a higher level of recycled content where technically and commercially viable.
- c) support our project's site management team during the works by:
  - I. Working in full compliance with the methods detailed within the REMP – in particular comply with all actions to reduce and reuse waste or increase recovery;
  - II. Informing our project team of deviations (in advance) from REMP with reasoning;
  - III. Identifying additional ways to reduce and reuse waste and/or increase recovery and informing our project team of the opportunities;
  - IV. Complying with the site waste segregation strategy, including the avoidance of cross-contamination of segregated (non-mixed) skips; and
  - V. Ensuring that materials and waste are stored in a safe and tidy manner and that waste is disposed of (in appropriate skip or receptacle) at the earliest opportunity;
- d) when requested, support our project team on completion of the Works by:
  - I. Contributing to a project review to identify what worked well and improvements;
  - II. Ensuring all necessary data is provided to our project team; and
  - III. Providing written evidence of the recycled content level of specified materials in the form of invoice / delivery notes along with datasheets for the materials

## **21. MANAGEMENT OF WASTE**

### **21.1 WASTE HIERARCHY**

- a) We have a commitment to divert our waste from landfill, and we have targets to reduce the volume of waste at each construction phase. All subcontractors are expected to assist in meeting these aims or advise where/when waste cannot be diverted from landfill.
- b) Sub-Contractors will demonstrate how waste hierarchy principles will be delivered in their work package, to avoid creation of waste on our sites and projects (design our waste, offsite manufacture), prevent waste arising, reuse materials and recover materials for recycling, ultimately to demonstrate their Duty of Care compliance for waste removed from site under exemption to their depot/yard.
- c) We are committed to working with and employing community material reuse schemes, such as National Community Wood Recycling Scheme and Recipro. Sub-Contractors will care for excess materials and use these schemes as directed by the Site Management team.
- d) We encourage the use of supplier take-back schemes to return materials back to the industry, supporting "circular economy" principles. Sub-Contractors will care for excess materials and use of take-back schemes as directed by the project's site team.

### **21.2 WASTE MANAGEMENT CONTRACTORS**

- a) We will assess waste management contractors to ensure their legislative compliance (Waste Duty of Care) and to select waste contracting partners in regions with whom we can work to achieve waste targets and sustain compliant performance. We only work with companies who can demonstrate a minimum diversion from landfill of 96% for mixed waste, unless dispensation is agreed with our Group Environment Manager.
- b) The company's Supply Chain Managers will complete an initial assessment through PQQ that will be validated by the appointed Environmental Manager, who will visit and complete an audit of the waste contractor's operation.
- c) We encourage reporting in accordance with PAS 402.
- d) Sub-Contractors using self-appointed waste contractors on our sites will provide Duty of Care (DoC) and waste diversion performance to our Company standards, or better.

### **21.3 DUTY OF CARE and WASTE TRANSFER**

- a) The producer of waste has a duty to ensure that the waste is controlled at the point of origin and transferred to a permitted disposal site or waste transfer station by a licenced waste carrier.
- b) Where subcontractors have responsibility for removal of waste, they must:
  - a. Comply with all relevant legislation, including the Waste Regulations 2011 (Duty of Care),
  - b. Provide segregated skips (where space allows),
  - c. Send the waste to be recycled wherever possible and practicable,
  - d. Use subcontractors approved or nominated by the project team,
  - e. Provide details of waste recycling figures and waste management methods (reuse, recycling, recovery, landfill or other).
  - f. Achieve the targets in (a).
  - g. Complete a copy of the project's Site Waste Record form, for each container of waste leaving the site, with data on skip content by waste stream and voidage.

- c) All companies, and subcontractors, removing waste from site must provide their own Waste Carriers Licence or the Waste Carriers licence for the waste contractor used and the destination Environmental Permit, as well as the respective waste transfer notes (WTNs) before waste is removed from site.
- d) A WTN must also be provided for every load of waste leaving the site, including muck away and demolition waste. All WTNs must comply with the Waste Regulations 2011, and must include;
  - a. The relevant 6 digit List of Waste Code (or European Waste Catalogue Code)
  - b. A description of the waste.
  - c. The correct SIC code (if responsible for their own waste the Sub-Contractor will have a unique, trade specific, code),
  - d. Contain a Declaration (see Regulation 12 of the Waste Regulations 2011)
  - e. WTNs must also be signed by the carrier's representative and the subcontractor.
  - f. The WTNs must be copied and handed to the project's site team by the close of play every day.
- e) Where the waste is hazardous, transfers must be compliant with the Waste Regulations 2011 and the Hazardous Waste Regulations.
  - a. A compliant Hazardous Waste Consignment Note with Part A to D completed must be provided on removal of the waste.
  - b. This must include (in Wales only from 01-04-16) the Hazardous Waste Premises Code for the site which is available from the Building Manager.
  - c. A copy of the corresponding Hazardous Waste Consignment Note with Part E completed must be provided to the site within 1 month of waste transfer date.
  - d. Complete a copy of the SWMP Waste Record Form for each container of waste leaving the site, to provide compliance assurance and support waste targets.

#### **21.4 EXCAVATION WASTE and MATERIALS PRODUCTION**

- a) Material management planning for excavated soils is important for all volumes of material excavated to demonstrate control of soil to legislative and best practice standards.
- b) Excavation contractors shall achieve waste diversion from landfill performance to no less than 96%, excluding hazardous wastes, to support our waste diversion targets; or to advise the site team of specific constraints preventing diversion from landfill. Waste shall only be disposed of at landfill sites if all options have been exhausted.
- c) Excavation contractors will provide a plan detailing how excavated waste will be managed to meet diversion from landfill targets, before any movement from site. Permits for destination sites (with diversion rates) will be provided by the subcontractor, to support the plan with evidence of waste Duty of Care, for approval by the site team, prior to any movement from site.  
Any changes to or deviation from the plan must be approved (for example, use of an additional destination site) and accepted before movement from site.
- d) Waste removed from site will be provided with a waste transfer note for each movement (or season ticket for bulk movements to each destination site), correctly classifying the waste being removed (for example, 'soil and stone' EWC 17-05-04) and the destination site for each load removed.

A summary 'excavation waste tracker log' will be provided detailing the waste by EWC code, the destination site and volume taken from/to each site. The 'tracker log' must highlight any changes in landfill diversion rate, especially if the destination site operates material recovery facilities (MRF) with variable recovery rates.

- e) Evidence will be required of material movements on site (cut and fill) with records logged daily and supporting maps showing origin, stockpile and final positioning.
- f) Photographic and soil sampling evidence will also be requested as appropriate to provide assurance and certainty of use.
- g) The ground-works sub-contractor will:
  - i. Ensure materials excavated are itemised and stockpiled accordingly.
  - ii. Ensure clean material is stock-piled separately from contaminated material.
  - iii. Prohibit mixing of soil types (ensure stocks are segregated/signed/marked).
  - iv. Comply with sampling requirements and provide representative samples.
  - v. Maintain accurate records of material types and quantities excavated, stockpiled and redistributed, and documenting evidence provided for assurance to the materials management plan.
  - vi. Ensure that the product produced is fit for purpose and used accordingly within planning, industry code of practice/protocols and other legal frameworks.
  - vii. Ensure that cluster networks are set up accordingly and that on site treatment is fit for purpose.
  - viii. Ensure that transfers of material coming in from cluster projects are suitable for on-site treatment or use.
  - ix. Ensure all transfers of product are recorded using the Product Transfer Note.

## **21.5 DEMOLITION WASTE and MATERIALS PRODUCTION**

- a) Demolition contractors (including trade contractors responsible for minor demolitions and strip-out activities) provide valuable service to recover materials across the built environment.
- b) Demolition contractors shall achieve waste diversion from landfill performance to no less than 96%, excluding hazardous waste, to support our waste diversion targets; or to advise the site team of specific constraints preventing diversion from landfill.
- c) Waste shall only be disposed of at landfill sites if all options have been exhausted.
- d) All product removed is to be regarded as waste under Waste Regulations, unless sufficient evidence of processing can be provided to demonstrate that waste has been controlled and processed according to industry Exemptions or use of Quality Protocols.
- e) Ensure that material produced is fit for purpose and used accordingly within planning, industry code of practice/protocols and other legal frameworks.
- f) Recovery of potential products and materials will be assessed using the ICE Demolition Audit Protocol or similar standard of audit, or use our Pre-demolition audit process.
- g) If demolition materials are to be crushed (screened) on site for reuse, the Aggregates Quality Protocol (QP) must be followed, with plan for onsite factory area (dedicated



zones for raw stock, crusher feed stock and crushed product) and a copy of the process quality documentation provided to the Company, with supporting evidence of waste segregated at Stage I and Stage II of the Aggregates QP. Where necessary, in the absence of a subcontractor procedure, we can provide a documented process to be used on site.

- h) The demolition Sub-Contractor's site supervisor (SSS) will be responsible for overseeing all demolition and/or aggregates production works on site, ensuring Duty of Care requirements are met and that suitable evidence (records/photos) is provided.
- i) Undertake demolition audit and identify outlets for arisings other than disposal. Provide destination sites and waste diversion rates for each waste stream in plan.
- j) Undertake joint inspections of the crusher throughput with the project's site team.
- k) Maintain accurate and up-to-date records of product / non-conforming product, detailing rejected material by waste stream and volume.
- l) Comply with our Materials Management Plan requirements.
- m) Comply with sampling requirements as representative for the duration of processing. Representative samples and analysis will be provided with one sample per 1000m<sup>3</sup> of processed material and (if less than 1000m<sup>3</sup>), with minimum of at least three samples taken evenly over the operating period, to provide assurance to material certification.
- n) Ensure all product transfers are recorded correctly using our Product Transfer Note.
- o) Take all possible measures to prevent contamination of product at each process stage.
- p) Comply with CE Marking requirements when selling / giving product to another entity.

#### **21.6 CONSTRUCTION and COMMISSIONING WASTE**

- a) Trade contractors in building construction, fit-out and refurbishment shall achieve a waste diversion from landfill target not less than 96%. We will work with companies who can demonstrate a minimum diversion from landfill of 96% for mixed construction waste, unless agreed with the Group Environment Manager.
- b) We will expect Sub-Contractors to use and pay proportional share of the waste skip costs for waste produced.
- c) All Sub-Contractors will deposit and segregate wastes as directed by the Site Management team.
- d) All significant waste streams, such as inert wastes, timber, metal, packaging, plasterboard, paper and cardboard and hazardous wastes will be segregated on site where space allows. Where segregated waste skips and bins are provided on site, wastes must be segregated and placed into the correct skip/bin.
- e) If Sub-Contractor elects to manage own waste directly (and space available on site to do so), we will need your Waste Duty of Care (DoC) assurance and waste diversion performance evidence from the waste service companies used by trade contractors before they are used, or alternative companies should be identified.

- f) Packaging wastes should be minimised on site where possible by use of returnable packaging, storing materials so that they will not be damaged, avoiding unnecessary wastage and by reusing materials where possible.
- g) Where practicable, all stillage and pallets are to be returnable, and packaging returnable or packaging materials kept to a minimum.

## **22. SITE ENVIRONMENTAL DATA REPORTING**

- a) On the first working day of each month, the Sub-Contractor shall report the quantities of the following to our project's site management team;
  - diesel used on site in litres,
  - water used on site in m<sup>3</sup>, with individual volumes if the Sub-Contractor has separate metered supplies (if using standpipes they shall be metered),
  - attenuated water used on site in m<sup>3</sup>, whether harvested or abstracted under exemption for temporary use prior to discharge
  - LPG use on site in kg,
  - electricity used on site, if separately metered, reading in kWh directly from the meter
- b) Provide noise, dust or vibration records, if they have been collected for plant or site activities. Weather station records will be provided where used, in particular during land remediation, groundworks and demolition phases.
- e) Provide copies of all WTN's and HWCN's, (no later than the end of the day on which wastes were removed) providing a copy of the SWMP Waste Record Form, for each container of waste leaving the site. Summary of bulk excavated soil/stone movements will be required weekly (for large bulk movements to destination site(s)) or monthly.
- f) Provide copies of all Carriers Registrations and Permits/Exemptions for all waste destination sites, before the Carrier is sent to site to remove waste.

## **23. SUSTAINABLE TRAVEL, LOGISTICS & VULNERABLE ROAD USERS**

- a) Sub-Contractors will support the site's sustainable travel planning commitments, use public transport and share travel to our projects wherever practicable, in order to minimise nuisance to community, reduce carbon footprint for the project and
- b) Suppliers will optimise delivery to site and adhere to delivery periods to avoid nuisance to community, in particular avoiding peak times for schools and hospitals.
- c) We expect the minimum requirements of FORS (Silver) as its standard for safer construction site logistics and material deliveries across the UK, in order to meet CLOCS Champion compliance. Further requirements will be specified in Appendix C2 Health and Safety Sub Contractor Conditions.
- d) In addition, all deliveries within the M25 will be made in compliance with TfL's Safer Lorry Scheme, which is designed to improve cyclist and pedestrian safety and applied to all vehicles over 3.5 tonnes to be fitted with side-guards to protect cyclists in the event of a collision, along with Class V and Class VI mirrors, giving the driver a better view of cyclists and pedestrians around their vehicle.

- e) Adherence with the site specific requirements addressing each site's local challenges, as set out in the Logistics section of the Construction Phase SHE Plan, will be expected for safe deliveries and protection of vulnerable roads users on the approach to and offload/pick-up movements at our sites; this is mandatory and support in its continued improvement from Partners is expected.
- f) Preference will be given to suppliers and subcontractors operating to FORS or CLOCS making deliveries to our project sites nationally, outside the London M25 circular.

#### **24. PROJECT SPECIFIC REQUIREMENTS**

Where there are specific concerns or project/client/planning specific requirements an Addendum to C6 will be appended in section 24 by the Commercial Team, with agreement of the Environmental Manager.

**25. RISK ASSESSMENT BY TRADE SUB-CONTRACTOR**

The following table should be used as a guide only, for the applicability of each ApxC6 Environmental Conditions section relevant to each of our subcontracted trade partners. Each trade has been assessed in context of comparable EMS risk along the project's delivery chain, with colour coding given as follows:

**High**

**Medium**

**Low**

Applicable Sections by Sub/Contracted Trades	1 to 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Air Conditioning	Y	Y	Y	Y	Y	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Brickwork / Blockwork	Y	Y	Y	Y	Y	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Carpentry / Joinery	Y	Y	Y	n/a	Y	n/a	Y	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Ceramic Tiling	Y	Y	Y	Y	n/a	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Cladding / Curtain Walling / Windows & Doors	Y	n/a	Y	n/a	Y	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Demolition	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	If/as Req'ed
Diamond Drilling / Builders Works	Y	Y	Y	Y	Y	Y	Y	n/a	n/a	Y	Y	Y	Y	Y	If/as Req'ed
Flooring	Y	n/a	Y	Y	Y	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Frame - Concrete / Timber / Steel	Y	n/a	Y	Y	Y	Y	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Furniture / Catering / Equipment	Y	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Glazing & Curtain Walling	Y	n/a	Y	n/a	n/a	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Groundworks	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	If/as Req'ed
Insulation	Y	n/a	Y	n/a	Y	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Labour Agency (ensure training meets C6 needs)	Y	Y	Y	Y	Y	Y	Y	Y	n/a	Y	Y	Y	Y	Y	If/as Req'ed
Landscape / Fencing	Y	n/a	Y	Y	Y	Y	Y	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Lift Installations	Y	n/a	Y	n/a	Y	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Mastic Sealant	Y	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Mechanical & Electrical	Y	Y	Y	Y	Y	Y	Y	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Painting	Y	n/a	n/a	Y	Y	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
PCC Floors	Y	n/a	n/a		Y	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Piling	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	If/as Req'ed
Plastering/Drylining/Suspended Ceiling	Y	n/a	Y	Y	n/a	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Refurbishment & Renovation	Y	Y	Y	Y	Y	Y	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Roofing	Y	n/a	Y	Y	n/a	Y	Y	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Scaffolding	Y	n/a	Y	n/a	Y	Y	Y	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Security	Y	n/a	n/a	n/a	n/a	Y	n/a	n/a	n/a	Y	Y	Y	Y	Y	If/as Req'ed
Security Doors	Y	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Security Systems	Y	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Y	Y	Y	Y	Y	If/as Req'ed
Smoke Control & Ventilation	Y	n/a	n/a	n/a	n/a	n/a	Y	n/a	n/a	Y	Y	Y	Y	Y	If/as Req'ed
Steel / Metalwork	Y	n/a	Y	n/a	Y	Y	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Stone / Marble	Y	n/a	Y	n/a	Y	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Street Furniture	Y	n/a	Y	n/a	Y	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Tarmac	Y	Y	Y	Y	Y	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Temporary Electrics	Y	Y	n/a	Y	Y	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed
Tower Cranes	Y	Y	Y	Y	Y	Y	n/a	n/a	n/a	Y	Y	Y	Y	Y	If/as Req'ed
White Goods	Y	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Y	Y	Y	Y	Y	Y	If/as Req'ed