Track Vegetation and Fencing Repairs Contract

between:

LONDON UNDERGROUND LIMITED
as Company

and

CLESHAR CONTRACT SERVICES LIMITED
as Supplier

For the supply and supervision of vegetation management gangs in support of vegetation management services, fencing repair services and ad hoc pest control services

Contract Reference Number TfL-01330 – Track Vegetation and Fencing Repairs

Volume 1 – Contract and Schedules 1 to 3 inclusive

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This **DEED** is made on the 2nd day of December 2019

BETWEEN

(1) **London Underground Limited** (company number 01900907) whose registered office is 5 Endeavour Square, Stratford, London E20 1JN (the "**Company**", which expression shall include its successors and assigns); and

(2) **Cleshar Contract Services Limited** (company number 02742648) whose registered office is Heather Park House, North Circular Road, Stonebridge, London NW10 7NN (the "**Supplier**")

Each a Party, together the Parties

RECITALS:

(A) The Company invited expressions of interest from appropriately qualified organisations for services listed in the Railway Industry Supplier Qualification Scheme (RISQS) database relating to the provision of the Services (as defined in Clause 1.1 below).

(B) The Supplier has submitted proposals to the Company setting out how it will perform the Services as required by this Contract.

(C) The Company has selected the Supplier as the most economically advantageous tenderer to provide the Services pursuant to this Contract.

(D) Therefore, the Company has agreed to buy and the Supplier has agreed to provide the Services on the terms and conditions set out in this Contract.

(E) This Contract may be utilised by the Company or any other member of the TfL Group.

(F) This Contract is comprised of two volumes set out below:

Volume 1 – Contract and Schedules 1 to 3 inclusive

Volume 2 – Schedules 4 to 18 inclusive

NOW IT IS AGREED THAT:

IT IS AGREED AS FOLLOWS:

1 Definitions and Interpretation

1.1 In this Contract the following words and phrases have the following meanings:

"**Abatement**"	means	as defined in Schedule 9 (Performance Measurement);
"**Activity**"	means	any Services activity;
"Additional Services"	means	as defined in Part B of Schedule 4 (Contract Variation Procedure and Additional Services);
"**Affiliate**"	means	in relation to any person, any holding company or subsidiary of that person or any subsidiary of such holding company, and "holding company" and "subsidiary" shall have the meaning given to them in section 1159 of the Companies Act 2006 save that for the purposes of determining whether one entity is an Affiliate of another any transfer of shares by way of security or to a nominee of the transferor shall be disregarded;
"**Applicable Laws**"	means	depending on the context, all or any laws, statutes, proclamations, recommendations, codes of practice, by-laws, directives, Regulations, statutory instruments, rules, orders, rules of court, delegated or subordinate legislation, rules of common law or any European Union legislation (including any declarations of conformity) at any time or from time to time in force in the United Kingdom and which are or may become applicable to the Contract, any agreement or document referred to in the Contract, or for the performance of the

Services;

"**AWR**"	means	the Agency Workers Regulations 2010 (*SI 2010/93*);]
"**Baseline Resource Programme**"	means	the programme specifying the number of Gang(s) to be provided by the Supplier to deliver the Company's annual workbank of Services and in respect of Budget Period One is as detailed in Schedule 1 (Contract Data);
"**Budget Period**"		has the meaning given in Schedule 2 (Payment);
"**Budget Period(s)**"	means	each of the following periods (and "Budget Period One", "Budget Period Two" and "Budget Period Three" " shall be construed accordingly):

Budget Period	Start	Finish	Duration
One	08/12/2019	31/03/2021	17 Periods
Two	01/04/2021	31/03/2022	13 Periods
Thee	01/04/2022	22/09/2022	6 Periods 5 Days

"**Cessation Plan**"	means	the plan agreed between the Parties or determined by the Company in accordance with Clause 60.1 to give effect to a Declaration of Ineffectiveness or a Public Procurement Termination Event;
"**Commencement Date**"	means	the date specified as such in Schedule 1 (Contract Data);
"**Company**"	means	the entity named as such in the Contract and its legal successors in title and assigns;

"**Company Equipment**"	means	the equipment which the Company has agreed to supply to the Supplier without charge and intended for use by the Supplier exclusively in the provision of Services under this Contract including the equipment detailed in paragraph 7.1 of Schedule 3 (Specification);
"**Company's Representative**"	means	the person appointed by the Company and named as such in Schedule 1 (Contract Data);
"**Competent**"	means	in respect of Supplier Personnel individuals who have the relevant and in date qualifications in accordance with paragraph 5 of Schedule 3 (Specification) for each of the Gang Types;
"**Competent Authority**"	means	any legislative, judicial, regulatory or administrative body or agency (or any subdivision of any of them) of the United Kingdom or of the European Union or any supranational body which has rulemaking power or whose directives, decisions, instructions, rulings, laws or regulations are directly enforceable against either of the Parties in connection with the performance of the Contract;
"**Conduct Regulations 2003**"	means	the Conduct of Employment Agencies and the Employment Business Regulations 2003 (SI 2003/3319);
"**Confidential Information**"	means	any information given orally or in writing which is a trade or business secret or method; technical know-how; personal data which relates to a living individual who can be identified from that information; information relating to any crime, breach of statutory duty or criminal investigations; information relating

		to the protection of prominent persons, national security, counter-terrorism or other information relating to the provision of police services for any national or international purpose; information relating to the Company's obligations in accordance with sections 118 to 121 of the Railways Act 1993; confidential financial information including but not limited to taxation information and returns to shareholders; and any other information that a party would reasonably expect to be able to protect by virtue of business confidentiality provisions;
"**Consequential Loss**"	means	in relation to a breach of this Contract or other circumstances in which a party is entitled to recover any costs, expenses or liabilities suffered or incurred, loss of profit, loss of revenue, loss of contract, loss of goodwill and/or other financial loss resulting from such breach and whether or not the party committing the breach knew, or ought to have known, that such loss would be likely to be suffered as a result of such breach;
"**Contract**"	means	this contract made between the Company and the Supplier;
"**Contract Information**"	means	(i) the Contract in its entirety (including from time to time agreed changes to the Contract) and (ii) data extracted from the invoices submitted pursuant to Clause 15 and Schedule 2 (Payment) which shall consist of the Supplier's name, the expenditure account code, the expenditure account code description, the document number, the clearing date and the invoice amount;

"**Contract Management Plan**"	means	the contract management plan to be prepared by Supplier for approval by Company in accordance with Schedule 18 (Mobilisation);
"**Contract Reference Number**"	means	the number shown on the front page of this Contract;
"**Contract Variation Procedure**"	means	the contract variation procedure set out in Schedule 4 (Part A) (Contract Variation Procedure and Additional Services);
"**Core Group**"		has the meaning given in Schedule 13 (Contract Management);
"**Data Protection Legislation**"	means	(a) the Regulation (EU) 2016/679 on the protection of natural persons with regard to the Processing of personal data and on the free movement of such data; (b) Directive (EU) 2016/680 (the Law Enforcement Directive); (c) any legislation in force from time to time in the United Kingdom relating to privacy and/or the Processing of Personal Data, including but not limited to the Data Protection Act 2018; (d) any statutory codes of practice issued by the Information Commissioner in relation to such legislation; and (e) the Privacy and Electronic Communications (EC Directive) Regulations 2003;
"**Declaration of Ineffectiveness**"	means	means a declaration of ineffectiveness in relation to this Contract made by a court of competent jurisdiction in accordance with Regulation 98(2)(a) or Regulation 103(3) of the

Public Contracts Regulations 2015 (as amended) or Regulation 113(2)(a) or Regulation 118(3) of the Utilities Contracts Regulations 2016 (as amended);

"**Defined Cost**"	means	the amount(s) calculated in accordance with paragraph 1.4 of Schedule 2 (Payment);
"**Demobilisation Plan**"	means	the de-mobilisation plan to be prepared by Supplier and approved by the Company pursuant to Schedule 16 (Obligations on Handover);
"**Disallowed Cost**"	means	any Supplier cost which the Company's Representative decides: (A) is not justified by the Supplier's accounts and records; (B) should not have been paid to a Specialist Subcontractor in accordance with its subcontract; (C) was incurred only because the Supplier did not: (1) follow a procedure stated in the Contract; or (2) obtain best value from Specialist Subcontractors; or (3) give an early warning which this Contract required him to give; (D) that the Supplier is unable to demonstrate has been reasonably and properly incurred by the Supplier for the purposes of this Contract;

(E) is not incurred in relation to the relevant Budget Period,

and the cost of:

(F) Gangs to the extent that the number of Gangs supplied exceeds the number of Gangs agreed by the Company by the acceptance of the Baseline Resource Programme for each Budget Period , as may be amended in accordance with the provisions of Schedule 4 (Contract Variation Procedure and Additional Services);

(G) resources not used to provide the Services (after allowing for reasonable availability and utilisation) or not taken away from the Worksites when requested by the Company's Representative;

(H) the cost of understrength Gangs that cannot work safely in accordance with the Generic Method Statements and the Task Method statements with a reduced strength team;

(I) fines, charges, penalties and fees imposed on or accepted by the Supplier as a result of any unsafe, unlawful or criminal conduct or any infringement or disregard of any Applicable Laws;

(J) strikes, riots and civil commotion confined to the Supplier's employees and/or any subcontractor or Specialist

		Subcontractor employees and,
		for the avoidance of doubt, any Disallowed Cost shall be the responsibility of the Supplier and the Supplier shall not be entitled to any reimbursement from the Company in respect of the same;
"**Disclosed Data**"	means	information relating to the provision of the Services disclosed to the Supplier and its shareholders and advisers before the date of this Contract including the Invitation to Tender;
"**Dispute**"		has the meaning given in Schedule 17 (Dispute Resolution Procedure);
"**Documentation**"	means	all documents, items of information, data, reports, drawings, specifications, plans, software, designs, inventions and/or other material produced or supplied by or on behalf of the Supplier including by Supplier Personnel (or any of them)in the performance of the Contract and whether in paper form or stored electronically;
"**Energy Technology List**"	means	the government-managed list of energy-efficient plant and machinery that forms part of the Enhanced Capital Allowance scheme;
"**Enhanced Capital Allowance**"	means	the enhanced capital allowance scheme for energy saving technologies (first published on 15 October 2015) as amended from time to time by the Department for Business, Energy & Industrial Strategy and "Enhanced Capital Allowances" shall be construed accordingly;
"**Environmental Claim**"	means	receipt by the Company in connection with any pollution or contamination of the environment

of:

(a) any written claim, demand, suit or notice from a third party, including a Regulatory Authority ("Regulatory Authority" means any government entity or other public authority or privatised utility having responsibility for any matters concerning the environment, or Environmental Law); or

(b) any charge or condition imposed by any Regulatory Authority or any notice served by any Regulatory Authority requiring Remediation (including any written indication from any Regulatory Authority that a requirement to carry out Remediation will be imposed on the Company unless the Company agrees to carry out Remediation voluntarily);

"**Environmental Law**" means all and any laws, including common law, legislation, codes of practice, notices, judgements, decrees, regulations, applicable, clean-up standards, circulars, guidance notes (statutory or otherwise), as may be enacted, adopted, amended or supplemented, concerning the protection of human health, or the environment or the conditions of the work place;

"**Equipment**" means all equipment which is not Tools of the Trade or Company Equipment and which the Company instructs the Supplier to provide in accordance with Part B of Schedule 4 (Contract Variation Procedure and Additional Services);

"**Equipment Overhead and Profit Percentage**"	means	the percentage indicated as such in Schedule 1 (Contract Data);
"**Escalation Procedure**"	means	as defined in Schedule 9 (Performance Measurement);
"**Ethical Sourcing Policy**"		has the meaning given to the term in Clause 26.3;
"**Ethical Trading Initiative Base Code**" or "**ETI Base Code**"	means	the ETI Base Code referred to in Clause 26.7 and set out in Appendix 1 to Schedule 15 (Responsible Procurement) of the Contract;
"**Excepted Liabilities**"	means	the liability of the Supplier for: (a) any Abatements levied in accordance with this Contract; (b) any costs or expenses of the Supplier of performing its obligations under this Contract, including but not being limited to the costs of re-performing the Services as required pursuant to the performance measurement provisions; (c) any compensation on termination amounts pursuant to a termination for Supplier default; (d) any taxes, whether payable under any Applicable Laws or pursuant to this Contract; (e) Losses against which the Supplier is entitled to an indemnity under any policy of insurance (or would have been entitled but for any breach of or failure to maintain such insurance);

(f) Losses caused by fraudulent acts, including fraudulent misrepresentation or acts of a criminal nature;

(g) Losses caused by the Supplier committing a Prohibited Act or Safety Breach;

(h) loss of or damage to any property (including the Underground Network and Worksites and any other property belonging to the Company or for which it is responsible);

(i) claims etc. made against the Company by third parties (whether under contract, tort, breach of statutory duty or otherwise);

(j) any Losses against which the Company is indemnified under the TUPE provisions;

(k) any Losses against which the Company is indemnified for third party IPR infringement;

(l) any Losses caused by the Supplier committing a breach of the provisions of the contract privacy, data protection & cyber security provisions or in respect which the Company is indemnified under those provisions;

(m) death or personal injury caused by the Supplier's negligence or that of Supplier Personnel;

(n) any interest due as a result of any late

payments of any of the Excepted Liabilities;

(o) environmental damage;

(p) express obligations re warranty claims; and

(q) any Losses against which the Company is indemnified under clause 24.18 or 24.19;

"**Existing Contracts**"	means	any and all contracts, whether current, expired or terminated, pursuant to which goods or services have been supplied or provided by the Supplier (in the capacity of Supplier or subcontractor) to the Company or any member of the TfL Group;
"**Expiry Date**"	means	means the date specified as such in Schedule 1 (Contract Data), as may be extended pursuant to the provisions of Clause 2.2;
"**Fault Rectification Services**"	means	the services set out in paragraph 5.3.12 of Schedule 3 (Specification);
"**Financial Year**"	means	1st April to 31st March each year;
"**Force Majeure Event**"	means	any of the following (or any circumstances arising as a consequence of any of the following) if and only to the extent that such event or circumstances is or are not caused by, and their effects are beyond the reasonable control of, a Party affected by such an event or circumstances and which have an adverse effect on the Party affected by such an event or circumstances and such Party's ability to perform its obligations under the Contract and is not an event or circumstances (i) whose effect the Party affected by such an event is

otherwise required to avoid or provide against (other than by way of insurance) under the Contract or (ii) which the Party affected by such an event could reasonably have avoided or provided against:

(a) war, invasions, acts of foreign enemies, hostilities (whether war be declared or undeclared), civil war, rebellion, revolutions, insurrection, military or usurped power, confiscation, or requisition by or under the order of any government or public or local authority;

(b) civil unrest;

(c) any act of terrorism or a specific threat of terrorism which results in the partial or total, temporary or long term closure of the Underground Network;

(d) lightning, earthquake or subject to (f) below, extraordinary storm;

(e) fire;

(f) flooding, other than flooding caused by rising water table or by weather conditions (including extraordinary storm);

(g) tunnel collapse;

(h) compliance with the provision of sections 118 to 121 of the Railways Act 1993;

(i) nuclear, chemical or biological contamination including ionizing radiation or contamination by radioactivity from any nuclear fuel or nuclear waste from

the combustion of nuclear fuel or radioactive toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof;

(j) the discovery of fossils, antiquities or other material which in each case is required to be exhumed or unexploded bombs; and

(k) strikes, lock outs or other industrial action being in each case industry-wide;

"**Gang Cost**"	means	the total Shifts the Supplier can demonstrate to have been worked under and in accordance with this Contract by each Gang Type multiplied by the applicable Gang Rate;
"**Gangs**"	means	any of the Gang Types;
"**Gang Rates**"	means	the rate for each Gang Type as listed in Schedule 1 (Contract Data) and adjusted in accordance with Part C (Price Adjustment for Inflation) of Schedule 2 (Payment);
"**Gang Rates Breakdown**"	means	the breakdown of the Gang Rates calculated using Defined Cost set out in Appendix 5 of Schedule 1 (Contract Data);
"**Gang Types**"	means	the labour gangs comprised of Supplier Personnel set out in Schedule 3 (Specification) and comprising the following:

(a) tree gangs;

(b) vegetation gangs;

(c) utility gangs;

		(d) understory gangs; (e) depot gangs; and (f) fencing gangs;
"**Good Industry Practice**"	means	the exercise of that degree of skill, diligence, prudence and foresight and operating practice which would reasonably and ordinarily be expected from time to time from a skilled, competent and experienced contractor seeking in good faith to comply with all its contractual obligations and all Applicable Laws (whether or not binding on the Company), and engaged in the same type of undertaking and under the same or similar circumstances as those envisaged by this Contract;
"**Greater London**"		has the meaning ascribed to it in the GLA Act;
"**Greater London Authority Act**" or "**GLA Act**"	means	the Greater London Authority Act 1999 relating to the formation of the Greater London Authority;
"**Health and Safety Management Plan**"	means	the health and safety management plan set out in Appendix 2 to Schedule 5 (Health, Safety, Quality and Environmental Requirements);
"**HGCRA**"	means	the Housing Grants, Construction and Regeneration Act 1996 as amended by the Local Democracy, Economic Development and Construction Act 2009 or as further amended or supplemented;
"**Infrastructure Manager**"	has	the meaning ascribed to it in the Railways and Other Guided Transport Systems (Safety) Regulations 2006;
"**Initial Term**"	means	the period of time from and including the Commencement Date to and including the

		Expiry Date;
"Intellectual Property Rights" or "IPRs"	means	any intellectual property rights in any part of the world and includes but is not limited to all rights to, and interests in, any patents (including supplementary protection certificates), designs, trade-marks, service marks, trade and business names and get up, moral rights, domain names, copyright and neighbouring rights, databases, semi-conductors, know how, knowledge, trade secrets and any other proprietary rights or forms of intellectual property (protectable by registration or not) whether registered or not in respect of any technology, technique, concept, idea, style, scheme, formula, system, logo, mark or other matter or thing, existing or conceived, used, developed or produced by any person, together with all applications and rights to apply for registration or protection of such rights, Confidential Information relating to those rights, material embodying those rights and in each case rights of a similar or corresponding character;
"Interest Rate"	means	the percentage above the base rate from time to time of the Bank of England as specified in Schedule 1 (Contract Data);
"Invitation to Tender" or "ITT"	means	the invitation to tender issued on 2nd May 2019 through the TfL e-tendering portal.

"**Key Materials**"	means	any materials which the Company requires to be supplied by Supplier and which are identified in, and which the Supplier must maintain minimum stockholdings of in accordance with, paragraph 6.1 of Schedule 3 (Specification);
"**Key Personnel**"	means	Supplier Personnel identified as such in Schedule 12 (Key Personnel) and any changes to the same that are made in accordance with Clause 24.11;
"**London Living Wage**"	means	the basic hourly wage (before tax, other deduction and any increase for overtime) as may be revised from time to time by the Living Wage Foundation, the Mayor or any other relevant Competent Authority;
"**Losses**"	means	any expense, liability, loss, claims, fines, damages, costs (including reasonable legal and other professional fees and disbursements), penalties, settlements and judgments whatsoever or howsoever arising incurred by the Company, its subcontractors, employees or agents or any other member of the TfL Group;
"**Management Fee**"	means	the amount calculated by multiplying the Gang Cost by the Management Fee Percentage;
"**Management Fee Percentage**"	means	the percentage stipulated as such in Schedule 1 (Contract data);
"**Management Service**"	means	the management services set out in paragraph 8 of Schedule 3 (Specification);
"**Margin**"		has the meaning given in Schedule 2 (Payment);

"**Materials**"	means	any materials which are not Key Materials and which the Company instructs the Supplier to provide in accordance with Part B of Schedule 4 (Contract Variation Procedure and Additional Services);
"**Materials Overhead and Profit Percentage**"	means	the percentage stipulated as such in Schedule 1 (Contract Data);
"**Mayor**"	means	the person from time to time holding the office of Mayor of London as established by the GLA Act;
"**Mobilisation Activities**"	means	the mobilisation activities the Supplier is required to provide in the Mobilisation Period as set out in and in accordance with Schedule 18 (Mobilisation) and the Mobilisation Plan;
"**Mobilisation Cost**"	means	the amount stated in Schedule 1 (Contract Data) which is a fixed non-adjustable lump sum for completion of all necessary Mobilisation Activities including but not limited to those activities stated in the Mobilisation Period
"**Mobilisation Period**"	means	the period between the Commencement Date and the Services Commencement Date;
Mobilisation Plan"	means	the plan set out in Appendix 1 (Mobilisation Plan) to Schedule 18 (Mobilisation);

"**Necessary Consents**"	means	any permits, licences, permissions, consents, approvals, certificates and authorisations (whether statutory or otherwise) which are required for the performance of any of the Supplier's obligations under this Contract, including those required in order to comply with Applicable Laws, Standards or as a result of the rights of any third party;
"**Notified Sum**"		has the meaning given to that term in paragraph 1.3.7 of Schedule 2 (Payment);

"**Occasion of Tax Non-Compliance**"	means	(a) any tax return of the Supplier submitted to a Relevant Tax Authority on or after 1 October 2012 is found to be incorrect as a result of: (i) a Relevant Tax Authority successfully challenging the Supplier under the General Anti-Abuse Rule or the Halifax Abuse Principle or under any tax rules or legislation that have an effect equivalent or similar to the General Anti-Abuse Rule or the Halifax Abuse Principle; and/or (ii) the failure of an avoidance scheme which the Supplier was involved in, and which was, or should have been, notified to a Relevant Tax Authority under the DOTAS or any equivalent of similar regime; and/or (b) the Supplier's tax affairs give rise on or after 1 April 2013 to a criminal conviction in any jurisdiction for tax related offences which is not spent at the Commencement Date or to a penalty for civil fraud or evasion;
"**Operator**"	means	a person with statutory duties to provide or secure the provision for Greater London of public passenger services by railway or a person who secures the provision of such services through appropriate contractual arrangements;

"**Payment Application**"		has the meaning given to that term in paragraph 1.3.2 of Schedule 2 (Payment);
"**Payment Assessment Date**"		has the meaning given in Schedule 2 (Payment);
"**Period**"	means	the Company's accounting periods as notified from time to time by the Company to the Supplier, each such Period being of between 25 and 32 days and one of 13 periods during the Company's Financial Year;
"**Personal Data**"	means	has the meaning given to it in Data Protection Legislation;
"**PPE**"	means	personal protective equipment.
"**Prescribed Period**"	means	has the meaning given to that term in paragraph 1.3.8 of Schedule 2 (Payment).
"**Price for the Services Provided to Date**"	means	the cumulative total of: i. the Mobilisation Cost; ii. the Gang Cost; iii. the amount of Defined Cost that the Supplier can demonstrate to have been incurred in accordance with the Contract for Key Materials, Materials, Equipment and Specialist Sub-Contractors; iv. the applicable Margin; and v. the applicable Management Fee;
"**Prohibited Act**"	means	(a) offering or agreeing to give to any servant, employee, officer or agent of the Company any gift or consideration of any kind as an inducement or reward: (i) for doing or not doing (or having done or not having done) any act in

relation to the obtaining or performance of the Contract or any other contract with the Company; or

(ii) for showing or not showing favour or disfavour to any person in relation to the Contract or any other contract with the Company; or

(b) entering into the Contract or any other contract with the Company with which commission has been paid or has been agreed to be paid by the Supplier or on its behalf or to its knowledge unless, before the Contract is entered into, particulars of any such commission and of the terms and conditions of any such contract for the payment of such contract have been disclosed in writing to the Company; or

(c) committing an offence:

(i) under the Bribery Act 2010;

(ii) under legislation creating offences in respect of fraudulent acts; or

(iii) at common law in respect of fraudulent acts,

in relation to the Contract or any other contract with the Company; or

(d) defrauding or attempting to defraud the Company;

"**Public Procurement Termination Event**"	means	(a) the Contract or any contract has been subject to substantial modification which would require a procurement procedure in accordance with Regulation 72(9) of the Public Contracts regulations 2015 or Regulation 88(8) of the Utilities Contracts Regulations 2016); or (b) if the Company determines that the Contract should not have been awarded to the Supplier in view of a serious infringement of the obligations under the EU Treaties and applicable procurement Regulations.
"**Quality Management Plan**"	means	the quality management plan set out in Appendix 3 to Schedule 5 (Health, Safety, Quality and Environmental Requirements) as amended from time to time;
"**QUENSH**"	means	has the meaning given in Schedule 5 (Health, Safety, Quality and Environmental Requirements);
"**Regulations**"	includes	any regulation, rule, official directive, request or guideline (whether or not having the force of law) of any governmental, intergovernmental or supranational body, agency, department or regulatory, self-regulatory or other authority or organisation.
"**Released Activity**"	means	an Activity that has been released to the Supplier to be performed and/or delivered in accordance with the procedure set out in paragraph 3 of Schedule 14 (Project Processes);

"**Relief Event**"		has the meaning given to it in Clause 22 (Relief Events);
"**Remediation**"	means	any or all investigation, sampling, analysing, removing, remedying, cleaning up, abating, containing, controlling or ameliorating the presence in or effects on the environment of any contamination or pollution including, but without limitation, the removal, treatment and disposal of material and the treatment and monitoring of ground waters and gases and emissions and the obtaining of expert technical, legal and other professional advice (including all project management functions);
"**Responsible Procurement Policy**"	means	the policy document entitled the "GLA Group Responsible Procurement Policy" dated March 2006, updated in January 2008 and as may be amended;
"**Role**"	means	any role in which a member of the Supplier Personnel is engaged in connection with the supply of Services;
"**Safety Breach**"	means	a material breach of any obligation under the Contract caused by the gross incompetence of or wilful default by the Supplier (or anyone employed by or acting on behalf of the Supplier) or any of its agents which has materially affected the safe operation of the Underground Network or the safety of the Company's customers, staff or any other person;
"**Schedule of Cost Components**"		has the meaning given in Schedule 2 (Payment),

"**Services**"	means	means the services stated in the Specification or any other part of this Contract to be performed by the Supplier under this Contract and any services, functions or responsibilities which may reasonably be regarded as incidental to the supply of the Services and/or anything necessary to comply with them and which may reasonably be inferred from this Contract and which includes the provision of Supplier Personnel;
"**Services Commencement Date**"	means	the date specified as such in Schedule 1 (Contract Data);
"**Shift**"	means	each shift in any of the shift patterns set out in Appendix 1 (Gang Rates) of Schedule 1 (Contract Data);
"**Shift Report**"		has the meaning given in Schedule 14 (Project Processes);
"**Specialist Sub-Contractors**"	means	the sub-contractors which the Company instructs the Supplier to engage in accordance with paragraph 9.4 of Schedule 3 (Specification) and Part B of Schedule 4 (Contract Variation Procedure and Additional Services);
"**Specialist Sub-Contractor Overhead and Profit Percentage**"	means	the percentage stipulated as such in Schedule 1 (Contract Data);

"**Specification**"	means	the description of the Services to be provided by Supplier in accordance with this Contract as set out or referenced in Schedule 3 (Specification), including any subsequent amendments made in accordance with this Contract;
"**Standards**"	means	the Category 1 and 2 Standards and Draft Category 1 and 2 Standards and such European, British and International Standards and associated Codes of Practice required by the Company for the Supplier to provide the Services in accordance with Good Industry Practice. A full set of current Standards is available for the Supplier's use on-line at the LU Standards e-library or as notified to the Supplier;
"**Supplier**"	means	the entity named as such in the Contract;
"**Supplier Default**"		has the meaning given in Clause 30.1;
"**Supplier Personnel**"	means	all employees, workers, agents or consultants of the Supplier and the Supplier's subcontractors from time to time including the Temporary Workers;
"**Supplier's Representative**"	means	the person appointed by the Supplier and named as such in Schedule 1 (Contract Data);
"**Term**"	means	the duration of the Contract which, unless terminated earlier in accordance with this Contract, shall be the Initial Term as may extended pursuant to Clause 2.2 of the Form of Contract;
"**Termination Notice**"	means	a notice of termination issued in accordance with this Contract;

"**TfL**" **or** "**Transport for London**"	means	Transport for London, a statutory body set up by the Greater London Authority Act 1999;
"**TfL Group**"	means	Transport for London and all of its subsidiaries and their subsidiaries (as defined in Section 1159 of the Companies Act 2006) from time to time, together with Crossrail Limited (company number 04212657) and reference to any "member of the TfL Group" refers to TfL or any such subsidiary;
"**Tools of the Trade**"	means	the tools and equipment stipulated in the Specification as necessary to be provided by Supplier and brought to the Worksite(s) for each Gang Type requirements and as set out in paragraph 5.3.11.5 of Schedule 3 (Specification);
"**Transparency Commitment**"	means	TfL's commitment (applying to TfL, the Company and the rest of the TfL Group) to publish contracts, tender documents and data from invoices received in accordance with the Local Government Transparency Code 2015 and TfL's own published transparency commitments;
"**Underground Network**"	means	the stations and depots (wherever situate), assets, systems, track and other buildings which are used in the maintenance and provision of the underground service known as "London Underground";

"**Value Added Tax**" **or** "**VAT**"	means	value added tax as provided for in the Value Added Tax Act 1994 and legislation (whether delegated or otherwise) supplemental thereto, or in any primary or secondary legislation promulgated by the European Union or any official body or agency of the European Union, and any similar sales, consumption or turnover tax replacing or introduced in addition to the foregoing;
"**Variation**"	means	any addition, omission or other change to the Specification;
"**Variation Order**"	means	the written authorisation from the Company to a Variation Proposal in accordance with the Contract Variation Procedure;
"**Variation Proposal**"	means	the written proposal put by the Company or the Supplier for a Variation in accordance with the Contract Variation Procedure in substantially the form set out in Appendix 1 of Part A (Contract Variation Procedure) to Schedule 4 (Contract Variation Procedure and Additional Services);
"**Water Technology List**"	means	the government-managed list of energy-efficient plant and machinery that forms part of the Enhanced Capital Allowance scheme;
"**Working Day**"	means	any day of the week (other than Saturday or Sunday) which is not an English bank holiday, or public holiday;
"**Worksite**"	means	the site(s) and/or work areas at which the Services are to be provided.

1.2 Headings in the Contract are for only for convenience and shall not affect the interpretation of the Contract.

1.3 Where appropriate, the singular includes the plural and vice versa and words importing a particular gender shall include all genders.

1.4 Any reference to "writing" means a communication consisting of words in any legible and visible form, including words produced by any form of electrical or mechanical means and in typed, electronic or printed format as well as in manuscript, and "written" shall be construed accordingly.

1.5 A reference to a Clause or Schedule shall be to a Clause of, or a Schedule to, the Contract (as the case may be) and references to the any Contract include its recitals and Schedules.

1.6 References to (or to any specified provision of) the Contract or any other document shall be construed as references to the Contract that provision or that document as in force for the time being and as from time to time amended in accordance with the terms of the Contract or the document in question.

1.7 Reference to any Applicable Laws and Standards also includes a reference to the Applicable Laws and Standards as from time to time amended, extended or re-enacted.

1.8 References to the "Company" shall include its successors, transferees and assignees.

1.9 References to a person, firm or company shall include any individual company, unincorporated association or body (including a partnership or joint venture) or other entity whether or not having a separate legal personality.

1.10 Any obligation on a Party to do or not do any act, matter or thing includes an obligation to procure that it is done or not done (as the case may be).

1.11 Words preceding the words "include", "includes", "including" and "included" shall be construed without limitation by the words which follow those words.

1.12 In the event that a conflict, ambiguity or inconsistency exists between the Clauses of this Contract and the Schedules or between any of the Schedules, then (save as expressly provided in this Contract) the order of precedence shall be as follows:

(a) the Clauses of this Contract;

(b) the Schedules to this Contract (equal priority, but subject to this Clause 1.12); and

(c) any other document referred to in, or incorporated by reference into, this Contract.

1.13 If there is any inconsistency between any diagram and any text, the text shall take precedence.

1.14 In the event of any inconsistency between the Schedules and the Parts, Annexes or Appendices thereto, the Schedules shall prevail.

1.15 Neither the giving of any approval, consent, examination, acknowledgement, knowledge of the terms of any agreement or document nor the review of any document or course of action by or on behalf of the Company, nor the failure of the same shall, unless otherwise expressly stated in this Contract, relieve the Supplier of any of its obligations under this Contract or of any duty which it may have hereunder to ensure the correctness, accuracy or suitability of the matter or thing which is the subject of the approval, consent, examination, acknowledgement or knowledge.

1.16 Where this Contract contemplates that the Company may elect, determine, approve, reject, consent, nominate, appoint, decide, specify, permit or consider any matter or thing, the Company may make such election, determination, approval, rejection, consent, nomination, appointment, decision, specification, permission or consideration in its absolute discretion without being required to give reasons, unless this Contract expressly requires otherwise.

1.17 Where this Contract contemplates that the Company may elect, determine, approve, reject, consent, nominate, appoint, decide, specify, permit or consider any matter or thing, this means in advance and in writing in order for the Supplier to be able to place reliance on it.

1.18 This Contract was drafted with the joint participation of the Parties and no provision of this Contract will be construed adversely to a Party solely on the ground that such Party was responsible for the preparation of this Contract or that provision.

1.19 Where used in any part of this Contract the phrase "reasonable endeavours" shall be taken to mean an obligation to do whatever could reasonably be done in the circumstances to fulfil the obligation concerned by:

(a) a responsible and sufficiently funded contractor acting in accordance with Good Industry Practice (in the case of the Supplier); or

(b) a responsible customer receiving the Services (in the case of the Company).

2 Commencement and duration

2.1 This Contract and the rights and obligations of the Parties (excluding the obligations of the Supplier to provide the Services but including the Supplier's obligation to provide the Mobilisation Activities) shall take effect on the Commencement Date and (save in the event of earlier termination) shall continue until the Expiry Date unless extended in accordance with Clause 2.2. The obligation of the Supplier to provide the Services shall take effect on the Services Commencement Date and (save in the event of earlier termination) shall continue until the Expiry Date unless extended in accordance with Clause 2.2.

2.2 The Company shall at its sole option be entitled at any time prior to the date falling no later than twelve (12) months prior to the Expiry Date to serve notice on the Supplier of its decision to extend this Contract for a period of up to twenty (24) months (the "**Extension Period**") either in respect of all or part of the Services.

2.3 The provisions of this Contract shall continue to apply mutatis mutandis to any such extension of this Contract (other than Clause 2.2 containing the option to extend and subject to any variations as may be agreed by both Parties).

2.4 Save as otherwise may be agreed, the Gang Rates at the start of the Extension Period shall be the Gang Rates in the immediately preceding twelve (12) months prior to the Extension Period, indexed in accordance with the provisions of Clause 15 (Price and Payment) and Schedule 2 (Payment).

2.5 On receipt of notice further to Clause 2.2 from the Company by the Supplier, this Contract shall be deemed extended accordingly.

3 Due Diligence

3.1 The Supplier acknowledges and agrees that the Company has delivered or made available the Disclosed Data and that the Supplier has:

(a) satisfied itself of all details relating to the Specification; and

(b) satisfied itself as to the assets to which it will acquire rights and the nature and extent of the risks assumed by it under this Contract.

3.2 The Company shall not be liable for any costs arising from the Supplier's failure to perform its obligations under this Clause 3 or from any actual or perceived lack by the Supplier of information or knowledge.

3.3 The Supplier shall not in any way be relieved from any obligation under this Contract nor shall it be entitled to make any claim against the Company on grounds that any information, whether obtained from the Company or otherwise (including information made available by the Company), is incorrect or insufficient and shall make its own enquiries as to the accuracy and adequacy of that information.

3.4 The Supplier acknowledges, represents and warrants that:

(a) the Company has relied upon the Supplier's expertise and professionalism in the carrying out of all due diligence activities in relation to this Contract including the requesting of and verification of all Disclosed Data; and

(b) the Disclosed Data, together with the Supplier's own expertise and knowledge of the Company's operations, are sufficient to enable the Supplier to satisfy itself:

(i) as to the scope and nature of the Services to be provided; and

(ii) that it is able to perform its obligations under this Contract.

3.5 The Supplier shall not be entitled to any additional payment nor be excused from any liability under this Contract and has no right to make a claim against the Company as a result of:

(a) the Supplier misinterpreting any matter or fact relating to the Specification or this Contract; or

(b) the Supplier having failed to review the Disclosed Data or any documents referred to in the Disclosed Data.

3.6 Subject to Clause 3.7, no warranty, representation or undertaking (whether express or implied) is given by the Company as to the relevance, accuracy, completeness,

adequacy or fitness for purpose of any Disclosed Data or that such information constitutes all of the information relevant or material to the Specification and the Services. The Supplier represents and agrees that it has placed and will place no reliance on the Disclosed Data and that it has made its own enquiries to satisfy itself as to the accuracy, adequacy and completeness of the Disclosed Data supplied to it in connection with this Contract. Accordingly, the Supplier shall not be relieved from any obligation under this Contract in connection with:

(a) the supply and the content of any Disclosed Data; and

(b) any representations or statements made in respect of any Disclosed Data, and all liability on the part of the Company in connection with the matters set out at Clauses 3.5(a) and 3.5(b) is excluded to the extent permitted by Applicable Laws.

3.7 Nothing in this Clause 3 shall exclude any liability which the Company or any of its agents or employees would otherwise have to the Supplier in respect of any statements made fraudulently or fraudulent omissions to make statements prior to the Commencement Date.

4 Supplier Warranties

4.1 The Supplier warrants to the Company that:

(a) it is properly constituted and incorporated under the laws of England and Wales and has all necessary authority, power and capacity to enter into this Contract, and that this shall remain the case until the Expiry Date;

(b) it has entered into and executed this Contract by its duly authorised representatives in accordance with all procedures required by its governing laws and constitutional documents and all necessary corporate and other actions required to authorise the execution of, and the performance of its obligations under, this Contract have been taken by the Supplier and this Contract is executed on behalf of the Supplier by a duly authorised representative of the Supplier;

(c) it has the right to grant to the Company and any member of the TfL Group all licences (including without limitation all rights to sub-licence) of all and any Intellectual Property Rights as contemplated in this Contract and such

Intellectual Property Rights are not infringing upon the Intellectual Property Rights or infringed by the Intellectual Property Rights of any third party;

(d) it has examined the Specification and all other documents forming this Contract and is not aware of any ambiguity or discrepancy within this Contract or between this Contract and any other documents which it is required to comply with which might adversely affect the carrying out of the Services for the Gang Rates in accordance with the terms of this Contract;

(e) at the Commencement Date there are no actions, suits or proceedings or regulatory investigations pending or, to the Supplier's knowledge (having made all due enquiry), threatened against or affecting the Supplier or any of its assets before any court or administrative body or arbitration tribunal that might affect the ability of the Supplier to meet and carry out its obligations under this Contract;

(f) at the Commencement Date all information, representations and other matters of fact communicated in writing to the Company or its agents or employees in connection with the response of the Supplier to the Invitation to Tender or in the course of negotiations in respect of this Contract are true, complete and accurate in all respects or were at the time they were made with any omissions or inaccuracies being notified to the Company by the Supplier prior to the Commencement Date by way of updating information;

(g) as at the Commencement Date, the execution, delivery and performance by the Supplier of its obligations under this Contract will comply with Applicable Laws and will not result in a default under any agreement by which the Supplier is bound or any order or decree of any court of competent jurisdiction or arbitrator which is binding on the Supplier, and which could prevent the supplier from entering into and performing its obligations under this Contract;

(h) it has not (and none of its employees or contractors or agents or any employees of any contractors or agents has) committed any Prohibited Act in relation to this Contract prior to entering into or in entering into this Contract;

(i) it has and will throughout the duration of this Contract have in place adequate procedures (as referred to in Section 7(2) of the Bribery Act 2010) designed to prevent persons associated with the Supplier from bribing any person with the intention of obtaining or retaining business for the Supplier or with the

intention of obtaining or retaining an advantage in the conduct of business for the Supplier;

(j) it has obtained or will obtain, at or before the time such Necessary Consents are required to be obtained, all Necessary Consents from time to time necessary to carry out its obligations under this Contract;

(k) as at the date of this Contract there are no material facts or circumstances in relation to the financial position or operational constitution of the Supplier which have not been fully and fairly disclosed to the Company and which if disclosed might reasonably have been expected to affect the decision of the Company to enter into this Contract;

(l) no proceedings or other steps have been taken and not discharged (nor, to the best of the knowledge of the Supplier, having made all due enquiry, threatened) for the winding-up or dissolution or for the appointment of a receiver, administrative receiver, administrator, liquidator, trustee or similar officer in relation to any of the assets or revenues of the Supplier;

(m) it has and until the Expiry Date will continue to have the expertise to supply the Services;

(n) it is resident for tax purposes in (and only in) the UK, and undertakes that it will, at all times ensure that its affairs are conducted in a way which ensures they are and will remain resident for tax purposes in (and only in) the UK;

(o) as at the date of this Contract, it has notified the Company in writing of any Occasion of Tax Non-Compliance or any litigation that it is involved in that is in connection with any Occasion of Tax Non-Compliance;

(p) it shall, where applicable to the Supplier, comply with the Modern Slavery Act 2015 and any guidance issued by the Secretary of State under it; and

(q) as at the date of this Contract, it has not been in any of the situations referred to in Regulation 57(1) of the Public Contracts Regulations 2015 and should therefore have been excluded from the procurement procedure in accordance with Regulation 80(2) of the Utilities Contracts Regulations 2016.

5 Supplier's Primary Obligations

5.1 The Supplier shall provide:

(a) the Mobilisation Activities; and

(b) the Services,

to the Company and perform its obligations under this Contract in accordance with the terms set out in the Contract (including the Schedules).

5.2 The Supplier shall ensure and warrants to the Company that:

(a) the Services will:

(i) be performed by appropriately qualified and trained personnel exercising the highest standard of diligence, care and skill;

(ii) be performed in accordance with the Specification;

(iii) conform to all Applicable Laws (including but not limited to any law and regulations applicable to the Company or the Underground Network);

(iv) comply with all Standards and any additional standards listed in the Specification; and

(v) be performed in accordance with the requirements of the ISO 9000 and ISO 14000 series as appropriate to the provision of the Services, the Health and Safety Management Plan, the Quality Management Plan, or any equivalent international quality assurance standards as may be accepted as an alternative in the absolute discretion of the Company.

(vi) comply with the requirements of the Company set out in the Contract and all lawful and reasonable directions of the Company;

(b) it shall provide the required Supplier Personnel, Tools of the Trade and Key Materials as set out in the Specification;

(c) all Supplier Personnel involved in the provision of the Services:

(i) shall arrive at the Worksite(s) punctually and able to commence the Services at the time designated;

(ii) are entitled to work in the United Kingdom;

(iii) have no known employment history indicating that they are unsuitable to work for the Company;

(iv) can communicate effectively, both orally and in writing, in the English language;

(v) are equipped with all necessary PPE in compliance with the Standards and this Contract;

(vi) are equipped with all necessary Equipment required to undertake the Services in accordance with the Specification;

(vii) perform their tasks in accordance with Good Industry Practice; and

(viii) have received appropriate training for particular tasks as is indicated by the Specification.

(d) it shall be able to provide documentary evidence that all Supplier Personnel involved in the provision of the Services are appropriately qualified and competent to perform the Services in accordance with the Contract;

(e) it shall at all times comply with the Quality Management Plan and Health and Safety Management Plan.

5.3 The Supplier shall use all prudent and commercial steps necessary to mitigate and minimise:

(a) any actual or potential increase in the Gang Rates, or any other costs that may be payable by the Company under the Contract and any delay to any Services to the maximum extent reasonably practical; and

(b) any actual or potential Losses (including but not limited to costs on or relating to termination of the Contract).

5.4 The Supplier shall ensure that all Supplier Personnel provided to the Company in accordance with the terms of the Contract comply with all relevant obligations of the Supplier in accordance with the Contract.

5.5 The Supplier shall carry out the Services in such a manner as not to endanger or interfere in any way with the railway, the Company or any operator.

5.6 Without prejudice to Clauses 5.1 to 5.5 the Parties shall co-operate with one another and act reasonably and in good faith in and about the performance of their respective obligations and the exercise of their respective rights under the Contract.

5.7 For the avoidance of doubt, neither a communication from the Company nor the review or acceptance of the Services waives, limits or amends in any way any warranties, liabilities or responsibilities of the Supplier under this Contract.

6 Provision of Labour

6.1 The Supplier shall supply to the Company the Supplier Personnel:

(a) in the numbers of Gangs;

(b) of the required trades and skills; and

(c) to the required shift/working pattern and at the times,

set out in the Contract and identified in or required pursuant to the Specification or as otherwise instructed by the Company.

6.2 The Supplier warrants and undertakes that the Supplier Personnel supplied to the Company are, and at all times during the provision of the Services in accordance with the Contract shall remain, competent to perform the role for which they have been supplied in accordance with the Contract (including (without limitation) the Specification) or as otherwise instructed by the Company.

6.3 Subject to Clauses 6.4 to 6.7 inclusive the Company shall have the right to issue an instruction changing the manner in which the Services are provided which may:

(a) reduce or increase the numbers of Supplier Personnel required; and/or

(b) change the trades, grades or skills required; and/or

(c) change the shift/working pattern required; and/or

(d) change the Standards; and/or

(e) otherwise amend the Specification.

Such instruction shall be issued in accordance with Clause 14.1 and Schedule 4 (Contract Variation Procedure and Additional Services).

6.4 The minimum period of notice for an instruction changing the manner in which the Services are provided is as stipulated in Schedule 1 (Contract Data). The minimum period does not apply to the implementation of a change to the Standards or the serving of a health and safety notice or the removal of incompetent Supplier Personnel in which event the instruction shall be implemented at the earliest possible moment.

6.5 In the event that the Company seeks to change the manner in which the Services are provided with less than the minimum period of notice, the Supplier shall use its best endeavours to meet the Company's requirements.

6.6 In the event that the Company omits the Services required either in whole or in part in accordance with Clause 6.3 the Company shall owe no liability with regard to any part of the Services not used save that should the Company omit the Services required either in whole or in part with less than the minimum notice period stipulated in Schedule 1 (Contract Data), the Company shall pay those justified and reasonable costs incurred by the Supplier directly relating to that part of the Services not used provided that such costs were otherwise unavoidable and are supported by documentary evidence.

6.7 With reference to Clause 5.3 the Supplier shall use best endeavours to mitigate the costs incurred under Clause 6.6 and any failure to do so will relieve the Company from any liability in respect of additional payment.

7 Labour Utilisation

7.1 The Company shall instruct the Supplier Personnel supplied in accordance with the Contract to carry out only such tasks as are consistent with their qualifications and skill.

7.2 The Supplier and/or the Supplier's Representative shall, comply with the provisions of Schedule 14 (Project Processes) including in relation to the planning of resource.

8 Early Warning

8.1 The Supplier shall give an early warning by notifying the Company as soon as it becomes aware of any matter which could:

(a) increase the Gang Rates;

(b) reduce Gang productivity;

(c) prevent the Supplier from performing its obligations under this Contract or cause the Supplier to be in breach of this Contract or any Sub-Contract;

(d) adversely affect the Company;

(e) lead to the Supplier terminating or suspending any sub-contract; or

(f) cause a breach of any Applicable Laws or Standards.

9 Records and Audit

9.1 The Supplier shall, and shall procure that its subcontractors shall, maintain a true and correct set of records including personnel records relating to all aspects of their performance of the Contract and all transactions related to the Contract. For the avoidance of doubt, such records shall include but are not limited to:

(a) all necessary information for the evaluation of claims or variations;

(b) management accounts, information from management information systems and any other management records;

(c) accounting records (in hard copy as well as computer readable data);

(d) subcontract files (including proposals of successful and unsuccessful bidders, bids, re-bids etc);

(e) original estimates;

(f) estimating worksheets;

(g) correspondence;

(h) variation and claims files (including Documentation covering negotiated settlements);

(i) general ledger entries detailing cash and trade discounts and rebates;

(j) commitments (agreements and leases) greater than £5,000;

(k) details of the work or services performed;

(l) details of the hours worked;

(m) details of the costs incurred;

(n) detailed inspection records; and

(o) such materials prepared in relation to the Invitation To Tender and subsequent tendering process relating to cost breakdowns, reconciliations against best and final offer pricing and project plans, in each case which have not already been provided to the Company.

9.2 The Supplier agrees, and shall procure that its subcontractors agree, to retain all such records in such a manner as the Company may reasonably instruct for a period of not less than twelve (12) years after completion of performance this Contract. In the absence of specific instructions as to the method of storage, the Supplier shall retain his records in an orderly and logical fashion and in a legible form.

9.3 The Company and its authorised representatives and any party legally authorised to inspect any part of the Underground Network and/or Worksite(s) shall have the right to inspect and audit any of the records referred to in this Clause 9 at any time during the period referred to in Clause 9.2.

9.4 The Supplier shall promptly provide all reasonable co-operation in relation to any audit or check including, to the extent reasonably possible in each particular circumstance:

(a) granting or procuring the grant of access to any premises or Worksite(s) used in performance of the Contract, whether the Supplier's own premises or otherwise;

(b) granting or procuring the grant of access to any equipment (including all computer hardware, software and databases) used (whether exclusively or non-exclusively) in the performance of the Supplier's obligations under the Contract, wherever situated and whether the Supplier's own equipment or otherwise;

(c) making any contracts and other documents and records required to be maintained under the Contract available for inspection;

(d) providing a reasonable number of copies of any contracts and other documents or records reasonably required by the Company's auditor and/or granting copying facilities to the Company's auditor for the purposes of making such copies; and

(e) complying with the Company's reasonable requests for access to senior personnel engaged in the Supplier's performance of the Contract.

9.5 The Supplier shall maintain an effective and economical programme for monitoring and maintaining quality of the Services, including any and all services forming part of them, planned and developed in conjunction with any other functions of the Supplier necessary to satisfy the Contract's requirements.

9.6 The Supplier shall permit the Company's authorised representatives, access and facilities (as required and when notified) for the purpose of systems and product quality audits including but not limited to access to Documentation showing results of testing and inspection, certificates of conformance and safety-related documents. The Supplier shall provide the Company with a copy of any or all of the records listed in this Clause 9 free of charge within thirty (30) days of the Company's request for the same.

9.7 The Supplier shall and shall ensure that any subcontractor shall ensure that appropriate security systems are in place to prevent unauthorised access to, extraction of and/or alteration to data during the audit undertaken pursuant to the Contract.

10 Company's Obligations

10.1 The Company shall pay the Supplier the Price for Services Provided to Date for the Services in accordance with Clause 15, Schedule 2 (Payment) and the terms of the Contract.

10.2 Payment of the Price for Services Provided to Date shall not affect any claims or rights which the Company may have against the Supplier and shall not be an admission by the Company that the Supplier has performed its obligations under the Contract properly.

10.3 As regards the Company, this Contract is not exclusive and the Company may:

(a) itself perform any services similar or analogous to any part of or all of the Services or any Additional Services; or

(b) contract with any third party to perform any services similar or analogous to any part of or all of the Services or any Additional Services.

10.4 In the event that the Company contracts with any third party to perform any services similar or analogous to any part or all of the Services, the Supplier shall provide such information and assistance and within such timescales as the Company may reasonably request in connection with such procurement.

11 Tools of the Trade, Equipment and Materials

11.1 Save for any Company Equipment that the Company agrees to provide in accordance with this Contract, the Supplier shall provide all such Tools of the Trade and Key Materials required by the Contract and shall ensure that the Tools of the Trade and Key Materials are available for use by the Supplier Personnel whenever required for the provision of the Services.

11.2 The Supplier shall ensure that the Tools of the Trade and Equipment required by the Contract are maintained in good working order and comply with the Standards and Applicable Laws and are suitably and properly certificated and insured.

12 Company Equipment

12.1 Not used

12.2 Any Company Equipment supplied by the Company to the Supplier shall remain the property of the Company and the Supplier shall ensure that all Company Equipment are properly labelled as the property of the Company and are kept separate from and not mixed with any materials owned or in the possession of the Supplier or with any materials supplied to it by third parties.

12.3 The Supplier shall check the Company Equipment at the time of delivery to ensure that they are in good condition and in accordance with the Specification and shall certify the advice note of the supplier of the Company Equipment accordingly and return the advice note as soon as reasonably possible to that supplier. The Supplier shall report any loss or damage immediately following inspection of the Company Equipment to the Company, the Company's Representative, the supplier of the

Company Equipment and the carriers of the Company Equipment. In the event that such a report is not made, the Supplier shall be responsible for any loss or damage existing at the time of receipt which would have been apparent on a visual check of quantities and condition.

12.4 The Supplier shall properly store all Company Equipment and other property of the Company whilst the same are in the Supplier's possession and protect the same from damage by exposure to the weather and shall take every reasonable precaution against accident or damage to the same from any cause. The Supplier shall be liable for all loss or damage to such Company Equipment and other property of the Company whilst the same are in or ought to be in the Supplier's possession or in, or ought to be in, the possession of any sub-contractor of the Supplier except where such loss or damage is solely due to any negligent act or omission of the Company or its employees.

12.5 The Supplier shall maintain the Company Equipment in accordance with paragraph 7 of Schedule 3 (Specification).

12.6 The Supplier shall return to the Company's Representative all Company Equipment provided to the Supplier in accordance with Schedule 16 (Obligations on Handover) or as otherwise requested by Company in writing.

13 Title

13.1 Whatever title the Supplier has to materials (including Materials and Key Materials) to be incorporated into or form part of the Services shall pass to the Company upon the earlier of (i) payment for such materials or (ii) when such materials are brought within the Worksite(s), without prejudice to any rights of rejection the Company may have. Title to materials referred to in (ii) passes back to the Supplier if it is removed from the Worksite(s) with the permission of the Company's Representative and payment for such material has not been made. Until such time as they are brought within the Worksite(s), the Supplier shall be responsible for and insure against the loss, destruction and damage of materials to be incorporated into or form part of the Services (including while in transit) for their full replacement value, whether or not the property of the Supplier or the Company.

13.2 The Supplier shall label the materials "Property of TfL" where title has passed to the Company prior to bringing such items within the Worksite(s) and shall ensure that such items are identifiable as belonging to the Company. The Supplier shall not

mortgage, pledge or create a security interest in the material, plant or equipment in favour of any third party.

13.3 The Supplier has no title to an object of value or of historical or other interest within the Worksite(s). Without prejudice to the generality of Clause 22, the Supplier shall notify the Company's Representative when such an object is found and the Company's Representative shall instruct the Supplier how to deal with it. The Supplier shall not move the object without instructions.

13.4 The Supplier has title to materials from excavation and demolition only as stated in the Specification.

14 Variation and Additional Services

14.1 The Company may, at any time during the term of the Contract, instruct or authorise (as the case may be) a Variation in accordance with the Contract Variation Procedure, in which event the relevant parts of the Contract shall be amended accordingly.

14.2 Any other variation to the terms of the Contract shall be effective only if in writing and signed by both Parties.

14.3 Additional Services

Notwithstanding the provisions of Schedule 4 (Contract Variation Procedure and Additional Services) and the definition of Additional Services as set out in Part 1 of Part B of Schedule 4 (Contract Variation Procedure and Additional Services), in the event that the Company elects the Supplier to deliver any additional or varied works or services (whether or not defined as Additional Services in Part 1 of Part B of Schedule 4 (Contract Variation Procedure and Additional Services), the Company shall have the right to determine, in its sole discretion and in all circumstances, whether the provisions of the Contract Variation Procedure set out in Part A of Schedule 4 (Contract Variation Procedure and Additional Services) or the provisions of the Additional Services procedure in Part B of Schedule 4 (Contract Variation Procedure and Additional Services) shall apply. In the event that Additional Services are deemed to be treated as a Variation pursuant to Part A of Schedule 4 (Contract Variation Procedure and Additional Services), the provisions of Part B of Schedule 4 (Contract Variation Procedure and Additional Services) shall not apply.

15 Price and Payment

15.1 The Company shall pay the Supplier the Price for Services Provided to Date for the Services in accordance with the terms of this Contract and Schedule 2 (Payment).

15.2 Payment of the Price for Services Provided to Date shall not affect any claims or rights which the Company may have against the Supplier and shall not be an admission by the Company that the Supplier has performed its obligations under this Contract properly.

15.3 The Supplier shall ensure that all Payment Applications clearly show the Contract Reference Number.

15.4 All sums payable to the Company by the Supplier under the Contract (including any Abatement(s)) shall be paid in full, free of any present or future taxes, levies, duties, charges, fees or withholdings and without any deduction, restriction, conditions, withholding, set-off or counterclaim whatsoever; and if the Supplier is compelled by law to make any deduction or withholding, the Supplier shall gross up the payment so that the net sum received by the Company will be equal to the full amount which the Company would have received had no such deduction or withholding been made.

15.5 No payment made by the Company shall indicate or be taken to indicate the Company's acceptance or approval of any part of the Services or any act or omission of the Supplier from any obligation or liability imposed upon the Supplier by any provision of the Contract or otherwise.

16 Performance Measurement

16.1 At the end of the Company's first full Period after the Commencement Date (and for the duration of the Contract) every four (4) weeks after that date the Company shall assess the Supplier's performance under the Contract in accordance with Schedule 9 (Performance Measurement).

16.2 The Company shall have the right to:

(a) levy Abatements as set out in Schedule 9 (Performance Measurement); and

(b) use the Escalation Procedure set out in Schedule 9 (Performance Measurement) to rectify any unsatisfactory performance by the Supplier in its performance of the Contract or any failure by the Supplier to meet the performance standards set out in Schedule 9 (Performance Measurement).

(c) Without limiting any other remedy, if the Services are not performed in accordance with this Contract then the Company shall be entitled to appoint an alternative supplier(s) to perform the relevant Services and/or rectify the relevant failure and recover from the Supplier any costs reasonably incurred by the Company in obtaining such substitute services from such alternative supplier(s). Such costs shall at the Company's option either:

(i) be deducted from any payment due to the Supplier whether under this Contract or otherwise; or

(ii) be the subject of a demand for payment from the Company which, shall be payable by the Supplier as a debt due within 14 days.

17 Access

17.1 The Company shall give the Supplier access to the parts of the Underground Network required for the performance of the Services in accordance with the provisions of this Clause 17.

17.2 Subject to the provisions of this Clause 17, the Company will use its reasonable endeavours to give access to any part of the Underground Network necessary for the provision of the Services.

17.3 The Supplier acknowledges that the Company does not guarantee uninterrupted or exclusive possession to any parts of the Underground Network and that its access to some parts of the Underground Network may be limited in accordance with the Contract.

17.4 The Supplier shall ensure that all booked access is used efficiently with minimal disruption and disturbance to others or damage to the Underground Network. The Supplier shall make good any such damage at its own cost at the earliest opportunity and to the reasonable satisfaction of the Company’s Representative.

17.5 The Supplier shall not and shall ensure that its Supplier Personnel do not frustrate any booked access or cause any booked access to be withdrawn. The Supplier shall indemnify and keep indemnified the Company in respect of any claims by third parties relating to the disruption, delay or cancellation of their access due to the actions or omissions of the Supplier.

18 Work on Company's Worksites

18.1 During the Term, the Supplier shall:

(a) ensure the Supplier Personnel used in the provision of the Services are competent, properly trained and supervised and hold appropriate qualifications or certifications in accordance with any Applicable Laws and Standards;

(b) ensure that all employees and agents of the Supplier including any of the Supplier's subcontractors working on the Company's or third parties' sites comply with the sites' local safety arrangements and undergo any relevant induction or training necessary and comply with all reasonable instructions of the Company or third party;

(c) notwithstanding the terms of Clause 18.1(d), accept full responsibility for its subcontractors and ensure that such subcontractors adhere to the terms and conditions of the Contract;

(d) supply the Company with a list of all Supplier Personnel working on the Company's or third parties' site and notify the Company in writing of any changes to the identity of such personnel within one (1) Working Day of such change taking place;

(e) ensure that no employees or agents of the Supplier including any of the Supplier's subcontractors use the Company's or a third parties' site equipment without the prior written consent of the Company or the relevant third party;

(f) carry out the Services in such a manner as not to endanger or interfere in any way with the railway, the Company or any railway operator. The Supplier shall strictly observe all rules and regulations set out or referred to in the Contract and any further instructions, rules and regulations which it may from time to time receive from the Company's Representative for the working, protection and return of the railway or for the protection of persons on or adjacent to the railway; and

(g) attend the Company or any third party in order to advise on the effects of the Supplier's actions or proposed actions in respect to the Services on the integrity and/or functionality of any other aspect of the railway.

(h) Without prejudice to Clauses 18.1(a) to (g) the parties shall co-operate with one another and act reasonably and in good faith in and about the performance of their respective obligations and the exercise of their respective rights under the Contract.

18.2 The Company's Representative may require the Supplier to remove from any Worksite any person employed by the Supplier who in the opinion of the Company's Representative:

(a) misconducts himself or persists in any conduct which is prejudicial to health or safety;

(b) is incompetent or negligent in the performance of its duties; or

(c) has had his employment terminated in whatever capacity from any of the Worksites, any part of the Underground Network or any other Company premises,

and the Supplier shall comply with the Company's Representative's requirements. Such removal shall not affect the Supplier's obligation to provide the Services in accordance with this Contract. Any such person shall not be employed again by the Supplier to provide the Services without prior written permission of the Company's Representative.

18.3 Any person removed from the Worksite(s) under Clause 18.2 shall be replaced as soon as reasonably possible by the Supplier and the Supplier shall promptly notify the Company of such replacement and in any event by no later than two (2) Working Days of the replacement.

19 Not Used

20 Environmental Claims

20.1 The Supplier shall indemnify the Company against Losses and Remediation costs in respect of any Environmental Claims which may arise out of or by reason of the Supplier's performance, non-performance or part performance of the Contract including (but not limited to) Part C: (Environmental Requirements) of Schedule 5 (Health, Safety, Quality and Environmental Requirements) to the extent that such Losses and Remediation costs are due to any act, negligence, breach of contract,

breach of statutory duty, error, omission or default by the Supplier, its employees, subcontractors or agents.

20.2 The Supplier shall notify the Company's Representative and the Company as soon as it becomes aware that any Remediation is or will become necessary on any part of the Company's Worksites.

20.3 Where the Supplier discovers or suspects that the site has been contaminated or polluted by another party, the Supplier shall notify the Company's Representative and the Company of the identity of the other party, where known.

20.4 The Supplier shall not without the prior written consent of the Company undertake any environmental investigations on site or commission or undertake any Remediation.

21 Environment, Health and Safety

21.1 The Supplier shall comply with its obligations under Schedule 5 (Health, Safety, Quality and Environmental Requirements) of the Contract.

21.2 The Supplier shall not endanger in any manner the health and safety of, or unreasonably interfere with the proper performance of the duties of, the Company's employees or third parties or otherwise expose the Company to liability under any Applicable Laws and Standards, including (without limitation) the Health and Safety at Work etc. Act 1974, the Transport and Works Act 1992, or any statutory modifications or re-enactments thereof.

21.3 The Supplier shall act in accordance with the health and safety regulations and requirements stated in the Specification, including (but not limited to):

(a) the provisions of the Company's Contract QUENSH Conditions that are indicated as being applicable to this Contract in the QUENSH menu set out in Schedule 5 (Health, Safety, Quality and Environmental Requirements) as amended from time to time; and

(b) the Company's drug and alcohol principles as amended from time to time.

21.4 Section 14.1.1 (Alcohol and drugs) of QUENSH shall apply to the Contract as if the term "LU Premises" means any of the Company's property and as if references to "LU" are references to the Company.

21.5 The Company may at its discretion carry out on the Supplier's behalf any testing of the Supplier's employees, subcontractors or agents for drugs or alcohol which the Contract requires the Supplier to carry out. The reasonable cost to the Company of carrying out the testing shall be paid by the Supplier.

Working on and Adjacent to the Railway

21.6 The Supplier shall ensure that the Supplier Personnel shall conduct themselves in such a manner as not to endanger or interfere in any way with the railway, the Company or any railway operator. The Supplier shall ensure its Supplier Personnel are instructed to strictly observe all Applicable Laws and Standards set out or referred to in the Contract and any further rules, regulations or instructions which he may from time to time receive from the Company for the working and protection of the railway or for the protection of persons on or adjacent to the railway or railway operations.

21.7 In all cases where the Services have to be carried out on or adjacent to the railway traffic, the Supplier shall require its Supplier Personnel to observe special precautions for the protection of such railway traffic in accordance with the requirements stated or referred to in the Specification.

22 Relief Events

22.1 The following are events which may cause the Supplier delay or disruption and for which the Supplier may be relieved from termination due to a Supplier Default subject to the terms of this Clause 22 ("Relief Events"):

(a) (subject to compliance by the Supplier with the requirements of Clause 17) the frustration of any access to be provided by the Company in accordance with Clause 17;

(b) a breach of this Contract by the Company (except to the extent caused by or contributed to by the Supplier or any sub-contractor or person for whom those parties are responsible) that is not one of the other Relief Events;

(c) flooding caused by rising water table or by weather conditions including extraordinary storm, bursting or overflow of water tanks, apparatus or pipes;

(d) an interruption in the supply of power or other utility services for which the Supplier is not responsible, if and only to the extent that such failure or

interruption is not caused by, and its effects are beyond the reasonable control of, the Supplier and it could not reasonably have avoided or provided against the effects;

(e) any act of terrorism or a specific threat of terrorism which results in the partial or total, temporary or long term closure of the Underground Network and/or Worksite(s);

(f) lightning, earthquake or extraordinary storm;

(g) fire;

(h) tunnel collapse;

(i) compliance with the provision of Sections 118 to 121 of the Railways Act 1993;

(j) the discovery of fossils, antiquities or other material which in each case is required to be exhumed or unexploded bombs; and

(k) strikes, lock outs or other industrial action being in each case industry-wide.

22.2 The Supplier shall notify the Company's Representative of the occurrence of an event which has happened or which it expects to happen if:

(a) it believes it to be a Relief Event that is delaying or disrupting (or is likely to delay or disrupt) the Services; and

(b) the Company's Representative has not notified the event to the Supplier.

The event shall be notified as soon as is reasonably practicable and in any event no later than five (5) Working Days after the Supplier becomes aware or ought reasonably to have become aware of the event or the likelihood of its occurrence.

22.3 The Supplier shall submit full and detailed particulars of any Relief Event to the Company's Representative as soon as reasonably practicable after receiving the Company's Representative's notification and in any event no longer than ten (10) Working Days after the occurrence. The particulars shall include full, detailed particulars of the cause and effect of the Relief Event and:

(a) the extent of the delay, if any;

(b) details of the measures adopted by the Supplier to mitigate the effects of the Relief Event;

(c) the likely effects, if any, on access requirements; and

(d) such further information as may reasonably be required by the Company.

The Company shall be entitled to:

(A) seek clarification in respect of the particulars provided by the Supplier; and/or

(B) request further particulars and related information in connection with the occurrence of the Relief Event.

Provided that there shall be no increase to the Gang Rates arising as a result of a Relief Event.

22.4 If the Company's Representative decides that the occurrence is a Relief Event in accordance with this Contract and is delaying or disrupting (or is likely to delay or disrupt) the Services then:

(a) without prejudice to Clause 22.5, the Supplier shall not be deemed to be in breach of this Contract as a result of its failure to perform and the Company shall not be entitled to apply the provisions of Schedule 9 (Performance Measurement) in respect of any affected Services, to the extent that the same is attributable to the Relief Event; and

(b) the Supplier shall be entitled to an extension of time for the performance of its affected obligations.

22.5 The Company shall be under no obligation to make any payments to the Supplier in respect of any Services affected by the Relief Event during the period in which the Relief Event is subsisting provided that any such non-performance by the Supplier shall be disregarded for the purposes of the Company's right to terminate this Contract pursuant to Clause 30.

22.6 The Supplier shall have no entitlements in accordance with Clause 22.4 to the extent that:

(a) the event or any of its effects arises from any error, unlawful act or omission, negligence, default, breach of contract, breach of statutory duty and/or failure

to comply with this Contract of the Supplier or any of its employees or agents or of any sub-contractor or supplier or any of their employees or agents;

(b) the Supplier has failed to take all reasonable steps to mitigate the actual or potential effect of the event or has failed to use its best endeavours to adjust the order and sequence in which it proposes to provide the Services; and/or

(c) the Company's Representative decides that there was no such occurrence, that the occurrence was not one of the Relief Events, or that the occurrence has had no adverse effect on the provision of the Services.

22.7 In the event that information is provided after the date referred to in Clauses 22.2 and/or 22.3, then the Supplier shall not be entitled to any extension of time or relief from its obligations under this Contract in respect of the period for which the relevant information is delayed.

22.8 This Clause 22 shall not give the Supplier any entitlement to an extension of the period of the Supplier's employment under this Contract or any extension to the Expiry Date.

22.9 A Relief Event may not be notified after the Expiry Date (or termination if earlier).

23 Independent Supplier

23.1 The Supplier is an independent Supplier and is not and shall not hold itself out as, and shall procure that none of the Supplier's employees, agents or subcontractors or their employees hold themselves out as, an agent of the Company. All personnel used by the Supplier in the performance of its obligations under the Contract shall be employees of the Supplier, or any subcontractor or agent of the Supplier.

24 Supplier Personnel

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24.1 For the purposes of this Clause 24.1.

"**Current Service Provider**" means any person, company or other legal entity which on or before the Commencement Date was the employer of any of the Transferring Employees, and which (for the avoidance of doubt) may include the Company.

"**Replacement Employer**" means any person to whom a Subsequent Relevant Employee may or does transfer under the Transfer Regulations on termination of the contract (or part of it);

"**Relevant Claims and Liabilities**" means all liabilities, obligations, proceedings, court or tribunal orders, losses, fines and penalties, damages, expenses, costs (including reasonable legal costs and disbursements) actions, claims and demands;

"**Subsequent Transfer Date**" means the time and date on which a Subsequent Relevant Employee transfers to a Replacement Employer by virtue of the Transfer Regulations;

"**Subsequent Relevant Employee**" means a person employed or engaged by the Supplier or relevant subcontractor from time to time in respect of any part of the Services who would transfer to a Replacement Employer by virtue of the Transfer Regulations on termination of the contract (or part of it);

"**Transfer Regulations**" means all or any of the following: the Transfer of Undertakings (Protection of Employment) Regulations 2006; the Transfer of Employment (Pension Protection) Regulations 2005; any other or further regulations, order or statutory instrument which apply or are capable of applying to a person to whom section 257 of the Pensions Act 2004 applies, as amended, replaced or extended from time to time and including any regulations or other legislation which (either with or without modification) re-enacts, adopts, consolidates or enacts in rewritten form any such regulations; and

"**Transferring Employees**" means those employees of or those engaged by the Current Service Provider who transfer or have the right to transfer to the Supplier under the Transfer Regulations

24.2 The Supplier complies and procures that his subcontractors comply with any obligations which may arise out of a transfer to the Company or another person under the Transfer Regulations upon the Expiry Date or earlier termination of the Contract.

24.3 At any time during the last twelve (12) months of the Contract and/or during any period of notice terminating the Contract, the Company may require the Supplier to provide, within a specified period of being requested, to the Company (or to any other person or persons nominated by the Company) such information as is reasonably

required by the Company or such other persons relevant to the potential liabilities of the Company or any other person arising under the Transfer Regulations including but not limited to information on the following:

(a) the names of employees (of the Supplier or its subcontractors) engaged in providing the Services, their salaries and other conditions of employment, ages and length of service;

(b) the method of organisation of the employees (of the Supplier or its subcontractors) engaged in providing Services and documentary evidence relating to such organisation;

(c) the proposals for informing and consulting with affected employees;

(d) details of collective agreements and union recognition agreements; and

(e) any other employee liability information within the meaning of the Transfer Regulations, and will in addition provide copies to the Company upon request of any communication with any potential or intended new consultant or the Supplier's employees or their representatives relating to the effect on such employees of the expiry or termination of the Contract.

24.4 The Supplier will provide the Company upon request with the name and address of a person within its organisation to whom all queries and requests for information under this Clause 24.4 may be addressed. The Supplier will if required by the Company warrant that any information provided under Clause 24.3 is accurate, complete and not misleading, including any information supplied in relation to its subcontractors.

24.5 The Supplier will not and will procure that its subcontractors will not in the twelve (12) months prior to the Expiry Date (or, where notice of termination is given of less than six (6) months, during any such period of notice) without the Company's written consent:

(a) re-organise or substantially alter the number or method of organisation or identity of the employees engaged in providing the Services, except to the extent that any such change is the result of a bona fide business reorganisation of the Supplier or the relevant subcontractor which is not related or confined to the employees engaged in providing the Services or the expected Expiry Date or termination of the Contract, or

(b) make any increase to the salaries or any significant change to the terms and conditions of employment of the employees engaged in providing the Services, except where such increases or changes would have arisen in the ordinary course of the Supplier's or the relevant subcontractor's business and are not related to the Expiry Date or termination of the Contract (either because they are applied to all of the Supplier's or the relevant subcontractor's employees, whether or not engaged in providing the Services or otherwise) or are the result of a bona fide business reorganisation of the Supplier or the relevant subcontractor which is not related or confined to the employees engaged in providing the Services or relates to the Expiry Date or termination of the Contract.

24.6 The Supplier shall indemnify the Company against all Relevant Claims and Liabilities arising from or incurred by reason of any act or omission of the Supplier, its servants or agents in connection with or arising from or incurred by reason of the employment of the Transferring Employees, including but not limited to any claim against the Company or any other person for damages for breach of contract, or for compensation for unfair or wrongful dismissal or redundancy, or failure to provide comparable pension rates, or failure to provide information, or failure to inform or consult Transferring Employees, or in respect of death or personal injury, breach of statutory duty or any other claim in tort by a Transferring Employee, or by a person who would be a Transferring Employee but for any act or omission (including dismissal or constructive dismissal) of the Supplier, arising from the operation (or alleged operation) of the Transfer Regulations in relation to the Services.

24.7 The Supplier shall indemnify the Company and all Replacement Employers against all Relevant Claims and Liabilities arising from or related to:

(a) any claim by a Subsequent Relevant Employee in respect of any default, failure or omission (or alleged default, failure or omission) by any person whatsoever concerning or arising from employment before a Subsequent Transfer Date in respect of which the Company or the Replacement Employer incurs liability cost or expense by reason of the operation (or alleged operation) of the Transfer Regulations;

(b) any claim by any former or existing employee of the Supplier or relevant subcontractor (other than a Subsequent Relevant Employee) in respect of which the Company or a Replacement Employer incurs liability cost or

expense by reason of the operation (or alleged operation) of the Transfer Regulations; and

(c) in this Clause 24.7 "**Relevant Claims and Liabilities**" include those incurred by the Company by reason of any contract term between the Company and a Replacement Employer provided always that in relation to Relevant Claims and Liabilities which the Company may incur to a Replacement Employer, the Supplier shall not be required to indemnify the Company or the Replacement Employer for more than or with a greater scope than it would if such Relevant Claims and Liabilities were made against or incurred by the Company in providing an indemnity under this paragraph.

24.8 The provisions of this Clause 24.8 are without prejudice to the Transfer Regulations. For the avoidance of doubt, any remedies available to the Company for any breach by the Supplier of any provision of this Clause 24.8 shall be in addition to and not in substitution for any remedies available to the Company under any provision of the Transfer Regulations.

Key Personnel

24.9 The Supplier shall ensure that each of the Key Personnel devotes substantially their whole time and effort to the performance of the Services. The Supplier shall take all reasonable steps to ensure it retains the services of the Key Personnel and shall not without the Company's prior written consent terminate their employment, remove or change Key Personnel or do any such thing which would cause any of the Key Personnel to resign.

24.10 The Supplier agrees to inform the Company of any changes to the Key Personnel where any relevant member of Key Personnel dies, suffers long term sickness or disability, is incapacitated by reason of ill health or accident from performing his or her duties for a period of or periods aggregating thirty (30) days in the preceding three (3) months, is guilty of gross or serious misconduct, goes on any period of statutory leave (other than holiday) or leaves the Supplier's employment.

24.11 The Supplier shall be responsible for the costs of replacing any member of Key Personnel with an appropriately qualified and competent replacement (including but not limited to, the cost of training any replacement to ensure that they can take over the vacated position efficiently and without disrupting the Services). The Supplier shall use all reasonable endeavours to ensure that any replacement for any member

of Key Personnel is engaged and available to perform his or her role as soon as reasonably practicable and at least within seven (7) days of the expiry of the notice period of the relevant member of Key Personnel. Where termination of the relevant member of Key Personnel is due to gross or serious misconduct, a replacement shall be engaged and available to perform his/her role as soon as reasonably practicable and in any event within twenty-eight (28) days. Further, save where the relevant member of Key Personnel being replaced has vacated the position immediately due to death, illness, gross misconduct or some other similar reason, the Supplier shall, at its own cost, ensure that the member of Key Personnel being replaced works in parallel with his or her replacement to hand over to them for a period of seven (7) days or any shorter period agreed between the parties.

24.12 A reasonable period before an offer of engagement is made to a replacement member of Key Personnel, the Supplier shall provide such information about and access to the relevant individual as the Company may reasonably require. The Company shall notify the Supplier if it objects to the appointment of an individual as a member of Key Personnel, together with its reasons for such objection. The Supplier shall comply with any request by the Company that a particular person should not become a member of Key Personnel.

24.13 The Company may change the list of Key Personnel on reasonable notice and subject to the consent of the Supplier, such consent not to be unreasonably withheld or delayed.

Supplier Personnel

24.14 If anyone employed by the Supplier, acting independently of the Supplier, commits a Safety Breach or Prohibited Act, then the Company may require the Supplier to exclude that individual from the Worksite(s) with immediate effect and that individual may only be readmitted to the Worksite(s) at the Company's absolute discretion.

24.15 The Supplier shall be responsible and liable for the recruitment, training, management, removal and termination of all Supplier Personnel and the acts and omissions of the Supplier Personnel in the provision of the Services and shall indemnify the Company on demand in respect of all Losses that may be suffered or incurred by the Company in connection with the acts or omissions of Supplier Personnel in connection with or relating to the provision of the Services and/or when dealing with any individuals employed or engaged in any capacity by the Company.

24.16 The Supplier shall adopt the following process in the event that any Supplier Personnel become surplus to requirements during the Term:

(a) where Supplier Personnel become surplus to requirements and are displaced, the Supplier shall use reasonable endeavours to identify and offer one suitable alternative job to each such Supplier Personnel elsewhere in the Supplier;

(b) where within one (1) month of the displacement of Supplier Personnel, the Supplier is unable to identify a suitable alternative job within its respective organisation the Supplier shall ask the Company whether there are any suitable vacancies within its organisation or other subcontractor organisations;

(c) where the Company is asked by the Supplier whether there are any suitable vacancies within its organisation, the Company shall use reasonable endeavours to identify a suitable alternative job and shall notify the Supplier in writing within one (1) month of the request being made whether such an alternative position has been identified;

(d) where the Supplier is asked by another subcontractor whether there are any suitable vacancies within its organisation, the Supplier shall use reasonable endeavours to identify a suitable alternative job and shall notify the other subcontractor in writing within one (1) month of the request being made whether such an alternative position has been identified; and

(e) where the Company or another subcontractor has a suitable vacancy for that Supplier Personnel and is prepared to offer that vacancy to such employee, it shall provide full details of that vacancy to the Supplier (together with the notification as to whether the position has been identified and that Supplier Personnel shall upon accepting an offer from the Company or the other subcontractor (as the case may be) transfer on the standard terms and conditions for that organisation unless otherwise agreed between the Supplier Personnel and, as the case may be, the Company or the other subcontractor.

24.17 In the event that the Supplier, having complied with its obligations under Clause 24.16 is unable to identify a suitable alternative job for the displaced employee or the displaced employee rejects any suitable alternative job offer (including any job offer made by the Company or another subcontractor), then the Supplier may dispense with the services of the displaced employee.

24.18 The Supplier shall keep the Company and any successor to the Supplier and any of its or their officers, agents and employees indemnified in full and on demand from and against any and all Losses arising out of, in relation to, in connection with or as a result of any allegation, claim or assertion that any Supplier Personnel is or was or has been held or deemed, to have been an employee of the Company or, save where the Transfer Regulations apply, an employee of any successor to the Supplier or to have been otherwise engaged directly by the Company, including without limitation against any liability arising from or in connection with any claim for wrongful or unfair dismissal or for a redundancy payment;

24.19 The Supplier shall be responsible for deduction and payment of all tax, National Insurance contributions and other levies in respect of persons employed by the Supplier including the Supplier Personnel and shall keep the Company and any successor to the Supplier and any of its or their officers, agents and employees indemnified in full and on demand from and against any and all Losses arising out of all liability to make such statutory payments that may be suffered or incurred by the Company and any successor to the Supplier.

24.20 The Supplier shall ensure that Supplier Personnel are contractually obliged to comply with:

(a) all relevant statutes, laws, regulations and codes of practice from time to time in force applicable to the performance of a Contract and applicable to the Company's business;

(b) the Company's health and safety policy whilst the Supplier Personnel are on the Company's premises or Worksite(s); and

(c) a restriction not to disclose any confidential information of the Company or of any member of the TfL Group or of the Company's customers or suppliers or agents (direct or indirect), which they may acquire during the course of the performance of the Contract.

24.21 The Company and the Supplier acknowledge and agree that the AWR does not apply to this Contract on the basis that it is understood that Supplier Personnel will not be working under the direction and supervision of the Company.

25 London Living Wage

25.1 The Supplier acknowledges and agrees that the Mayor, pursuant to Section 155 of the GLA Act has directed the Company (including its subsidiaries) to ensure that the London Living Wage is paid to anyone engaged by the Company who is required to perform contractual obligations in Greater London or on the Underground Network.

25.2 The Supplier shall, to the extent the Contract is for the provision of Services to be undertaken within Greater London or on the Underground Network:

(a) ensure that none of its employees (whether engaged directly or as agency staff employed via an employment agency or similar) engaged in the provision of Services under the Contract is paid an hourly wage (or equivalent of an hourly wage) less than the London Living Wage;

(b) provide to the Company such information concerning the application of the London Living Wage as the Company or its nominees may reasonably require;

(c) disseminate on behalf of the Company to its employees who are paid no more than the London Living Wage such perception questionnaires in relation to the London Living Wage as the Company or its nominees may reasonably require and promptly collate and return to the Company responses to such questionnaires;

(d) co-operate and provide all reasonable assistance to the Company and its nominees in monitoring the effect of the London Living Wage; and

(e) procure that any subcontractor (of any tier) is required to comply with the provisions of this Clause 25 and the provisions of this Clause 25 are included in any subcontract (of any tier) with a sub-contractor.

25.3 The Supplier shall not, and shall procure that any subcontractor shall not, without the prior written consent of the Company, vary or purport to vary the provisions contained in any contract or subcontract in accordance with the operation of this Clause 25.

25.4 In the event that the Supplier either itself or through a sub-contractor is in breach of this Clause 25, the Supplier shall:

(a) if notification has not been made by the Company, notify the Company immediately upon becoming aware of the breach; and

(b) rectify the breach, or procure that the breach is rectified within 7 days of becoming aware of the breach.

25.5 In the event that the Supplier fails to rectify the breach as required by Clause 25.4(b), the Company shall have the right, in its absolute discretion:

(a) to require the Supplier to terminate the sub-contract or agency agreement of the party in breach; or

(b) to require the removal of any personnel from involvement with the Services who are not being paid the London Living Wage.

26 Responsible Procurement

26.1 The Supplier and the Company acknowledge and agree that the Mayor, in accordance with section 155 of the GLA Act has directed the Company and its subsidiaries to do all things reasonably necessary to comply with (inter alia) the Responsible Procurement Policy in its procurement activities.

26.2 The Supplier shall and shall procure that its subcontractors (of any tier) shall comply with, and shall provide such co-operation and assistance as may be reasonably requested by the Company to enable the Company to comply with the Responsible Procurement Policy.

26.3 The Supplier acknowledges and agrees that the Company is required to develop a policy relating to the promotion of the procurement of works, goods and services in an ethical manner (the "**Ethical Sourcing Policy**") which shall reflect and be consistent with the relevant principles of the Responsible Procurement Policy, and the Supplier shall and shall procure that all of its sub-contractors shall, comply with such the Ethical Sourcing Policy to the extent it does not conflict with the Responsible Procurement Policy.

26.4 The Supplier acknowledges and agrees that it (and its subcontractors) shall be required to comply with any changes to the Responsible Procurement Policy (and any adjustment or amendment to the Ethical Sourcing Policy as a result of such amendment or adjustment to the Responsible Procurement Policy).

26.5 The Supplier shall procure that any sub-contractor is required to comply with the provisions of this Clause 26 and the provisions of this Clause 26 are included in any sub-contract (of any tier).

26.6 The Supplier shall not, and shall procure that any subcontractor shall not, without the prior written consent of the Company, vary or purport to vary the provisions contained in any contract or subcontract in accordance with the operation of this Clause 26.

26.7 The Supplier shall at all times comply with the ETI Base Code set out in Appendix 1 to Schedule 15 (Responsible Procurement) of the Contract and shall at all times comply with the provisions of Schedule 10 (Strategic Labour Needs and Training).

27 Incompetent Supplier Personnel

27.1 The Supplier shall notify the Company immediately if it believes that any Supplier Personnel is unsuitable for the Contract or the relevant Services or becomes aware of any matter that indicates that a member of the Supplier Personnel may be unsuitable (including in the circumstances set out in Clause 27.2) for the Contract or the relevant Services or is inconsistent with any information previously provided including where a member of the Supplier Personnel ceases to have the appropriate skills, approvals or a right to work in the UK or where this Contract may be or has been breached.

27.2 Supplier Personnel will be deemed to be incompetent and not in accordance with the Specification if their standard of workmanship or their productivity is held to be less than can be reasonably expected from a person of their purported competency, skill and training when compared with industry standards in the opinion of the Company's Representative. Work undertaken by incompetent Supplier Personnel may be rejected as defective.

27.3 Where the Supplier Personnel supplied by the Supplier are deemed to be incompetent and not in accordance with the Specification including in the circumstances set out in Clauses 27.1 and 27.2 then the Supplier shall replace such Supplier Personnel immediately upon notification from the Company.

27.4 Where the Company notifies the Supplier that Supplier Personnel are deemed incompetent and not in accordance with the Specification, the Supplier shall not be entitled to payment of the part of the Price for the Services Provided to Date relating to the provision of Supplier Personnel which is the subject of such notification from the Company.

27.5 Where the Company suffers direct loss due to one of the specified events listed in Clause 27.6, then:

(a) the Company shall be entitled to recover from the Supplier an amount relating to such direct loss, provided that such deduction is limited to the non-attendance or partial attendance of Supplier Personnel and the abortive costs of other labour utilisation (including the Company's and third party labour) and abortive costs of Tools of the Trade and Equipment utilisation including access bookings as may be caused by the specified event; and

(b) this shall constitute a Level 2 Non-Conformance as defined in and to be dealt with in accordance with Schedule 9 (Performance Measurement).

27.6 The specified events referred to in Clause 27.5 are:

(a) Non-attendance of Supplier Personnel either individually or collectively except where this is due to exceptional circumstances affecting travel or access to the Worksite(s);

(b) Partial attendance of Supplier Personnel either individually or collectively where the hours worked are less than required by the Specification;

(c) Supplier Personnel either individually or collectively not having the required competency, skills, training, certification and/or permits or not having the Tools of the Trade necessary to provide the Services;

(d) Removal of any Supplier Personnel due to a default of the Supplier or any Supplier Personnel supplied by the Supplier, including without limitation a Safety Breach or Prohibited Act; and

(e) Non-attendance of Supplier Personnel arising from any strike or other industrial action.

28 Intellectual Property Rights

Existing Contracts

28.1 This Contract is entirely without prejudice to, and nothing in it is intended to, nor shall, in any way prejudice the rights of any member of the TfL Group in relation to intellectual property under or pursuant to Existing Contracts.

Vesting of Intellectual Property Rights created under this Contract

28.2 All Intellectual Property Rights created as a result of or and/or wholly or mainly in connection with the performance of, or in order to perform, the Contract ("**Developed Work**") shall vest in the Company. The Supplier shall assign or shall procure that each of the Supplier Personnel and its subcontractors (of any tier) or other third party (as applicable) shall assign such Intellectual Property Rights to the Company and shall execute or procure the execution of such documents and take such steps as the Company may reasonably require to give the Company the full benefit of this Contract. The Supplier shall procure that each member of the Supplier Personnel waives its moral rights or similar rights in the Developed Work. The Supplier shall ensure that no person engaged by it in pursuance of this Contract including any Supplier Personnel shall at any time do anything to jeopardise the Company's ability to secure and protect such rights. The Supplier shall if requested by the Company procure that each member of the Supplier Personnel enters into a written undertaking with the Company in such form as the Company may require from time to time to assign to the Company any such Intellectual Property Rights, before that Supplier Personnel commences any work for the Company pursuant to the Contract or otherwise.

28.3 Notwithstanding the provisions of Clause 28.2, the Supplier shall ensure that if, in carrying out any work under this Contract, the Supplier or any of its employees, consultants, sub-contractors or agents, makes any invention, design, discovery or improvement, whether individually or jointly, which derives from any work carried out under this Contract, then all such information shall be communicated forthwith to the Company and to no other party and the Supplier shall procure assignment of any and all rights in such invention, design, discovery or improvement to the Company.

Ownership of the Supplier’s Intellectual Property Rights

28.4 Without prejudice to Clause 28.2, all Intellectual Property Rights owned by the Supplier or its subcontractors (of any tier) or other third party and which are not assigned to, or vested in, the Company pursuant to Clause 28.2 shall remain or be vested in the Supplier, its subcontractors (of any tier) or other third party (as the case may be).

Company's Licence to use the Supplier's Intellectual Property Rights

28.5 The Company shall have and the Supplier hereby grants, and procures that its subcontractors (of any tier) or other third party grant, to the Company a worldwide, royalty-free, perpetual, irrevocable, non-exclusive licence (with the right to sub-licence such rights to any third party) to use and copy the Intellectual Property Rights referred to in Clause 28.4 for the purposes of:

(a) understanding the Services;

(b) operating, maintaining, repairing, modifying, altering, enhancing, re-figuring, correcting, replacing, re-procuring and re-tendering the Services;

(c) extending, interfacing with, integrating with, connecting into and adjusting the Services;

(d) enabling the Company to carry out the operation, maintenance, repair, renewal and enhancement of the Underground Network;

(e) executing and completing the Services; and

(f) enabling the Company to perform its function and duties as Infrastructure Manager and Operator of the Underground Network.

Provision of Supporting Documentation and Other Materials

28.6 The Supplier shall:

(a) promptly, and in any event by no later than such date as the Company may notify to the Supplier, provide at no charge to the Company, copies of any materials and items (including, without limitation, Documentation) in the Supplier's or subcontractor's (of any tier) or other third party's possession or control (or which ought reasonably to be in the Supplier's or subcontractor's or other third party's possession or control) which are referred to or relied upon in using and copying, or required in any way for the use and copying of, the Intellectual Property Rights referred to in Clauses 28.2, 28.4 and 28.5 above; and

(b) keep copies of such materials, items and Documentation in a secure place where they will not deteriorate and undertake regular (and in any event not less than every three (3) months) integrity testing of the same and provide

written evidence of such testing to the Company at regular intervals and in any event upon the Company's request.

Company's Rights of Retention

28.7 If the Supplier has not complied with its obligations under Clause 28.6(a), the Company shall be entitled to retain one quarter of the sums that would otherwise be due to the Supplier under this Contract until the Supplier has complied with its obligations under Clause 28.6(a).

28.8 Company's Rights to the Software

If the Supplier or any of its subcontractors providing software for incorporation into or operation of the Services stops trading, is subject to an insolvency event equivalent to any of those events set out in Clause 30.1(c) (including their equivalent in any jurisdiction to which the Supplier or any of its subcontractors is subject), makes known its intention to withdraw support of that software or fails to support that software in accordance with the terms of this Contract then the Supplier, at no charge to the Company, shall use its best endeavours to transfer or procure the transfer to the Company of all Intellectual Property Rights in that software.

Company's Rights in relation to Other Procurement Activities

28.9 For the avoidance of doubt, the Company shall be entitled to use and copy the materials, items and Documentation referred to in Clause 28.6 and anything in which the Intellectual Property Rights referred to in Clauses 28.2, 28.4 and 28.5 subsist for the purposes of inviting tenders or of procuring services similar to the Services for the carrying out of any activities in connection with the licence under Clause 28.5 subject always to the Company's requirements for tenderers to treat the same in the strictest confidence.

Supplier's Indemnity against Third Party Intellectual Property Rights Infringement

28.10 The Supplier shall indemnify and hold harmless the Company against any actions, claims, losses, demands, costs, charges or expenses that arise from, or are incurred by reason of, any infringement or alleged infringement of any Intellectual Property Rights belonging to any subcontractor (of any tier) or other third party and against all costs and damages of any kind which the Company may incur in connection with any actual or threatened proceedings before any court or arbitrator or any other dispute resolution forum. If required by the Company the Supplier shall conduct negotiations

with any subcontractor (of any tier) or other third party and/or a defence in relation to any action, claim or demand referred to herein on behalf of the Company.

28.11 In the event of a claim of infringement of any Intellectual Property Rights the Supplier shall use all reasonable endeavours to make such alterations or adjustment to the method of providing the Services as may be necessary to ensure that the use and the provision of the Services continues in spite of such claim.

Ownership of the Company's Intellectual Property Rights

28.12 Intellectual Property Rights in all Documentation and in all other material and items supplied by the Company to the Supplier in connection with the Contract shall remain vested in the Company or the person owning such rights at the time the Documentation, material or items were supplied. The Supplier shall, if so requested, at any time, execute such documents and perform such acts as may be required fully and effectively to assure to the Company the rights referred to in this Clause.

Company's Intellectual Property Rights

28.13 The Supplier is not entitled to use in any manner whatsoever any Intellectual Property Rights belonging to the Company.

29 Company Step-in

29.1 Without limiting any other remedy, if the Supplier fails to comply with its obligations to perform the Services as required by this Contract, the Company shall be entitled to perform or procure the performance of the Services or part thereof itself or from a third party. Without prejudice to any other right or remedy of the Company hereunder or under the general law, all expenditure properly incurred by the Company exercising its rights under this Clause 29 is recoverable by the Company from the Supplier and the Company shall be entitled to deduct such amounts from any amount due or to become due to the Supplier under the Contract.

29.2 Without prejudice to the provisions of Clause 29.1 if the Company reasonably believes that it needs to take action in connection with the Services:

(a) because a serious risk exists to the health or safety of persons or property or to the environment; and/or

(b) to discharge a statutory duty,

then the following provisions shall apply.

29.3 The Company shall provide notice to the Supplier in writing of the following:

(a) the action it wishes to take;

(b) the reason for such action;

(c) the date it wishes to commence such action;

(d) the time period which it believes will be necessary for such action; and

(e) to the extent practicable, the effect on the Supplier and its obligations to provide the Services during the period such action is being taken.

29.4 Following service of the notice required in Clause 29.3, the Company or a third party appointed by the Company for the purpose shall take such action as is notified under these provisions and any consequential additional action as the Company reasonably believes is necessary (the "Required Action").

29.5 For so long as and to the extent that the Required Action is taken, and this prevents the Supplier from providing any part of the Services, the Supplier shall be relieved from its obligations to provide such part of the Services and the Company shall not be liable to make any payment for such part of the Services.

29.6 For the purposes of this Clause 29 the Supplier hereby grants to the Company and any third party the right to use any Intellectual Property Rights, Documentation, goods, materials and spares belonging to the Supplier or used by the Supplier in connection with the Contract as may be required by the Company to exercise its rights under this Clause 29 and the Supplier shall provide all such co-operation and assistance as may be required by the Company to enable the Company to exercise its rights under this Clause 29.

30 Termination and Suspension

30.1 For the purposes of Clause 30, a Supplier Default is any of the following events:

(a) the Supplier commits a breach of the Contract which in the case of a breach capable of remedy has not been remedied within five (5) Working Days, or such other period as may be agreed between the Supplier and the Company, of the Company serving notice on the Supplier requiring such remedy;

(b) the Supplier or anyone employed by or acting on behalf of the Supplier (whether or not acting independently of the Supplier when committing any breach) commits a Safety Breach or Prohibited Act;

(c) the Supplier enters into compulsory or voluntary liquidation (other than for the purpose of effecting a solvent reconstruction or amalgamation provided that if the company resulting from such reconstruction or amalgamation is a different legal entity it shall agree to be bound by and assume the obligations of the Supplier under the Contract) or is deemed unable to pay its debts as they fall due in accordance with Section 123(1) of the Insolvency Act 1986, or a meeting of its shareholders or directors is convened to consider any resolution for (or petition or file documents with the courts for) its administration or an administrative receiver, manager, administrator, liquidator, trustee or other similar officer is appointed or notice is given to appoint the same or any similar or analogous procedure or step is taken in any jurisdiction;

(d) a breach of the Supplier's obligations under Clause 55; or

(e) the Company becomes entitled to terminate in accordance with Clause 33.1;

(f) the Supplier has, at the date of the Contract, been in one of the situations referred to in Regulation 57(1) of the Public Contract Regulations 2015 and should therefore have been excluded from the procurement procedure in accordance with those regulations or Regulation 80(2) of the Utilities Regulations 2016 (without prejudice to the Company's rights of termination implied into the contract by Regulation 73(3) of the Public Contracts Regulations 2015 or by Regulation 89(3) of the Utilities Contracts Regulations 2016);

(g) the Supplier fails to comply in the performance of the Services with legal obligations in the fields of environmental, social or labour law; or

(h) the Company becomes entitled to terminate in accordance with Schedule 9 (Performance Measurement).

30.2 If a breach, that is not a Supplier Default, has continued for more than ten (10) Working Days or occurred more than three (3) times in any six (6) month period then the Company may serve a notice on the Supplier:

(a) specifying that it is a formal warning notice;

(b) giving reasonable details of the breach; and

(c) stating that the breach is a breach which, if it recurs frequently or continues, may result in a termination of this Contract.

30.3 If, following service of a warning notice the breach specified in a warning notice given further to Clause 30.2 has continued beyond twenty (20) Working Days or recurred in three (3) or more months within the six (6) month period after the date of service, then the Company may serve another notice (a "Final Warning Notice") on the Supplier:

(a) specifying that it is a Final Warning Notice;

(b) stating that the breach specified has been the subject of a warning notice served within the six (6) month period prior to the date of service of the Final Warning Notice; and

(c) stating that if the breach continues for more than ten (10) Working Days or recurs in three (3) or more months within the six (6) month period after the date of service of the Final Warning Notice, such breach shall constitute a persistent breach and this Contract may be terminated further to Clause 30.5.

30.4 A warning notice may not be served in respect of any incident of breach which has previously been counted in the making of a separate warning notice.

30.5 If a Supplier Default has occurred and the Company wishes to terminate this Contract in whole or in part, the Company must serve a Termination Notice on the Supplier.

30.6 The Termination Notice must specify the type of Supplier Default which has occurred entitling the Company to terminate and whether the Company is terminating this Contract in whole or in part and if in part, the extent of the termination, and the date on which the termination shall become effective.

30.7 Without prejudice to Clause 30.1 to Clause 30.6, the Company shall have the right:

(a) to terminate the Contract at any time by serving a Termination Notice on the Supplier in writing stating that the Contract will terminate on the date specified in the notice which must be a minimum of six months from the date of issue of the notice ;

(b) at any time to require the Supplier to suspend provision of the Services by giving notice in writing (a "**Suspension Notice**") to the Supplier; or

(c) without prejudice to Clause 32.1(b) if anyone employed by the Supplier, acting independently of the Supplier, commits a Safety Breach or Prohibited Act, then the Company may require the Supplier to exclude that individual from the Worksite(s) with immediate effect and that individual may only be readmitted to the Worksite(s) at the Company's absolute discretion.

30.8 Without prejudice to the Company's right to terminate the Contract under Clause 30.1 or 30.2 or at common law, the Company may terminate the Contract at any time following a Declaration of Ineffectiveness or a Public Procurement Terminations Event in accordance with the provisions of Clause 60.1.

30.9 In the event that the Company terminates the Contract for any reason under this Clause 30, the Supplier shall, without prejudice to any other rights or remedies which the Company may have under the Contract or under general law, at the Company's option:

(a) permit the Company to enter the Supplier's premises and take possession of any equipment, goods or Documentation which are the property of the Company;

(b) permit the Company to place an order for the remaining Services with any other person or persons or complete the provision of such Services by its own workmen; and

(c) promptly return to the Company any equipment, goods or Documentation which are the property of the Company and of which the Supplier or any of its subcontractors have possession.

In either such case, the Company shall be entitled to retain the benefit of any part of the Services already provided by the Supplier in accordance with the Contract, at the material time.

30.10 In the event that the Contract is terminated in accordance with Clause 30.7(a) the Supplier shall be entitled to be paid:

(a) the total value of the Services provided at the date of termination of this Contract or the relevant part of it (as applicable), such value to be ascertained

in accordance with this Contract as if this Contract had not been terminated, together with any amounts due to the Supplier under this Contract not included in such total value; and

(b) the reasonable properly incurred cost of removal of the Supplier's property from the Worksites in respect of which this Contract has been terminated.

30.11 Following a termination in accordance with Clauses 30.1 or 30.8 (but not a termination in accordance with Clause 30.7(a)):

(a) the Supplier shall be liable and shall indemnify the Company and keep the Company fully and effectively indemnified for:

(i) any Losses of whatever nature arising out of or in connection with the relevant breach; and

(ii) where the Company exercises its rights under Clause 30.7(b) and in doing so incurs costs which are in excess of those which would have been incurred in relation to the due provision of the Services under the Contract by the Supplier ("**Excess Costs**"), such Excess Costs.

30.12 the Supplier shall be entitled to be paid for Services provided and which have not been paid for at the date of termination, to the extent that the provision of such Services has been terminated, less the cost to the Company of having the Services that have not been carried out completed (whether the Company has those Services delivered or not).In the event that the Contract is suspended in accordance with Clause 30.7(b), the Supplier shall:

(a) issue to the Company an Application for Payment in respect of those Services provided to the Company in accordance with the Contract up until the date of such suspension; and

(b) not carry out any further work in connection with the provision of the Services until such time as the Company issues a notice lifting the suspension (a "**Notice to Proceed**").

30.13 In the event that the Contract is suspended in accordance with Clause 30.7(b), and such suspension continues for a period of twenty-eight (28) days, the Supplier shall be entitled to request that the Company serve a Notice to Proceed. In the event that no Notice to Proceed is issued by the Company within a further fourteen (14) days

from such request of the Supplier, the Supplier shall be entitled to approach the Company with a request for a variation, in accordance with the Contract Variation Procedure.

30.14 In the event that the parties are unable to agree upon the variation requested under Clause 30.13, then a Dispute shall be deemed to have arisen and the matter shall be referred for resolution in accordance with Clause 49.

30.15 Termination of the Contract for whatever reason shall not affect the accrued rights of the parties arising in any way out of the Contract as at the date of termination and in particular but without limitation the right to recover damages against the other party.

30.16 If anyone employed by the Supplier, acting independently of the Supplier, commits a Safety Breach or Prohibited Act, then the Company may require the Supplier to exclude that individual from the Services with immediate effect and that individual may only resume the performance of the Services at the Company's absolute discretion.

30.17 The parties shall comply with their respective obligations set out in Schedule 16 (Obligations on Handover).

31 Licences, Consents, Notices and Approvals

31.1 The Company shall obtain all licences, consents, notices and approvals relating to the Services except those stated in the Specification as being the responsibility of the Supplier, which shall be obtained at the Supplier's own cost. The Supplier shall ensure that the conditions or requirements of licenses and consents and other approvals are complied with by its Supplier Personnel.

31.2 Where the Specification states that the Supplier will be required to contribute to the preparation of submissions for licences and consents the Supplier shall afford all necessary assistance to achieve such licences and consents within the timescales stated in the Specification.

32 Indemnity and Insurance

32.1 The Supplier shall be liable for, and shall indemnify the Company, including any of its employees, servants, agents, subcontractors, directors and officers and members of the TfL Group on an after-tax basis against all Losses suffered or incurred by the Company or any relevant member of the TfL Group, arising from or in connection with the performance or non-performance of the Supplier under the Contract:

(a) in respect of death or personal injury to any person;

(b) in respect of loss of or damage to any property (including the Underground Network and any other property belonging to the Company or for which it is responsible);

(c) arising out of or in the course of or by reason of any act, omission, negligence or breach of contract or breach of statutory duty, wilful misconduct of the Supplier Personnel, the Supplier, its employees, agents or subcontractors; and

(d) arising under the Company's contracts with third parties,

(e) and shall, at its own cost on the Company's request, defend the Company in any proceedings involving the same.

32.2 The Supplier shall not be liable to indemnify the Company or any member of the TfL Group under the indemnity in Clause 32.1 to the extent Losses are solely due to the negligence, breach of duty or breach of contract of the Company.

32.3 The Supplier's indemnity under Clause 32.1 and all other indemnities under the Contract shall remain in force for the duration of the Contract and for the period of twelve (12) years after the Expiry Date or earlier termination of the Contract.

32.4 The Company may withhold from any sum due or which may become due to the Supplier any sum due to the Company as a result of the operation of Clause 32.1 provided that an appropriate notice to withhold payment has been served by the Company on the Supplier.

32.5 Other than in respect of the Losses (i) described in Clauses 32.1(a) and 32.1(d) above and (ii) Excepted Liabilities, neither Party shall have any liability to the other for any Consequential Loss arising out of the performance of its obligations under or in connection with the Contract. Each Party respectively undertakes not to sue the other Party, TfL or any member of the TfL Group in respect of Consequential Loss.

32.6 Without prejudice to the obligation to indemnify the Company set out in Clauses 32.1, the Supplier undertakes to:

(a) maintain at its own cost employer's liability insurance of not less than £10,000,000 (ten million pounds) per occurrence;

(b) maintain at its own cost an adequate level of public liability insurance in respect of the Supplier's liability for death or injury to any person and loss of or damage to property and being not less than £10,000,000 (ten million pounds) per occurrence;

(c) ensure that the foregoing insurance policy or policies shall be or are effected with a reputable insurer. Such insurance shall be on terms approved by the Company (such approval not to be unreasonably withheld or delayed) and shall be maintained in force for a period not less than twelve (12) years after the completion of the Services;

(d) ensure that any subcontractors also maintain adequate insurance having regard to the obligations under the contract which they are contracted to fulfil; and

(e) produce within seven (7) days of any reasonable request by the Company and in any event before the commencement of any of the Services under the Contract satisfactory evidence in the form of a broker's letter or similar confirming the existence of insurance in accordance with the terms of this Clause 32.

32.7 The Supplier's liabilities under the Contract shall not be deemed to be released or limited by the Supplier taking out the insurance policies referred to in Clause 32.6.

32.8 If the Supplier fails to maintain the insurance policies as provided in this Clause 32, the Company may effect and keep in force any such insurance and pay such premium or premiums at commercially competitive rates as may be necessary for that purpose and from time to time deduct the amount so paid from any monies due or which become due to the Supplier or recover the same as a debt due from the Supplier.

32.9 The Supplier must comply with the terms and conditions of the insurances and all reasonable requirements of the insurers, including (without limitation), in connection with the prosecution and settlement of claims, the recovery of losses and the prevention of accidents. The Supplier must bear the cost of all exclusions and limitations under the insurances.

33 Force Majeure

33.1 Neither party shall be in breach of its obligations under the Contract if there is any total or partial failure of performance by it of its duties and obligations under the Contract occasioned by any Force Majeure Event. If either party is unable to perform its duties and obligations under the Contract as a direct result of a Force Majeure Event, that party shall within one (1) Working Day of such event taking place give written notice to the other party specifying the event and the steps taken by it to minimise or overcome the effects of such event. The operation of the Contract shall be suspended during the period (and only during the period) in which the Force Majeure Event continues. Without delay upon the Force Majeure Event ceasing to exist the party relying upon it shall give written notice to the other of this fact. If the Force Majeure Event continues for a period of more than twenty-eight (28) days and substantially affects the abilities of the Supplier to perform its obligations under the Contract, the Company shall have the right to terminate the Contract immediately upon giving written notice of such termination to the Supplier.

34 Confidentiality

34.1 The Supplier undertakes to keep confidential and not to disclose to any third party (without the prior written consent of the Company) any Confidential Information supplied by the Company to the Supplier and shall use such information only for the purpose of the performance of his obligations under the Contract.

34.2 On the Company's request, the Supplier shall, so far as is reasonably possible:

(a) transfer onto hard copies or other media in industry standard format and programming languages and deliver to the Company any Confidential Information in its possession or control supplied by the Company to the Supplier;

(b) return to the Company all copies (whether hard copy or other media) of such Confidential Information; and

(c) destroy, erase or otherwise expunge from its records, systems, databases or other forms of archive all such Confidential Information save to the extent that information needs to be retained for statutory purposes or tax purposes.

34.3 The Supplier shall ensure that all his subcontractors, suppliers, employees and agents perform his obligations in Clauses 34.1 and 34.2 as if they were the Supplier,

and the Supplier shall be responsible to the Company for any act or omission by his subcontractors, suppliers, employees and agents in breach of such obligations.

34.4 The Supplier shall notify the Company promptly if the supplier becomes aware of any breach of confidence by a subcontractor, supplier, employee or agent and shall give the Company all assistance the Company reasonably requires in connection with any proceedings the Company brings, or other steps the Company takes, against that subcontractor, supplier, employee or agent for such breach of confidence.

34.5 The Supplier shall not, either alone or jointly with others, publish any material relating to the Company, the Company's Representative, the Contract or the Services without the prior written consent of the Company.

34.6 The Supplier shall not, either alone or jointly with others, make any press, television, radio or other media announcement in connection with the Contract or the Services, or any Dispute arising under or in connection with the Contract.

34.7 The provisions of Clauses 34.1 to 34.6 shall not apply:

(a) to any information which is already in the public domain at the time of its disclosure other than by breach of the Contract; or

(b) to any information which is required to be disclosed to the extent required by any Applicable Law, the regulations of any recognised stock exchange, any taxation authorities or by order of a court or other tribunal of competent jurisdiction or any relevant regulatory body.

34.8 The Supplier acknowledges that damages would not be an adequate remedy for any breach of this Clause 34 by the Supplier and that (without prejudice to all other remedies to which the Company may be entitled as a matter of law) the Company shall be entitled to any form of equitable relief to enforce the provisions of this Clause.

35 Assignment, Novation and Subcontracting

35.1 The Supplier shall not assign, novate, transfer or subcontract any of its rights or obligations under the Contract or any part thereof without the prior written consent of the Company.

35.2 The subcontracting of all or any part of the Services to a subcontractor shall not relieve the Supplier of its obligations to perform the Services under the Contract. The

Supplier shall remain responsible for the acts, defaults, omissions and negligence of any of its subcontractors.

35.3 The Company may novate, assign, transfer or subcontract the Contract (or any part thereof) to any person at any time without the consent of the Supplier, provided the Company has given prior written notice to the Supplier.

35.4 Within seven (7) days of any written request by the Company to the Supplier, the Supplier shall execute a deed of novation in the form set out in Schedule 6 (Form of Deed of Novation) in favour of any person to whom the Contract is being novated.

35.5 For the purposes of Clauses 35.5 to 35.10:

(a) "Subcontract" means a contract between the Supplier and a Subcontractor; and

(b) "Subcontractor" means a subcontractor to the Supplier, being the counterparty of a contract with the Supplier in supply of goods, facilities, services or works necessary for or related to the provision of the Services (or any part of them).

35.6 Subject to the Company's prior written consent pursuant to Clause 35.1, where the Supplier subcontracts any or all of the Services, the Supplier shall include in each Subcontract (and procure that its Subcontractors (and any their subcontractors of any tier) include in each of their subcontracts of any tier):

(a) payment terms substantially similar to those set out in Clause 15 and Schedule 2 (Payment), and

(b) terms allowing the Supplier or (in respect of a subcontract below the first tier) the payer under the relevant subcontract to terminate that subcontract if the relevant subcontractor fails to comply in the performance of its contract with legal obligations in the fields of environmental, social or labour law.

35.7 On or before the Commencement Date, the Supplier shall notify the Company in writing of the name, contact details and details of the legal representative of any Subcontractor, to the extent that such information has not already been provided by the Supplier to the Company. The Supplier shall also immediately provide to the Company in writing, the names, the contact details and details of the legal

representatives of each new Subcontractor which the Supplier subsequently involves in the Services after the Commencement Date.

35.8 The Company reserves the right to verify whether there are any grounds for excluding any Subcontractor under Regulation 57 of the Public Contracts Regulations 2015. Where necessary for the purpose of the Company's exercise of its right under this Clause 35.8, the Company may request that the information provided by the Supplier under Clause 35.8 shall be accompanied by one or more European Single Procurement Document(s) (within the meaning of Regulation 59 of the Public Contracts Regulations 2015) in respect of the relevant Subcontractor(s). Further, the Company:

(a) shall require that the Supplier replace any Subcontractor in respect of which the verification has shown that there are compulsory grounds for exclusion under Regulation 57 of the Public Contracts Regulations 2015; and

(b) may require that the Supplier replace any Subcontractor in respect of which the verification has shown that there are non-compulsory grounds for exclusion under Regulation 57 of the Public Contracts Regulations 2015

35.9 The Supplier shall promptly notify the Company of any circumstances from time to time that might give rise to a right of the Company to require replacement of a Subcontractor pursuant to Clauses 35.8(a) or 35.8(b).

35.10 The Company shall have no obligation to make any termination or compensation payment on respect of any termination pursuant to Clauses 35.8(a) or 35.8(b).

36 Contract Management

36.1 Each Party shall appoint one (1) or more representatives to act on its behalf under this Contract. Each Party shall advise the other Party, in writing, of the names and contact details of its representatives and these shall be recorded in Schedule 1 (Contract Data). The Supplier shall not appoint such a representative without the prior written consent of the Company (which consent shall not be unreasonably withheld). Any Party may, on giving reasonable notice to the other Party, appoint an additional representative or replace an existing representative but the Supplier may only do so with the prior written consent of the Company. Amendments to the Supplier's Representative and/or the Company's Representative (as set out in Schedule 1 (Contract Data)) do not require the Parties to comply with the Contract Variation Procedure.

36.2 Each Party shall be responsible for the acts, omissions, neglects and defaults of its representatives as if such acts, omissions, neglects and defaults were its own. Each Party will be bound by any decision made or action taken by its representatives.

36.3 Subject to Clause 48, any notice, information, instructions or communication given:

(a) to the Supplier's Representative shall be deemed to have been given to the Supplier; and

(b) to the Company's Representative shall be deemed to have been given to the Company.

36.4 The Company shall not be responsible for any notice, communication or other purported instruction required to be given under this Contract given by a person alleging to act for and on behalf of the Company unless such person is one of the Company's Representatives. Accordingly, the Supplier shall not be entitled to rely on any such notice, communication or purported instruction and shall not do so or claim relief, additional time, losses, expenses, damages, costs or other liabilities should the Supplier act on or fail to act on it.

36.5 Each party shall comply with their respective obligations set out in Schedule 13 (Contract Management).

37 Poaching of Staff

37.1 For the Term, and for a period of six (6) months after the Expiry Date or other termination of the Contract the Supplier shall not directly or indirectly (whether on its own account or for any other person, firm, company or organisation) solicit or endeavour to solicit or entice away from or endeavour to entice away from the Company any employee employed by the Company as at the Commencement Date or thereafter, but excluding any recruitment pursuant to a public advertisement.

38 NOT USED

39 Tax Deduction - The Construction Industry Scheme

39.1 The Supplier shall provide the following information to the Company by no later than the date of the first Payment Application:

(a) If the Supplier is a company:

(i) Unique Taxpayer Reference ("**UTR**") number; and

(ii) company registration number.

(b) If the Supplier is a partnership:

(i) partnership's UTR number;

(ii) each partner's name; and

(iii) each partner's UTR number.

(c) If the Supplier is an individual:

(i) UTR number; and

(ii) National Insurance number.

39.2 The Company's obligation to make any payment under this Contract is subject to the provisions and requirements of the Construction Industry Scheme.

39.3 The Supplier shall note that in the event payments under the Contract are subject to the statutory deduction of tax in accordance with the Construction Industry Scheme such deduction shall apply to the full value of said payments whether or not such payments may be wholly or partly due to costs other than the cost of labour.

40 Other Activities

40.1 The Company accepts that the Supplier may provide services to third parties during the currency of the Contract. The Supplier agrees that it will not put itself in a position where its other assignments conflict with the provision of the Services and its obligations under the Contract.

41 Costs

41.1 Except as otherwise agreed, each Party shall bear its own costs incurred in connection with the negotiation, preparation and execution of the Contract.

42 Severance

42.1 If any provision of the Contract is, or becomes, invalid, illegal or unenforceable in whole or in part then the validity, legality and enforceability of all other provisions and the remainder of the affected provisions of the Contract shall not be affected or impaired, provided that the operation of this Clause 42 would not negate the commercial interest and purpose of the parties under the Contract.

42.2 Where a tribunal determines that any provision of the Contract is in any way unenforceable the relevant provision shall be amended or modified to the extent necessary to give the provision a valid legal and enforceable provision which is as similar as possible to that unenforceable provision and is reasonably consistent with the purpose and intent of the Contract.

43 Publicity

43.1 The text of any press release or other communication to be published by or in the media concerning the subject matter of the Contract shall require the prior written approval of the Company. No interviews concerning the same shall be given by the Supplier with the media without prior written approval from the Company of the content of such an interview.

44 Corruption, Gifts and Payments of Commission

44.1 The Supplier and the Supplier Personnel shall not, and the Supplier shall procure that its subcontractors and agents do not, commit any Prohibited Act or cause the Company to commit any equivalent act.

44.2 The Supplier and the Supplier Personnel shall not, and the Supplier shall procure that its subcontractors and agents do not, enter into any business arrangements with the employees, officers or agents of the Company other than as a representative of the Company without the Company's prior written approval.

44.3 The Company has the right to audit any and all records necessary to confirm compliance with Clause 44.1 and 44.2 at any time during the performance of the Contract and during the period referred to in Clause 9.2.

45 Criminal Record Declarations

45.1 For the purposes of this Clause 45:

"**Relevant Individual**" means any servant, employee, officer, consultant or agent of either the Supplier or any subcontractor or supplier carrying out, or intended to carry out, any aspect of the Services; and

"**Relevant Conviction**" means any unspent criminal conviction relating to actual or potential acts of terrorism or acts which threaten national security.

45.2 The Supplier shall procure from each Relevant Individual (as the case may be) a declaration that he has no Relevant Convictions ("Declaration") or disclosure of any

Relevant Convictions. A Declaration shall be procured prior to a Relevant Individual carrying out any of the Services. The Supplier shall confirm to the Company in writing on request and in any event not less than once in every year that each Relevant Individual has provided a Declaration. The Supplier shall procure that a Relevant Individual notifies the Supplier immediately if he has a Relevant Conviction and the Supplier shall notify the Company in writing immediately on becoming aware that a Relevant Individual has a Relevant Conviction.

45.3 The Supplier shall not engage or allow to act on behalf of the Supplier or any subcontractor in the performance of any aspect of the Services any Relevant Individual who has disclosed a Relevant Conviction or who the Supplier is aware has a Relevant Conviction.

45.4 The Company shall have the right in accordance with the audit rights set out in Clause 8 to audit and inspect the records of the Supplier and its subcontractors and its and their respective employees and agents in order to confirm and monitor compliance with this Clause 45 at any time during performance of the Contract.

45.5 If the Supplier fails to comply with the requirements under Clause 45.2 and/or 45.3 the Company may, without prejudice to its rights under Clause 30.1, serve notice on the Supplier requiring the Supplier to remove or procure the removal of (as the case may be) any Relevant Individual who has not provided a Declaration from the Contract and/or Worksite(s) with immediate effect and take such steps as are necessary to ensure that such Relevant Individual has no further involvement with the carrying out of the Services unless (in the case of non-compliance with Clause 45.2) within five (5) Working Days of receipt of the notice the Supplier confirms to the Company that he has procured all of the relevant Declarations required under Clause 45.2.

45.6 A persistent breach of Clause 45.2 and/or Clause 45.3 by the Supplier shall entitle the Company to terminate the Contract in whole or in part with immediate effect in accordance with Clause 30.1(a) as if such persistent breach was a Supplier Default.

45.7 In the event the Company becomes aware that a Relevant Individual has a Relevant Conviction, the Supplier shall remove or procure the removal (as the case may be) of such Relevant Individual from the Contract and/or the Worksite(s) with immediate effect and take such steps as are necessary to ensure that such Relevant Individual has no further involvement with the carrying out of the Services.

45.8 The Supplier shall ensure that each Relevant Individual has the right to work in the UK and shall comply with its obligations under the relevant immigration legislation including but not limited to the obligation to conduct document checks in respect of Relevant Individuals.

45.9 Nothing in this Clause 45 shall in any way waive, limit or amend any obligation of the Supplier to the Company arising under the Contract and the Supplier's responsibilities in respect of performance of the Services remain in full force and effect and the Supplier is not entitled to claim any extra costs or time or relief from any of its obligations as a result of any actions under this Clause 45.

46 No Waiver

46.1 No failure or delay on the part of either party to exercise any right or remedy under the Contract shall be construed or operate as a waiver thereof nor shall any single or partial exercise of any right or remedy as the case may be. The rights and remedies provided in the Contract are cumulative and are not exclusive of any rights or remedies provided by law.

47 Entire Agreement

47.1 The Contract embodies and sets forth the entire contract and understanding of the Parties and shall supersede all prior oral or written contracts understandings or arrangements relating to the subject matter of the Contract. Except in the case of fraud, neither Party shall be entitled to rely on any contract, understanding or arrangement which is not expressly set forth in the Contract.

48 Notices and Service of Process

48.1 Subject to Clause 48.3, any notice, communication or document given under, or in connection with, the Contract must be in English and in writing and sent by letter, electronic mail, or fax or delivered by hand to the other Party's representatives in each case to the address stated in Clause 48.2. The notice, communication or document will be effective as follows:

(a) if sent by letter, it will be effective when it is delivered;

(b) if the notice or other document is sent by electronic mail, it shall be deemed to be given five (5) working hours (where "working hours" are 09:00 to 17:00 in a Working Day) following the time when the sender's electronic mail system dispatches the electronic mail provided that the correct email addresses are

used, and the onus shall be on the sender to prove the time that the electronic mail was dispatched and the address it was sent to. The place of delivery of electronic mail will be deemed to be the postal address of the recipient set out in Schedule 1 (Contract Data);

(c) if sent by fax, it will be effective when it has been transmitted and the transmission report from the fax machine states that the entire fax has been sent successfully; and

(d) if delivered by hand to the other Party's representative, it will be effective immediately it is delivered.

48.2 The address, electronic mail address and fax numbers of the Company and the Supplier are set out in Schedule 1 (Contract Data).

If a Party's details change, it must notify the other Party promptly in writing of any such changes.

48.3 The Parties agree that proceedings arising out of or in connection with this Contract may not be served by electronic mail or fax provided that the Company may from time to time give notices to the Supplier that such proceedings may be served by electronic mail or fax. If the Company gives such a notice then with effect from such notice such proceedings may be served by electronic mail or fax in accordance with Clause 48.2. The Company may from time to time rescind such a notice by further notice and, with effect from the date of such notice of rescission, proceedings arising out of or in connection with this Contract may not be served by electronic mail or fax.

48.4 This Clause 48 does not apply to the service of any proceedings or other documents in any legal action or, where applicable, any arbitration or other method of dispute resolution.

49 Dispute Resolution

If any question, dispute, difference or claim (a "Dispute") should arise under or in connection with this Contract, either Party may refer it for resolution pursuant to Schedule 17 (Dispute Resolution Procedure).

50 Counterparts

50.1 The Contract may be executed in several counterparts each of which shall be deemed an original and all of which shall constitute one and the same document.

51 Partnerships and Joint Ventures

51.1 If the Supplier is a partnership, the rights, obligations and liabilities of the partners in the partnership under the Contract are joint and several. The Contract and the liabilities of the partners under the Contract shall not automatically terminate upon the death, retirement or resignation of any one or more members of such partnership or upon the admission of additional partner or partners. The partner or partners in the partnership shall use their reasonable endeavours to procure that any additional partner or partners enter into an agreement with the Company confirming his/her acceptance of the rights, obligations and liabilities of the Supplier under the Contract.

51.2 If the Supplier comprises two (2) or more parties in joint venture, the rights, obligations and liabilities of each such party under the Contract are joint and several.

51.3 Nothing in the Contract shall constitute, or shall be deemed to constitute, a partnership between the parties. Except as expressly provided in the Contract, neither party is deemed to be the agent of the other and neither party holds itself out as the agent of the other.

52 Governing Law and Jurisdiction

52.1 This Contract and any dispute or claim arising out of or in connection with it or its subject matter shall be governed by and construed in accordance with the law of England and Wales.

52.2 The Company and the Supplier submit, subject to the provisions of the Contract, to the exclusive jurisdiction of the courts of England and Wales provided that the Company has the right in its absolute discretion to enforce a judgement and/or to take proceedings in any other jurisdiction in which the Supplier is incorporated or in which any asset of the Supplier may be situated.

53 Contracts (Rights of Third Parties) Act 1999

53.1 Subject to any Replacement Employer’s rights under Clause 24 and any successor to the Supplier's rights under Clause 38, no person except any member of the TfL Group may enforce the Contract by virtue of the Contracts (Rights of Third Parties) Act 1999, but this does not affect any other right or remedy of a third party arising at law.

53.2 Notwithstanding those rights referred to in Clause 53.1, the Company and the Supplier may agree to vary or rescind the Contract without the consent of any third party.

54 Bonds and Guarantees

54.1 Where stated in Schedule 1 (Contract Data), the Supplier shall at its own expense provide within five (5) Working Days of the Company's request the following:

(a) an executed bond issued by a financial institution whose long term debt obligations are rated not less than A- by Standard & Poor's and/or A3 by Moody's in the form set out in Schedule 7 (Form of Parent Company Guarantee and Performance Bond) in favour of the Company; and/or (as applicable)

(b) an executed parent company guarantee from the ultimate holding company or other parent company of the Supplier (provided that such company's long-term debt obligations are rated not less than A- by Standard & Poor's and/or A3 by Moody's) in the form set out in Schedule 7 (Form of Parent Company Guarantee and Performance Bond) in favour of the Company.

54.2 The Supplier shall ensure that any bond required under Clause 54.1 provides:

(a) in aggregate, credit protection for the Company in an amount of not less than the amount specified in Schedule 1 (Contract Data); and

(b) is renewed every twelve (12) months until the Expiry Date (or date of termination of the Contract if earlier).

54.3 If at any time the existing bond and/or parent company guarantee cease to meet the requirements of Clauses 54.1 and 54.2 then the Supplier shall replace such bond and/or parent company guarantee with a bond and/or parent company guarantee that meet the requirements within five (5) Working Days. This Clause 54 shall not reduce or amend the Supplier's obligation to perform the Services in accordance with the Contract.

54.4 If requested by the Company, the Supplier shall provide an accompanying legal opinion to the bond and/or parent company guarantee supplied under Clause 54.1 completed and signed by a qualified lawyer from the country in which the guarantor

and/or parent company is resident in the form and substance satisfactory to the Company.

54.5 The Company shall not be obliged to make any payment to the Supplier under the Contract unless and until the parent company guarantee and/or performance bond (as the case may be) and legal opinion (if applicable) have been provided in a form satisfactory to the Company.

54.6 Not used.

54.7 Not used.

54.8 The Supplier shall be regarded as being in material breach of the Contract which is incapable of remedy in the event that any parent company guarantee and/or performance bond (as the case may be) is or becomes invalid or otherwise unenforceable.

54.9 Where the Supplier has provided the Company with a performance bond and thereafter any variation is made to the Services or Contract under Clause 14, the Company may in its discretion require the Supplier to provide at its expense a replacement performance bond for a greater sum where such variation either alone or when aggregated with any other variations has resulted in a material increase to the value of the Contract to the Company.

55 Change of Control

55.1 The Supplier shall not without the prior written consent of the Company implement any change of ownership of the Supplier where such change relates to fifty per cent (50%) or more of the issued share capital of the Supplier.

56 Interest

56.1 If either Party fails to pay to the other any amount payable in connection with the Contract on or before the due date for payment, interest shall accrue on the overdue amount from the due date for payment until the date of actual payment (whether before or after judgment) at the Interest Rate. Any interest accruing under this Clause 56.1 shall be immediately payable by the paying Party on demand.

56.2 Interest (if unpaid) arising on an overdue amount will be compounded monthly with the overdue amount but will remain immediately due and payable.

57 Freedom of Information

(a) For the purposes of this Clause 57:

"**FOI Legislation**" means the Freedom of Information Act 2000, all regulations made under it and the Environmental Information Regulations 2004 and any amendment or re-enactment of any of them; and any guidance issued by the Information Commissioner, the Department for Constitutional Affairs, or the Department for Environment Food and Rural Affairs (including in each case its successors or assigns) in relation to such legislation;

"**Information**" means information recorded in any form held by the Company or by the Supplier on behalf of the Company; and

"**Information Request**" means a request for any Information under the FOI Legislation.

(b) The Supplier acknowledges that the Company:

(i) is subject to the FOI Legislation and agrees to assist and co-operate with the Company to enable the Company to comply with its obligations under the FOI Legislation; and

(ii) may be obliged under the FOI Legislation to disclose Information without consulting or obtaining consent from the Supplier.

(c) Without prejudice to the generality of Clause 57(b) the Supplier shall and shall procure that its subcontractors (if any) shall:

(i) transfer to the Company's Representative (or such other person as may be notified by the Company to the Supplier) each Information Request relevant to the Contract, the Services or any member of the TfL Group that it or they (as the case may be) receive as soon as practicable and in any event within two (2) Working Days of receiving such Information Request; and

(ii) in relation to Information held by the Supplier on behalf of the Company, provide the Company with details about and/or copies of all such Information that the Company requests and such details and/or copies shall be provided within five (5) Working Days of a request from

the Company (or such other period as the Company may reasonably specify), and in such forms as the Company may reasonably specify.

(iii) The Company shall be responsible for determining whether Information is exempt information under the FOI Legislation and for determining what Information will be disclosed in response to an Information Request in accordance with the FOI Legislation. The Supplier shall not itself respond to any person making an Information Request, save to acknowledge receipt, unless expressly authorised to do so by the Company.

58 Data Transparency

58.1 The Supplier acknowledges that the Company is subject to the Transparency Commitment. Accordingly, notwithstanding Clause 34 and Clause 57, the Supplier hereby gives its consent for the Company to publish the Contract Information to the general public.

58.2 The Company may in its absolute discretion redact all or part of the Contract Information prior to its publication. In so doing and in its absolute discretion the Company may take account of the exemptions/exceptions that would be available in relation to information requested under the FOI Legislation. The Company may in its absolute discretion consult with the Supplier regarding any redactions to the Contract Information to be published pursuant to Clause 58.1. The Company shall make the final decision regarding publication and/or redaction of the Contract Information.

59 Survival

Clauses 9 (Records and Audit), , 15.5 (Sums Payable by Supplier), 20 (Environmental Claims), 24 (Supplier Personnel), 26 (Responsible Procurement), 27 (Incompetent Supplier Personnel), 28 (Intellectual Property Rights), 30 (Termination and Suspension), 32 (Indemnity and Insurance), 34 (Confidentiality), 42 (Severance), 44 (Corruption, Gifts and Payment of Commission), 46 (No Waiver), 47 (Entire Agreement), 48 (Notices and Service of Process), 51 (Partnerships and Joint Ventures), 52 (Governing Law and Jurisdiction), 53 (Contracts (Rights of Third Parties) Act 1999), 57 (Freedom of Information), 58 (Data Transparency), 59 (Survival), 60.1 (Declaration of Ineffectiveness), and 60.5 (Privacy, Data Protection and Cyber Security), paragraph 1.3.21 of Schedule 2 (Payment) (Set Off) of the Contract shall survive any termination of the Contract and continue in full force and

effect, along with any other Clauses or Schedules of this Contract necessary to give effect to them. In addition, any other provision of this Contract which by its nature or implication (including in respect of any accrued rights and liabilities) is required to survive the termination will survive such termination as aforesaid.

60 Transport for London Group

60.1 Declaration of Ineffectiveness and Public Procurement Termination Event

(a) Without prejudice to the Company's right to terminate this Contract under Clauses 30.1 to 30.7(a) or at common law, the Company may terminate the Supplier's employment at any time in accordance with the provisions of this Clause 60.1 in the event that:

(i) there is a Declaration of Ineffectiveness; or

(ii) there is a Public Procurement Termination Event (without prejudice to the Company's rights implied into the Contract by Regulation 73(3) of the Public Contracts Regulations 2015 or by Regulations 89(3) of the Utilities Contracts Regulations 2016)

(b) In the event that any court makes a Declaration of Ineffectiveness or there is a Public Procurement Termination Event, the Company shall notify the Supplier. The Parties agree that the provisions of this Clause 60.1 shall apply as from the date of receipt by the Supplier of the notification of a Declaration of Ineffectiveness or a Public Procurement Termination Event. Where there is any conflict or discrepancy between the provisions of Clause 30.1 and this Clause 60.1 or the Cessation Plan, the provisions of this Clause 60.1 and the Cessation Plan prevail.

(c) The Declaration of Ineffectiveness or a Public Procurement Termination Event shall not prejudice or affect any right, liability or remedy which has accrued or which shall accrue to either Party prior to or after such Declaration of Ineffectiveness or a Public Procurement Termination Event.

(d) As from the date of receipt by the Supplier of the notification of the Declaration of Ineffectiveness or Public Procurement Termination Event, the Parties (acting reasonably and in good faith) shall agree or, in the absence of such agreement, the Company shall reasonably determine an appropriate Cessation Plan with the object of achieving:

(i) an orderly and efficient cessation of the Services or (at the Company's request) a transition of the Services to the Company or such other entity as the Company may specify; and

(ii) minimal disruption or inconvenience to the Company or to public passenger transport services or facilities, in accordance with the provisions of this Clause 60.1 and to give effect to the terms of the Declaration of Ineffectiveness or Public Procurement Termination Event.

(e) Upon agreement, or determination by the Company, of the Cessation Plan the Parties shall comply with their respective obligations under the Cessation Plan.

(f) The Company shall pay the Supplier's reasonable costs in assisting the Company in preparing, agreeing and complying with the Cessation Plan. Such costs shall be based on any comparable costs or charges agreed as part of the Contract or as otherwise reasonably determined by the Company. Provided that the Company shall not be liable to the Supplier for any loss of profit, revenue goodwill or loss of opportunity as a result of the early termination of the Supplier's employment in accordance with this Clause 60.1.

60.2 Crime and Disorder Act 1998

The Supplier acknowledges that Transport for London is under a duty under Section 17 of the Crime and Disorder Act 1998 (as amended by the Police and Justice Act 2006 and the Policing and Crime Act 2009) to:

(a) have due regard to the impact of crime, disorder and community safety in the exercise of TfL's duties;

(b) where appropriate, identify actions to reduce levels of crime and disorder; and

(c) without prejudice to any other obligation imposed on the Company, exercise its functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent, in its area:

(i) crime and disorder (including anti-social and other behaviour adversely affecting the local environment);

(ii) the misuse of drugs, alcohol and other substances; and

(iii) re-offending,

and in the performance of the Contract, the Supplier shall assist and co-operate with the Company and relevant members of the TfL Group and shall use reasonable endeavours to procure that its subcontractors assist and co-operate, with the Company and relevant members of the TfL Group to enable TfL to satisfy its duty.

60.3 The Company's business

The Supplier acknowledges that it:

(a) has sufficient information about the Company and the Services;

(b) is aware of the Company's processes and business;

(c) has made all appropriate and necessary enquiries to enable it to carry out the Services in accordance with the Contract;

(d) is aware of the purposes for which the Services are required; and

(e) shall neither be entitled to any additional payment nor excused from any obligation or liability under the Contract due to any misinterpretation or misunderstanding by it of any fact relating to the Services.

60.4 Best value

The Supplier acknowledges that TfL is a best value authority for the purposes of the Local Government Act 1999 and as such the Company is required to make arrangements to secure continuous improvement in the way it exercises its functions, having regard to a combination of economy, efficiency and effectiveness. The Supplier shall assist the Company to discharge TfL's duty where possible, and in doing so, shall carry out any review of the Services reasonably requested by the Company from time to time. The Supplier shall negotiate in good faith (acting reasonably) with the Company any changes to the Contract in order for the Company to achieve best value.

60.5 Privacy, Data Protection and Cyber Security

The parties shall comply with their respective obligations under the Data Protection Legislation.

(a) The Supplier shall follow the 10 Steps to Cyber Security issued by the National Cyber Security Centre (or equivalent or replacement guidance or requirements in place from time to time).

(b) The Supplier must follow the 10 Steps to Cyber Security issued by the National Cyber Security Centre.

60.6 Conflict of Interest

(a) The Supplier acknowledges and agrees that it does not have any interest in any matter where there is or is reasonably likely to be a conflict of interest with the carrying out of the Services or with any member of the TfL Group, save to the extent fully disclosed to and approved in writing by the Company.

(b) The Supplier shall undertake ongoing and regular checks for any conflict of interest throughout the duration of the Contract and in any event not less than once in every six (6) months and shall notify the Company in writing immediately on becoming aware of any actual or potential conflict of interest with the carrying out of the Services under the Contract or with any member of the TfL Group and shall work with the Company to do whatever is necessary (including the separation of staff working on, and data relating to, the Services from the matter in question) to manage such conflict to the Company's satisfaction, provided that, where the Company is not so satisfied (in its absolute discretion) it shall be a material breach of this Contract.

60.7 Equality and Diversity and Modern Slavery

Without limiting the generality of any other provision of the Contract, the Supplier:

(a) shall not unlawfully discriminate;

(b) shall procure that its employees and agents do not unlawfully discriminate; and

(c) shall use reasonable endeavours to procure that its subcontractors do not unlawfully discriminate when providing the Services,

within the meaning and scope of the Equality Act 2006, the Equality Act 2010 and any other relevant enactments in force from time to time in relation to discrimination in employment.

(d) The Supplier acknowledges that the Company is under a duty under section 149 of the Equality Act 2010 to have due regard to the need to:

(e) eliminate unlawful discrimination on the grounds of age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation (all "**Protected Characteristics**") and marriage and civil partnership;

(f) advance equality of opportunity between persons who share a Protected Characteristic and persons who do not share it; and

(g) foster good relations between persons who share a Protected Characteristic and persons who do not.

In performing the Contract the Supplier shall assist and cooperate with the Company where possible in satisfying this duty.

(a) The Supplier shall ensure that its staff, and those of its subcontractors who are engaged in the performance of the Contract comply with the Company's policies in relation to equal opportunities and diversity, workplace harassment and drugs and alcohol as may be updated from time to time. Copies of these policies are available from the Company at any time on request.

(b) The Company's Harassment, Bullying and Discrimination Policy as up-dated from time to time (copies of which are available on request from the Company) requires the Company's own staff and those of its sub-contractors to comply fully with the Harassment, Bullying and Discrimination Policy to eradicate harassment in the workplace. The Supplier shall:

    (i) ensure that its staff, and those of its sub-contractors who are engaged in the performance of the Contract are fully conversant with the requirements of the Harassment, Bullying and Discrimination Policy;

    (ii) fully investigate allegations of workplace harassment in accordance with the Harassment, Bullying and Discrimination Policy; and

(iii) ensure that appropriate, effective action is taken where harassment is found to have occurred.

(c) In addition to this Clause 60.7, the Supplier shall comply with its obligations under Schedule 15 (Responsible Procurement) in respect of the equality and diversity.

(d) The Supplier undertakes, warrants and represents that

(i) neither the Supplier nor any of its officers, employees, agents or subcontractors has:

(A) committed an offence under the Modern Slavery Act 2015 (a "**MSA Offence**"); or

(B) been notified that it is subject to an investigation relating to an alleged MSA Offence or prosecution under the Modern Slavery Act 2015; or

(C) is aware if any circumstances within its supply chain that could give rise to an investigation relating to an alleged MSA Offence or prosecution under the Modern Slavery Act 2015;

(ii) it shall comply with the Modern Slavery Act 2015 and the Modern Slavery Policy;

(iii) it shall notify the Company immediately in writing if it becomes aware or has reason to believe that it, or any of its officers, employees, agents or subcontractors have, breached or potentially breached any of Supplier's obligations under this Clause 60.7. Such notice to set out full details of the circumstances concerning the breach or potential breach of Supplier's obligations.

Any breach of this Clause 60.7 by the Supplier shall be deemed a material breach of the agreement and shall entitle the Company to terminate the agreement in accordance with Clause 30.1(a).

60.8 Work Related Road Risk

(a) For the purposes of Clauses 60.8(a) to 60.8(i) (inclusive) of this Contract, the following expressions shall have the following meanings:

"Approved Progressive Driver Training"	means an ongoing programme of Drivers' training to ensure they have the appropriate knowledge, skills and attitude to operate safely on urban roads. This includes the training specific for the urban environment (including on-road experience from a cyclist's perspective), which is required to be completed at least once every 5 years;
"Car-derived Van"	means a vehicle based on a car, but with an interior that has been altered for the purpose of carrying larger amounts of goods and/or equipment;
"Category N2 HGV "	means a vehicle designed and constructed for the carriage of goods having a MAM exceeding 3,500 kilograms but not exceeding 12,000 kilograms;
"Category N3 HGV"	means a vehicle designed and constructed for the carriage of goods and having a MAM exceeding 12,000 kilograms;
"CLOCS Standard"	means the Construction Logistics and Community Safety standard, which aims to eliminate risk of a collision between heavy goods vehicles servicing the construction sector and vulnerable road users by ensuring effective practice in the management of operations, vehicles, drivers and construction sites; further information can be found at: www.clocs.org.uk;
"Collision Report"	means a report detailing all collisions during the previous twelve (12) months involving injuries to persons or fatalities;
"Delivery and Servicing Vehicle"	means a Lorry, a Van or a Car-derived Van;

"Direct Vision Standard" or "DVS"	means Direct Vision Standard, a performance based assessment and rating tool, as updated from time to time that measures how much direct vision a Driver has from a Category N3 HGV cab in relation to other road users. Further information can be found at: www.tfl.gov.uk
"Driver"	any employee of the Supplier (including an agency or contracted driver), who operates Delivery and Servicing Vehicles on behalf of the Supplier while providing the Services;
"DVLA"	means Driver and Vehicle Licensing Agency;
"FORS"	means the Fleet Operator Recognition Scheme, which is an accreditation scheme for businesses operating commercial vehicles including vans, HGV, coaches and P2W. It offers impartial, independent advice and guidance to motivate companies to improve their compliance with relevant laws and their environmental, social and economic performance;
"FORS Standard"	means the standard setting out the accreditation requirements for the Fleet Operator Recognition Scheme, a copy of which can be found at: www.fors-online.org.uk;
"Gold Accreditation"	means the highest level of accreditation within the FORS Standard, the requirements of which are more particularly described at: www.fors-online.org.uk;
"HGV"	means a vehicle with a MAM exceeding 3,500 kilograms;

"**MAM**"	means the maximum authorised mass of a vehicle or trailer including the maximum load that can be carried safely while used on the road;
"**Silver Accreditation**"	means the minimum level of accreditation within the FORS Standard acceptable for the contract schedule, the requirements of which are more particularly described at: www.fors-online.org.uk; and
"**Van**"	means a vehicle with a MAM not exceeding 3,500 kilograms.

Fleet Operator Recognition Scheme Accreditation

(b) Where the Supplier operates Delivery and Servicing Vehicles to provide the Services, it shall within ninety (90) Days of the Commencement Date:

(i) (unless already registered) register for FORS or a scheme, which in the reasonable opinion of the Company, is an acceptable substitute to FORS (the "**Alternative Scheme**"); and

(ii) (unless already accredited) have attained the standard of Bronze Accreditation (or higher) or the equivalent within the Alternative Scheme and shall maintain the standard of Silver Accreditation (or equivalent standard within the Alternative Scheme) by way of an annual independent assessment in accordance with the FORS Standard or take such steps as may be required to maintain the equivalent standard within the Alternative Scheme. Alternatively, where the Supplier has attained Silver or Gold Accreditation, the maintenance requirements shall be undertaken in accordance with the periods set out in the FORS Standard.

Safety Features on HGV

(c) The Supplier shall ensure that every HGV, which it uses to provide the Services, shall be fitted with safety features consistent with the FORS Silver Accreditation.

(d) Construction Logistics and Community Safety (CLOCS)

Where applicable:

(i) the Supplier shall comply with the CLOCS Standard; and

(ii) the Supplier shall ensure that the conditions at all sites and locations where:

(A) the Services are being provided, or

(B) in connection with the performance of the Services, any waste is being disposed of or supplies are being delivered to or from,

are appropriate for each Category N3 HGV being used in the provision of the Services.

Direct Vision Standard

(e) Where applicable:

(i) The Supplier shall comply with Schedule 11 (Direct Vision Standard); and

(ii) the Supplier shall ensure that:

(A) from and including 26 October 2019, all Category N3 HGVs used in the provision of the Services achieve a minimum of a one (1) star Direct Vision Standard rating; and

(B) from and including 26 October 2023 all Category N3 HGVs used in the provision of the Services achieve a minimum of three (3) star Direct Vision Standard rating.

Driver Training

(f) Where the Supplier operates Delivery and Servicing Vehicles to provide the Services the Supplier shall ensure that each of its Drivers attend Approved Progressive Training throughout the Term.

Collision Reporting

(g) Where the Supplier operates Delivery and Servicing Vehicles to provide the Services, the Supplier shall within 15 days of the Commencement Date, provide to the Company a Collision Report. The Supplier shall provide to the Company an updated Collision Report within five Working Days of a written request from the Company at any time.

Self-Certification of Compliance

(h) Where the Supplier operates Delivery and Servicing Vehicles to provide the Services, within 90 Days of the Commencement Date, the Supplier shall make a written report to the Company detailing its compliance with Clauses 60.8(b), 60.8(c), 60.8(e), 60.8(f) and 60.8(g) of this Contract (the "**WRRR Self-certification Report**"). The Supplier shall provide updates of the WRRR Self-certification Report to the Company on each six month anniversary of its submission of the initial WRRR Self-certification Report.

Obligations of the Supplier regarding subcontractors

(i) The Supplier shall ensure that those of its subcontractors who operate Category N2 Lorries, Category N3 Lorries, Vans and/or Car-derived Vans to provide the Services shall comply with the corresponding provisions of this Contract:

(i) Clause 60.8(b)m 60.8(f), (g), and 60.8(h);

(ii) for Category N2 HGVs – Clauses 60.8(c);

(iii) for Category N3 HGVs – Clauses 60.8(c),and, where applicable 60.8(d) and 60.8(e)

(iv) or Vans and Car-Derived Vans – Clauses 60.8(f), 60.8(g) and 60.8(h) as if those subcontractors were a Party to this Contract.

Failure to Comply

(j) Without limiting the effect of any other clause of this Contract relating to termination, if the Supplier fails to comply with any of Clauses 60.8(b), 60.8(c), 60.8(e) (where applicable), 60.8(f), 60.8(g), 60.8(h) and/or 60.8(i):

(i) the Supplier has committed a material breach of this Contract; and

(ii) the Company may refuse the Supplier, its employees, agents and Delivery and Servicing Vehicles entry onto any property that is owned, occupied or managed by the Company for any purpose (including but not limited to deliveries).

61 CompeteFor

61.1 Without prejudice to Clause 35, the Supplier will, on a non-exclusive basis, use the CompeteFor electronic brokerage service (or such alternative web-based tool as the Company may direct from time to time) ("**CompeteFor**") to make available to other Suppliers all appropriate opportunities, arising in connection with the Contract, to supply labour, goods or services to the Supplier.

61.2 The Supplier will use all reasonable endeavours to ensure that its subcontractors (for the purposes of this Clause 61, the "**Supplier's Subcontractors**") use CompeteFor, on a non-exclusive basis, to make available to other subcontractors all appropriate opportunities, arising in connection with the Contract, to supply labour, goods and services to the Supplier's Subcontractors.

61.3 The Supplier will monitor (and maintain a record of) the number, type and value of opportunities, arising in connection with the Contract, made available to other Suppliers via CompeteFor, whether by the Supplier or the Supplier's Subcontractors, and will report this information on a quarterly basis by way of email to the Company's Representative.

THIS AGREEMENT has been executed as a deed by the parties and delivered on the date first above written

6856

Executed as a deed by affixing the Common Seal of
London Underground Limited
in the presence of:-

[redacted]

Authorised Signatory

Executed as a deed by Cleshar Contract Services Limited

acting by [redacted]

Authorised Signatory

and [redacted]

Authorised Signatory

Schedule 1

Contract Data

Contract Reference Number:	TfL-01331
Commencement Date:	18st November 2019
Service Commencement Date:	8 h December 2019
Expiry Date:	22 September 2022
Notices (to Company):	Address: Mr Joel Baker (C/O) the Legal Dept. London Underground Ltd 55 Broadway London SW1H 0BD Email: [redacted]@tube.tfl.gov.uk
Notices (to Supplier):	Address: [redacted] Heather Park House North Circular Road Stonebridge London NW10 7NN Email: [redacted]@cleshar.co.uk
Company's Representative:	Mr Joel Baker (Track Environmental Manager) Address: London Underground Ltd Floor 1 Stratford Market Depot Burford Road E15 2SB Email: [redacted]@tube.tfl.gov.uk Tel: [redacted]
Supplier's Representative:	[redacted] Address: Heather Park House North Circular Road Stonebridge London NW10 7NN Email: [redacted]@cleshar.co.uk Tel: [redacted]

Senior Representative (Company):	Peter McNaught (Director Asset Operations) Address: Floor 11B Palestra 197 Blackfriars Road London SE1 8NJ] Email: [redacted]@tfl.gov.uk Tel: [redacted]
Senior Representative (Supplier):	[redacted] Address: Heather Park House North Circular Road Stonebridge London NW10 7NN Email: [redacted]@ cleshar.co.uk Tel: [redacted]
Clause 6.4 notice period for 'changing the manner in which the services are provided'	Where the Company issues an instruction to reduce the number of Gangs from that detailed in the accepted Baseline Resource Programme the minimum notice period is 4 weeks.
Worksites:	As advised by the Company in each Worksite Scope.
Core Group (initial members):	Company: [redacted] (Head of Track) [redacted] – Lead Commercial Manager Supplier: [redacted] [redacted]
Mobilisation Cost	£[redacted] Note: A breakdown of the Mobilisation Cost is appended at Appendix 3 to this Schedule 1
Budget Period One Gang Cost	£[redacted] Note: A breakdown of the Mobilisation Cost is appended at Appendix 2 to this Schedule 1
Budget Period One Management Fee	£[redacted]

Management Fee Percentage:	[redacted] Note: A breakdown of the above percentage addition is appended at Appendix 6 to this Schedule 1
Materials Overhead and Profit Percentage	[redacted] Note: A breakdown of the above percentage addition is provided at Appendix 6 to this Schedule 1
Equipment Overhead and Profit Percentage	[redacted] Note: A breakdown of the above percentage addition is provided at Appendix 6 to this Schedule 1
Specialist Sub-Contractor Overhead and Profit Percentage	[redacted] Note: A breakdown of the above percentage addition is provided at Appendix 6 to this Schedule 1
Interest Rate (Clause 20):	[redacted]
Performance Security (Clause 53):	Performance Bond: Not Required
Performance Security (Clause 53):	Parent Company Guarantee: Required
The bond provides, in aggregate credit protection for the Company of an amount not less than: NB: Any performance bond provided is renewed every twelve (12) months until the Expiry Date (or date of termination of this Contract if earlier) for an amount equal to that stated in the box opposite (notwithstanding any claim or claims under any bond previously provided to the Company).	£[redacted])
The Gang Rates are:	appended at Appendix 1 to this Schedule 1
The Gang Rates Breakdown is:	appended at Appendix 4 to this Schedule 1
The Key Materials are:	listed in paragraph 5 of Schedule 3 (Specification)
Baseline Resource Programme (for Budget Period One) is:	appended at Appendix 2 to this Schedule 1

SCHEDULE 1 - APPENDIX 1: GANG RATES

Shift Pattern	Rate Ref	Gang Type							
		Tree	Tree (PTS trained)	Vegetation	Vegetation (PTS trained)	Utility	Understorey	Depot	Fencing
Monday to Friday 8 hour dayshift	(1)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Monday to Friday 8 hour nightshift	(2)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Saturday 8 hour dayshift	(3)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Saturday 8 hour nightshift	(4)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Sunday / Bank Holiday 8 hour dayshift	(5)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Sunday / Bank Holiday 8 hour nightshift	(6)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Christmas & New Year Bank Holiday 8 hour dayshift	(7)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Christmas & New Year Bank Holidays 8 hour nightshift	(8)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Notes:

(1). A breakdown of cost for Supplier Personnel calculated using Defined Cost is provided at Appendix 5 to this Schedule 1.

SCHEDULE 1 - APPENDIX 2 – BASELINE RESOURCE PROGRAMME

Baseline Resource Schedule for the Budget Period One				2019/2020												
Gang Type			Period	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Period 11	Period 12	Period 13
			Shifts per Period	17	19	19	20	20	19	20	20	20	17	20	20	23
	Shift	Gang Rate Ref	Rate	Gang Type Numbers per Period												
Tree Gangs	Day	[redacted]	[redacted]										[redacted]			
Tree Gangs (PTS trained)	Day															
Vegetation Gangs	Day															
Vegetation Gangs (PTS trained)	Day															
Utility Gang Rates	Day															
Understory Gangs	Day															
Depot Gangs	Day															
Fencing Gangs	Day															
Tree Gangs (nights)	Night															
Vegetation Gangs (nights)	Night															
Utility Gangs (nights)	Night															
Total Cost of gangs by Period				[redacted]												

Baseline Resource Schedule for the Budget Period One				2020/2021													
Gang Type			Period	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Period 11	Period 12	Period 13	Total Shifts in Budget Period
			Shifts per Period	22	18	20	20	20	19	20	20	20	17	20	20	17	
	Shift	Gang Rate Ref	Rate	Gang Type Numbers per Period													
Tree Gangs	Day	[redacted]	[redacted]	[redacted]													[redacted]
Tree Gangs (PTS trained)	Day																
Vegetation Gangs	Day																
Vegetation Gangs (PTS trained)	Day																
Utility Gang Rates	Day																
Understory Gangs	Day																
Depot Gangs	Day																
Fencing Gangs	Day																
Tree Gangs (nights)	Night																
Vegetation Gangs (nights)	Night																
Utility Gangs (nights)	Night																
Total Cost of gangs by Period				[redacted]													[redacted]

Total Cost for Budget Period = [redacted]

SCHEDULE 1 - APPENDIX 3 – MOBILISATION COST BREAKDOWN

Ref:	Description	£ p
1	Prelims	
2		
3	Head of Support Services	£ [redacted]
4	Head of Commercial	£ [redacted]
5	Health & Safety	£ [redacted]
6	Quality Lead	£ [redacted]
7	Environmental Lead	£ [redacted]
8	HR Manager	£ [redacted]
9	Veg Manager	£ [redacted]
10		
11	TUPE Inductions / Recruitment	£ [redacted]
12		
13	TUPE Training	£ [redacted]
14		
15		
16		
17		
18		
19		
20		

SCHEDULE 1 - APPENDIX 4 – GANG RATES BREAKDOWN

Gang Types	Shift rates (£)								Number in Gang	Gang Totals							
Tree Gangs	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Arborist / Ariel Rescue	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]7	2	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Groundsman	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	2	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PWT/ SPC-TH/EH qualification	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	1	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Ancillary Expenditure	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	1	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Gang Rates										£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Tree Gang (PTS trained)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Arborist / Ariel Rescue	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	2	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Groundsman	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted].56	2	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PWT/ SPC-TH/EH qualification	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	1	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
PTS qualification	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	4	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Ancillary Expenditure	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	1	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Gang Rates										£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Vegetation Gangs	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Groundsman	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	4	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PWT/ SPC-TH/EH qualification	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	1	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Ancillary Expenditure	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	1	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Gang Rates										[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Vegetation Gangs (PTS)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Groundsman	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	4	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PWT/ SPC-TH/EH qualification	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	1	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
PTS qualification	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	4	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Ancillary Expenditure	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	1	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Gang Rates										£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Utility Gangs	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Groundsman	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	4	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PWT/ SPC-TH/EH qualification	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	1	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Ancillary Expenditure	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	1	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Gang Rates										£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Utility Gangs (PTS)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Groundsman	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	4	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PWT/ SPC-TH/EH qualification	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	1	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
PTS qualification	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	4	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Ancillary Expenditure	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	1	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Gang Rates										£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Understory Gangs	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Groundsman	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	4	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PWT/ SPC-TH/EH qualification	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	1	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Ancillary Expenditure	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	1	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Gang Rates										£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Depot Gang	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Groundsman	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	6	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PWT/ SPC-D qualification	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	1	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Possession Master qualification	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	1	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Ancillary Expenditure	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	1	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Gang Rates										£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Fencing Repair Gang	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Fencing Operative	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	2	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PWT/ SPC - TH/EH/D qualification	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	1	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Ancillary Expenditure	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	1	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Gang Rates										£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

SCHEDULE 1 - APPENDIX 5 – DEFINED COST BREAKDOWN FOR SUPPLIER PERSONNEL

Rate 1	Monday to Friday 8 hour dayshift (Traffic Hours)
Rate 2	Monday to Friday 8 hour nightshift (Engineering Hours)
Rate 3	Saturday 8 hour dayshift (Traffic Hours)
Rate 4	Saturday 8 hour nightshift (Engineering Hours)
Rate 5	Sunday / Bank Holiday 8 hour dayshift (Traffic Hours)
Rate 6	Sunday / Bank Holiday 8 hour nightshift (Engineering Hours)
Rate 7	Christmas & New Year Bank Holidays 8 hour dayshift (Traffic Hours)
Rate 8	Christmas & New Year Bank Holidays 8 hour nightshift (Engineering Hours)
Rate 9-11	Extra over for SPC/PWT qualifications (all grades and all shifts)
Rate 12	Extra over for Possession Master (all grades and all shifts)
Rate 13	Extra over for PTS qualification (all grades and all shifts)
Rate 14-19	Ancillary Expenditure to be added to each Gang Type

Grade	Rate Code	Wages/Salary SoCC 1.1 (B) £ P	Bonuses/ Special allowances and circumstances SoCC 1.1 (C) (1) to (4) inc. £ P	Sickness, holidays and severance SoCC 1.1 (C) (5) & (6) £ P	Subsistence, medical, passports and Protective clothing SoCC 1.1 D (1) to (4) inc. £ P	Applicable laws, superannuation, life assurance, Employers National Insurance SoCC 1.1 (D) (1) to (6) £ P	Training SoCC 1.1 (D) (7) & (13) £ P	Medical Insurance, death benefit, accident benefits and medical aid (SoCC 1.1 (D) (8) to (11) inc. £ P	Vehicle provided as contracted remuneration SoCC 1.1 (D) (12) £ P	Other £ P	Total Cost Per annum £ P	Number of shifts worked per annum per Gang member role	Cost per shift (8hrs) £ P
Arborist / Ariel Rescue	1	£											
Groundsman		£											
Fencing Operative		£											
Arborist / Ariel Rescue	2	£											
Groundsman		£											
Fencing Operative		£											
Arborist / Ariel Rescue	3	£											
Groundsman		£											
Fencing Operative		£											
Arborist / Ariel Rescue	4	£											
Groundsman		£											
Fencing Operative		£											
Arborist / Ariel Rescue	5	£											
Groundsman		£											
Fencing Operative		£											
Arborist / Ariel Rescue	6	£											
Groundsman		£											
Fencing Operative		£											
Arborist / Ariel Rescue	7	£											
Groundsman		£											
Fencing Operative		£											
Arborist / Ariel Rescue	8	£											
Groundsman		£											
Fencing Operative		£											

Grade Uplifts	Rate Code	Wages/Salary SoCC 1.1 (B) £ P	Bonuses/ Special allowances and circumstances SoCC 1.1 (C)(1) to (4) inc. £ P	Sickness, holidays and severance SoCC 1.1 (C)(5) & (6) £ P	Subsistence, medical, passports and Protective clothing SoCC 1.1 D (1) to (5) inc. £ P	Applicable laws, superannuation, life assurance, Employers National Insurance SoCC 1.1 (D)(6) £ P	Training Socc 1.1 (D) (7) & (13) £ P	Medical Insurance, death benefit, accident benefits and medical aid (SoCC 1.1 (D) (8) to (11) inc. £ P	Vehicle provided as contracted remuneration SoCC 1.1 (D)(14) £ P	Other £ P	Total Cost Per annum £ P	Number of shifts worked per annum per Gang member role	Cost per shift (8hrs) £ P
SPC/PWT-TH/EH	9	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SPC/PWT-D	10	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SPC/PWT-TH/EH/D	11	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Possession Master	12	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PTS	13	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Ancillary Expenditure for vehicles, equipment, welfare and materials	Rate Code	Tools of the Trade SoCC 1.1 (E) (1) £ P	Site Vehicles, crew buses and the like SoCC 1.1 (E) (2) £ P	Fuel and Consumables SoCC 1.1 (E) (3) £ P	Maintenance and Servicing SoCC 1.1 (E) (4) £ P	Welfare facilities, drinking water and the like 1(E) (5) £ P	Other £ P				Total Cost Per annum £ P	Total number of shifts worked per annum for each Gang Type	Cost per shift (8hrs) £ P
Tree Gangs	14	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]	[redacted]	[redacted]3
Vegetation Gangs	15	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]	[redacted]	[redacted]
Utility Gangs	16	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]	[redacted]	[redacted]
Understory Gangs	17	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]	[redacted]	[redacted]
Depot Gangs	18	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]	[redacted]	[redacted]
Fencing Gangs	19	£ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]	[redacted]	[redacted]

SCHEDULE 1 - APPENDIX 6 – PERCENTAGE BREAKDOWNS

Management Fee Percentage breakdown

Cost component	%
Management Services	[redacted]
Other	[redacted]
Overhead	[redacted]
Profit	[redacted]
Total Management Fee Percentage	[redacted]

Materials Overhead and Profit Percentage breakdown

Cost component	%
Overhead	[redacted]
Profit	[redacted]
Total Materials Overhead and Profit Percentage	[redacted]

Equipment Overhead and Profit Percentage breakdown

Cost component	%
Overhead	[redacted]
Profit	[redacted]
Total Equipment Overhead and Profit Percentage	[redacted]

Specialist Sub-Contractor Overhead and Profit Percentage Breakdown

Cost component	%
Overhead	[redacted]
Profit	[redacted]
Total Specialist Sub-Contractor Overhead and Profit Percentage	[redacted]

Schedule 2
Payment

Definitions

The following expressions shall have the following meanings:

"Margin" means the amount calculated by summating the following:

a) The total of Defined Cost for Materials multiplied by the Materials Overhead and Profit Percentage
b) The total of Defined Cost for Equipment multiplied by the Equipment Overhead Percentage
c) The total of Defined Cost for Specialist Sub-Contractors Equipment multiplied by the Specialist Sub-Contractor Equipment Overhead Percentage

"Payment Assessment Date" means the last day of each Period or such other date as the Company may notify the Supplier from time to time.

"Schedule of Cost Components" means the schedule set out at Part B of this Schedule 2 (Payment).

1. Payment

1.1. Baseline Resource Programme

1.1.1. Other than as expressly provided in paragraph 9 of Schedule 3 (Specification) (Additional Services) and Schedule 4 (Contract Variation Procedure and Additional Services) , the total Charges as set out in the Baseline Resource Programme remains fixed in each Budget Period.

1.1.2. The Gang Rates used in the pricing of the Baseline Resource Programme in each Budget Period are subject to adjustment for inflation in accordance with the provisions stated in Part C (Price Adjustment for Inflation) of this Schedule 2 (Payment).

1.1.3. The Materials Overhead and Profit Percentage is deemed to be fully inclusive of all overheads associated with the provision of Materials and for profit.

1.1.4. The Equipment Overhead and Profit Percentage is deemed to be fully inclusive of all overheads associated with the provision of Equipment and for profit.

1.1.5. The Specialist Sub-Contractor Overhead and Profit Percentage is deemed to be fully inclusive of all overheads associated with the provision and management of Specialist Subcontractors and for profit.

1.1.6. The Management Fee Percentage is deemed to be fully inclusive of all ancillary costs and services necessary to provide the Management Service and all other services and costs not included in the Gang Rates; Materials Overhead and Profit Percentage and the Equipment Overhead and Profit Percentage necessary to provide the Services including but not limited to demobilisation costs in relation to Supplier's obligations under Schedule 16 (Obligations on Handover).

1.2. Application Workflow and Timeline

1.2.1. The Payment Application (as defined below) workflow and timeline is set out in Part E (Payment Application Workflow and Timeline) of this Schedule 2 (Payment) but in the event of conflict with the other provisions of this Schedule 2 (Payment), the other provisions of this Schedule 2 (Payment) shall take precedence.

1.3. Assessing the Amount Due

1.3.1. There shall be a Payment Assessment Date in each Period from the Commencement Date until the Expiry Date in respect of the whole of the Services.

1.3.2. The Supplier shall submit its assessment of the amount due in the relevant Period ending in the Payment Assessment Date, in accordance with paragraph 1.3 of this Schedule 2 (Payment) to the Company's Representative not more than five (5) days after each Payment Assessment Date (each, a "**Payment Application**"). The Supplier shall submit any supporting documents that are reasonably necessary to enable the Company's Representative to check the Supplier's assessment of the amount due. The Supplier shall maintain and make available as required by the Company's Representative, with each Payment Application, all timesheets, labour, allocation sheets, invoices, equipment records and all other relevant supporting documents and information as may be reasonably required by the Company's Representative (including the Shift Reports required pursuant to Schedule 14 (Project Processes). The Payment Application and supporting documents (if any) shall specify the Supplier's assessment of the amount due in the Period to which the Payment Application relates and the basis upon which that sum is calculated.

1.3.3. The Company's Representative shall issue a payment notice to the Supplier within twenty-one (21) days of receipt of the Supplier's Payment Application (a "**Payment Notice**"). The Payment Notice shall constitute a payment notice for the purposes of Section 110A of the HGCRA and the Company's Representative shall notify the Supplier of the amount that the Company's Representative considers to be due to the Supplier at the end of the Period to which the Payment Notice relates, if any, and the basis on which the amount is calculated and it is immaterial if the amount referred to in the Payment Notice is zero.

1.3.4. Within five (5) days of receipt of a Payment Notice, the Supplier shall deliver to the Company's Representative a VAT invoice in the amount of the Payment Notice, with a copy of the Payment Notice attached.

1.3.5. The date on which a payment becomes due is twenty-one (21) days after the date on which the Company's Representative receives the Payment Application.

1.3.6. The final date for payment of each invoice shall be fourteen (14) days after the date payment becomes due under paragraph 1.3.5 above, except if the Supplier fails to issue a VAT invoice in accordance with the timescales set out in paragraph 1.3.4 above (and such failure is not due to any failure by the Company to comply with its obligations under paragraph 1.3.3 above) then the final date for payment shall be extended by the additional number of days taken by the Supplier to issue the VAT invoice

1.3.7. Subject to paragraphs 1.3.8, 1.3.9 and 1.3.10 of this Schedule 2 (Payment), the Company shall pay the Supplier the sum referred to in the Payment Notice (or, if the Company's Representative has not served a Payment Notice, the sum referred to in the Supplier's Payment Application under paragraph 1.3.2) (the "**notified sum**") on or before the final date for payment for each invoice.

1.3.8. If the Company intends to pay less than the notified sum, the Company's Representative shall notify the Supplier no later than one (1) day (the "**Prescribed Period**") before the final date for payment. The notice shall specify:

(A) the amount the Company considers to be due for the relevant Period on the date the notice is served and any basis upon which that sum is calculated; or

(B) if there is more than one basis, each basis and the amount attributed to it.

It is immaterial for the purposes of this paragraph 1.3.8 that the amounts referred to in sub-paragraphs 1.3.8 (A) or 1.3.8 (B) may be zero. Where a notice is given under this paragraph 1.3.8 , paragraph 1.3.7 applies only in respect of the sum specified pursuant to this paragraph 1.3.8.

1.3.9. Notwithstanding paragraphs 1.3.7 and 1.3.8 and without prejudice to Clauses 30.10 and 30.12 if the Supplier is subject to an event set out in Clause 30.1(c) after the Prescribed Period, the Company shall not be required to pay the Supplier the notified sum on or before the final date for payment.

1.3.10. The Company shall pay the Supplier the Price for Services Provided to Date as at the relevant Payment Assessment Date less the Price for Services Provided to Date as at the immediately preceding Payment Assessment Date, in accordance with paragraph 1 of this Schedule 2 (Payment), subject to such deductions and additional payments due under the Contract in respect to:

(A) Abatement(s) in accordance with Schedule 9 (Performance Measurement);

(B) adjustments in connection with Variation Orders in accordance with Schedule 4 (Contract Variation Procedure and Additional Services) (without double counting if and to the extent the effect of any Variation Order is a change to any of elements i) to v) of the definition of "Price for Services Provided to Date");

(C) termination payments in accordance with Clauses 30.10 and 30.12; and

(D) other sums that may be payable by the Company to the Supplier or recoverable by the Company from the Supplier under the Contract.

1.3.11. Any tax which the law requires the Company to pay to the Supplier is included in the amount due. If the amount to be paid to the Supplier is less than the amount to be paid by or retained from the Supplier, the difference is recoverable from the Supplier as a debt due on demand.

1.3.12. Payments of the Price for Services Provided to Date made by the Supplier in a currency other than the currency of this Contract shall be included in the amount due as payments to be made to the Supplier in the same currency.

1.3.13. If any performance bond or parent company guarantee required by this Contract is not procured by the Supplier and delivered to the Company in accordance with Clause 53 (Bonds, Warranties and Guarantees) of this Contract then without prejudice to any other rights and remedies the Company may have, one half of the Price for Services Provided to Date may be retained in assessments of the amount due and shall not be payable to the Supplier until such documents have been delivered.

1.3.14. Not used.

1.3.15. Within forty (40) Working Days of the end of the Budget Period, the Supplier shall submit to the Company's Representative a statement detailing the Price for Services Provided to Date up to the end of the Budget Period. For the purposes of this paragraph 1.3.15, the Price for Services Provided to Date for the relevant Budget Period shall be the gross amount assessed prior to any reductions of the Price for Services Provided to Date pursuant to paragraph 1.3.10 of this Schedule 2 (Payment). The statement shall be broken down in to its constituent elements as set out in paragraph 1.3.2 of this Schedule 2 (Payment).

1.3.16. Within forty (40) Working Days of receipt of the statement the Company's Representative shall advise the Supplier of any corrections to be made to the statement and confirm in writing the agreed amount of the Price for Services Provided to Date for the relevant Budget Period, such confirmation shall be without prejudice to any further corrections that may be made subsequently by the Company's Representative.

1.3.17. The Company's Representative shall correct any wrongly assessed amount due in a later Payment Notice.

1.3.18. The amount due is exclusive of any VAT. For the avoidance of doubt, notwithstanding the other terms of this clause, the Company shall be under no obligation to make any payment to the Supplier whatsoever in respect of VAT until the Supplier has provided to the Company a VAT invoice in the relevant amount. To the extent that any VAT paid by the Company in respect of any goods or services supplied by the Supplier under the Contract has been charged in error, is charged at a higher rate of VAT than is properly applicable, or there is an agreed reduction in the value of the supply between the Supplier and the Company, the Supplier shall without delay (and in any event within one (1) month of the mistake being discovered or a reduction being agreed) issue a valid credit note to the Company in respect of such VAT and the Supplier shall repay to the Company any such VAT paid by the Company to the Supplier in error in respect of supplies made under the Contract.

1.3.19. Any payment made by the Company under the Contract, including any final payment, shall not prevent the Company from recovering any amount overpaid or wrongfully paid, however such payments may have arisen

including, but not limited to, those amounts paid to the Supplier by mistake of law or fact. The Company's Representative shall be entitled to withhold from any sums due or which may become due to the Supplier from the Company any amount which the Company's Representative considers to be due or which may become due from the Supplier assessed on the basis of the Company's Representative's bona fide estimate, provided that an appropriate written notice to pay less has been served by the Company's Representative on the Supplier. Such estimates shall bind the Supplier unless varied by agreement between the parties or by any award, decision, order or judgement, whichever is the earlier.

1.3.20. The Supplier shall ensure that it complies with paragraphs 4.2 and 4.3 of Schedule 14 (Project Processes).

1.3.21. Any deductions applicable pursuant to paragraph 1.3.10 above may be:

1.3.21.1. set off against and/or withheld from any sum then due or which at any time thereafter may become due to the Supplier under this Contract; or

1.3.21.2. be the subject of a demand for payment from the Company, which shall be payable by the Supplier as a debt due within 14 days.

1.4. Defined Cost

1.4.1. All the Supplier's costs which are not included in the Defined Cost are treated as included in the Management Fee.

1.4.2. Defined Cost shall be in accordance with Part A (Pricing Preamble) and includes only amounts calculated in accordance with Part B (Schedule of Defined Cost Components) of this Schedule 2 (Payment) and using:

(A) the percentages stated in Schedule 1 (Contract Data); and

(B) other amounts at open market or competitively tendered prices with deductions for all discounts, rebates and taxes which can be recovered.

1.4.3. Without prejudice to its obligations in Clause 9 (Records and Audit), the Supplier shall keep the following records:

(A) accounts of payments of Defined Cost;

(B) proof that such payments have been made;

(C) communications about and assessments of any compensation events for Sub-Contractors in accordance with any relevant Sub-Contract;

(D) information used to compile forecasts of Defined Cost; and

(E) any other records as stated in this Schedule 2 (Payment).

1.4.4. Notwithstanding the definition of Disallowed Cost, the Company may at its sole discretion allow payments for profit to an Affiliate sub-contractor to be included as Defined Cost where the Company is satisfied that this represents best value for the Company and that the requirements of Clause 35 (Assignment, Novation and Sub-Contracting) have been satisfied.

1.4.5. The Supplier shall permit the Company and its authorised representatives to inspect at any time the accounts and records the Supplier is required to keep by. Such accounts and records shall be retained for the period stated in Clause 9.2.

1.5. Late Payment

1.5.1. If any payment which is due and payable under this Contract is not made in full by the final date for payment no effective pay less notice is issued to the Supplier, the Supplier may suspend the performance of this Contract.

1.5.2. The Supplier shall not exercise the Supplier's right to suspend performance of this Contract for late payment unless the Supplier has given notice to the Company stating:

(A) the Supplier's intention to suspend the performance of this Contract, and

(B) the grounds for suspending the performance of this Contract.

1.5.3. The Supplier shall notify the Company not less than 7 days before the date on which the Supplier intends to suspend the performance of this Contract.

1.5.4. Suspended performance shall be ended when the amount that should have been paid to the Supplier is paid to the Supplier in full. The Supplier shall resume performance on the next Working Day after payment is made unless the Company instructs otherwise.

1.5.5. If a certified payment is late, or if a payment is late because the Company's Representative does not issue a certificate which the Company's Representative should issue, interest is payable on the late payment at the Interest Rate. Such interest shall be assessed from the final date for payment until the date when the late payment is made, and shall be included in the first assessment after the late payment is made.

SCHEDULE 2 - PART A: PRICING PREAMBLE

1.1. The Defined Cost shall be in £ sterling, shall exclude VAT. Defined Cost shall be calculated in accordance with Part B – Schedule of Defined Cost Components.

1.2. The parties acknowledge and agree that, save as adjusted pursuant to paragraph 1.4 below, the Gang Rates are fixed for the Term. The Gang Rates Breakdown is included in the Contract for information purposes only.

1.3. The Gang Rates and Defined Cost, together with the Management Fee, the Materials Overhead and Profit percentage; the Equipment Overhead and Profit percentage and the Specialist Sub-Contractor Overhead and Profit Percentage shall be inclusive of all costs and expenses (including, but not limited to, labour, materials, equipment, profit, overhead and travel time) of whatsoever nature and howsoever incurred by the Supplier in consideration of the provision of the Services and the performance of the Supplier's obligations in accordance with the Contract, including as detailed in this Schedule 2 (Payment).

1.4. At the date of commencement of each Budget Period (commencing at the start of Budget Period Two) (the "**Adjustment Date**"), the Gang Rates listed in Schedule 1 (Contract Data) shall be indexed in accordance with Part C (Price Adjustment for Inflation) of this Schedule 2 (Payment). The adjustments shall take effect on each Adjustment Date and shall apply for the duration of that Budget Period.

1.5. The cost implications of variations made in accordance with Part A of Schedule 4 (Contract Variation Procedure) of Schedule 4 (Contract Variation Procedure and Additional Services) to the Contract shall be calculated on the basis of Defined Cost in accordance with Part B (Schedule of Cost Components) in this Schedule 2 (Payment)).

1.6. The cost implications of Additional Services instructed in accordance with Part B (Additional Services) of Schedule 4 (Contract Variation Procedure and Additional Services) shall be calculated by reference to the Gang Rates and the Defined Cost of Materials; Equipment and Specialist Subcontractors as may be applicable.

SCHEDULE 2 - PART B: SCHEDULE OF DEFINED COST COMPONENTS

1 Gangs (Supplier Personnel)

1.1 The following components for the cost of:

(A) Supplier Personnel who are directly or indirectly employed by the Supplier and whose normal place of working is within the Worksites as a Gang member;

(B) wages and salaries and amounts paid by the Supplier for Supplier Personnel and paid in accordance with each Shift worked in the delivery of the Services;

(C) payments to Supplier Personnel in respect of:

(1) bonuses and incentives (where specifically provided for in the employment contract terms of individual Supplier Personnel);

(2) overtime (where authorised beforehand in writing by the Company);

(3) working in special circumstances (only applicable for working at heights, working in exposed conditions, trade supplements, plus rates, shift allowance, tool allowance, local allowance and food allowance);

(4) special allowances (only applicable for working at heights, working in exposed conditions, trade supplements, plus rates, shift allowance, tool allowance, local allowance and food allowance);

(5) absence due to sickness and holidays (including maturity and paternity leave); and

(6) severance related to work on this Contract;

(D) payments made for Supplier Personnel in respect of:

(1) subsistence and lodging where operatives are required to stay overnight in order to perform the Services;

(2) medical examinations;

(3) passports and visas;

(4) protective clothing;

(5) complying with Applicable Laws;

(6) superannuation and life assurance including:

a. employers contributions to employee pensions to the extent they are part of a pension scheme available to all employees (additional contributions made to individuals are deemed to be part of the Management Fee;

b. applicable for taxes in respect of employees;

c. National Insurance contributions;

d. payment under employment law;

(7) levies for industrial training (if required by law) in so far as they are applicable to Supplier Personnel in the performance of the Services;

(8) medical insurance relating to Supplier Personnel in the performance of the Services;

(9) death benefit;

(10) occupational accident benefits;

(11) medical aid;

(12) a vehicle provided as part of contracted remuneration; and

(13) safety training.

(E) Ancillary expenditure for vehicles, equipment, welfare facilities and materials provided for the use and support of labour gangs including:

(1) Tools of the Trade;

(2) Site vehicles, crew buses and the like;

(3) Fuel and consumables;

(4) Maintenance and servicing; and

(5) Welfare facilities, drinking water and the like.

2 Materials

2.1 The following components for the cost of materials in respect of Key Materials and other Materials (subject to instruction by the Company) :

(A) Payments:

(1) for delivery to Worksites of Materials and consumables;

(2) for providing and removing packaging;

(3) for samples and tests;

(4) to utilities for the provision and use of water, gas, electricity and other services (where these services are not provided by the Company);

(5) to public authorities, utilities and other properly constituted authorities of charges which they are authorised to make in respect of the Services and where such charges are not paid directly by the Company; and

(6) for accommodation and rest rooms, including associated servicing costs where such facilities are not provided by the Company and the Company has instructed the Supplier to provide such facilities.

(7) Cost is credited with payments received for the disposal of material.

3 Equipment

3.1 The following component for the cost of usage of the Equipment used within the Worksites:

(A) Payments for hire or rent of Equipment not owned by the Supplier or an Affiliate of the Supplier:

- at hire or rental rates multiplied by the time Equipment is required.

(B) Payments for Equipment owned by the Supplier; purchased by the Supplier under a hirer purchase or lease agreement or hired by the Supplier from an Affiliate of the Supplier:

- At open market rates, multiplied by the time the Equipment is required.

(C) Payments for Equipment purchased by the Supplier specifically for the delivery of the Services:

- the change in value over the period for which the Equipment is required; and
- time related servicing costs for the period for which the Equipment is required.
- The change in value is the difference between the purchase price and either the sale price or the open market sale price at the end of the period that the plant or equipment is required. Interim payments in the change in value shall be included at each Payment Assessment Date

(D) Payments for the purchase of Equipment which is consumed in the delivery of the Services

(E) Unless included in hire or rental rates payments for:

- transporting Equipment to and from the Worksites;
- erecting, modifying and dismantling Equipment
- the cost of operators (where such operator is not Supplier Personnel in a Gang)

(F) Payments for Materials used to construct or fabricate Equipment

3.2 The time required is expressed in Working Days, weeks or Periods. For idle and standby time, the following times shall be deducted:

(A) the first half Working Day for items paid at a daily rate;

(B) the first third of a week for items paid at a weekly rate; and

(C) the first quarter of a Period for items paid at a Period rate.

4 **Specialist Sub-Contractors**

4.1 Where the Company instructs the under Part B (Additional Services) of Schedule 4 (Contract Variation Procedure and Additional Services) the Supplier to procure the

services of a Specialist Subcontractors the allowable cost is the invoiced cost of work which is sub-contracted net of all trade discounts.

SCHEDULE 2 - PART C: PRICE ADJUSTMENT FOR INFLATION

1 Definitions

For the purposes of this Part C (Price Adjustment for Inflation) of Schedule 2 (Payment), the following terms have the following meanings:

1.1 the "Base Date" used in the calculation of the Price Adjustment Factor is 31 March 2020;

1.2 the Base Date Index ("B") is the latest available Index before the Base Date;

1.3 the Latest Index ("L") is the latest available Index at the Adjustment Date;

1.4 the "Adjustment Date" is the date of commencement of each Budget Period (commencing at the start of Budget Period Two);

1.5 the "Price Adjustment Factor" is (L-B)/B expressed as a percentage + 100% for the Index linked to it, and may be negative; and

1.6 the "Index" is the Consumer Price Index ("CPI") published by the Office for National Statistics.

2 Price Adjustment Factors

2.1 If an Index is changed after it has been used in calculating a Price Adjustment Factor but before the next Adjustment Date, the calculation is repeated and a correction made.

2.2 If any of the indices referred to in the Index ceases to be published, the Parties shall use such alternative index or publication or information which produces the same, or as nearly as possible the same, result. If the reference date used in the compilation of any such alternative index, publication or information shall change, the figure taken to be shown in such index, publication or information shall be the figure which would have been shown in the index or information if the original reference date had been retained.

2.3 If there has been a material change in the basis of information from which the Index is compiled which produces a significant change to the indexation provisions contained in the Contract, or it becomes impossible (by reason or any change after the date hereof in the method used to compile any such Index or information or for any other reason, whatever) to calculate the amounts due by reference to any such Index or information or any alternatives thereto, the parties shall use such alternative method of indexation

under the Contract as a basis for the making of subsequent payments under the Contract as most closely reflects the intent of the Index or information in question.

2.4 If any Dispute shall arise between the Parties as to the construction or effect of paragraphs 1 to 2 of this Part C (Price Adjustment for Inflation) of Schedule 3 (Payment) or as to the calculation of any sum calculated in accordance with the provisions of paragraphs 1 to 3 of this Part C (Price Adjustment for Inflation) of Schedule 2 (Payment), the matter may be referred by either party for resolution under the dispute resolution procedure set out in Schedule 17 (Dispute Resolution Procedure) of the Contract.

3 Time of calculation

3.1 The Gang Rates stated in Schedule 1 (Contract Data)) shall be adjusted annually for inflation in accordance with this Part C (Price Adjustment for Inflation) of Schedule 2 (Payment) by multiplying them by the relevant Price Adjustment Factor.

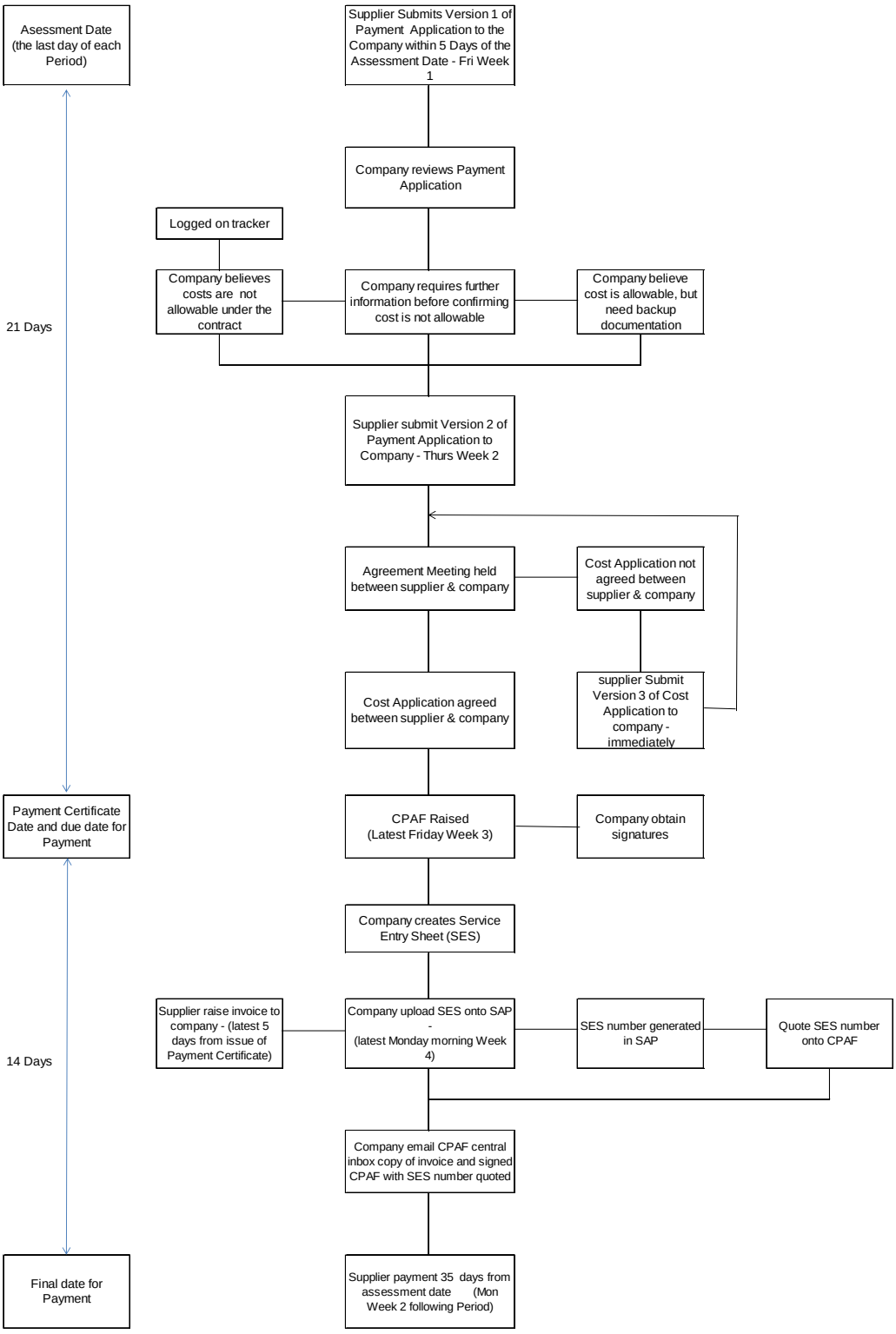
3.2 Adjustments shall take effect on each Adjustment Date and shall apply for the duration of that Budget Period using the Price Adjustment Factor applicable at the relevant Adjustment Date and applying that to the Gang Rates listed in Schedule 1 (Contract Data).

SCHEDULE 2 - PART D: PAYMENT ASSESSMENT DATES (BUDGET PERIOD ONE)

Activity					Latest date for completion				
					Payment Application issued	HGCRA Due Date	HGCRA Payment Notice issued (TfL CPAV Certificate)	VAT Invoice issued	Final Date for Payment
Owner					Supplier	Company	Company	Supplier	Company
	Financial Year	Period	Period end date	Assessment Date					
Budget Period one	2019/20	1	27/04/2019	27/04/2019					
		2	25/05/2019	25/05/2019					
		3	22/06/2019	22/06/2019					
		4	20/07/2019	20/07/2019					
		5	17/08/2019	17/08/2019	22/08/2019	12/09/2019	12/09/2019	17/09/2019	26/09/2019
		6	14/09/2019	14/09/2019	19/09/2019	10/10/2019	10/10/2019	15/10/2019	24/10/2019
		7	12/10/2019	12/10/2019	17/10/2019	07/11/2019	07/11/2019	12/11/2019	21/11/2019
		8	09/11/2019	09/11/2019	14/11/2019	05/12/2019	05/12/2019	10/12/2019	19/12/2019
		9	07/12/2019	07/12/2019	12/12/2019	02/01/2020	02/01/2020	07/01/2020	16/01/2020
		10	04/01/2020	04/01/2020	09/01/2020	30/01/2020	30/01/2020	04/02/2020	13/02/2020
		11	01/02/2020	01/02/2020	06/02/2020	27/02/2020	27/02/2020	03/03/2020	12/03/2020
		12	29/02/2020	29/02/2020	05/03/2020	26/03/2020	26/03/2020	31/03/2020	09/04/2020
		13	31/03/2020	31/03/2020	05/04/2020	26/04/2020	26/04/2020	01/05/2020	10/05/2020

SCHEDULE 2 - PART E: PAYMENT APPLICATION WORKFLOW AND TIMELINE

Payment Application Workflow and Timeline



Schedule 3

Specification

1. DEFINITIONS AND ABBREVIATIONS

1.1. For the purposes of this Schedule 3 (Specification) the following expressions shall have the following meaning:

"Generic Method Statements" means a written document that has been developed by the Supplier and is used in assessing risks and managing risks, which helps ensure that the necessary precautions have been communicated to those involved in any Activity undertaken by the Supplier and is in the form of template provided at Appendix 1 to this Schedule 3 (Specification).

"Site Person in Charge" or "SPC" means the individual Supplier Personnel who is responsible for the Gang working on a Released Activity.

"Site specific risk assessments" means a written document completed daily by the Gang SPC for a Released Activity at each Worksite that identifies hazards and risk factors that have the potential to cause harm to Supplier Personnel and evaluate the risk associated with that hazard which clearly identifies ways to mitigate these hazards and risks while working.

"Station Grounds" means open station grounds and tube station grounds.

"Zone" has the meaning as set out in paragraph 3.1 of this Schedule 3 (Specification).

1.2. The abbreviations in the following table have the meaning as stated:

Abbreviation	Meaning
BTA	Basic Track Awareness
CS30	Chainsaw Maintenance and Crosscutting Course
CS31	Felling Small Trees up to 380mm
CS38	Access Tree Using Rope & Harness, Aerial Rescue
CS39	Aerial Cutting of Trees with a Chainsaw Using Free-fall Techniques

Abbreviation	Meaning
CS40	Aerial Pruning
CS41	Aerial Tree Rigging
DAMPS	Drug and Alcohol Management Plan
PWT-EH	Protecting Workers on The Track – Engineering Hours
PWT-TH	Protecting Workers on The Track – Traffic Hours
PWT-D	Protecting Workers on The Track – Depots
PA1 and PA6	Use of pesticides training courses
PTS	Personnel Track Safety (Network Rail)
SPC	Site person in Charge

2. SCOPE OF SERVICES:

2.1. The Supplier shall provide and manage labour Gangs who are Competent and equipped with the 'Tools of the Trade' necessary to undertake Activity(s) on the Company's track side infrastructure.

2.2. The scope includes five elements as follows:

2.2.1. provision of labour Gangs and Fault Rectification Services;

2.2.2. provision and maintenance of stock holdings of Key Materials

2.2.3. the maintenance and servicing of Company Equipment

2.2.4. Management Services; and

2.2.5. Additional Services.

2.3. Management Services relate to the management of labour Gangs and include reporting, health and safety and welfare obligations as more particularly described in paragraph 8 of this Schedule 3 (Specification).

2.4. Additional Services are subject to the written instruction of the Company from time to time made in accordance with Part B (Additional Services) of Schedule 4 (Contract Variation Procedure and Additional Services) including the provision of Materials,

Equipment and Specialist Subcontractors as more particularly described in section 9 of this Schedule 3 (Specification).

3. DESCRIPTION AND LOCATION OF WORKSITES:

3.1. The Worksites will be predominantly trackside locations and Station Grounds. The Worksites will be located in three Zones (West Zone, North Zone & East Zone) of the Greater London area. These Zones are detailed in Appendix 2 to this Schedule 3 (Specification). Within in each of the Zones the Company will provide an identified location at one of the Company's premises where the Supplier can position a container for storage of its own trade equipment (including Tools of the Trade) and required Key Materials, Materials and consumables.

3.2. The location of Worksites will be determined by the Company's Representative (vegetation managers) and who will brief the Supplier in respect of each Released Activity in accordance with the process set out in Schedule 14 (Project Processes).

4. GENERAL REQUIREMENTS

4.1. Security Passes

4.1.1. Supplier Personnel shall wear the relevant security pass as required by the Company at all times when at the Company's premises or Worksites.

4.2. Keys and Access

4.2.1. When required, keys and access cards (including other methods of controlled access) shall be provided to the Supplier and the Supplier shall be responsible for the safe keeping of such keys and access cards. The Supplier shall not manufacture duplicate keys and access cards under any circumstances. The Supplier shall return to the Company all keys and access cards that have been issued on completion of any specific Activity for which keys and access cards have been issued.

4.2.2. Should the Supplier lose any key or access card provided by the Company then immediately on discovery of the loss, the Supplier shall:-

4.2.2.1. notify the Company of the loss; and

4.2.2.2. pay to the Company the cost of replacement of the key(s) or card(s) including any associated installation work.

4.3. Conduct

4.3.1. The Supplier shall ensure that all staff engaged in delivery of the Services shall be of good character, capability, appearance and behaviour.

4.3.2. The Supplier shall ensure that Supplier Personnel maintain the highest standard of behaviour at all times and are professional and courteous when dealing with members of the public, Company staff and visitors. Where a complaint is made by a member of the public to Supplier Personnel it shall be raised by the Supplier as an incident in accordance with paragraph 5.3.10 of this Schedule 3.

4.3.3. The Supplier shall ensure that their Supplier Personnel execute Activities on the Worksite(s) with minimal levels of noise and appropriate conduct, especially within close proximity to any residential buildings and shall note and comply with any noise abatement requirements.

4.3.4. The Worksites are located on or in the vicinity of the operational railway. The Supplier shall note that access to the Worksite for the Company must be afforded at all times. The operation of railway traffic including public ways and adjoining properties must not be hindered in any way whatsoever. Insofar as and to the extent that it is within the jurisdiction of the Supplier to control such matters referred to in this paragraph, the Supplier must minimise disruption and interference to the operations in these areas.

4.3.5. The Supplier is required to make its own assessment of any vehicular traffic restrictions affecting its access to the Worksite. The Supplier must park considerately and ensure that its vehicles do not obstruct the use by the public or the Company's staff.

4.3.5.1. The Supplier shall instruct its Supplier Personnel to:

(a) keep the Worksite tidy and free of personal litter at all times;

(b) keep the welfare provision in a clean and sanitary condition;

(c) comply with the PPE requirements;

(d) comply with the Company's Smoking, Drugs and Alcohol Policy;

(e) restrict themselves to only those areas made available to them by the Company; and

(f) not interfere with any railway plant or track except as required by the Services.

4.4. Personal Protective Equipment (PPE)

4.4.1. The Supplier determine the PPE requirements for each of the Worksites by undertaking a risk assessment of the tasks being undertaken and environmental conditions such as environmental contaminants, stagnant water and the like. It shall be the Supplier's responsibility to ensure that the Worksites are not accessed by any person who does not have appropriate PPE.

4.4.2. Not all Worksites should be treated as contaminated and additional PPE should only be mandated by the Supplier when there is a risk substantiated by evidence from samples analysed and such risk cannot be eliminated. Many tasks may be undertaken simultaneously at Worksites in confined areas and therefore the Supplier shall ensure that risk assessments will include the minimum required PPE for the Worksites as a whole and not just the particular single activity being undertaken.

4.4.3. The Supplier shall comply with the following minimum requirements for PPE:

4.4.3.1. Hi Vis

- High Visibility clothing worn to meet BS EN 471. (vest trousers etc.)
- Where there is a risk of entanglement with moving parts clothing to meet BS EN 510.

4.4.3.2. Eye protection

- Light eye protection EN166 Optical Class 1 and “F” rated
- Safety goggles to BS EN 166.1B
- prEN 175: Equipment for eye & face protection during welding/allied processes.

4.4.3.3. Safety boots

- Safety boots with ankle support (laced up) mid sole protection to EN354 200 Joule standard (S3)
- Waterproof boot if in water
- Welders boots if welding

4.4.3.4. Hardhats

- Safety Helmets BS EN 397 and worn at all times.

4.4.3.5. Respiratory protection

- EN149 Filtering half-masks against particles. FFP3 filters
- EN 14387 Turbo hood/mask
- BS EN 145: Self-contained closed-circuit breathing.
- BS EN 146: Powered particle filtering devices (including hoods or helmets).
- BS EN 147: Powered particle filtering devices (including masks).
- BS EN 149: Filtering half-masks against particles.

4.4.3.6. Hearing protection to EN352

4.4.3.7. Gloves

- BS EN 388 standard Protective gloves against mechanical risks (abrasion, cutting, etc.).
- BS EN 374: Protective gloves against chemicals/ microorganisms.
- prEN 381-7: Protective gloves for chainsaws.
- prEN 12477: Protective gloves for welders.

4.4.3.8. Welders Coverall

- BS EN ISO 11611:2007

4.4.3.9. Chemical protection

- BS EN 465: Liquid chemicals (spray-tight) Type 4 equipment.
- BS EN 466: Liquid chemicals (liquid-tight) Type 3 equipment.

- BS EN 467: Liquid chemicals (partial body e.g. Apron, sleeves & hoods).

4.5. Facilities provided by the Company for the use of the Supplier

4.5.1. The Company will make station and depot welfare facilities available for the use of the Supplier Personnel.

4.5.2. The Company will provide a location at the Company's premises within each of the three Zones identified in Appendix 2 to this Schedule 3, where the Supplier can position a container for storage of consumables Tools of the Trade, Equipment, Key Materials and Materials.

4.6. Facilities to be provided by the Supplier

4.6.1. The Supplier is responsible for providing all other facilities necessary for providing the Services where required in addition to those provided by the Company and detailed in paragraph 4.5 above.

4.6.2. For the avoidance of doubt the Supplier is responsible for the provision of drinking water at Worksites and shall provide reusable bottles for Supplier Personnel to refill with water at their mess facilities or from a bulk at an access point. Water shall not be provided in single use disposable bottles.

4.7. Transportation to and from the Worksites

4.7.1. Supplier is responsible for all transportation including the transportation of the Supplier Personnel to and from the Worksites.

4.7.2. To facilitate the maximisation of productivity the Supplier Personnel are not required to report to a designated sign in locations each shift and may be transported by the Supplier directly to the Worksites.

4.7.3. The Supplier shall use as far as reasonably possible multipurpose vehicles for transportation of Supplier Personnel to and from the Worksites in order:

(A) to minimise vehicle movements; and

(B) facilitate the transportation of Company Equipment, Equipment, Key Materials, Materials, Tools of the Trade and the removal of waste (as described in paragraph 4.11).

4.7.4. The Supplier shall also plan all vehicle movements in the most fuel efficient manner to reduce carbon emissions and the impact on air quality (in accordance with the Schedule 5 Health Safety and Quality Requirements).

4.8. Manual handling

4.8.1. All Supplier Personnel will be required to man-handle Company Equipment, Equipment, Key Materials, Materials and Tools of the Trade and must be trained in manual handling.

4.9. Standards

4.9.1. The Suppler shall comply with all relevant Standards. The Supplier shall comply with all Standards referred to as "Category 1" Standards. The Supplier shall also comply with Standards referred to as "Category 2" Standards which the Supplier is instructed to comply with in this Contract or by the Company's Representative including the Standards in the table at paragraph 4.9.3 below.

4.9.2. Immediately upon the Supplier becoming aware of a new or revised Standard becoming available, the Supplier shall advise the Company Representative who will advise whether the revised Standard should be adopted by the Supplier.

4.9.3. All Standards are available on the Company's Standards database. A list of relevant standards is provided below. The list shall not be assumed to be exhaustive and shall not diminish the Supplier's responsibility to comply with all relevant Standards.

LUL Standards (General)

Standard Number	**Category**	**Title**
S1158 (A9)	1	Track - Inspection and Maintenance
S1165 (A4)	1	Landscaping and Vegetation
SS1167 (A3)	1	Operational Boundary Fencing

Standard Number	Category	Title
S1552 (A18)	1	Contract QUENSH conditions
S1556 (A14)	1	Incident reporting and investigation

British Standards

Number	Title
BS 1722 part 1 and part 10	Fences
BS 3998: 2010	Tree Work

4.9.4. The Supplier shall deliver the Service in a manner consistent with the requirements of S1165.

4.9.5. The Supplier shall perform fencing repairs in accordance with Standard S1167.

4.9.6. Work to trees shall comply with BS3998 and current Good Industry Practice.

4.9.7. In respect of Standard S1165 the Company will undertake the vegetation inspections as required by S1165 clause 3.3.2.2. This activity will be completed by the Company's vegetation managers and inspectors.

4.9.8. The Company will check the quality of the work performed by the Supplier is of an acceptable standard and consistent with the requirements of S1165.

4.9.9. The Supplier shall and shall ensure that Supplier Personnel shall cooperate with the Company in relation to the inspections and quality checks referred to in paragraphs 4.9.7 and 4.9.8 above.

4.10. Fly Tipping

4.10.1. The Supplier shall report to the Company (by raising an incident report in accordance with the requirements set out in paragraph 5.3.10) instances of when fly tipping which are encountered in the delivery of the Services. Where

required the Company Representative may instruct the Supplier to dispose of fly tipped waste as Additional Services.

4.11. Waste arising from the Services

4.11.1. Where onsite disposal methods are not possible the Supplier shall (where required by the Company) transport waste (including sharps) from Worksites back to the Company's premises (designated by the Company to the Supplier in writing) and unload said waste into skips and sharps disposal containers provided by the Company at designated locations.

4.11.2. The Supplier shall provide suitable containers for the safe transportation of waste (including sharps). Where required the Company Representative may instruct the Supplier to dispose of waste arising from the Services (including sharps) directly to an approved disposal facility as Additional Services.

4.11.3. The Company will be responsible for determining the correct method of disposal of the waste and the Supplier shall comply with the Company's determination.

4.12. Invasive species

4.12.1. The Supplier shall be responsible for ensuring appropriate management of legally controlled species set out in Schedule 9 of the Wildlife and Countryside Act 1981 including (but not limited to) Japanese knot weed; Giant Hogweed; Buddleia; and Oak Processionary Moth when it is encountered as part of Released Activity(s) without the need for specific instruction from the Company.

4.12.2. Where invasive species are encountered which are outside of the scope of that defined by a Released Activity the Supplier shall raise an incident report is accordance with the requirements set out in paragraph 5.3.10.

4.13. Hazardous Materials

4.13.1. The Supplier shall ensure the safe delivery, storage and disposal of any hazardous materials such as herbicides/pesticides/ poisons etc. which may be required for the delivery of the Released Activities.

5. PROVISION OF LABOUR GANGS AND FAULT RECTIFICATION SERVICES

5.1. The Supplier shall provide labour Gangs in the quantity and the Gang Types set out in the Baseline Resource Programme agreed in accordance with the process set out in Schedule 14 (Project Processes) and as may be required to be provided as Additional Services instructed in accordance with Part B (Additional Services) of Schedule 4 (Contract Variation Procedure and Additional Services).

5.2. The labour Gangs shall be comprised of Supplier Personnel of the grades skills and competencies described in the following paragraph 5.3.

5.3. Gang Types and composition.

5.3.1. The following table sets out the acceptable skill level, competence, training and certification to be possessed by a Supplier Personnel for that labour to qualify as Competent for each Gang Type.

5.3.2. The Supplier shall ensure that all Supplier Personnel provided for each Gang Type have the required qualifications.

5.3.3. In addition to the qualifications set out in the tables for each of the Gang Types the following site supervision and Company protection qualifications are also required:

(A) Tree; vegetation; utility; and understorey Gangs shall each contain an individual who has SPC, PWT-TH and PWT-EH qualifications;

(B) Depot Gangs shall each contain an individual who has SPC; PWT-D and Possession Master qualifications;

(C) Fencing Gangs shall each contain an individual who has SPC; PWT-TH, PWT-EH and PWT-D qualifications; and

In addition to the above, when Supplier Personnel are working in proximity to Network Rail infrastructure, Network Rail protection qualifications will also be required and the Supplier shall roster Gangs to provide for the following:

(D) least two tree Gangs and two vegetation Gangs on dayshift are comprised of Supplier Personnel all with PTS certification; and

(E) all Gangs working nightshifts are comprised of Supplier Personnel all with PTS certification.

5.3.4. Gang Type: Tree Gang

5.3.4.1. All tree Gangs shall be comprised of the following grades and numbers of Supplier Personnel with the minimum of the qualifications identified for each grade:

Grade	**Nr**	**Qualifications Required**
Arborist / Ariel Rescue	2	BTA/First Aid/Manual Handling/CS30 & 31, 38-39 & 40-41/DAMPS/Ground saw/Strimmer/Hedge cutter Including Long arm/Chainsaw Including Long Arm/Sharps
Groundsman	2	BTA/First Aid/Manual Handling/CS30 & 31/PA1 & PA6/DAMPS/Ground saw/Strimmer/Hedge cutter Including Long arm/Chainsaw Including Long arm/Chipper Trained/Sharps
Total in Gang	4	

5.3.4.2. The primary functions of the tree Gangs will be tree pruning, pollarding, reduction and felling, treatment and incineration (at the nearest approved incinerator) of oak processionary moths, ground clearance of vegetation, wood chipping and work on 3rd party trees as may be required by the Company as part of a Released Activity.

5.3.4.3. Tree Gangs shall be expected to be available for adverse weather cover/standby and early morning cab riding (visual inspections from train cabs) for high wind events as required by the Company.

5.3.5. Gang Type: Vegetation Gang

5.3.5.1. All vegetation Gangs shall be comprised of the following grades and numbers of Supplier Personnel with the minimum of the qualifications identified for each grade:

Grade	Nr	Qualifications Required
Groundsman	4	BTA/First Aid/Manual Handling/CS30 & 31/PA1 & PA6/DAMPS/Ground saw/Strimmer/Hedge cutter Including Long arm/Chainsaw Including Long arm/Chipper Trained/Sharps
Total in Gang	4	

5.3.5.2. Vegetation gangs will be used in the clearance of all ground-based vegetation along the fence lines and cable runs to the defined clearance distance, by controlling and cutting back existing vegetation through pruning, the treatment and removal of invasive species, wood chipping and the application of herbicides as required by the Company in each Released Activity.

5.3.5.3. The vegetation Gangs may be required to remove woodland, scrub, hedgerows etc. for the purposes of maintenance or works on areas adjacent to the track. The vegetation Gangs shall also complete litter picking of embankments as part of the delivery of any Released Activity.

5.3.5.4. Replanting may also be required to be undertaken as part of a Released Activity scopes and vegetation Gangs will be required to undertake replanting activities as and when required by the Company.

5.3.6. <u>Gang Type: Utility Gang</u>

5.3.6.1. All utility Gangs shall be comprised of the following grades and numbers of Supplier Personnel with the minimum of the qualifications identified for each grade:

Grade	Nr	Qualifications Required
Groundsman	4	BTA/First Aid/Manual Handling/CS30 & 31/PA1 & PA6/DAMPS/Ground saw/Strimmer/Hedge cutter Including Long arm/Chainsaw Including Long arm, Chipper Trained/Sharps
Total in Gang	4	

5.3.6.2. Utility Gangs will be used in the clearance of all ground-based vegetation along the fence lines and cable runs to the defined clearance distance, by controlling and cutting back existing vegetation through pruning, the treatment and removal of invasive species, installation of signage, the planting of new trees, shrubs and plants, wood chipping and the application of herbicides as required by the Company in each Released Activity.

5.3.6.3. The utility Gangs shall also complete litter picking of embankments as part of the delivery of Released Activity; the clearance of fly-tipping (to ensure compliance with WI1800 Fly-Tipping Incidents) and pest control activities (limited to setting of rat bait boxes and traps) as required by the Company.

5.3.6.4. The Supplier shall ensure that utility Gangs are able operate the Company Equipment including the motorised track trolley for adverse weather and herbicide application. The Supplier shall ensure that utility Gangs are available for adverse weather cover/standby as and when required by the Company.

5.3.7. <u>Gang Type: Understory Gang</u>

5.3.7.1. All understory Gangs shall be comprised of the following grades and numbers of Supplier Personnel with the minimum of the qualifications identified for each grade.

Grade	Nr	Qualifications Required
Groundsman	4	BTA / First Aid / Manual Handling/ CS30 & 31 / PA1 & PA6 / DAMPS / Ground saw / Strimmer / Hedge cutter Including Long arm / Chainsaw Including Long arm/ Chipper Trained / Sharps
Total in Gang	4	

5.3.7.2. Understory Gangs will be used in the clearance of all ground-based vegetation along the fence lines and cable runs to the defined clearance distance by controlling and cutting back existing vegetation, treatment and removal of invasive species, the planting of new trees, shrubs and plants, wood chipping and the application of herbicides as required by the Company in each Released Activity.

5.3.7.3. The Gangs will assist with the clearance of vegetation ahead of major tree works in support of the tree Gangs and may provide assistance to tree Gangs engaged in the delivery of Released Activity and be expected to complete wood chipping as required by the Company.

5.3.7.4. The Gang shall complete litter picking of embankments as part of the delivery of Released Activity.

5.3.8. Gang Type: Depot Gang

5.3.8.1. All depot Gangs shall be comprised of the following grades and numbers of Supplier Personnel with the minimum of the qualifications identified for each grade

Grade	Nr	Qualifications Required
Groundsman	6	BTA/First Aid/Manual Handling/PWTD/SPC/CS30 & 31/PA1 & PA6/DAMPS/Ground saw/Strimmer/Hedge cutter Including Long arm/Chainsaw Including Long arm/Sharps
Total in Gang	6	

5.3.8.2. The depot Gangs will be used to complete tree pruning, pollarding, reduction and felling, the treatment and removal of invasive species, wood chipping and the application of herbicides as required by the Company in each Released Activity.

5.3.8.3. Each depot Gang must be able to operate Company Equipment including motorised track trolleys for adverse weather and leaf fall season. The depot Gangs shall also complete litter picking of embankments during of part of the delivery of any Released Activity.

5.3.9. Gang Type: Fencing Gang

5.3.9.1. Fencing Gangs shall be comprised of the following grades and numbers of Supplier Personnel with the minimum of the qualifications identified for each grade

Grade	Nr	Qualifications Required
Fencing operative	2	BTA/Depot Area A/IWA/PTS/COSS/DAMPS/First Aid/Manual Handling/Face Fit (cement & dust)/CAT Scanner/PASMA/IPAF/Fall Arrest Harness/Hot Works/Fire watch/Chapter 8/CRB/Sharps
Total in Gang	2	

5.3.9.2. Fencing Gangs will be used to undertake simple fence repairs and fence replacement on all types of fence types used on the Company's boundaries that have been damaged/ vandalised as required by the Company's inspectors, following their route patrols. Such maintenance of fencing is vital to prevent the trespass by third parties onto the network whose intent is to steal and vandalise Company assets.

5.3.9.3. The scope of the repairs will generally not exceed one bay, or 2 adjacent fence posts, but may also include access gates and locks, and barbed wire up to length of 30 metres.

5.3.9.4. The Supplier shall ensure that Materials used for fence lines shall comply with BS 1722 part 1 and part 10 and Standard S1167 which, where required, supersedes the former standard.

5.3.10. <u>Gang reporting requirements</u>

5.3.10.1. All Gang SPCs shall complete a Shift Report in accordance with the process set out in paragraph 4.3 of Schedule 14 (Project Processes) using the template provided at Appendix 4 Part B to this Schedule 3.

5.3.10.2. Additionally the Supplier's SPC in each Gang shall be responsible for reporting incidents to the Company's incident reporting system in accordance with Standard S1556 (Incident reporting and investigating) by phoning the 'Incident Line' on 02920 266780.

Health, Safety and Environmental incidents must be reported via IE2 (Information Exchange 2)

5.3.10.3. A non-exhaustive list of examples of the type of incidents that should be reported is as follows:

- Spillages of fuel of chemicals
- unexpected finds (e.g. bird's nests, protected species, invasive species)
- Fly tipping;
- High concentrations of sharps;
- Situations which could potentially have led to environmental damage (near misses); and
- Complaints made by members of the public

5.3.10.4. Where protected species are discovered the Supplier has also immediately cease activities in the area, notify the Company's Representative and seek instruction in regards to how to proceed.

5.3.11. Tools of the Trade for each Gang Type:

5.3.11.1. The Supplier shall ensure all Supplier Personnel who attend the Worksites are in possession of all Tools of the Trade as may be required to complete Released Activity(s) and Fault Rectification Services.

5.3.11.2. The Supplier shall ensure all Tools of the Trade are fit and safe for the intended purpose, complying with all relevant current codes of practice, British standards and the like and are in good serviceable condition having been properly maintained, serviced and repaired. The Supplier shall consider the environmental impact of the Tools of the Trade and select tools which are efficient in operation in order to minimise such impact. Where reasonably possible the Supplier shall use battery powered tools and for nightshift activities battery powered tools shall only be used (unless otherwise approved in witting by the Company's Representative) in order to minimise noise and disturbance.

5.3.11.3. The Supplier shall provide any consumables and/or fuel consumed in the use of Tools of the Trade and Company Equipment.

5.3.11.4. Failure to comply with paragraphs 5.3.12 to 5.3.14 may result in lost productivity and is held to be a substantial breach and shall be raised as a Level 2 Non Conformance in accordance with Schedule 9 (Performance Measurement). It is essential therefore that the Supplier ensure that the Supplier Personnel within each of the Gangs Types are supplied are at all times with all necessary Tools of the Trade.

5.3.11.5. The following tables define the minimum levels equipment to be provided by the Supplier as "Tools of the Trade" for each of the Gang Types. The listings are not exhaustive, and the Supplier shall be responsible for providing all necessary Tools of the Trade. If the Supplier considers that a Released Activity requires Equipment in addition to Tools of the Trade the Supplier's Representative shall advise the Company's Representative and seek instruction.

Gang Type	Tools of the Trade	Minimum quantity
Tree Gangs	General hand tools	Supplier to determine
	Aerial chainsaw	2nr per Gang
	Ground chainsaw	2nr per Gang
Vegetation Gangs	General hand tools	Supplier to determine
	Hedge trimmers	1 nr per gang
	Pole saw	1 nr per gang
	Blowers	1 nr per gang
	Ground chainsaws	2nr per Gang
	Strimmer's	1 nr per gang
	CDA and knapsack sprayers	1 nr per gang

Gang Type	Tools of the Trade	Minimum quantity
Utility Gangs	General hand tools	Supplier to determine
	Hedge trimmers	1 nr per gang
	Pole saw	1 nr per gang
	Blowers	1 nr per gang
	Ground chainsaws	2 nr per gang
	Eco-plug drill	1 nr per gang
	CDA and knapsack sprayers	1 nr per gang
	Strimmer's	1 nr per gang
Understory Gang	General hand tools	Supplier to determine
	Hedge trimmers	1 nr per gang
	Pole saw	1 nr per gang
	Blowers	1 nr per gang
	Ground chainsaws	2 nr per gang
	Eco-plug drill	1 nr per gang
	CDA and knapsack sprayers	1 nr per gang
	Strimmer's	1 nr per gang
Depot Gangs	General hand tools	Supplier to determine
	Hedge trimmers	1 nr per gang
	Pole saw	1 nr per gang
	Blowers	1 nr per gang
	Ground chainsaws	2 nr per gang
	Strimmer's	1 nr per gang
	CDA and knapsack sprayers	1 nr per gang

Gang Type	Tools of the Trade	Minimum quantity
Fencing Gang	General hand tools	Supplier to determine
	General purpose drill	1 nr per gang
	Angle grinder	1 nr per gang

5.3.12. Fault Rectification Services

5.3.12.1. Fault Rectification Services are Activities that need to be undertaken at short notice ("Faults") in order to allow the safe operation of the railway.

5.3.12.2. The Supplier shall deliver Fault Rectification Services at any Worksite location as may be required by the Company within each Zone.

5.3.12.3. Fault Rectification Services shall be delivered by the Supplier's Gangs delivering Released Activities and separate fault rectification gangs are not required.

5.3.12.4. As part of the Management Service the Supplier shall coordinate the activities of the Gangs at the Worksites so as to minimise the disruption caused to Released Activities as a result being required to deliver Fault Rectification Services.

5.3.12.5. The timescales for the clearance of Faults is set out in the following table:

Action	**Service Level**
Permanent rectification or interim rectification and make safe	Within 120 hours

5.3.12.6. The rectification times shall start at the time that the Supplier receives a Fault notification/requirement to deliver Fault Rectification Services from the Company (a "work order").

5.3.12.7. The Supplier shall close out all Faults/issued work orders within 24 hours of leaving the Worksite.

5.3.12.8. The Supplier shall receive instructions to carry out Fault Rectification Services from the Company's Representative who will act as the first line filter in respect of Faults issued by the Company's helpdesk(s).

5.3.12.9. The Supplier shall attend the Worksites and permanently rectify Faults. The Supplier shall endeavour to permanently rectify each Fault during a single attendance visit, but if necessary the Supplier shall make more than one attendance visit to make safe or permanently rectify the Fault. At the end of each and every attendance visit, the Fault shall be left in a safe condition, even if it cannot be permanently rectified.

5.3.12.10. The Supplier shall notify the Company's help desk when Faults have been permanently rectified or made safe.

5.3.12.11. Fault Rectification Services shall be provided by the Supplier at all times when Gangs are rostered for delivery of Released Activities as defined by the Baseline Resource Programme. Gangs will be expected to work overtime if necessary (and where instructed by the Company Representative) in order to achieve as a minimum an interim rectification of a Fault.

5.3.12.12. The Company's Help Desk and Local Reporting Systems:

(A) All Faults are logged via the Company's help desk. Work order(s) will be generated by the Company and issued to the Supplier by the Company's Representative. The Supplier shall manage, update and complete all work orders and provide all necessary information to update the Company's help desk on completion of each work order.

(B) The Company operates a number of help desks and/or local reporting systems for reporting and recording faults by Company staff. Faults cleared by the Supplier shall be reported as clear via the Company help desk facility or local reporting system utilised by the relevant Zone. Full details including the reporting process of each help desk or local

reporting system to be utilised in each Zone will be provided to the Supplier.

(C) The Supplier's Representative or delegate shall been available at all working times defined by the Baseline Resource Programme (or such additional working times that may be defined by an instruction for Additional Services) in order to respond to all Faults reported by the Company's Representative.

5.3.12.13. Work orders

(D) The Supplier shall perform the work and 'complete' the work order, recording the details of the work done against the work order for provision to the Company. Work orders must be completed within 24 hours of the final off site time. Final off site time is the date and time the Supplier's Gang left the Fault Worksite having completed the Services required by the work order.

(E) To enable the Company's help desk to be provided with up to date information, the Supplier shall for Fault Rectification Services provide a work order close out report within 24 hours of the off-site time. A work order close out report shall be provided after each visit irrespective of whether the required work has been completed:

(F) Work order close out report shall include:

i. Work order number

ii. Date and time of attendance

iii. Date and time of completion

iv. Worksite location

v. Attending Supplier Gang SPC name and signature

vi. Activity undertaken on each visit (E.g.: work logs

including: parts, materials and labour used)

vii. Further recommended action (if applicable)

5.3.13. Adverse Weather

5.3.13.1. Following adverse weather conditions the Company may require the Supplier's Gangs to be diverted from delivering Released Activities to assist the Company's personnel as necessary in returning stations and the railway to normal operation for example clearance of snow, localised flooding and the removal of fallen trees and the like. The Company will direct the Supplier in the activities that are required to be undertaken but the Supplier is responsible for briefing all Supplier Personnel in regards to all aspects of health and safety including method statements and risk assessments.

6. Provision and maintenance of stock holdings of Key Materials

6.1. In respect of Key Materials, the Supplier shall maintain a minimum stock holding held at the Company's premises (notified by the Company to the Supplier in writing) in a suitable lockable storage container.

Key Materials – Vegetation	**Minimum Stock Holding**
Pest control equipment	30 nr rat bait boxes
Cable run netting	1000 m
Plastic bags (compostable for leaf collection)	1000 nr

Key Materials – Fencing	**Minimum Stock Holding**
Fence Post 1800mm long straight	12 nr
Fence Post 2400mm long straight	12 nr
Fence Post 3000mm long straight	12 nr
Fence Post 2400mm long cranked	12 nr

Key Materials – Fencing	Minimum Stock Holding
Fence Post 3000mm long cranked	12 nr
Fencing panel 1800mm high (green powder coated expanded steel diamond configuration)	12 nr
Fencing panel 2400mm high (green powder coated expanded steel diamond configuration)	12 nr
Fencing panel 3000mm high (green powder coated expanded steel diamond configuration)	12 nr
Fencing panel 1800mm high (ref 358 galvanised weld mesh)	12 nr
Fencing panel 2400mm high (ref 358 galvanised weld mesh)	12 nr
Fencing panel 3000mm high (ref 358 galvanised weld mesh)	12 nr
2400mm high x 1400mm wise type S1 integrated lock access gates	2 nr
Barbed wire (galvanised)	520 m

6.2. The Supplier is authorised to purchase Key Materials on the Company's behalf in order that the minimum stock holdings set out in the above table are maintained at all times, but Supplier shall manage purchases such that the actual stock does not exceed the specified minimum holding by more than fifteen percent at any time. The Company shall not be obligated to pay for stock which has been purchased in excess of the specified minimum stock holding by more than fifteen percent.

6.3. Herbicides to be used must be approved initially at contract commencement by the Company in writing for use in the performance of the Services.

6.4. Key Materials are paid for in accordance with the definition of the Defined Cost of Materials and Schedule 2 (Payment).

6.5. The purchase of Materials which are not Key materials is subject to instruction by the Company as Additional Services in accordance with Part B (Additional Services) of Schedule 4 (Contract Variation Procedure and Additional Services).

7. MAINTENANCE AND SERVICING OF COMPANY EQUIPMENT

7.1. From the Commencement Date the Company will provide for the Supplier's use the following items of Company Equipment:

Items of Company Equipment	**Class**	**Quantity**
Wood chippers,	A	4nr
Motorised track trolley	B	4nr
Track trolley trailers	B	8nr
Pressure washing frames for track trolley trailers	B	4nr
Sandite/glycol frames for track trolley trailers	B	2nr
Railhead scrubbers	C	8nr

7.2. The Gangs shall use of the Company Equipment in the delivery of the Services and the Supplier's obligations in regards to consumables, maintenance and servicing of the Company's Equipment is set out in the following table:

Company Equipment	Obligation
Class A	To use strictly in accordance with operating instructions, maintain, service, protect from damage and theft and provide all consumables. Costs for servicing and maintenance shall be paid for in accordance with the Defined Cost of Materials and Schedule 2 (Payment) subject to the notification by the Supplier and approval by the Company in accordance with Part B (Additional Services) of Schedule 4 (Contract Variation Procedure and Additional Services). The cost of consumables is deemed to be included in the Management Fee. The Supplier is solely responsible for ensuring the safe operating condition of such Company Equipment.
Class B	To use strictly in accordance with operating instructions and to protect from damage and theft. Immediately report to the Company any defects or necessary repairs.
Class C	To use strictly in accordance with operating instructions, protect from damage and theft and provide all consumables. The cost of consumables is deemed to be included in the Management Fee. Immediately report to the Company any defects or necessary repairs.

7.3. The Supplier shall be held accountable for damage to the Company's Equipment caused by its improper use.

7.4. All Company Equipment, Tools of the Trade and other Equipment shall be removed from the Worksites at the end of each Shift unless prior written authority for storage has been obtained from the Company's Representative.

8. MANAGEMENT SERVICES

8.1. The Company's Role

8.1.1. The Company is responsible for producing the annual programme of vegetation management activities required to be undertaken as part of the overall network plan. The Supplier has no responsibilities in regard to

planning of Activities to be undertaken. This will be defined by the Company in accordance with the process for agreement of the Baseline Resource Programme for each Budget Period. In summary the Baseline Resource Programme defines:

8.1.1.1. the core requirement in respect of the number of each Gang Type required, which will be derived from the Company's baseline of Activities to be completed within the Budget Period

8.1.1.2. the requirements for dayshift and nightshift Gangs

8.1.2. The Company will determine the Worksites where the Gangs are required to work around the railway network (including between different line groups and Zones) and the Supplier is responsible for the supervision of the Gangs at the Worksites.

8.1.3. As stated above the Company determines the number of Gangs to be provided by means of the Baseline Resource Programme but may require the Supplier to reduce the number of Gangs included in the Baseline Resource programme at any point during each Budget period subject to a minimum of 4 weeks' notice.

8.1.4. Where the Company requires additional Gangs to be provided the Supplier will be instructed accordingly in accordance with Part B (Additional Services) of Schedule 4 (Contract Variation Procedure and Additional Services).

8.1.5. The Company may also require Gangs to work overtime and where required this will be instruction to Part A (Contract Variation Procedure) of Schedule 4 (Contract Variation Procedure and Additional Services).

8.1.6. The Company's Representative (or delegated representative) will also:

8.1.6.1. notify the Supplier in the event of emergencies when it is necessary to rotate/shift/reassign Gangs on day/night shifts for emergencies (subject to 24 hours' notice);

8.1.6.2. advise the Supplier as to the Worksites that Gangs are required to attend by holding weekly meetings with the Supplier's operational management and Supplier's SPC from each Gang to provide the detailed plan of Activity(s) for the forthcoming week; and

8.1.6.3. obtain access, licences, notices and approvals as may apply to each Worksite.

8.2. The Supplier's Management Services

8.2.1. The Supplier is paid the Management Fee in recognition of providing the following management functions set out in this paragraph 8.2.

8.2.2. Operational management

8.2.2.1. The Supplier shall provide adequate numbers of operational managers to manage and supervise the Gangs in the delivery of the required Activities. The number of operational managers provided by the Supplier shall reflect the number of Gangs that the required by the Baseline Resource Programme and any additional Gangs that may be instructed as Additional Services'.

8.2.2.2. The Supplier's operations managers shall be available at all times when Gangs are rostered for delivery of Released Activities as defined by the Baseline Resource Programme.

8.2.2.3. The Supplier's operational management duties shall include but are not limited to:

(A) Supervision of the Services

The Supplier shall supervise the Gangs in the delivery of the Services to ensure compliance with the Generic Method Statements, Worksite specific method statements and Task Method Statements.

The supervision function shall also include welfare support at the Worksites and ensuring compliance with the Supplier's health, safety and environmental obligations as set out in the Contract.

(B) The preparation of Generic Method Statements

The Supplier shall be responsible for the production of Generic Method Statements for review by the Company within 10 Working Days of the Commencement Date. The Generic Method Statements shall be substantially in the form of the initial Generic Method Statement included at Appendix 4 to this Schedule 3.

(C) Updating Generic Method Statements

The Generic Method Statements shall be updated by the Supplier as and when required and/or on requested by the Company to reflect any changes in working practices and the updated Generic Method statement shall be submitted to the Company for review.

(D) Worksite/task specific method statements

With reference to the Generic Method Statements the Supplier shall prepare Worksite/task specific method statements ("Task Method Statements") and issue to each of the Supplier's Gang SPCs prior to commencement of any Released Activity.

The Supplier shall ensure that all Gangs work strictly in accordance with all Generic Method Statements and Task Method Statements.

(E) Worksite Specific risk Assessments

The Supplier shall ensure that the SPC for each Gang undertake Worksite-specific risk assessments each shift including a visual risk assessment which shall be recorded on a risk assessment sheet.

The Worksite specific risk assessments shall be retained as Contract records for the inspection of the Company if required.

(F) Protection

The Supplier is responsible for providing qualified possession staff within each Gang in order that each Gang can be 'self-protecting' in accordance with the requirements set out in paragraph 5.3 above.

(G) Communication

The Supplier is responsible for ensuring that each Gang SPC has access to a phone at all times to stay in contact with the Company's Representative and station/line control should any incidents occur.

(H) Resource management

The Supplier shall be responsible for rostering and determining Supplier Personnel who are in the makeup of each Gang.

The Gangs are not required to meet at a designated sign in location at the commencement of each Shift and may be transported directly to the Worksites. The Supplier shall roster the Gangs and plan transportation and logistics in order to maximise the amount of productive working hours at all Worksites.

In the event that a full team of Supplier Personnel is not available for a Gang at the commencement of a Shift, the Supplier shall provide a Competent replacement. Where the Supplier cannot provide a Competent replacement, it shall notify the Company Representative immediately and advise if the Gang can continue to work safely in accordance with Generic Method Statements and Task Method Statements with a reduced strength team.

(I) Competency Management

It is incumbent upon the Supplier to ensure that all skilled and semi-skilled Supplier Personnel within each Gang attend the

Worksites with documentary evidence of the attainment of the Competency relating to the grade rate for which they have been supplied.

The Supplier Personnel must make evidence of Competency available for inspection when requested to do so by the Company Representative or nominated delegate.

Provided a Supplier Personnel is not deemed incompetent, failure to provide evidence of Competency will not be a reason to prevent a Supplier Personnel from engagement on the Released Activities, but will be a reason for the Company to reduce the applicable Gang Rate related to that Competency until such evidence is satisfactorily presented for inspection.

The Supplier shall operate and maintain a competency management system meeting the requirements set out in Developing and Maintaining Staff Competence Railway Safety Publication 1 (November 2016) as published by the Office of Road and Rail at:

https://orr.gov.uk/__data/assets/pdf_file/0016/4264/developing-and-maintaining-staff-competence-rsp1.pdf.

The Company reserves the right to audit the Supplier against the Company's Competency Management System Procedure having given reasonable prior notification.

(J) Contract Administration and Record keeping

The Supplier shall complete and submit the following daily reports to the Company comprising the following documentation and reports in the form required by the Company within 24hrs of the end of each Shift:

- Daily pre-work activity checklist
- Daily booking on/allocation sheet (signed by all staff)
- Daily specific risk assessment and toolbox talk sheet (signed by all staff

Templates for the daily reports are provided at Appendix 4 and include the template daily Shift Report which Supplier is required to complete in accordance with Schedule 14 (Project Processes).

The Supplier shall cover health, safety and environmental issues in toolbox talks including but not limited to: waste management, noise control and protected species.

The Supplier shall be responsible for the procurement and supply of all necessary resources for the delivery of the Contract including without limitation to consumables, Key Materials, Materials, Equipment and Specialist Subcontractors and the like.

9. ADDITIONAL SERVICES

9.1. Additional Gangs

9.1.1. The Company reserves the right to increase the number of Gangs above that defined by the accepted Baseline Resource Programme in accordance with Part B (Additional Services) of Schedule 4 (Contract Variation Procedure and Additional Services).

9.2. Materials

9.2.1. The Company may request the Supplier to procure Materials on its behalf in accordance with Part B (Additional Services) of Schedule 4 (Contract Variation Procedure and Additional Services).

9.3. Equipment

9.3.1. The Company may require the Supplier to supply additional Equipment which is not Tools of the Trade or Company Equipment on its behalf in accordance with Part B (Additional Services) of Schedule 4 (Contract Variation Procedure and Additional Services) where Company determines it to be necessary for the efficient delivery of Released Activities

9.4. Specialist Subcontractors

9.4.1. The Company may require the Supplier to engage Specialist Subcontractors to provide specialist supplemental services associated with vegetation management activities in accordance with Part B (Additional Services) of Schedule 4 (Contract Variation Procedure and Additional Services).

9.4.2. Example of specialist supplemental services may include, but is not limited to:

(A) Pest control (in addition to that carried out by the Utility Gangs

(B) Disposal of contaminated/controlled waste

10. Appendices

Appendix 1:Generic Method Statement template

Appendix 2:Vegetation management Zones

Appendix 3:The Suppliers initial Generic Method Statements

Appendix 4Template Shift Reports

Appendix 1: Generic Method Statement Template (F0862)

Pathway Information (delete when you use this template)

Template reference	Template file name	Version	Date
F0862	T Safe System of Work	A5	18/05/2018

Programme
Project
Document reference

In the event of an incident to ensure that the incident report is correctly routed, please fill in the box below:	
Responsible Area/Project (Level 6 in the Reporting Structure which is available from the Help section on TfL InfoExchange)	
Location (e.g. section of track)	
Area (e.g. Construction Site (Off Railway))	
Principal contractor (if applicable, note the name of the company)	

Safe System of Work

		Signature	Date
Prepared by	<Name> Project Manager		
Prepared by	<Name> Construction Manager		
Reviewed by	<Name> Project Engineer		
Reviewed by	<Name> HSE Adviser		
Distributed to	<Name>	Contractors	
Distributed to	<Name>	Sub-contractors	

Document History

Revision	Date	Summary of changes
	14/12/66	First draft

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DELETE THE BLUE TEXT AS THIS IS FOR GUIDANCE ONLY

About this Document

The purpose of this document is to describe to the workforce the Safe System of Work that must be implemented for the work they are undertaking. The Safe System of Work must be derived from a suitable and sufficient Health, Safety and Environment (HSE) risk assessment, must adequately address site- and job-specific risks and must demonstrate that the work will be undertaken in compliance with relevant TfL standards and applicable statutory requirements.

This template must be used by all projects where TfL is the Contractor and directly undertaking physical works (adding modifying or removing assets or survey works).

It does not apply to projects where TfL employs an external Principal Contractor / Contractor or to projects where TfL is acting as the Principal Contractor but is employing contractors to undertake the actual works (unless TfL is acting as a contractor for any works).

The SSoW is commonly referred to as 'Method Statement'.

General

- Must address the identified hazards and associated risks for the job/site and must describe the measures required to control the risks
- Must meet, address and incorporate the requirements of:
    - Health, Safety and Environment Pre Construction Information
    - Construction Phase Plan
    - Health, Safety and Environment Pre Construction Information Designer Risk Assessments
    - Designer Method Statements (technical requirements on methodology)
    - Design drawings
    - Design specifications
    - Directions/instructions from specialists, manufacturers etc.
    - Other relevant TfL standards and relevant health, safety and environmental legislation

NB: This list is not exhaustive.

- Must evidence that the work is planned and managed to ensure the safety of all workers from the start of their work on site to the completion of the job.

The SSoW is produced in conjunction with a Task Briefing Sheet. The Task Briefing Sheet is based on/driven by the SSW and there are several Task Briefing Sheets for each SSoW. To elaborate:

- **Safe System of Work:** A SSoW is produced for a 'work/activity' package. What activities are included in a package needs to be decided on a job by job basis – for example, a SSoW could be produced per trade (e.g. demolition, piling, lift installation) or per area (if very independent works).
- **Task Briefing Sheet:** Task Briefing Sheets are written for the workforce. There should be a Task Briefing Sheet for each activity in the SSoW (e.g. tiling). The idea is that Task Briefing

Sheets capture today's activity, the risks specific to this activity, the site where the works are to be carried out, and the site specific risks and controls. There is a sign off sheet to record the briefings, and evidence understanding of the brief for the workforce to sign.

State where a section is not applicable.

1 Work Details

1.1 Description of Work

This section should contain the safe system of work in a step by step sequence; detailing the work that is to be carried out as part of the work package – include references to task sheets (what tasks does the work package consist of and in what sequence do they need to be done). The information should be easily understood and sequential.

- Identify and reference any specific technical or quality requirements (e.g. inspection and test plans).
- Detail the equipment to be used and at each stage of the task.
- Drawings, technical data and diagrams can be included as attachments
- References to other documents, work procedures, standards etc. can be made if applicable but the relevant documents must be available on site when the work is being carried out.
- Include arrangements where relevant for completion of the work (including handover and housekeeping).

Note: The description of the work should incorporate; put into context the control measures that are necessary to mitigate significant risks (as identified in the risk assessment). For example, necessary isolations, permits etc.

1.2 Duration of Works

Enter details here

1.3 Working Hours

E.g. Traffic or Engineering Hours, time of day, day or night

1.4 Control of Activity Risks

Identify significant activity hazards/risk associated with the work package and their control measures. Consider how work activities affect:

- Workers
- Neighbours (e.g. Network Rail, nearby houses etc.)
- Other people working in the vicinity
- The environment (e.g. nearby water courses)
- LU staff
- The operational railway (including infrastructure, services etc.)

- Members of the public

The following hazards should be considered in this section – identify other hazards as applicable:

- Use of lifting equipment and lifting operations
- Use of portable tools
- Mechanical plant
- Track mounted vehicles and plant
- Hazardous materials
- Temporary structures and falseworks
- Work at height
- Fire
- Excavation
- Access/egress
- Transportation
- Noise
- Vibration
- Dust and air quality
- Waste
- Electricity
- Other hazards

NB: You may include risk assessments or summaries of risk assessments in this section. However, if you decide on the latter, the full risk assessment should be included in the project files or in the appendix.

NB: Where risk assessments are revised, this section needs to be updated accordingly.

The information provided in this section should be used to prepare the Task Briefing Sheets and identify the risks that need to be covered in the briefing.

1.5 Resources

Identify planned resources required to complete activities in the work package – considering the following:

- Materials
- Specifications of required plant and machinery
- Tools – e.g. scaffolding, lighting
- Workforce: Specify how many people are needed to carry out the works, what their roles are and what training, licences and qualifications they are required to hold (these should

be related to the task as well as to risks identified in the risk assessment) – e.g. QAF 54, Fire Watch Person, Track Trolley Operator, SPC etc.

- The PPE required by the workforce, visitors etc – outline any specific PPE requirements associated with certain tasks (e.g. harnesses, ear defenders etc).

1.6 Permits and Licences

Include details of any Licences and Permits you may need for the works – e.g. Storage Licence, Movement of Materials Licences, Permit to Dig, Hot Work Permit etc.

Explain what they are needed for, how they work, who issues them etc

1.7 Waste

Specify how waste will be dealt with and disposed of if or make a reference where this information can be found (e.g. WMP).

2 Site Details

2.1 Access and Egress

- Identify arrangements for site access and egress and route to worksites for people, tools, equipment, plant and materials, if applicable.
- Describe how the site will be kept secure and unauthorised access prevented.
- Include parking arrangements and site traffic management if this information is not included elsewhere (e.g. the CPP).
- Access arrangements for materials & plant, particularly where transporting materials to the site of the work might pose a problem.
- Describe the method of signing in and out at the site or station.

NB: Consider shared work sites

2.2 Site layout

- Identify site location, layout and any limits of work.
- Where possible, a site diagram or plans should be provided.
- Include details of adjacent activities where relevant.

2.3 Interfaces

Provide details of known interfaces which may have an impact on the work(force) and/or which the work(force) may affect – e.g. neighbours (noise issues etc. ...), other work activities, water courses, Network Rail etc.

NB: More specific information should be included in the Task Briefing Sheet.

2.4 Control Site Risks

Identify significant site hazards/risks and their control measures. Consider how work activities affect:

- Workers
- Neighbours (e.g. Network Rail, nearby houses etc.)
- other people working in the vicinity
- The environment (e.g. nearby water courses)
- LU staff
- The operational railway (including infrastructure, services etc.)
- Members of the public

Identify the required controls and specify for which tasks the control measures will need to be briefed.

This should include, but not just reproduce, hazards from the Construction Health and Safety Plan and will require site visit(s) to identify all hazards.

Significant hazards are those where the risk from the hazard need controls to be specified as part of this work. Typical site hazards include, for example, buried services, limited steep access embankments, overhead lines, infrastructure risks, asbestos, contaminated land, pests and weeds, LU Operations, and sites where violence towards site staff is known.

Risks associated with storage of material anywhere near the track should be considered in line with requirements set out in Section 3.9 of S1158.

For the risk identification to be done properly, the activity risk assessments should be reassessed in the context of the location where the work will be undertaken. The total risk assessment is a product of the hazards and risks of the activity plus the hazards and restrictions at the site where the work activity is to take place.

NB: You may include risk assessments or summaries of risk assessments in this section. However, if you decide on the latter, the full risk assessment should be included in the project files or in the appendix.

NB: Where risk assessments are revised, this section needs to be updated accordingly.

2.5 Protection

Where required specify the planned type of protection intended.

2.6 Isolations

Specify which equipment needs to be isolated, who will isolate it, how it will be isolated and how you will confirm that it has been isolated.

2.7 Communication and Contact Details

- Detail the means of communication systems to be made available and any back-up system to be available where required.

- Include the conditions where communication failures might require work to be stopped or restricted.
- Make reference to the Emergency Preparedness Plan EPP
- Provide a project organisational chart with all relevant contacts both on and off site including on-call contact, Main/Sub-contractor contact details, third parties, public utilities and services contacts where relevant – e.g. Project Manager, Site Manager, BTP, Highways Agency, Environment Agency, LU Line Service Centre.
- Describe or reference any specific emergency procedures required, for example, confined space working, working at height, MEWP, etc.

2.8 Emergency Arrangements

- To ensure that any eIRFs generated is routed to the correct reviewer; please fill in the box on front sheet of the SSOW.
- List the emergency contact numbers including accident/incident reporting contact numbers - including contacts for environmental emergencies where applicable.
- The nearest A&E hospital details should be included in the Construction Phase Plan along with the access point suitable for an ambulance – include this information in this document if there is no CPP for the work.
- The numbers of first aiders provided, location of first aid equipment, etc.
- Pay particular attention to special emergency arrangements required by the teams being briefed and the arrangements for dealing with imminent danger.
- Describe or reference any specific emergency procedures required, for example, confined space working, working at height, MEWP, etc.

NB: Some of this information may be already contained in the CPP

2.9 Welfare

For temporary sites, explain the arrangements to provide toilet facilities, washing facilities, drying rooms, mess rooms and, if applicable, catering arrangements. For fixed sites this information should be included in the Construction Phase Plan.

3 Briefing and Reporting

3.1 Briefing Arrangements

If this information is not contained in the CPP specify the following:

- Identify who is responsible for briefings, what information shall be briefed and to whom, how briefings will be undertaken, how the briefing will be recorded and how understanding by the operatives confirmed.
- Describe the arrangements and authority for ensuring that any necessary changes to the Task Briefing Sheet on site are controlled by the project team to make sure that the information briefed is up to date and accurate.

- The Task Briefing Sheet is intended for the use of the SPC/Works Supervisor conducting the briefing.

3.2 Reporting Accidents and Incidents

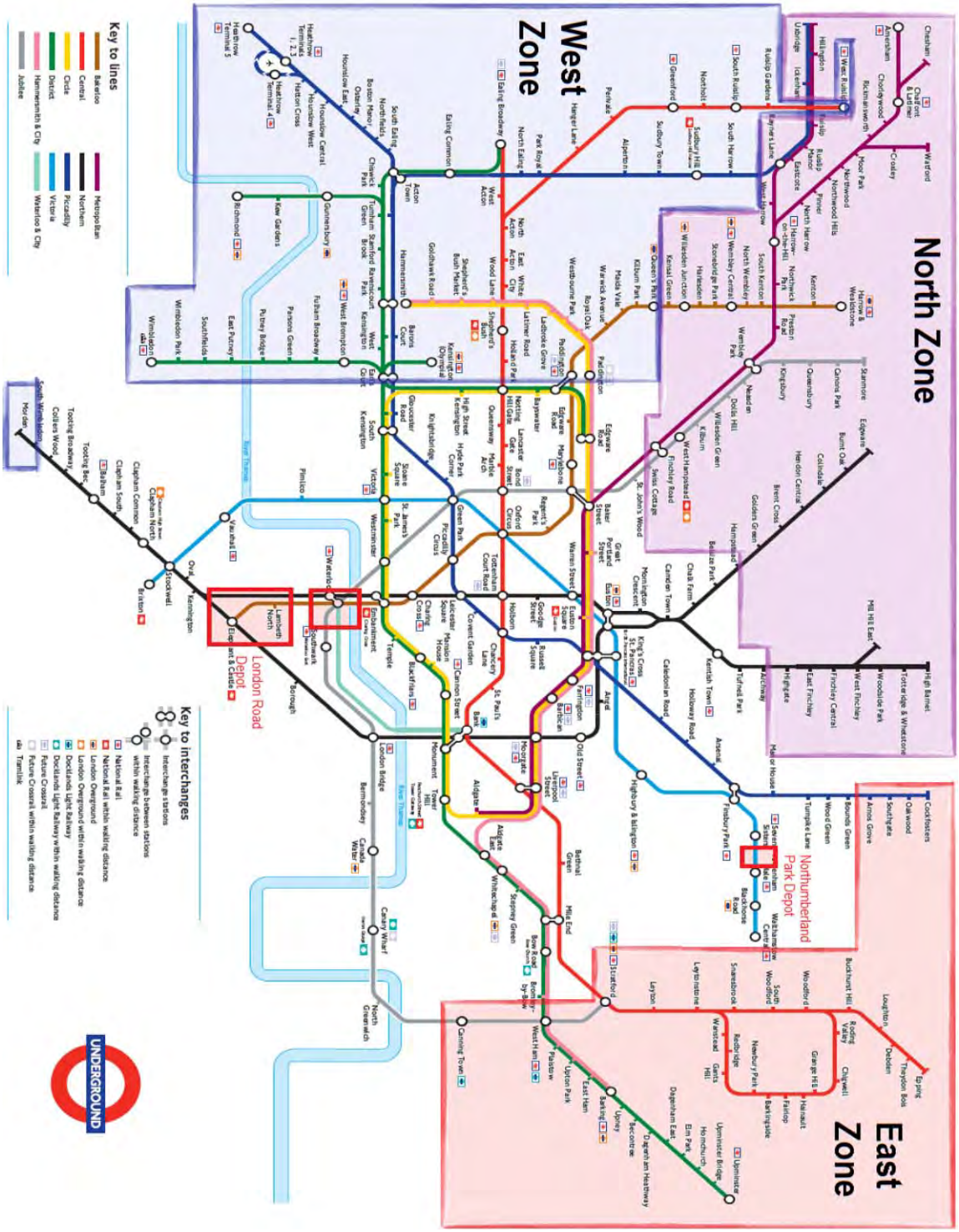
If this information is not contained in the CPP, detail the arrangements for reporting accidents/incidents if this information is not included elsewhere (such as the Construction Phase Plan)

4 Appendix

Risk Assessments (including COSHH and Manual Handling Assessment

Other appendices may include Lifting Plans, Traffic Management Plans, and Site Layout Plans etc.

Appendix 2: Vegetation Management Zones



Appendix 3: The Suppliers initial Generic Method Statements

Tree Gangs: Generic Method Statement:

Programme Project **Track Vegetation and Fencing Renewals**
Document reference **SSoW 03 Trees Gang**

In the event of an incident to ensure that the incident report is correctly routed, please fill in the box below:	
Responsible Area/Project	TBA
Location	Various locations
Area	Track and Lineside locations
Principal contractor	Cleshar

Safe System of Work
Tree works

		Signature	Date
Prepared by	[redacted] Project Manager		
Reviewed by	[redacted] HSE Advisor		
Reviewed by	<Name> Client		
Distributed to	<Name>	Contractors	
Distributed to	<Name>	Sub-contractors	

Docment History

Revision	Date	Summary of changes
Tender	26/05/19	Tender draft

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1.1 Description of Work

Tree works shall comprise of;

- **Tree inspections**

Tree inspections will be carried out to target works for gangs. This will be to minimise service disruptions, protect the ecological component of London Undergrounds land. To identify non-native, or hazardous species i.e. hogweed, Japanese knotweed.

- **Pollarding trees**

When required, Cleshar Arboricultural gangs will pollard trees that have excessive crown growth, or overhanging.

- **De-limbing trees**

Required when decayed, or storm, or disease damage which renders limb, or limbs unstable.

- **Crown reductions**

Partial pruning of the tree crown to facilitate sight line clearance to signals, or removal of nuisance of leaf fall, or fruit drop reducing slipping, or tripping hazards, or third party claims.

- **Tree climbing**

Accessing of tree for works at height to carry out operations listed above. Commonly a rope access system to allow selective pruning, or complete tree removal.

- **Using a wood chipper**

Mechanical reduction of tree waste from tree operations. Product is suitable for as weed suppression or paving where tree waste left on site would be a fire hazard.

The Following Task briefing sheets will be used to undertake these works:

- Task briefing sheet 01- Access, site set up
- Task briefing sheet 02- Work on or near the track
- Task briefing sheet 03- Site work (Biological hazards)
- Task briefing sheet 04- Site hazards (Exposure to weather)
- Task briefing sheet 05- Manual Handling
- Task briefing sheet 06- Use of hand tools
- Task briefing sheet 07- Use of power tools
- Task briefing sheet 08- Driving and transportation
- Task briefing sheet 11- Use of fuel powered equipment and refuelling
- Task briefing sheet 12- Working near overhead power cables
- Task briefing sheet 13- Ground disturbance, and excavation
- Task briefing sheet 16- Use of a ladder or step ladder
- Task briefing sheet 17- Access or work on slopes and embankments
- Task briefing sheet 20- Oak Processionary moth
- Task briefing sheet 21- Tree and shrub planting
- Task briefing sheet 22- Use of a chainsaw
- Task briefing sheet 24- Use of chipping machines
- Task briefing sheet 25- Use of hedge cutters
- Task briefing sheet 26- Use of mini transporter
- Task briefing sheet 27- Use of a mini track trolley

1.2 Duration of Works

This is part of the 2019 TfL Vegetation and Fencing contract from 2019-2022. This Method Statement will be reviewed annually.

1.3 Working Hours

The works are normally planned to take place Monday - Friday 07:30-16:00 (daylight). However due to high risks in certain areas of the track environment where traffic protection cannot take place, engineering hours or possession work will be implemented.

1.4 Control of Activity Risks

Upon arriving at a new site the SPC/PWT must inspect the site and complete a Specific Vegetation Works Risk Assessment. The climber/Arborist will complete an initial tree works assessment. If additional risks are identified as work proceeds, or the local Manager makes the SPC/PWT aware of an issue, this must also be recorded and control measures set out.
Any precautions that are required to protect the public or other parties passing through or around the site must be recorded on the Risk Assessment form.

If the risk is unusual or beyond the knowledge of the SPC/PWT to deal with the SPC/PWT must contact his manager or HSQE department for advice before proceeding with the task in that area.

As part of the SPC/PWT site assessment, and the Arborists tree assessment, a check must be made for any wildlife, or signs of wildlife, such as bird's nests, wasp's nests, badgers sets, etc.; or any Non Native Invasive Species such as Japanese Knotweed or Oak Processionary Moth. Any identified must be included in the Specific Vegetation Works Risk Assessment. The client's representative must be informed and an exclusion zone set to ensure they are not disturbed. This must be documented on the form.

The form will identify the relevant Task Briefing Sheets for the works on that site.

Once the form is completed the SPC/PWT must brief his gang on the site and the specific control measures noted on the form and Task Briefing Sheet and all operatives must sign the form.

The form must be held in the site file while the gang are on site and returned to the Project Manager at the end of the works.

All operatives will be competent and trained in any activity they are tasked to undertake. Training records will be held on skills cards and kept on file at head office.

Any London Underground visitors, or staff, will receive a full briefing on the activities and control measures, before being permitted access to the worksite. The worksite will be set up in such a way, that the safe system of work will minimise risk, or minimise intrusion to any London Underground staff, or assets, or others who may be working in the area. If, at any point, the worksite is likely to become intrusive to others the SPC/PWT will attempt to reach an agreement with the third party, or London Underground, with the new safe system of work being documented on an On-Site Risk Assessment. When this cannot be agreed the SPC/PWT will contact their Line Manager, or the Cleshar Health and Safety department for further instructions

1.4.1 Neighbours (e.g. Network Rail, nearby houses etc.)

Site surveys will be carried out prior any significant works to establish access to site, any interfaces with public i.e. private & business properties, bus/trams stops or areas/building/facilities where large number of public congregate.

Means of Control may include:

- Advance communication with neighbouring property owners/occupiers
- Letter drops
- Access negotiation and consultation
- Operative briefings and toolbox talks

Where works interface with Network Rail infrastructure, Cleshar will ensure that operatives are PTS trained and the relevant safe system of work in place, i.e. Network Rail approved Work Package Plans and Permits, COSS, ALO etc.

Additionally, as works proceed On–Site Risk Assessments will be used to assess new or changing situations. The PWT/SPC's are trained on preparing On–Site Risk Assessments.

1.4.2 Working on 3rd Party vegetation or land

When works are planned on a third party's land, a separate site specific Method Statement, and Site Specific Risk Assessment shall be produced in agreement with the third parties land owner, or land owners representative. All works will be discussed in advance during planning meetings, conference calls, and other mediums of two way communications. When the risks from working on a third parties land are different from the normal risks, or considered unusual, additional training, site specific inductions, tool box talks, and selection of experienced, and trained operatives to be deployed to complete the works. Regular site inspections will be carried out by Cleshar Management, and Health and Safety department.

1.4.3 The environment (e.g. nearby water courses)

Cleshar operatives will be briefed on ecological and other environmental issues relevant to their task and the location of the works. These are included in the risk assessment and can include issues such as sensitive receptors in the vicinity of the site, the presence of protected or invasive species, and protected habitats. The On–Site Risk Assessments and Task Methodology sheet will detail all environmental risks associated with water, ecology, contaminated land, noise, vibration and pollution.

In some cases, an ecological survey prior to any works will be required to confirm presence of high risk species, both protected and invasive, to ensure adequate control measures are in place prior to and during the works.

Also, where sensitive receptors, such as, residents, schools, care homes or similar, are in close proximity to the site and may be affected by noise and other nuisances, a noise assessment may be required prior the works to establish if noise mitigation is required.

Environmental incidents are reported and investigated in the same manner as safety incidents. Operatives shall report to their manager if they are unable to fulfil their duties as a result of discovering any ecological issues (e.g. presence of protected species, nesting birds and reptiles).

1.4.4 Nesting season

All nesting sites will be recorded on a digitally secured spreadsheet, and will be included on the SPC/PWT's tablet. Before any works commence, the SPC/PWT will check to see if the worksite

has any nests located there. The SPC/PWT will be briefed in identifying common species and will have an awareness of likely habitats of birds. Tool box talks will be delivered throughout the contract on nesting birds.

1.4.5 The operational railway (including infrastructure, services etc.)

Engineering Hours

When Engineering Hours works are required, risks to the operational railway and/or London Underground infrastructure will be assessed during the planning stage of the works. When working Engineering Hours a PWT-EH will be appointed to protect the operatives. The PWT-EH will follow all London Underground rules, and will book on with the Track Access Controller as per London Underground rule books and procedures. The PWT-EH will test the traction current has been discharged with their Current Rail Indicator Device. Before permitting the operatives access to the operational railway, the PWT-EH will deliver a full briefing to the operatives on the protection arrangements for that shift.

Traffic Hours

Traffic Hours works are required, risks to the operational railway and/or London Underground infrastructure will be assessed during planning of the works. A PWT-TH will follow all London Underground rules, and will book on with the Line Controller prior to works commencing. Before the PWT-TH allows operatives access to the worksite, he will deliver a full briefing which will comprise of all protection arrangements for the shift.

Working in Depots

When works are carried out in Depots, all risks to the operational railway, the Depots and/or London Underground infrastructure will be assessed during planning of the works. A PWT- Depot will follow all London Underground, and Depot rules, and will sign in, or book on with the Depot Duty Manager. Before the PWT-Depot allows operatives access to the worksite, he will deliver a full briefing which will comprise of all protection arrangements for the shift.

1.4.6 Use of lifting equipment and lifting operations

All equipment used to carry a load (such as climbing equipment, or rigging equipment) will be fit for purpose. All equipment will be identifiable and inspected in regular intervals:

Type of inspection	What is inspected	Record keeping	Inspected by
Daily Inspection	All parts of fall protection equipment (harness, lanyards, ropes)	No written record required	User
Weekly Inspection	All parts of fall protection equipment (harness, lanyards, ropes	Written record required	User
Thorough inspection as per LOLER (6-monthly intervals)	All parts of fall protection equipment (equipment for carrying people)	Formal inspection record required	By a competent person

Type of inspection	What is inspected	Record keeping	Inspected by
Thorough Inspection as per LOLER (12-monthly intervals)	All parts of fall protection equipment (rigging equipment etc)	Formal inspection record required	By a competent person

1.4.7 Use of portable tools

All portable equipment will be inspected by the operator prior to the use. Only trained and certified operatives will be permitted to use the tools. Site inspections will carried out, by a competent person who will check all portable and small hand tools are fit for purpose, are being used as intended, and are being used by trained and competent operatives. All equipment will be identifiable and inspected in regular intervals:

Tools	Power source	Test Record
Chainsaw(s)	2 stroke mix	3-monthly (tagged)
Pole saw	2 stroke mix	3-monthly (tagged)
Strimmers	2 stroke mix	3-monthly (tagged)
Portable petrol generator	Petrol	3-monthly (tagged)

1.4.8 Mechanical plant

The table below will be used as part of the scope of works. All equipment will be tested and in date, and will have an attached service tag, informing the user of the next due service date. Only trained and certified operatives are permitted to operate any mechanical plant. An On–Site Risk Assessment will be produced to cover any risks operating any mechanical plant may produce under local conditions. Task sheets are available for:

- Task sheet 11 – Use of powered fuelled equipment, and refuelling
- Task sheet 24 – Use of chipping machines
- Task sheet 25 - Use of a hedge cutter
- Task sheet 26 – Use of mini transporter

Tools	Power source	Test Record	Inspected by
Chipper	Diesel	Tagged or site file	User
Hedge cutters/trimmer	2 stroke mix	Tagged or site file	User
Portable generator	Diesel/petrol	Tagged or site file	User
Mini dumper	Diesel	Tagged or site file	User

1.4.9 Track mounted vehicles and plant

When the works require track mounted vehicles and plant a separate Task Methodology Sheet will be produced to control hazards that arise from the activity. When used the Track Trolley will be in a serviceable condition, clearly tagged and only be operated by suitably trained and competent

operatives. The PWT-EH will inform TAC of the presence of Track Trolley on site. The use of the Track Trolley will be included on the On-site risk assessment, which will be completed before works commence.

The Track Trolley(s) will be fitted at all times with the full complement of safety devices including flashing lights. Pre-use checks will be carried out by the competent Track Trolley Controller.

NOTE: Track Trolleys are only to be used when traction current is switched off and Protection arrangements are in place.

Track Trolleys will be used to minimise manual handling in areas where trackside access is required. Preference will be given to the use of split link trolleys to reduce the amount of manual handling of the Track Trolley itself.

There will be a sufficient number of staff to carry each part to ensure that no-one is overstretched and no damage occur whilst walking through stations (edges may be taped).

Track Trolleys will only be used in Engineering Hours and may only be placed on the track after the PWT-EH has confirmed that traction current has been discharged.

When the traction current has been discharged each section of the trolley will be passed down to the track team from station platform and assembled by Track Trolley operators who are familiar with the type of Track Trolley used. The platform edges shall be protected with plywood or rubber mats when carrying out this task.

Plant, tools, equipment and materials will then be transported to the Track Trolley and loaded on. The load must not exceed the SWL of the Track Trolley.

Riding on a Track Trolley is prohibited.

Track Trolleys will be under the control of trained Track Trolley operators. The Track Trolley operator will need to be type specific trained.

Additional task lighting will be provided to illuminate the track ahead, where required. This will allow any hazards such as spare rails or missing covers to be seen, and help prevent slips, trips or falls.

At the start of the working shift, the PWT-EH must inform the appropriate signaller of the requirement to scotch and clip points. On completion of the working shift the PWT-EH must confirm to the appropriate signaller that all scotches and clips have been removed.

Extra care must be taken when traversing points and crossing work. Before passing over points you must:

- Make sure the Track Trolley is stationary.
- Place scotches and clips in position before allowing track trolley to proceed.

For further guidance on use of a Track Trolley refer to Task sheet 27 - Use of a Track Trolley.

1.4.10 Hazardous materials

The following will be implemented when using hazardous substances;

- A COSHH Assessment must be requested through HSQE, and be available on site before works commence.
- Chemicals and substances will not be stored on site unless specifically listed on the storage licence and agreed with the Landlord.

- All substances will be used and stored as per manufacturer's instructions and guidance and the COSHH Assessments.
- The necessary PPE must be worn in accordance with product label and COSHH assessments, i.e. checks are to be made on mask filters or face shields/goggles when carrying out dilution or pouring activities.
- All mixing/diluting/equipment filling must be done on drip trays to prevent environmental contamination. A check is to be made against the COSHH assessment for any special PPE requirements.
- All containers must be labelled, transported and stored according to manufacturer's instructions.
- Operatives using substances must understand the hazards of the chemicals or substances used.
- All spillages must be contained immediately; a spill kit must be available on site when using chemicals or substances.
- Minimising risk to the user and others in the area must be ensured at all times. This will be carried out via adequate signage and exclusion zones, where necessary.
- Material and equipment must be positioned and handled so that it cannot fall, slip, roll or be blown onto the track, railway equipment, public highway, platforms or walkways.

The following products will be used as part of the scope of works. If any other product or substance is required, a COSHH assessment shall be provided by the HSQE department before the product or substance is to be used on site.

Material to be used	Hazardous	COSHH Assessment
Garlon Ultra Herbicide	**YES**	**Yes in Appendices**
Pesticide Roundup	**YES**	**Yes in Appendices**
STIHL chain oil	**YES**	**Yes in Appendices**
Generic nuisance dust	**YES**	**Yes in Appendices**
Japanese knotweed clearing	**YES**	**Yes in Appendices**
STHIL hedge trimmer grease	**YES**	**Yes in Appendices**
Round up pro Glyphosate	**YES**	**Yes in Appendices**
Oak processionary moth	**YES**	**Yes in Appendices**
STHIL strimmer grease	**YES**	**Yes in Appendices**
Hairspray	**YES**	**Yes in Appendices**
Dimlin flo	**YES**	**Yes in Appendices**

1.4.11 Working at height

When working at height, the hierarchy of controls will always be followed with the safest means of access to be considered first. Cherry pickers, MEWPS will always be considered first when Risk Assessing working at height, as the safest means of accessing a tree.

- Work at height will be avoided, where practicable.

- All works must be planned and organised including survey for overhead power lines and distances, tree conditions including potential weakness caused by decay and presence of birds' nests etc.
- An On-Site Risk Assessment will be carried out to identify additional hazards.
- The SPC is to complete an Arboriculturist initial tree work assessment.
- The SPC will brief the gang including information within the On-Site Risk Assessment to all involved in the activity.

MEWP

When access to a tree permits it, A MEWP (Mobile Elevating Work Platforms) may be used. The MEWP is only to be used by trained, and competent operatives. The safe working load will not be exceeded at any time. If the MEWP's have out riggers, theses will be in place as per manufacturers guidance. The MEWP will be recorded on the On-Site Risk Assessment on how it will be used on site, this will be briefed to all operatives on the worksite.

Scaffold Tower

Scaffold towers will only be assembled by PASMA trained operatives. Wheels will be locked off whenever the towers are being worked from, and will never be moved when operatives are in the tower. The access gate will be closed at all times. The use of the scaffold tower will be included on the On-Site Risk Assessment, with control measures being briefed to all operatives involved in the works.

Step ladders/ladders

Ladders – must be used for access/egress only, or as an exception only for works of a short duration (5 to 10 min) when other access equipment is not suitable. Priority must be given to podiums, towers, access platforms etc.

Only industrial (130kg) class 1 ladders/stepladders conforming to BS EN 131 must be used.

The following factors must be considered when inspecting and using ladders on site:

- Stiles are not damaged, warped or buckled
- No rungs are missing
- All treads are clean
- All secure stepladder locking devices are in place and working, when extended
- Ensure ladders (both feet) are resting on firm and level surfaces
- Ensure that step ladders are fully extended
- Ensure ladders are angled outwards to avoid slipping (*Rule of thumb – "one out for every four up")*
- Where a ladder cannot be fixed ensure a second person foots the ladder whilst in use.
- Step ladders to be footed at all time whilst in use.
- If a ladder is used as regular access/egress it must be secured and not footed

For further guidance when working at height please refer to

- Task sheet 15 – Tree climbing
- Task sheet 16 – Use of ladders and step ladders

Item	Precautions
Tree climbing	• Trained and competent tree climbers using correct safety techniques only to engage in tree climbing works. • Individual operatives to plan the ascent and descent prior to works, ensuring that the descent and lowering of anchor devices is carried out in controlled manner. • A minimum of two people will be present during all tree climbing operations. • One operative must be on the ground to perform an aerial rescue in case of emergency. • Equipment for tree climbing must be in good order and inspected. (see section 5.5) • Good communication between team members must be established. • Adequate breaks to be given. • Operatives must be in good health and fit to undertake the tasks. • Ensure that public and others within the site are warned of overhead operations, exclusion zones are established with barriers and warning signage where necessary. • An Aboriculturist initial tree work assessment is completed before operatives begin to climb. Including all environmental and weather conditions.
Work on parapets etc.	• Work to be planned to provide fall prevention wherever possible, by the use of restraint harnesses, handrails or access equipment. • As last resort a fall arrest systems is to be used. Risk assessment to be completed prior to working with fall arrest equipment. • A rescue plan will be in place when working with fall arrest equipment.

Item	Precautions
Use of ladders and stepladders	• Working time from a ladder/stepladder should be kept to a minimum. Normal activity should only involve continuous work of between five and ten minutes. • Ladders are not to be taken to or used on or near live track. • Three points of contact must be maintained at all times. • To prevent overreaching, the "belt buckle" of the installer must remain within the ladder stiles and both feet on the same rung. If work must be carried out further away, then the ladder must be moved. • Ladders can be used for Arbouricultrists to gain access to trees when working at height, but the ladder must be footed first, and once the tree climber has anchor point in place, the tree climber will then begin to climb the tree. When the tree climber is no longer on the ladder, and is in the tree, the ladder will be removed, and placed where it will not become a tripping hazard. • The manufacturer's instructions for the use of the ladder must always be followed. • The installer will always face the ladder/stepladder. • The correct footwear to give a secure grip must be used at all times together with appropriate gloves to protect the hands. • Tools must be carried up and down the ladder using a tool belt or a hand line. • Metal ladders should be carried horizontally by two people, and not used, when in the direct vicinity of overhead power cables. Such handling can lead to an electrical discharge, especially in damp or wet conditions, which could result in a severe or fatal electric shock to the user by transmission through the ladder. • Personnel and equipment must maintain a minimum distance of 1.75m away from any overhead power cables.

1.4.12 Excavation

When excavation works are required Task briefing sheet 13- Ground disturbance and excavation is to be followed for the management of the works.

1.4.13 Access/egress

When an activity compromises safe access and/or egress to site, an On-Site Risk Assessment will be produced to safely assess how all operatives, plant and machinery can safely access the worksite. No work will commence until the alternative safe access has been established.

If necessary, works will be postponed to ensure that access /egress conditions are such that they do not pose a risk to safety of those accessing the worksite.

All operatives will receive a briefing on the On-Site Risk Assessment, regarding safe access/egress.

The SPC/PWT will contact their Line Manager/Health and Safety department for further advice, as necessary.

For further guidance refer to:

- Task briefing sheet 01- Access, site set up.

1.4.14 Transportation

Transportation will be via small vans or flatbed 7.5 tonne vehicles. It must be ensured, by the Cleshar SPC/PWT, that all deliveries are co-ordinated and all vehicles are parked in a position where they present no additional risks to both road users and the general public.

When vehicles are off loaded, a supervised area will be marked out by cones or barriers to safeguard the interface between the work force and the general public.

For works that require obstruction of roads a formal traffic management plan will be prepared and road closures organised.

For further guidance on driving and transportation please refer to:

2 Task sheet 08 – Driving and transportation.

1.4.15 Noise

Cleshar routinely measure noise levels from the most commonly used tools to evaluate the most appropriate control measures and to select the least noise polluting tools. The following control measures shall be followed when using the listed tools below.

Potentially Noisy Operation	Means of Control
Chainsaws, STIHL Blower, Hedge Trimmer, Strimmer, chipper, generator	• All works will be carried out using well-maintained equipment. SPC/PWT to assess noise levels and introduce local controls i.e. acoustic screens if required. • Hearing protection will be worn where indicated by Risk assessment. • Access to worksite will be limited to those involved in the works during high levels of noise. • Hearing protection zones will be established and hearing protection use enforced, where the noise level could reach 85 dB (A) • Hearing protection will be issued to all operatives using power tools or working in the vicinity. • Lower noise generating equipment will be selected, where practicable. • Ensuring worksite deliveries are managed correctly and well-disciplined to reduce noise at all times. • Where deliveries can be done during the day this option must be utilised, whenever practicable. • The SPC/PWT must ensure, where practicable, that all noisy plant is kept as far away from residential properties as possible.

	• Extra care is taken to keep all noise to a minimum at night with the vicinity of the local residents in mind. • In agreement with London Underground, Cleshar will establish contact with local residents during prolonged noisy works in a particular location. • A Section 61 notice will be applied for, if necessary

1.4.16 Vibration

All operatives shall be made aware of the risks of a prolonged exposure to vibration. Operatives will be made aware of the symptoms of white finger, carpel tunnel syndrome and all other Hand Arm Vibration related injuries. It is not envisaged that the trigger time the operatives may be exposed to on any normal shift may cause Hand Arm Vibration exposure risk.

Potential High Vibration	Means of Control

Chainsaws, STIHL Blower, Hedge Trimmer, Strimmer	• The equipment must be tagged, tested and well maintained. • Lower vibration equipment to be selected, where practical. • User maintenance of equipment to be implemented. • The SPC/PWT must ensure that operatives take regular breaks throughout shifts and carry out non-HAV based tasks to minimise the risk of vibration white finger. • Where possible rotation of operators will be implemented • Periodic monitoring of exposure to vibration will be carried out to ensure the ELV is not exceeded. • Operatives will be briefed on the consequences of exposure to vibration. • Operatives will be briefed to keep warm and dry hands when working in winter, i.e. wearing gloves. • HAVI monitors & HAV Control Handbooks are to be used to monitor exposure levels of operators using vibrating equipment. Monitoring is to be carried out on a periodic basis or as per CCS HSQE instruction. • When operatives are at ground level chainsaw jackets/sleeves must be worn. • When operatives are using a chainsaw in a tree the use of a chainsaw jacket is to be Risk Assessed against physical exertion and the weather conditions. When it is not reasonably practical to wear a chainsaw jacket, then the protective chainsaw sleeves are to be worn. The period of usage of vibrating equipment must be reduced when: • Operative has tendency to suffer from poor circulation (symptoms include: frequently cold fingers and tingling) • The outside temperature is very low.

1.4.17 Dust and air quality

The following schedule identifies the plant or operations that emit pollution or dust with the practical means of minimising or reducing the dust and emissions:

Plant/Operations	Means of reducing emissions or dust
All fuel powered tools/equipment	• Equipment to be properly maintained • Equipment to be used according to the manufacturer's instructions • Only fuel that is specified by the manufacturer to be used • All generators to be positioned away from works and residential properties, where practicable. • Generators must be self bunded.

Plant/Operations	Means of reducing emissions or dust
Disturbing ballast/ground Handling waste material	• Area to be inspected before works commence to identify potential locations where dust may be a problem. • Suitable locations to be identified for stockpiling debris, prior to removal from site. • Areas damped down where dust is raised, especially in very dry conditions • Skips covered where used, for removal of debris

1.4.18 Housekeeping

Before works commence the operatives will receive a pre-works briefing from the SPC/PWT. Part of the briefing will comprise housekeeping arrangements. The SPC/PWT will brief the operatives to maintain a high level of housekeeping. If there is an extensive build-up of waste during the works, the SPC/PWT will stop works and instruct the gang to clear any waste before recommencing. The access and egress points will be kept clear at all times. The worksite will be left clear and tidy at the end of every shift. Any natural waste accumulated will be put into habitation piles. All other waste will be disposed of via Cleshar's skips.

1.4.19 Electricity

When Cleshar operatives are working adjacent to Network Rail sites, there may be an interface with overheard electrified cables. If this circumstance should arise, a separate Method Statement and Risk Assessment shall be produced. Any other interfaces encountered with electrical assets on site will have a separate Method Statement, and On Site Risk Assessment. The following task sheet can be used for further guidance:

- Task sheet 12 – Working near overhead power lines.

Traction current

When operatives are required to work in areas where traction current is live, the first option will always be to carry out the works during Engineering Hours, when traction current can be fully discharged under the protection of a PWT-EH. It is not feasible for the traction current to be discharged, works will take place during Traffic Hours under the protection of a PWT-TH.

When working in Depots the traction current will always be considered as live. Only operatives who Basic Track Awareness trained, and have received the depot induction are permitted to work there, under the protection of a PWT-D.

Cables

Where operatives are working around cables the cables will be protected and the operatives will use hand saws only (No Chainsaws). All cables, and other assets will be risk assessed before works commence.

1.4.20 Asbestos

During works where there is potential of disturbance of structures the Project Manager will request Asbestos report F3333 from the Client Hazardous Material Unit (HMU).

No works will be undertaken by Cleshar that may lead to disturbing asbestos or other unknown materials.

In the event of discovery of asbestos, ACM or suspected asbestos:

- Do not disturb.

- Stop work immediately
- Clear the area of personnel, tools and equipment
- Inform other parties in the vicinity
- Evacuate the area
- Call the HMU reporting Line [redacted]
- Call the Cleshar Health and Safety department

1.4.21 Fly-tipping

Any worksite where fly-tipped waste is encountered, that may cause risk to the work site, the operatives, or the works activity, the operatives must:

- Stop work, and plan other works, if feasible.
- Call their Line Manager/ Health and Safety department for further instructions.
- Cordon of the fly-tipped area.
- Inform London Underground of the location, type of waste, quantity of waste.
- If the waste appears to be hazardous, or the SPC can't safely identify what it is, they are not disturb, or attempt to move the waste.
- Take photos.

1.5 Resources

1.5.1 Materials

Any materials required for the works will be planned by the Project Manager. If a product, or substance requires a COSHH Assessment it will be required before the product is used on site and be included in the site documents. All materials that are used on site will be briefed to the gang by the PWT/SPC. Refer to hazardous materials section.

1.5.2 Specifications of required plant and machinery

Only plant and equipment that has been London Underground approved is permitted to be used on the works site. The tools required for the works can be found on the task briefing sheets, and the above Portable Tools, Mechanical Plant and Track Mounted Plant sections above. All operatives will be briefed on the tools required for the works during the pre-works briefing from the SPC/PWT.

The following tools will be used in the scope of works. The list is not exhaustive and other tools and equipment may be required.

- Hand tools
- Chainsaw STIHL MS 361
- Chainsaw STIHL MS 260
- Chainsaw STIHL MS 660
- Chainsaw STHIL MS 200T
- Chainsaw STHIL MS 440
- Chainsaw STHIL MS 200
- Telescopic chainsaw STHIL HT75
- Wood chipper
- Mini dumper

All tools used on the contract must be in a good condition. Electrical tools must be PAT tested and contain a label which allows a next test date to be identified. Chainsaws and strimmer's to be serviced as per service schedule.

Before using any tool it should be visually inspected for any damage in accordance with their user training.

Ensuring tools are in good condition and well maintained will also reduce noise. A sharp point or blade will significantly reduce noise generation.

1.5.3 Workforce

All training will be co-ordinated by the Cleshar training department and carried out by an approved training provider. Copies of all relevant certification are maintained at Cleshar Head Office. In addition all personnel will carry details of their individual training.

Operation/Personnel	Training Required
All operatives	LU ICI Sentinel Card , Asbestos Awareness, Manual Handling training, Site Induction
Operatives working on or near track in traffic hours	Basic Track Awareness
Operatives working in Depots Working in depot area A	Basic Track Awareness Specific Depot familiarisation induction and area A training
Person in Charge in charge of site safety	Site Person in Charge -Non Track location (SPC-NT) Protecting Workers on the Track (PWT)
First Aider	Appointed Person course as a minimum
Moving Track Trolley	Track Trolley Controller (Formally known as Trolley Operator)
Protecting Workers on the Track Traffic hours (when trains are moving and current is on)	Protecting Workers on the Track Traffic Hours (PWT-TH)
Protecting Workers on the track Engineering hours	Protecting Workers on the Track Engineering hours (PWT-EH)
Protecting Workers on the track Depots	Protecting Workers on the Track Depots (PWT-Depot)
Working on the Depots	Passport to depot (Familiarisation) training in Depots
Arboricultural Works	Certificate from a recognised training establishment to prove competency and qualification
Spraying herbicides	Safe use of pesticides levels NPTC PA1 & PA6
Using strimmer's/ hedge cutters/chippers/chain saws	Certificate from a recognised training establishment to prove competency and qualification

Operation/Personnel	Training Required
Working adjacent to Network Rail track	PTS-AC/DC

Personal Protective Equipment

The following PPE will be required:

PPE	Req.	Grade	When	Additional information
Safety Boots	✓	EN 20345	at all times	Steel toe capped boots with mid sole protection and ankle support
Chain saw boots	✓	EN 381-9 EN 381-3	When using chainsaw	Protective boots with good grip and protective guarding at front vamp and instep
High Visibility Jackets (with Cleshar Logo)	✓	EN 471	at all times	Except when climbing trees when Hi - Vi T-shirts are acceptable
Safety Glasses/goggles	✓	EN 166 F	As per Risk assessment	
Hard Hat	✓	EN 397	at all times	For tree climbing operations HSE strongly recommends a mountaineering style helmet complying with BS EN 12492).
Gloves (mechanical Protection)	✓	EN 388	As per Risk assessment	Handling, carrying materials etc

PPE	Req.	Grade	When	Additional information
Gloves (Chainsaw Protection)	✓	EN 381-7	As per risk assessment	Suitable gloves for the task and subject to the operator's risk assessment. Consider the need for protection from cuts from the chainsaw, Thorny materials and cold/wet Conditions. Where chainsaw protection is required this should be to BS EN381-7
Gloves (Chemical Protection)	✓	EN 374	As per COSHH assessment	
Half face mask	✓	EN149 FFP 3	During dusty operations	
Other respiratory protection	✓	As per COSHH	As per COSHH	
Ear defenders	✓	EN 352	when using power tools	Refer task risk assessment
Disposable Overalls/Coveralls	✓	EN 340	Strimming/ Spraying/ Removing waste	When using herbicides/pesticides - openings at neck and wrists must be a snug fit. The sleeves must also be long enough to cover the rubber gloves
Face/eye protection (mesh)	✓	EN 1731 mesh visors	When using mechanical vegetation cutting tools (strimmers)	
Gaiters	✓	EN 381-9	When using Chainsaw, working at height or ground level	Or occasional users working in even ground where there is little risk of tripping or snagging on undergrowth or brash, worn in combination with steel toe- capped safety boots.
Leg and groin protection	✓	EN 381 – 5	All round protection for arborists working in trees	AFAG recommends Type C leg protection for aerial work, because of the high all-round chainsaw cut protection. Where wearing Type C is impractical (I.e. because of the higher risk of heat stress) it may be appropriate to use Type A, where justified by the risk assessment

PPE	Req.	Grade	When	Additional information
Chainsaw Jacket	✓	EN 381:11:2002	When operating chainsaws at ground level, when Aborists are climbing/in the tree this is to be Risk Assessed against increased heat stress generated from physical exertion e.g. working from a rope and harness, as per HSE guidance INDG317 Rev 2.	
Protective sleeves.	✓	EN 381-10	At all times when operating a chainsaw.	

1.6 Permits and Licences

Permits and Licences required for task:

Permit or Licence required	Required	Item	Location
London Underground endorsed Sentinel card.	✓	All personnel	With individual
Access Number	✓	Engineering hours	Site File/with PWT (SPC-NT)
Storage Licence	✓	For any storage area permission from the Landlord is required.	At access point to the specific storage area
Hot Works Permit	✓	When abrading/welding/ burning	Site File/with PWT (SPC-NT)
Permit to Dig	✓	When excavating or disturbing ground	Site File/with PWT (SPC-NT)

1.7 Waste

Before works commence the area will be surveyed to identify any fly-tipped rubbish. Litter and small waste must be bagged up and removed from site in a van and taken to Cleshar yard and placed in the skip. Care to be taken of needles or other sharps around the work area, gloves to be worn and bags to be carried away from operative's body.

More substantial waste must be referred to the Client Manager for an instruction. If instructed, waste must be bagged up and removed to agreed location. If hazardous waste is discovered it is to be kept separate from other waste and clients' representative contacted to ensure the correct procedure is followed for its disposal. The Quantity and type of waste being removed is to be recorded on the Project Activity Sheet.

Any materials or debris arising from the works must be put into double builder's bags, secured with cable ties and removed from site by Cleshar or as agreed with the client. Where required, Cleshar will raise a request/permit for transporting the debris out of the station via the lift or escalator. For the sequence of operations with regard to waste disposal, generally follow the Waste Transfer note that has to be completed at various stages throughout the disposal process, to ensure traceability. A copy of the in Cleshar waste Carrier Licence will be held in the site file

2 Site Details

2.1 Access and Egress

Signing in and out must be done following the L0ndon Underground station signing in procedures. SPC/PWT instructions must be followed. Access to the works must be restricted to persons required to carry out the works to comply with London Underground's requirements. When entering via a station all operatives and visitors will sign in and out at the appropriate Station Supervisors Office before entering the LU network. Individuals must be in possession of the necessary certification, in line with London Underground requirements, to allow them to enter the area required. This will include visitors and personnel undertaking inspections/audits. The SPC/PWT will ensure that all access gates are closed and secured once inside and when leaving the site to prevent unauthorised access. Signage to warn of the works will be displayed at the access point.

When gaining access to a work site through a London Underground access gate the SPC/PWT will inform the Line Controller. The Line Controller will be told of the location the operatives are working at, the access point, the type of works being carried out, and the distance they are from the track, and the level of protection they are providing for the shift. When works have concluded, the SPC/PWT will inform the Line Controller the gang is clear of the worksite, and have locked the access gate.

When gaining access to gates on stations on the Metropolitan Line, as well as booking on with the Line controller, the SPC/PWT will report to the Station Supervisor's office and sign the gang in on the PICER form. The SPC/PWT will inform the Station Supervisor of the nature of works taking place, the location, and the access point. When works have concluded the SPC/PWT will inform the Station Supervisor.

2.2 Site layout

Works will be carried out at various stations, compounds, embankments across the TFL infrastructure. Prior to works commencing an On-Site Risk Assessment will be carried out to include details relevant to the specific location.

2.3 Interfaces

Any possible interface with other contractors, London Underground staff, or the general public will be identified in the planning meeting before the works commence. Control measure shall be implemented to ensure all third parties are safe from any works. Should operatives arrive on site, or an interface with any third party arise when works have already commenced, the SPC/PWT will phone their Line Manager for further instruction.

2.4 Control Site Risks

2.4.1 Workers

Before any works commence, the SPC/PWT will complete an On-Site Risk Assessment detailing any hazards the worksite presents, along with control measure to mitigate the hazards. This will be fully briefed out to all operatives before works commence. The following task sheets can be referenced. If the worksite presents a risk, where the hazards cannot be sufficiently controlled, the Person in Charge will contact their Line Manager, Health and Safety department for further guidance. The following task sheets can be referred to:

- Task sheet 01 – Access and site set up
- Task sheet 02 – Work on, or near the track
- Task sheet 03 – Site work (biological hazards)
- Task sheet 04 – Site work (Exposure to weather)
- Task sheet 17 – Access, or work on slopes, or steep embankments

2.4.2 Neighbours (e.g. Network Rail, nearby houses etc.)

Where a worksite becomes intrusive to neighbouring residential properties, a planning meeting will be held to decide how to control the safety interface with the residential area and the worksite. Letter drops will also be carried out prior to works commencing, advising residents of works that are due to commence. If Cleshar operatives notice the worksite becoming a risk, or intrusive to the residents, they will stop work, and contact their Line Manager, Health and Safety department for further guidance. A separate method statement, and/or a Site specific Risk Assessment would be produced to control the worksite.

When working on a Network Rail work site all Cleshar operatives will be PTS trained. A Site specific Risk Assessment will be completed along with Network Rail Safe Work Pack, and Network Rail permits before works commence. These will detail the hazards and risks the worksite presents, along with control measures to sufficiently protect Cleshar operatives. A Network Rail COSS will be appointed when working on Network Rail sites.

2.4.3 Other contractors working in the vicinity

Where the Cleshar worksite will present hazards to others working in the vicinity, a planning meeting will be held with all parties to discuss and plan how to protect all from the risks involved. A separate Method Statement, and Site Specific Risk Assessment will be raised and implemented to protect all involved from the hazards and risks identified. In the event of an unplanned interface with others working in the vicinity, the SPC/PWT will temporarily stop works, and plan with the other SPC/PWT on how to control the issues. If a mutual agreement can be reached, an On-Site Risk Assessment will be produced, and re-briefed to all. In the event an agreement cannot be

reached, the SPC/PWT will contact their Line Manager and/or Health and Safety department for further guidance.

2.4.4 The environment (e.g. nearby water courses)

Cleshar operatives will be briefed on ecological and other environmental issues relevant to their task and the location of the works. These are included in the risk assessments for the works, and can include issues such as sensitive receptors in the vicinity of the site, presence of protected or invasive species and protected habitats. The task briefing sheet will detail all environmental risks associated with water, ecology, contaminated land, noise, vibration and pollution.

In some cases, an ecological survey prior to any works will be required to confirm presence of high risk species, both protected and invasive, to ensure adequate control measures are implemented during the works.

Also, where sensitive receptors such as residents, schools, care homes or similar, are in close proximity to the site and may be affected by noise and other nuisances, a noise assessment may be required and the necessary mitigation measures implemented.

Environmental incidents are reported and investigated in the same manner as safety incidents. Operatives shall report to their manager if they are unable to fulfill their duties as a result of discovering any ecological issues (e.g. presence of protected species, nesting birds and reptiles).

2.4.5 LU staff

When Cleshar worksite will present hazards to London Underground staff a Site Specific Risk Assessment will be implemented to protect all involved from the hazards the worksite. In the event the risks cannot be sufficiently controlled, the SPC/PWT will contact their Line Manager, Health and Safety department for further guidance.

2.4.6 The operational railway (including infrastructure, services etc.)

Engineering Hours

When working Engineering Hours works are required, a PWT-EH will be appointed to provide protection to all operatives for that shift. The PWT-EH will book on with the Track Access Controller as per London Underground rules and procedures. All risks that arise from the worksite, when working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions.

Traffic Hours

When working Traffic Hours works are required, a PWT-TH will be appointed to provide protection to all operatives for that shift. The PWT-TH will book on with the Line Controller as per London Underground rules and procedures. All risks that arise from the worksite, when working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions.

Working in Depots

When working in any London Underground Depot is required, a PWT-Depot will be appointed to provide protection to all operatives for that shift. The PWT-Depot will book on with the Line Controller as per London Underground rules and procedures. All risks that arise from the worksite,

when working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions

Members of the public
The worksite will, for the most part, be on London Underground premises, behind a physical barrier creating a tangible physical segregation between the worksite and the members of the public. In the event that the worksite may pose a risk to the public, the works will be planned in advance and a site specific risk assessment for that particular worksite will be raised. The site will be demarcated and cordoned off. Before any works commence the SPC/PWT will do an On-Site Risk Assessment, including managing the interface with the general public. If there is a risk of violence due to the interface with the public, then operatives will remain together and move to a place of safety, moving any tools or equipment out of the way of the potential violence, where possible. If the SPC/PWT considers it necessary, they will call the police.

2.4.7 Asbestos
During works where there is potential of disturbance of structures the project manager will request Asbestos report F3333 from the Client Hazardous Material Unit (HMU)

No works will be undertaken by Cleshar that may lead to disturbing asbestos or other unknown materials.

In the event of discovery of asbestos, ACM or suspected asbestos the following process will be followed:

- Do not disturb.
- Stop work immediately
- Clear the area of personnel, tools and equipment
- Inform other parties in the vicinity
- Evacuate the area
- Call the HMU reporting Line 0207 088 5615

2.4.8 Buried services,
It is not envisioned that contact with buried services will be part of the scope of works in this Method Statement. If this is required throughout the cycle of the contract, a Site Specific Risk Assessment will be produced, with the required trained, and competent person to carry out any cat-scanning.

2.4.9 Limited steep access embankments,
When operatives are working on steep embankments a Site Specific Risk Assessment must be completed before any works commence. SPC/PWT shall ensure weather conditions do not impose a risk to the operatives, or the operational rail way. The site specific risk assessment shall include:

- Weather conditions.
- Underfoot conditions.
- Safe system of work, i.e. harness, fall arrest equipment.
- Level of protection required.
- Possible interfaces with Network Rail.
- Any London Underground assets that may need protection.
- Other contractors, or other works in the vicinity.

For further guidance refer to:

- Task sheet 17 Access or work on steep embankments.

2.4.10 Overhead lines

When works have an interface with Network Rail, and the OLE a Site Specific Risk Assessment will be produced before any works commence. All relevant Works Package Plans, permits, task briefing sheets will also be in place before any works commence. All staff will be PTS trained, under the protection of a COSS.

Refer to Task briefing sheet 12 – Working near overhead power lines.

2.4.11 Contaminated land

London Underground will inform Cleshar of areas with contaminated land. A specific Method Statement, and Site Specific Risk Assessment will be prepared for work in such areas and briefed to all the operatives.

2.4.12 Pests and weeds

All pest and weed management will be carried out as per Task sheet, risk assessment and relevant COSHH assessment by competent operatives. Areas treated with chemicals will be cordoned off where necessary and warning signs posted. Cleshar will implement provisions to prevent, as reasonably practicable, the migration of pests from site. All operatives will be made aware of the presence of rats, wasp nests, snakes, etc. during site briefing. Operatives will also be made aware of health and safety hazards associated with wildlife in tool box talks and inductions.

Hazards include:

- Bee/wasp stings,
- Leptospirosis,
- Snake bites and
- Diseases from pigeon droppings

2.4.13 LU Operations, and sites where violence towards site staff is known.

When operatives are required to carry out works in areas where violence towards staff is known, the following shall be considered.

- Informing British Transport Police, Metropolitan Police of planned works.
- London Underground Management, and Senior Cleshar Management to be made aware of the works, the time, location, duration of works.
- All operatives to be briefed to stay in groups of 2, and 3 and be advised to commute to, and from the worksite in groups.
- Nearest Police station, and other emergency services to be briefed to the operatives before any works commence.
- If operatives are confronted, or challenged they will be briefed to remain calm, talk softly, go to a place of safety, not to respond with violence.
- If operatives see any suspicious activity, they are to report it to the British Transport Police, Metropolitan Police.
- Works to be planned for daylight hours, where practicable.

2.5 Protection

All Cleshar gangs shall have the correct protection in place before any works commence. A trained, and competent PWT-EH/TH/Depot will provide protection for the works depending on when and where the works is taking place.

Traffic hours
The majority of the works is envisioned to take place during Traffic Hours. A PWT-TH will be appointed to each of the Utility gangs working on this contract. The PWT-TH will follow all London Underground rule books and procedures when executing their duties. The PWT-TH will book on with the Line Controller before any works commence.

Engineering hours
When working engineering hours a Protecting Workers on Track Engineering Hours (PWT-EH) shall provide protection to all operatives who required to carry out works. The PWT-EH will follow all London Undergrounds rule books and procedures.

Depot working
When working in a depot a Protecting Workers on Track Depot (PWT-Depot) shall provide protection to all operatives who required to carry out works. The PWT-Depot will follow all London Undergrounds rule books and procedures, and the rules for the depot they are working in.

2.6 Isolations

In the event the worksite is shared with Network Rail, or within a close proximity to Network Rail OLE, an isolation is required.

2.7 Communication and Contact Details

If operatives need to speak to their Managers or Health and Safety department they can call them at any time mobile phones, or through head office. If operatives need to reach anyone outside normal working hours, or in the event of an emergency Cleshar have a 24 hour HUB which is manned at all times. By using this the on-call operations Manager, or Health and Safety representative will be contacted.

The following contact details will be used for these works;

Company	Position	Responsible Person	Contact no.
TfL	**Project Manager**	Joel Baker	TBA
TfL	**H&S Advisor**	Richard Brooks	TBA
Cleshar	**Project Manager**	[redacted]	[redacted]
Cleshar	**H&S Advisor**	[redacted]	[redacted]
Cleshar	**Vegetation Manager**	[redacted]	[redacted]
Cleshar	**Vegetation Manager**	[redacted]	[redacted]
Cleshar	**Tree Inspector**	[redacted]	[redacted]

Emergency contact details:

Emergency Contacts		External number
Fire – Police - Ambulance		999
BT Police Control		0800 40 50 40
Rail Accident Investigation Board	Death or Serious Injury	01332 253 333
ORR	Fatal or Major injuries only Out of hours:	Monday to Friday, from 09:00 to 17:30 hrs - Telephone: **020 7282 3910**
		Outside these hours, weekends and public holidays please call the Department for Transport (DfT) Duty Officer on: **020 7944 5445**
Gas – Transco Emergency		0800 111 999
Electricity Emergency Line		0800 375 675
Local Water Company Emergency Line	Thames Water	0800 980 8800
Cleshar HUB	24hr 7 days a week	020 8733 8552
Environmental Agency	Emergency Line	0800 807 060
Various London hospitals		999
Network Rail Emergencies	24 hour Helpline	0345 711 4141

2.8 Emergency Arrangements

In the event of an emergency, the procedure as described in the project Emergency Plan will be followed.

Emergency procedures for first aid and fire evacuation will be briefed to all operatives prior to work commencing.

- The SPC/PWT will ensure that all operatives are aware of the assembly point, First Aider and nearest hospital.
- The SPC/PWT will ensure that the First aider is aware of the site address/location and access points in order to direct the emergency services.
- In the event of emergency the SPC/PWT will contact Station Supervisor to request emergency services (if working within the station location) or call 999.

The worksite may and will vary from shift to shift. Before each shift commences, the Person in Charge will brief the operatives on the closest Accident and Emergency unit, with the agreed staff assembly point should emergency services need to be called.

In the event of an Aerial rescue, operatives are to refer to Task sheet 32 Aerial rescue.
There will be a fully stocked first aid kit and a qualified Emergency First Aider assigned to each gang. The First Aider will be introduced to the work group during induction. In the event of an incident / accident the First Aider must administer first aid and report to the nearest station for assistance, if required. All accidents resulting in injuries will be reported immediately to the Project Manager, Cleshar HSQE department and as per project reporting procedures.

2.8.1 Fire

A portable fire point will be set up adjacent to the work area. The first aid kit will normally be kept with the fire point, the capacity of the firefighting equipment may change if the risk assessment stipulates.

Fire prevention:

The following activities will be carried on site;

- A re-fuelling point will be allocated, with drip tray, and funnel. This will be at least 5 metres away from any hot works.
- All plant and equipment will be fuelled at the depot before works start.
- Ensuring the fire point is easily accessible before any hot works commence.
- All hot works activities are to be included on the On-Site Risk Assessment, and pre-works briefing.

The standard fire point will consist of:

- **2x AFFF (9ltr)**
- **1x CO2 (5kg)**
- **1x Fire Blanket**

No smoking or vaping is allowed on London Underground Limited premises.

Hot works will be managed in accordance with a London Underground issued Hot Work permit and overseen by a Fire Watch Person. The London Underground trained Fire Watch Person will be present on site during the hot works and for a minimum of 1 hour after completion of works. The Fire Watch Person will not be engaged in activities that would prevent them from carrying out their Fire Watch duties.

2.9 Welfare

Welfare will be provided for each location and assessed on each site, normally agreement to share station's/Depot welfare facilities. A Welfare van can be provided for larger groups (e.g. during possessions) and remote locations as agreed between Cleshar and London Underground.

3 Briefing and Reporting

3.1 Briefing Arrangements

The SPC for the works will deliver a pre works briefing. The briefing will comprise of;

- Safe System of Work.
- Method Statement, and Risk Assessment, any COSHH Assessments that would be needed for that shift.
- Roles and responsibilities, i.e. who will be doing what task.
- Plant, equipment and tools needed for the shift.
- PPE requirements.
- Daily working activities.
- Any site specific hazards and mitigation measures.

When works are being carried out during Traffic Hours, and a PWT-TH is required the operatives will receive a protection briefing from the PWT-TH. The protection briefing will consist of;

- Train movements
- Protections arrangements, if a look out or hand signalman is being used
- Direction of traffic.
- The emergency arrangements, nearest hospital, staff assembly point.
- Site specific hazards, e.g. slipping and tripping hazards.
- The Person in Charge.
- The identity of the First Aider.

When works are being carried out during Engineering Hours, and a PWT-EH is required the operatives will receive a protection briefing from the PWT-EH. The protection briefing will consist of;

- Inform and show the SPC that the traction current has been discharged.
- The call back time for the shift.
- The protections limits and the worksite for the shift.
- The emergency arrangements - nearest hospital, staff assembly point.
- Site specific hazards, e.g. slipping and tripping hazards.
- The Person in Charge of works.
- The identity of the First Aider.

3.2 Reporting Accidents and Incidents

All accidents, incidents, near misses must be notified to the SPC/PWT and who will carry out an immediate investigation.

All accidents, incidents, near misses must be reported to the incident report operator on [redacted] (auto [redacted]) or [redacted] as soon as possible but by the end of shift at the latest and also reported to Customer Care Center [redacted] and to Duty Supervisor informed on site.

- LUL Incident Line [redacted]
- Cleshar HUB [redacted]

Environmental incidents must also be reported in the same manner as Health and Safety incidents.

If serious accident, incident or injury all operatives to remain on site until dismissed by authorised person (Cleshar Manager, London Underground Manager or Police), unless in need of medical treatment.

RIDDOR reports must be submitted by Cleshar H&S department unless reports are submitted by the client or subcontractors

4 Appendix

On Site Risk Assessment Form

B - Task briefing sheets (incorporating risk assessments)

- Task briefing sheet 01- Access, site set up
- Task briefing sheet 02- Work on or near the track
- Task briefing sheet 03- Site work (Biological hazards)
- Task briefing sheet 04- Site hazards (Exposure to weather)
- Task briefing sheet 05- Manual Handling
- Task briefing sheet 06- Use of hand tools
- Task briefing sheet 07- Use of power tools
- Task briefing sheet 08- Driving and transportation
- Task briefing sheet 11- Use of fuel powered equipment and refuelling
- Task briefing sheet 12- Working near overhead power cables
- Task briefing sheet 13- Ground disturbance, and excavation
- Task briefing sheet 16- Use of a ladder or step ladder
- Task briefing sheet 17- Access or work on steep slopes, and embankments
- Task briefing sheet 20- Oak Processionary moth
- Task briefing sheet 21- Tree and shrub planting
- Task briefing sheet 22- Use of a chainsaw
- Task briefing sheet 24- Use of chipping machines
- Task briefing sheet 26- Use of mini transporter
- Task briefing sheet 27- Use of a mini track trolley task sheet

C - COSHH Assessments

- Garlon Ultra Herbicide
- Hair spray
- Pesticide roundup
- STHIL chain oil
- Generic nuisance dust
- Japanese knotweed clearing
- STHIL hedge trimmer grease
- Glyphosate
- Oak processionary moth
- STHIL strimmer grease
- Dimlin Flo

Task Description/Methodology

Before Patrol

- Day before work contact Vegetation Manager for start location.
- Travel to start location by tube using travel card provided.
- Leave station through barriers.
- Access trackside through nearest S1 gate.
- Call Line Controller wait for tone then dial correct 3 digit number and inform the Line Controller of:
  - Name
  - Company
  - Contact Number
  - Works Taking Place
  - Location

Patrol

Check and note the following conditions:

- Condition of tree base (rot, decay, fungi, cracks, splits etc)
- Condition of trunk of tree (as above)
- Condition of the trees crown (deadwood, crown dieback, decay, splits, storm damage, etc)
- Any obstructed signals and sigh lines
- Issues with public footpaths, right of ways, cycle tracks, bridle paths, roads, etc
- Natural lean of the tree, etc
- Where tree identified for felling or pruning note any signs of fauna such as birds' nests, bats and badgers.
- Make note of all incidences of the above in notebooks to complete PM5's.

Monthly Report

The tree inspector will produce a monthly report to identify priorities for actions. Job tickets are issued to the vegetation gangs identifying the scope and urgency of works.

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Steep slopes and embankments , Electricity and trains	Slips, trips and falls, electrocution, impact with train,	M
Lone working	Unable to get prompt help if involved in an accident, injury or ill health Attack by people or animals	M

People at Risk:	Operatives ☒	Other contractors ☐	Visitors to site ☐	Public ☐

Control Measures	Post control Risk Rating
The inspector to be competent and experienced. All mandatory PPE to be worn. The easiest access to site to be selected. Weather conditions to be considered when accessing steep embankments and slopes. Site Specific Risk Assessment to be carried out.	L
• Inspector to be track competent trained. • Inspector to call the Line Controller before accessing the track areas. (as procedure above) **Lone Working procedure to be enforced:** ➢ Inspector to report on daily basis to the Project Manager: (Marty Mulligan 07973 512 547) ➢ Prior to access to site (confirm access location). ➢ At 13:00 (1 pm) confirm location and progress. ➢ At 16:00 (4 pm) confirm finish location. ➢ Frequency of calls to be increased where necessary due to increased risks of the location, weather conditions or other circumstances. ➢ Send e-mail to manager to inform of start and finish location upon completion. ➢ If the manager have not received a call from an inspector at the specified time he will contact him directly no later than 13:15 (16:15) leaving message if necessary. ➢ If unable to establish contact by 13:45 (16:45) a search party will be sent to the last	L

known location. ➢ Emergency services and the line controller will be informed where necessary. • Each inspector to carry First Aid kit and will be First Aid trained. • Inspector to be issued with company mobile phone and ensure that phone is fully charged before going to site. • Inspector to be deemed in good health and compliant with D&A procedure. Any medical conditions or medication will be reported to the project manager who will assess fitness work. (SPC/PWT) to contact occupational health advisor if necessary to make decision).	

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374
Reviewed issue 5	30/05/2019	Approved	[redacted]

Task Description/Methodology

Before commencing felling operations, a full site inspection and the Arboriculturist Tree Work Assessment form to be completed. This must be carried out taking into account the following considerations:

- Condition of tree base (rot, decay, fungi, cracks, splits, soil mounding , cracks near root flare, ivy etc)
- Condition of trunk of tree (rot, decay, fungi, cracks, splits presence of ivy ,loose bark, swelling or depression)
- Condition of the trees crown (deadwood, crown dieback, decay, splits, storm damage, stinging insects, animals , hidden electrical conductors etc)
- Weather conditions especially wind, ice, snow, wet limbs
- Location of power lines
- Location of underground utilities
- Public footpaths, right of ways, cycle tracks, bridle paths, roads, etc
- Has the use of a crane or MEWP been considered already for the hierarchy of controls against the Working at Heights regulations (WAH)?
- Natural lean of the tree, etc
- Direction tree is to be felled
- Gradients and steep inclines, working on embankments.

- A safe method of operation must be agreed to ensure that a safe working distance can be maintained between workers **(at least 2 tree lengths)** and between workers and machinery (outside the risk zone of the machines being used).
- If this is not possible due to the layout of the tree to the track or boundary, a competent arboricultural operative must carry out a Site Specific Risk Assessment and set up a safe system of work prior to felling.
- When felling adjacent to overhead electric lines, a clearance of not less than twice the height of the tree must be maintained. Felling should be directed away from the electric line. Where felling is within two tree lengths the advice of the owner of the overhead electric lines must be sought. (Refer to Task Sheet No 2 & 12).
- Direction of fall must be decided and suitable escape route clear of obstructions selected prior to felling.
- It must be ensured that no other person is within a distance equal to twice the length of the tree or directly below on steep slopes.
- Audible warning to be issued to those in the vicinity of the operations.
- Always make a sink. This allows the tree to be felled on a hinge that controls the rate and direction of fall.
- Arising from pruning operations will be lowered to ground level in a controlled manner or allowed to free fall where safe to do so, where ground staff will process into manageable sizes.
- Brushwood will then be chipped onto the ground around the tree bases and spread to an even thickness or chipped into the rear of the vehicle. Cord-wood will then be stacked as habitat piles between the trees or removed as agreed.
- Trees to be felled will be section felled to ground level or clear felled as appropriate with arising processed as above.
- Once any felling cut has been started on a tree, the tree must not be left standing. Do not start a new operation until the tree has fallen.
- The stems cut up in to manageable pieces and loaded onto a lorry by hand.
- Upon completion the area will be made safe. Warning hazards tape and signage to be erected where necessary.

Do not:

- Fell the supporting tree in an attempt to free the hung-up tree
- Climb a hung-up tree
- Fell another tree across the hung-up tree in an attempt to dislodge it
- Walk or work under a hung-up tree
- Cut pieces off the butt end of a hung-up tree in an attempt to dislodge it

- If a chainsaw is to be used to fell a tree, only rear handled chainsaws are to be used. (refer to Use of Chainsaw Task Sheet)
-

Hazards associated with the task	Consequences	Pre-

		controls Risk Rating
Uncontrolled or unintentional falls of trees, parts of trees or adjacent trees or structures Electrical power lines Obstructions Steep gradients Injuries caused by tools and equipment Falls from height	Strike by falling tree or tree part resulting in major injuries Major injuries, breaks, head injuries Musculoskeletal injuries Electrocution Major cuts	**H**

People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☒

Control Measures	**Post control Risk Rating**
• All operatives involved in the activity to be trained and competent. (Recognised arboricultural qualification). • Briefing and discussion of work plan before commencing the job. • Experienced operative to carry out a Site Specific Risk Assessment of the site and tree conditions. Safe system of work to be established, and communicated to all on site. • Each member of the group will have clear duties assigned to them, and will be vigilant of activities of the others in the group. Activities will be coordinated by the SPC/PWT. • Communication between members of the workgroup will be established. Clear warning signals known. • Work site to be segregated where possible, warning signs displayed on all reasonably foreseeable approaches to the work site to warn others and prevent unauthorised access. • Only recognised felling, delimbing/snedding, cross cutting and stacking techniques are to be carried out, as per training received. • All operatives to follow safe techniques for climbing, safety harness to be used. Free climbing is not permitted. (Refer to Tree Climbing Task Sheet). • Suitable escape routes to be set up and cleared of all debris. • Problems that could affect performance must be reported to management. • While climbing the operative will be tied off at all times. NO free climbing will be permitted. (Refer to Tree Climbing Task Sheet) • Aerial rescue will be implemented. • All equipment used will be suitable for purpose and maintained (Refer to equipment Task Sheets)	**M**

PPE (Minimum Requirement) Refer to Tree Climbing and the use of Chainsaw/Equipment Task Sheets

Reviewed issue 6	30/05/2019	Approved	[redacted]

Task Description/Methodology
• **Use of Chainsaw (top handled)** **Top - handled saws are only suitable for use off the ground** These saws have the rear handle over the top of the engine. They are only suitable for use off the ground by trained competent arborists. They are not designed for use on the ground or as a substitute for small, rear-handled chainsaws. • **Use of Chainsaw (rear handled)** **Rear handled saws must be used when working on the ground** These have the rear handle projecting from the back of the saw. They are designed to always be gripped with both hands, with the right hand on the rear handle. Select chainsaws which will be suitable for the intended work. It may be necessary to have a range of saws with different guide bar lengths available. As a general rule, the operative to choose a chainsaw with the shortest guide bar suitable for the work. Training in how to use chainsaws will identify the type and size of saw most suited to a range of operations. Protective sleeves are a mandatory requirement at all times when using the chainsaw at ground level. **Use of a chainsaw in a tree** When the Arboriculturist has climbed the tree and is position he must adhere to the following. When in position and ready to dismantle/ cut a limb the Arboriculturist will tie one end of the strop to the limb which is being cut, the arboriculturist will hold the strop with one hand while making his cuts with the other hand holding the limb which is being cut. This will enable the Arb to keep his arm away from the chainsaw. Before using the chainsaw the operative to carry out pre-use check to ensure that: • All nuts and screws are tight • The chain is correctly tensioned • The throttle cannot be squeezed unless the throttle lock-out is pressed • The correct PPE is available and worn When starting the engine operator should: • Place the saw on level ground • Secure the saw firmly • Set controls as recommended by manufacturer • Pull the start cord firmly Once the saw has started the operators should rev the throttle to warm up the engine and check: • The chain stops moving when the engine rev return to idle. • Chain break is effective when applied at maximum revs • The engine continues to run when the saw is turned through 90^0 in any direction. • The stop switch stops works. • Lubrication to the guide bar and chain is working correctly. Operative to repeat these checks throughout the day in regular intervals. **LONE WORKING IS NOT PERMITTED WHEN USING CHAINSAW**

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Contact with moving parts, kick back, pendulum impact	Cuts and abrasion resulting in major injuries Musculoskeletal injuries	**H**
Noise and vibration	Hearing loss, Vibration White Finger and other carpal tunnel syndrome.	**M**

Vapours from refuelling , fumes, contact with lubricants	ill health form fume inhalation, skin conditions, fire and explosion	**M**
Work at height (climbing trees) Falling tree parts on persons Falling tree parts on track	Falls from height, falls of equipment or materials from height resulting in head injuries/derailment.	**H**

People at Risk:	**Operatives** ☒	**Other contractors** ☐	**Visitors to site** ☒	**Public** ☐

Control Measures	**Post control Risk Rating**
• All operative operating chainsaw will be trained in its use and will be deemed competent by the manager. • All equipment will be maintained as per manufacturer's instructions and specifications. • Pre-use checks to be carried out by the users. • Works to be planned so that at least 5 meter distance is created between operatives using chainsaw. • Warning signs to be erected on all reasonable approaches to the worksite. • Compliance with safety training and instructions. • Strop to be used at all times when chain saw is in use when working in trees. • The operative is not to have his arm on the branch he is cutting where reasonably practicle. • Protective PPE is to be worn at all times when the chainsaw is operational. • The protective sleeves are mandatory at all times when operatives are using a chainsaw at ground level. • When the Arboriculturist is using the chainsaw they are to wear the chainsaw jackets when at ground level. When the Arb is using the chainsaw in a tree, the wearing of a chainsaw jacket is to be Risk Assessed against weather and environmental conditions. If it's considered the chainsaw jacket may introduce additional risk due to weather conditions then the protective sleeves must be worn.	**M**
• Lowest vibration equipment to be selected/ordered from hirer • Equipment to be regularly maintained • Rest from vibration equipment to be taken, staff rotation where possible • Operatives to be trained on the risks of exposure to vibration • Health surveillance to be carried out • Exposure Action and limit values to be complied with • Monitoring of exposure to vibration • Hearing protection to be worn when using chainsaw • Hearing protection zones to be established	**L**

Priority when choosing equipment	Equipment	Vibration magnitudes (m/s^2)	Exposure Action Value (EAV)	Exposure Limit Value (ELV)
1	Chainsaw Stihl MS 361	6.3*	1 hour 16 minutes	5 hours 2 minutes
2	Chainsaw Stihl MS 260	6.6*	2 hour 9 minutes	4 hours 35 minutes
3	Chainsaw Stihl MS 660	7.4*	55 minutes	3 hours 40 minutes
4	Chainsaw Stihl MS 200T	7.8*	50 minutes	3 hours 17 minutes
5	Chainsaw Stihl MS 440	10.2	30 minutes	1 hour 55 minutes
6	Chainsaw Stihl MS 200	11.5*	23 minutes	1 hour 30 minutes
7	Telescopic chainsaw Stihl HT75	11.8*	22 minutes	1 hour 26 minutes
8	Stihl 200T	5.24	1 h 49 minutes	7 hours 17 minutes
9	Stihl MS 261	12.5	19 minutes	1 hour 17 minutes

• Refer to COSHH assessment • Refuelling to be carried out designated areas only. • Petrol equipment to be used in ventilated areas only. • Fire point set up in the vicinity	**L**
• Refer to tree climbing Task Sheet 15 for control measures whilst working at height (climbing trees). • Communication to be established with personnel on the ground, warnings to be issued before cutting. Head protection to be worn at all times. • PWT/Lookout to be in position and warn of oncoming trains. • System of work set up so that cut branches do not fall on the track. •	**L**

PPE (Minimum Requirement)

Safety Helmet or climbing helmet	EN 397	Eye Protection (mesh visor) or goggles	EN 1731 or EN 166
Hearing Protection	EN 352-1	Chainsaw trousers	EN 381-5
Chainsaw boots	EN 20345- BS EN 17249	Hi Visibility vest (t-shirts)	EN 471
Hand protection	EN 388	Chainsaw jacket	EN 381:11:2002
Protective sleeves	EN 381		
Reviewed issue 6	30/05/2019	Approved	[redacted]

Task Description/Methodology

General
A minimum of two people will be present during all tree climbing operations. One of the ground team must be available, competent and equipped to perform an aerial rescue without delay.

Ensure a designated and responsible person (PWT/SPC) knows the daily work program and agree with them a suitable contact procedure. Where reasonably practicable, use a two way radio or mobile phone and a pre-arranged call in system. This is particularly important for remote sites where a check on the operator's safety is important.

Before the rescue
As part of the Risk Assessment, the worksite and planned operation must be evaluated to establish the necessary emergency procedures for recovery and evacuation of casualties. All operators on site will have received adequate training, instruction and information and be trained in these procedures.
When an injured climber needs rescuing, ensure all possible precautions are taken to safeguard other members of the team and any other people entering, or approaching the worksite. If overhead cables are involved, do not approach the work area. Stop work, assess the situation and contact the relevant electricity company.

Ensure no unauthorised people are within the work are.

The casualty
The casualty's condition must be assessed. If necessary, call for the emergency services before starting the rescue, making sure you give appropriate information about the location of the site and any particular access problems. You will need to provide personal details about the casualty (names and any relevant medical history etc), as well as the approximate time of the accident, treatment given and any chemicals involved.

Rescue equipment
The following rescue equipment needs to be available at the worksite:

- A suitable First-aid kit (see INDG214M *First aid at work*:)
- A suitable climber's harness and associated equipment, e.g. ropes, strops, karabiners or any other equipment that the rescuer is familiar with to help their rescue technique
- Other items of equipment necessary for a rescuer to climb effectively, e.g. a ladder, climbing irons, ascenders or descenders.
- A sharp knife with a retractable blade for cutting ropes etc. There is a risk of recoil when cutting ropes under tension, or cutting the wrong rope, as well as cut injuries to the rescuer or casualty. Consider other techniques for removing a casualty from a tensioned line.

Send for any additional rescue equipment that becomes necessary but is not available at the rescue site. If appropriate, other people in the vicinity may be directed to provide help.

The rescue
Helping the casualty;

Reassure the casualty and encourage self-help whenever possible.

Select a rescue method that does not put the rescuer at risk and minimises the risk of further injury to the casualty.

Only trained operatives should use equipment such as mobile elevated work platforms and cranes for aerial tree rescue.

Climbing to the casualty
Select an efficient method of climbing the tree to reach the casualty as quick as possible.

If specialised climbing aids are available and rescue personnel are trained in their use, use them to speed up the access to the casualty.

Take account of hazards such as severed, broken or hanging branches, or the casualty's equipment, that may create risk.

Assess the tree(s) and select appropriate equipment to remove parts of the tree(s) that would impede the rescue operation. Other operators may do this if needed.

Use other personnel, if available, to prepare the equipment ready for the use in the tree(s).

Make the area as safe from immediate hazards as soon as possible.

Assess the casualty's condition and prioritise first-aid treatment.

In some cases especially those involving fracture, crush or possible spinal injury, only move the casualty under medical supervision (e.g. a paramedic or the ambulance service.

Descending with the casualty

The rescuer needs to maintain close contact with the casualty to monitor changes in condition and to calm and control them if necessary.

Rescuers should be properly anchored at all times to ensure their own safety throughout the rescue operation. Anchor points must be selected to ensure they are capable of taking the anticipated loads during the rescue.

The rescuer and casualty need to descend together in ease movement through the branches and to monitor the casualty's condition.

Densely branched trees may require alternative methods of rescue. Obstacles on the ground may dictate the most suitable method.

Completing the rescue

Continue to help the casualty under the direction of the paramedics until the casualty is transported from site.

Ensure the site is safe and secure before all personnel leave. Note the contact details of any witnesses. Where possible, take photographs of the site. Do not use any of the equipment involved in the incident until it has been thoroughly examined by a competent person.

Notify the management of the incident and record the occurrence in the accident book.

Report the incident to HSE in accordance with the requirements of the Reporting of injuries, diseases and dangerous Occurrences Regulations 2013 (RIDDOR).

Hazards associated with the task				**Consequences**	**Pre-controls Risk Rating**
Falls from height.				Major injuries, head injuries, musculoskeletal injuries.	**M**
People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒		**Public** ☒
Business as usual control measures					**Post control Risk Rating**
• All operatives involved in tree climbing to be physically fit, and experienced. • Operatives must not carry out their normal duties when they are fatigued. Operatives must inform Line Manager if they are too tired to climb. Line Managers are to monitor fatigue by monitoring the climbers work load, and shift patterns. • If operatives are taking any medication it is to be reported to their Line Manger as per the CCS-Group procedure. • Where possible, climbing duties to be shared between two operatives to reduce fatigue.					

- SPC to ensure the climbers have sufficient breaks when carrying out climbing duties, particularly in hot/cold weather conditions.
- All climbing equipment and harness to be clearly marked with EN, and BS numbers, and CE mark.
- All climbing equipment to be used as per manufactures instructions, and for the intended purpose. All components must be compatible.
- All personal fall protection must be put together by a competent person.
- Life span of equipment to be established as per manufactures instructions.
- Climbers to carry out daily pre-use inspections of all parts of fall protection equipment, and weekly recorded inspection.
- Thorough inspection of all parts of fall protection to carried out by a competent/ independent person every six months. Lowering, and rigging equipment to be inspected annually.
- Operatives to be familiar with all the parts of the fall protection equipment.
- Maintenance of equipment such as karabiners to be carried out by the user on a daily basis.
- Exclusion zones to be set up to prevent unauthorised access to tree works areas.

Mandatory, and task specific PPE to be worn at all times.

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Climbing helmet	BS EN 12492
Hi-visibility vest	EN 471	Gloves	EN 388 or 374
Harness	BS EN 813 and 358	Eye protection/ face shield	BS EN 1731 or EN 166
PPE when chainsaw is used			
Chainsaw trousers	EN381-5	Chainsaw boots	BS EN 20345, BS EN 17249
Hearing protection	BS EN 352	Chainsaw Jacket	BS EN381-11
Protective sleeves	EN 381		
Issue 2	30/05/2019	Approved	[redacted]

Vegetation Gangs: Generic Method Statement

Programme Project **Track Vegetation and Fencing Renewals**
Document reference **SSoW 01 Vegetation Gang**

In the event of an incident to ensure that the incident report is correctly routed, please fill in the box below:	
Responsible Area/Project	TBA
Location	Various locations
Area	Track and Lineside locations
Principal contractor	Cleshar

Safe System of Work

Vegetation Management

		Signature	Date
Prepared by	[redacted] Project Manager		
Reviewed by	[redacted] HSE Advisor		
Reviewed by	<Name> Client		
Distributed to	<Name>	Cleshar site files	
Distributed to	<Name>		

Docment History

Revision	Date	Summary of changes
Tender	26/05/19	Tender draft

CLESHAR

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1 Work Details

1.1 Description of Work

The works comprise of controlling vegetation in the following areas:

- Boundary Fences
- Cable runs & Cess areas
- Vegetation Envelope
- Drainage Vegetation
- Structural Vegetation
- Signals Vegetation
- End Buffers
- Ivy and other climbing plants in all areas of Trackside land that present a hazard
- Litter picking from Boundary Fence to Track Cess
- Inspection, emergency repair and maintenance of Fence Lines
- Depot & Siding Track Area Vegetation Control
- Viaduct, Sub-surface Culvert & Open Station Ground Track Areas Vegetation Control
- Inspection and removal of Oak Processionary Moth
- Staged identification, control and eradication of Japanese Knotweed
- Treatment and removal of Giant Hogweed

The SPC/PWT must assign the operatives to the tasks within the area to ensure a logical sequence of stripping and clearing operations to keep the build-up of vegetation to a minimum. Others within the gang will remove general rubbish in bags, which will be removed from site each day and disposed of via the skips at Cleshar's Head Office, unless otherwise directed by the London Underground representative.

1.1.1 Task briefing sheets

The below task briefing sheet describes the methodology, sequence of works for the task the gang has been assigned to undertake. Full Risk Assessment, and control measures are included within the task briefing sheets. These will be appended to the back of all Method Statements.

The following Task briefing sheets will be used for the works:

- Task briefing sheet 01- Access, site set up
- Task briefing sheet 02- Work on or near the track
- Task briefing sheet 03- Site work (Biological hazards)
- Task briefing sheet 04- Site hazards (Exposure to weather)
- Task briefing sheet 05- Manual Handling
- Task briefing sheet 06- Use of hand tools
- Task briefing sheet 07- Use of power tools
- Task briefing sheet 08- Driving and transportation
- Task briefing sheet 09- Tree inspections
- Task briefing sheet 10- Use of strimmer's and hedge cutters
- Task briefing sheet 11- Use of fuel powered equipment and refuelling
- Task briefing sheet 12- Working near overhead power cables
- Task briefing sheet 13- Ground disturbance, and excavation
- Task briefing sheet 16- Use of a ladder or step ladder
- Task briefing sheet 17- Access or work on steep slopes, and embankments

- Task briefing sheet 18- Japanese knotweed
- Task briefing sheet 19- Giant hogweed
- Task briefing sheet 21- Tree and shrub planting
- Task briefing sheet 22- Use of a chainsaw
- Task briefing sheet 23- Use of a Hand held blower
- Task briefing sheet 24- Use of chipping machines
- Task briefing sheet 25- Use of hedge cutters
- Task briefing sheet 26- Use of mini transporter
- Task briefing sheet 27- Use of a mini track trolley task sheet
- Task briefing sheet 28- Use of a hand held auger
- Task briefing sheet 29- Use of MEWP- machine for tree felling
- Task briefing sheet 30- Use of spraying pesticides and herbicides
- Task briefing sheet 31- Use of Emergency Railhead Cleaning Unit Petrol Driven

All activities carried out on the project shall be in accordance with the following standards and procedures;

- Construction (Design and Management) Regulations 2015
- LUL Rule books
- LUL Quality, Environmental, Safety and Health (QUENSH 18)
- BS 4428, 3998, 3882, 5837
- Industry standards as set up by CIRIA and Arboriculturalist Association
- Forestry Handbook rev6
- Personal Protective Equipment at Work Regulations 1992
- Provision and Use of Work Equipment Regulations 1998
- Work at Height Regulations 2005
- Management of Health and Safety at Work Regulations 1999
- The Working Time Regulation 1998
- Manual Handling Operations Regulations 1992The Control of Substances Hazardous to Health Regulations 2002
- Health and Safety (First-Aid) Regulations 1981
- Provision and Use of Work Equipment Regulations 1998 (PUWER 98)
- The Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)
- The Control of Noise at Work Regulations 2005
- The Control of Vibration at Work Regulations 2005
- Control of Asbestos Regulations 2012
- Workplace (Health, Safety and Welfare) Regulations 1992
- The Health and Safety (Safety Signs and Signals) Regulations 1996
- Waste (England and Wales) Regulations 2011
- HSG 38 Task lighting at Work
- HSG 47 Avoiding danger from underground services
- HSG EH44 Dust in the workplace
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)
- Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR)
- Regulatory Reform (Fire Safety) Order 2005
- Temporary works standard/ Regs 1062 and BS975

1.2 Duration of Works

This is part of the 2019 TfL Vegetation and Fencing contract from 2019-2022. This Method Statement will be reviewed annually.

1.3 Working Hours

The works are normally planned to take place Monday - Friday 07:30-16:00 (daylight). However due to high risks in certain areas of the track environment where traffic protection cannot take place, Engineering Hours or Possession work will be implemented.

1.4 Control of Activity Risks

Upon arriving at a new site the SPC/PWT must inspect the site and complete a Site Specific Vegetation Works Risk Assessment. If additional risks are identified as work proceeds, or the local Manager makes the SPC/PWT aware of an issue, this must also be recorded and control measures set out.
Any precautions that are required to protect the public or other parties passing through or around the site must be recorded on the Risk Assessment form.

If the risk is unusual or beyond the knowledge of the SPC/PWT to deal with the SPC/PWT must contact their Line Manager or HSQE department for advice before proceeding with the task in that area.

As part of the SPC/PWT site assessment a check must be made for any wildlife or signs of wildlife, such as bird's nests, wasp's nests, badgers sets, etc.; or any Non Native Invasive Species such as Japanese Knotweed or Oak Processionary Moth. Any identified must be included in the Specific Vegetation Works Risk Assessment. The client's representative must be informed and an exclusion zone set to ensure they are not disturbed. This must be documented on the form.

The form will identify the relevant Task Briefing Sheets for the works on that site.

Once the form is completed the SPC/PWT must brief his gang on the site and the specific control measures noted on the form and Task Briefing Sheet and all operatives must sign the form on the SPC's tablet.

The form must be held in the site file while the gang are on site and returned to the Projects Manager at the end of the works.

All operatives will be competent and trained in any activity they are tasked to undertake. Training records will be held on skills cards and kept on file at head office.

Any London Underground visitors, or staff, will receive a full briefing on the activities and control measures, before being permitted access to the worksite. The worksite will be set up in such a way, that the safe system of work will minimise risk, or minimise intrusion to any London Underground staff, or assets, or others who may be working in the area. If, at any point, the worksite is likely to become intrusive to others the SPC/PWT will attempt to reach an agreement with the third party, or London Underground, with the new safe system of work being documented on an On-Site Risk Assessment. When this cannot be agreed the SPC/PWT will contact their Line Manager, or the Cleshar Health and Safety department for further instructions.

1.4.1 Neighbours (e.g. Network Rail, nearby houses etc.)

Site surveys will be carried out prior any significant works to establish access to site, any interfaces with public i.e. private & business properties, bus/trams stops or areas/building/facilities where large number of public congregate.

Means of Control may include:

- Advance communication with neighbouring property owners/occupiers
- Letter drops
- Access negotiation and consultation
- Operative briefings and toolbox talks

Where works interface with Network Rail infrastructure, Cleshar will ensure that operatives are PTS trained and the relevant safe system of work in place, i.e. Network Rail approved Work Package Plans and Permits, COSS, ALO etc.

Additionally, as works proceed On–Site Risk Assessments will be used to assess new or changing situations. PWT/SPC's are trained on preparing On–Site Risk Assessments.

1.4.2 Working on 3rd Party vegetation or land

When works are planned on a third parties land a separate site specific Method Statement, and Site specific Risk Assessment shall be produced in agreement with the third parties land owner, or land owners representative. All works will be discussed in advance during planning meetings, conference calls, and other mediums of two way communications. When the risks from working on a third parties land are different from the normal risks, or considered unusual, additional training, site specific inductions, tool box talks, and selection of experienced and trained operatives will be deployed to complete the works. Regular site inspections will be carried out by Cleshar Management and the Health and Safety department.

1.4.3 The environment (e.g. nearby water courses)

Cleshar operatives will be briefed on ecological and other environmental issues relevant to their task and the location of the works. These are included in the risk assessment and can include issues such as sensitive receptors in the vicinity of the site, the presence of protected or invasive species, and protected habitats. The On–Site Risk Assessments and Task Methodology sheet will detail all environmental risks associated with water, ecology, contaminated land, noise, vibration and pollution.

In some cases, an ecological survey prior to any works will be required to confirm presence of high risk species, both protected and invasive, to ensure adequate control measures are in place prior to and during the works.

Also, where sensitive receptors such as residents, schools, care homes or similar, are in close proximity to the site and may be affected by noise and other nuisances, a noise assessment may be required prior the works to establish if noise mitigation is required.

Environmental incidents are reported and investigated in the same manner as safety incidents. Operatives shall report to their manager if they are unable to fulfil their duties as a result of discovering any ecological issues (e.g. presence of protected species, nesting birds and reptiles.).

1.4.4 Nesting season

All nesting sites will be recorded on a digitally secured spreadsheet, and will be included on the SPC/PWT's tablet. Before any works commence, the SPC/PWT will check to see if the worksite has any nests located there. The SPC/PWT will be briefed in identifying common species and will have an awareness of likely habitats of birds. Tool box talks will be delivered throughout the contract on nesting birds.

1.4.5 The operational railway (including infrastructure, services etc.)

Engineering Hours

When Engineering Hours works are required, risks to the operational railway and/or London Underground infrastructure will be assessed during the planning stage of the works. When working

Engineering Hours a PWT-EH will be appointed to protect the operatives. The PWT-EH will follow all London Underground rules, and will book on with the Track Access Controller as per London Underground rule books and procedures. The PWT-EH will test the traction current has been discharged with their Current Rail Indicator Device. Before permitting the operatives access to the operational railway, the PWT-EH will deliver a full briefing to the operatives on the protection arrangements for that shift.

Traffic Hours

When the works requires Traffic Hours to be worked, risks to the operational railway and/or London Underground infrastructure will be assessed during planning of the works. A PWT-TH will follow all London Underground rules, and will book on with the Line Controller prior to works commencing. Before the PWT-TH allows operatives access to the worksite, he will deliver a full briefing which will comprise of all protection arrangements for the shift.

Working in Depots

When works are carried out in Depots, all risks to the operational railway, the Depots and/or London Underground infrastructure will be assessed during planning of the works. A PWT- Depot will follow all London Underground, and Depot rules, and will book on with the Depot Duty Manager prior to works commencing. Before the PWT-Depot allows operatives access to the worksite, the PWT-Depot will deliver a full briefing which will comprise of all protection arrangements for the shift.

1.4.6 Use of lifting equipment and lifting operations

All equipment used to carry a load (such as climbing equipment or rigging equipment) will be fit for purpose. All equipment will be identifiable and inspected at regular intervals:

Type of inspection	What is inspected	Record keeping	Inspected by
Daily Inspection	All parts of fall protection equipment (harness, lanyards, ropes)	No written record required	User
Weekly Inspection	All parts of fall protection equipment (harness, lanyards, ropes	Written record required	User
Thorough inspection as per LOLER (6-monthly intervals)	All parts of fall protection equipment (equipment for carrying people)	Formal inspection record required	By a competent person
Thorough Inspection as per LOLER (12-monthly intervals)	All parts of fall protection equipment (rigging equipment etc)	Formal inspection record required	By a competent person

1.4.7 Use of portable tools

All portable equipment will be inspected by the operator prior to the use. Only trained and certified operatives will be permitted to use the tools. Site inspections will carried out, by a competent person will check all portable, and small hand tools are fit for purpose, are being used as intended

by trained and competent operatives. All equipment will be identifiable and inspected in regular intervals:

Tools	Power source	Test Record
Chainsaw(s)	2 stroke mix	3-monthly (tagged)
Pole saw	2 stroke mix	3-monthly (tagged)
Strimmer's	2 stroke mix	3-monthly (tagged)
Portable petrol generator	Petrol	3-monthly (tagged)

1.4.8 Mechanical plant

The table below will be used as part of the scope of works. All equipment will be tested and in date, and will have an attached service tag, informing the user of the next due service date. Only trained and certified operatives are permitted to operate any mechanical plant. An On–Site Risk Assessment will be produced to cover any risks operating any mechanical plant may produce under local conditions. Task sheets are available for:

- Task sheet 11 – Use of powered fuelled equipment and refuelling
- Task sheet 24 – Use of chipping machines
- Task sheet 25 - Use of a hedge cutter
- Task sheet 26 – Use of mini transporter

Tools	Power source	Test Record	Inspected by
Chipper	Diesel	Tagged or site file	User
Hedge cutters/trimmer	2 stroke mix	Tagged or site file	User
Portable generator	Diesel/petrol	Tagged or site file	User
Mini dumper	Diesel	Tagged or site file	User

1.4.9 Track mounted vehicles and plant

When the works require track mounted vehicles and plant a separate Task Methodology Sheet will be produced to control hazards that arise from the activity. When used the trolley will be in a serviceable condition clearly tagged and only be operated by suitably trained and competent operatives. The PWT-EH will inform TAC of the presence of Track Trolley on site. The use of the Track Trolley will be included on the On-site risk assessment, which will be complete before works commence.

The Track Trolley(s) will be fitted at all times with the full complement of safety devices including flashing lights. Pre-use checks will be carried out by the competent Track Trolley Controller.

NOTE: Track Trolleys are only to be used when traction current is switched off and protection arrangements are in place.

Track Trolleys will be used to minimise manual handling in areas where trackside access is required. Preference will be given to the use of Split Link trolleys to reduce the amount of manual handling of the Track Trolley itself.

There will be a sufficient number of staff to carry each part to ensure that no-one is overstretched and no damage occurs whilst walking through stations (edges may be taped).

Track Trolleys will only be used in Engineering Hours and may only be placed on the track after the PWT-EH has confirmed that traction current has been discharged.

When traction current has been discharged each section of the trolley will be passed down to the track team from station platform and assembled by track trolley operators who are familiar with the type of Track Trolley used. The platform edges shall be protected with plywood or rubber mats when carrying out this task.

Plant, tools, equipment and materials will then be transported to the Track Trolley and loaded on. The load must not exceed the SWL of the Track Trolley.

Riding on a Track Trolley is prohibited.

Track Trolleys will be under the control of trained Track Trolley operators. The Track Trolley operator will need to be type specific trained.

Additional task lighting will be provided to illuminate the track ahead, where required. This will allow any hazards such as spare rails or missing covers to be seen, and help prevent slips, trips or falls.

At the start of the working shift, the PWT-EH must inform the appropriate signaller of the requirement to scotch and clip points. On completion of the working shift the PWT-EH must confirm to the appropriate signaller that all scotches and clips have been removed.

Extra care must be taken when traversing points and crossing work. Before passing over points you must:

- Make sure the Track Trolley is stationary.
- Place scotches and clips in position before allowing track trolley to proceed.

For further guidance on use of a Track Trolley refer to Task sheet 27 - Use of a Track Trolley.

1.4.10 Hazardous materials

The following will be implemented when using hazardous substances;

- A COSHH Assessment must be requested through HSQE, and be available on site before works commence.
- Chemicals and substances will not be stored on site unless specifically listed on the storage licence and agreed with the Landlord.
- All substances will be used and stored as per manufacturer's instructions and guidance and the COSHH Assessments.
- The necessary PPE must be worn in accordance with product label and COSHH assessments, i.e. checks are to be made on mask filters or face shields/goggles when carrying out dilution or pouring activities.
- All mixing/diluting/equipment filling must be done on drip trays to prevent environmental contamination. A check is to be made against the COSHH assessment for any special PPE requirements.

- All containers must be labelled, transported and stored according to manufacturer's instructions.
- Operatives using substances must understand the hazards of the chemicals or substances used.
- All spillages must be contained immediately; a spill kit must be available on site when using chemicals or substances.
- Minimising risk to the user and others in the area must be ensured at all times. This will be carried out via adequate signage and exclusion zones, where necessary.
- Material and equipment must be positioned and handled so that it cannot fall, slip, roll or be blown onto the track, railway equipment, public highway, platforms or walkways.

The following products will be used as part of the scope of works. If any other product or substance is required, a COSHH assessment shall be provided by the HSQE department before the product or substance is to be used on site.

Material to be used	Hazardous	COSHH Assessment
Glyphosate	**YES**	**Yes in Appendices**
Petrol	**YES**	**Yes in Appendices**
Diesel	**YES**	**Yes in Appendices**
STIHL chain oil	**YES**	**Yes in Appendices**
STHIL Hedge trimmer grease	**YES**	**Yes in Appendices**
Roundup pro Herbicide	**YES**	**Yes in Appendices**
Japanese knotweed clearing	**YES**	**Yes in Appendices**
Chikara Herbicide	**YES**	**Yes in Appendices**
Garlon Ultra –Herbicide	**YES**	**Yes in Appendices**
STHIL strimmer grease	**YES**	**Yes in Appendices**
Ecoplug Max	**YES**	**Yes in Appendices**
Leptospirosis	**YES**	**Yes in Appendices**
Generic nuisance dust	**YES**	**Yes in Appendices**

1.4.11Temporary structures and falseworks

If temporary structure is required, a specific Method Statement, and Risk Assessment will be prepared to cover the additional works.

1.4.12 Work at height

- Work at heights will be avoided, where practicable.
- All works must be planned and organised, including survey for overhead power lines and distances; tree conditions, including potential weakness caused by decay and the presence of birds' nests etc.
- On-Site Risk Assessment will be carried out to identify any additional hazards.
- The On-Site Risk Assessment will be briefed to all involved in the works.

Ladders

Ladders – must be used for access/egress only, or as an exception only for works of a short duration (5 to 10 min) when other access equipment is not suitable. Priority must be given to podiums, towers, access platforms etc.

Only industrial (130kg) class 1 ladders/stepladders conforming to BS EN 131 must be used.

The following factors must be considered when inspecting and using ladders on site:

- Stiles are not damaged, warped or buckled
- No rungs are missing
- All treads are clean
- All secure stepladder locking devices are in place and working, when extended
- Ensure ladders (both feet) are resting on firm and level surfaces
- Ensure that step ladders are fully extended
- Ensure ladders are angled outwards to avoid slipping (*Rule of thumb – "one out for every four up")*
- Where a ladder cannot be fixed ensure a second person foots the ladder whilst in use.
- Step ladders to be footed at all time whilst in use.
- If a ladder is used as regular access/egress it must be secured and not footed

For further guidance when working at height please refer to

- Task sheet 15 – Tree climbing
- Task sheet 16 – Use of ladders and step ladders

1.4.13 Excavation

When excavating works are required Task briefing sheet 13- Ground disturbance and excavation is to be followed for the management of the works.

1.4.14 Access/egress

When an activity compromises safe access and/or egress to site, an On-Site Risk Assessment will be produced to safely assess how all operatives, plant and machinery can safely access the worksite. No work will commence until the alternative safe access has been established.

If necessary works will be postponed to ensure that access / egress conditions are such that they do not pose a risk to safety of those accessing the worksite.

All operatives will receive a briefing on the On-Site Risk Assessment, regarding safe access/egress.
The SPC/PWT will contact their Line Manager/Health and Safety department for further advice, as necessary.

For further guidance refer to:

- Task briefing sheet 01- Access, site set up.

1.4.15 Transportation

Transportation will be via small vans or flatbed 7.5 tonne vehicles. It must be ensured, by the Cleshar SPC/PWT, that all deliveries are co-ordinated and all vehicles are parked in a position where they present no additional risks to both road users and passers-by.

When vehicles are off loaded, a supervised area will be marked out by cones or barriers to safeguard the interface between the work force and passers-by.

For works that require obstruction of roads a formal traffic management plan will be prepared and road closures organised.

For further guidance on driving and transportation please refer to:

- Task sheet 08 – Driving and transportation

1.4.16 Noise

Cleshar routinely measure noise levels from the most commonly used tools to evaluate the most appropriate control measures and to select the least noise polluting tools. The following control measures shall be followed when using the listed tools below.

Potentially Noisy Operation	Means of Control
Chainsaws, STIHL Blower, Hedge Trimmer, Strimmer, chipper, generator	• All works will be carried out using well-maintained equipment. SPC/PWT to assess noise levels and introduce local controls i.e. acoustic screens if required. • Hearing protection will be worn where indicated by Risk assessment. • Access to worksite will be limited to those involved in the works during high levels of noise. • Battery powered tools to be selected where reasonably practicable. • Hearing protection zones will be established and hearing protection use enforced, where the noise level could reach 85 dB (A) • Hearing protection will be issued to all operatives using power tools or work in vicinity. • Lower noise generating equipment will be selected, where practicable. • Ensuring worksite deliveries are managed correctly and well-disciplined to reduce noise at all times. • Where deliveries can be done during the day this option must be utilised, whenever practicable. • The SPC/PWT must ensure, where practicable, that all noisy plant is kept as far away from residential properties as possible. • Extra care is taken to keep all noise to a minimum at night with the vicinity of the local residents in mind. • In agreement with London Underground, Cleshar will establish contact with local residents during prolonged noisy works in a particular location. • A Section 61 notice will be applied for, if necessary

1.4.17 Vibration

All operatives shall be made aware of the risks of a prolonged exposure to vibration. Operatives will be made aware of the symptoms of white finger, carpel tunnel syndrome and all other Hand Arm Vibration related injuries. It is not envisaged that the trigger time the operatives may be exposed to on any normal shift may cause Hand Arm Vibration exposure risk.

Potential High Vibration	Means of Control

Chainsaws, STIHL Blower, Hedge Trimmer, Strimmer	• The equipment must be tagged, tested and well maintained. • Lower vibration equipment to be selected, where practical. • User maintenance of equipment to be implemented. • The SPC/PWT must ensure that operatives take regular breaks throughout shifts and carry out non-HAV based tasks to minimise the risk of vibration white finger. • Where possible rotation of operators will be implemented • Periodic monitoring of exposure to vibration will be carried out to ensure the ELV is not exceeded. • Operatives will be briefed on the consequences of exposure to vibration. • Operatives will be briefed to keep warm and dry hands when working in winter, i.e. wearing gloves. • HAVI monitors & HAV Control Handbooks are to be used to monitor exposure levels of operators using vibrating equipment. Monitoring is to be carried out on a periodic basis or as per CCS HSQE instruction. • When operatives are at ground level chainsaw jackets/sleeves must be worn. • When operatives are using a chainsaw in a tree the use of a chainsaw jacket is to be Risk Assessed against physical exertion and the weather conditions. When it is not reasonably practical to wear a chainsaw jacket, then the protective chainsaw sleeves are to be worn. The period of usage of vibrating equipment must be reduced when: • Operative has tendency to suffer from poor circulation (symptoms include: frequently cold fingers and tingling) • The outside temperature is very low.

1.4.18 Dust and air quality

The following schedule identifies the plant or operations that emit pollution or dust with the practical means of minimising or reducing the dust and emissions:

Plant/Operations	Means of reducing emissions or dust
All fuel powered tools/equipment	• Equipment to be properly maintained • Equipment to be used according to the manufacturer's instructions • Only fuel that is specified by the manufacturer to be used • All generators to be positioned away from works and residential properties, where practicable. • Generators must be self bunded.

Plant/Operations	Means of reducing emissions or dust
Disturbing ballast/ground Handling waste material	• Area to be inspected before works commence to identify for potential locations where dust may be a problem • Suitable locations to be identified for stockpiling debris, prior to removal from site. • Areas Damped down where dust is raised, especially in very dry conditions • Skips covered where used, for removal of debris

1.4.18 Housekeeping

Before works commence the operatives will receive a pre-works briefing from the SPC/PWT. Part of the briefing will comprise housekeeping arrangements. The SPC/PWT will brief the operatives to maintain a high level of housekeeping. If there is an extensive build-up of waste during the works, the SPC/PWT will stop works, and instruct the gang to clear any waste before recommencing. The access and egress points will be kept clear at all times. The worksite will be left clear and tidy at the end of every shift. Any natural waste accumulated will be put into habitation piles. All other waste will be disposed of via Cleshars skips.

1.4.19 Electricity

When Cleshar operatives are working adjacent to Network Rail sites, there may be an interface with overheard electrified cables. If this circumstance should arise, a separate Method Statement and Risk Assessment shall be produced. Any other interfaces encountered with electrical assets on site will have a separate Method Statement, and On Site Risk Assessment. The following task sheet can be used for further guidance:

- Task sheet 12 – Working near overhead power lines.

Traction current:

When operatives are required to work in areas where traction current is live, the first option will always be to carry out the works during Engineering Hours, when traction current can be fully discharged under the protection of a PWT-EH. It is not feasible for the traction current to be discharged, works will take place during Traffic Hours under the protection of a PWT-TH.

When working in Depots the traction current will always be considered as live. Only operatives who Basic Track Awareness trained, and have received the depot induction are permitted to work there, under the protection of a PWT-D.

- **Cables**

Where operatives are working around cables the cables will be protected and the operatives will use hand saws only (No Chainsaws). All cables, and other assets will be risk assessed before works commence.

1.4.20 Asbestos

During works where there is potential of disturbance of structures the project manager will request Asbestos report F3333 from the Client Hazardous Material Unit (HMU)

No works will be undertaken by Cleshar that may lead to disturbing asbestos or other unknown materials.

In the event of discovery of asbestos, ACM or suspected asbestos:

- Do not disturb.
- Stop work immediately
- Clear the area of personnel, tools and equipment

- Inform other parties in the vicinity
- Evacuate the area
- Call the HMU reporting Line [redacted]
- Call the Cleshar Health and Safety department

1.4.21 Fly-tipping

Any worksite which has fly-tipped waste, that may cause risk to the work site, the operatives, or the working activity, then the operatives must

- Stop works, and plan other works if feasible.
- Call their Line Manager/ Health and Safety department for further instructions.
- Cordon of the fly-tipped area.
- Inform London Underground of the location, type of waste, quantity of waste.
- If the waste appears to be hazardous, or the SPC cannot safely identify what it is, they are not disturb, or attempt to move the waste.
- Take photos.

1.5 Resources

1.5.1 Materials

Any materials required for the works will be planned by the Project Manager. If a product, or substance requires a COSHH Assessment it will be required before the product is used on site and will be included in the site documents. All materials that are used on site will be briefed to the gang by the PWT/SPC.

1.5.2 Specifications of required plant and machinery

Only plant and equipment that has been London Underground approved is permitted to be used on the works site. The tools required for the works can be found on the task briefing sheets, and the above Portable Tools, Mechanical Plant and Track Mounted Plant sections above. All operatives will be briefed on the tools required for the works during the pre-works briefing from the PWT/SPC.

The following tools will be used in the scope of works. The list is not exhaustive and other tools and equipment may be required.

- Hand tools
- Strimmer FS 400
- Chainsaw STIHL MS 361
- Leaf blower STHL BG85
- Leaf sucker/blower STHIL SH56
- Wood chipper
- Hedge trimmer STIHL HS81RC
- Telescopic Hedge trimmer (petrol)
- Mini dumper
- Litter picker
- Back pack sprayer 16LTR
- Back pack sprayer 16LTR Berthound Vermorel 200

All tools used on the contract must be in a good condition. Electrical tools must be PAT tested and contain a label which allows a next test date to be identified. Chainsaws and strimmer’s to be serviced as per service schedule.

Before using any tool it should be visually inspected for any damage in accordance with their user training.

Ensuring tools are in good condition and well maintained will also reduce noise. A sharp point or blade will significantly reduce noise generation.

1.5.3 Workforce

All training will be co-ordinated by the Cleshar training department and carried out by an approved training provider. Copies of all relevant certification are maintained at Cleshar Head Office. In addition all personnel will carry details of their individual training.

Operation/Personnel	Training Required
All operatives	LU ICI Sentinel Card , Asbestos Awareness, Manual Handling training, Site Induction
Operatives working on or near track in traffic hours	Basic Track Awareness
Operatives working in Depots Working in depot area A	Basic Track Awareness Specific Depot familiarisation induction and area A training
Person in Charge in charge of site safety	Site Person in Charge -Non Track location (SPC-NT) Protecting Workers on the Track (PWT)
First Aider	Appointed Person course as a minimum
Moving Track Trolley	Track Trolley Controller (Formally known as Trolley Operator)
Protecting Workers on the Track Traffic hours (when trains are moving and current is on)	Protecting Workers on the Track Traffic Hours (PWT-TH)
Protecting Workers on the track Engineering hours	Protecting Workers on the Track Engineering hours (PWT-EH)
Protecting Workers on the track Depots	Protecting Workers on the Track Depots (PWT-Depot)
Working on the Depots	Passport to depot (Familiarisation) training in Depots
Arboricultural Works	Certificate from a recognised training establishment to prove competency and qualification
Spraying herbicides	Safe use of pesticides levels NPTC PA1 & PA6
Using strimmer's/ hedge cutters/chippers/chain saws	Certificate from a recognised training establishment to prove competency and qualification
Working adjacent to Network Rail track	PTS-AC/DC

- **The PPE required by the workforce and visitors**

The following PPE will be required:

PPE	Req.	Grade	When	Additional information
Safety Boots	✓	EN 20345	at all times	Steel toe capped boots with mid sole protection and ankle support
Chain saw boots	✓	EN 381-9 EN 381-3	When using chainsaw	Protective boots with good grip and protective guarding at front vamp and instep
High Visibility Jackets (with Cleshar Logo)	✓	EN 471	at all times	Except when climbing trees when Hi - Vi T-shirts are acceptable
Safety Glasses	✓	EN 166 F	at all times	
Safety Goggles	✓	EN 166 F	As per Risk assessment	
Hard Hat	✓	EN 397	at all times	For tree climbing operations HSE strongly recommends a mountaineering style helmet complying with BS EN 12492).
Gloves (mechanical Protection)	✓	EN 388	As per Risk assessment	Handling, carrying materials.
Gloves (Chainsaw Protection)	✓	EN 381-7	As per risk assessment	Suitable gloves for the task and subject to the operator's risk assessment. Consider the need for protection from cuts from the chainsaw, thorny materials and cold/wet conditions. Where chainsaw protection is required this should be to BS EN381-7
Gloves (Chemical Protection)	✓	EN 374	As per COSHH assessment	
Half face mask	✓	EN149 FFP 3	During dusty operations	Face Fit Tested
Other respiratory protection	✓	As per COSHH	As per COSHH	
Ear defenders	✓	EN 352	When using power tools	Refer task risk assessment
Disposable Overalls/Coveralls	✓	EN 340	Strimming/ Spraying/ Removing waste	When using herbicides/pesticides - openings at neck and wrists must be a snug fit. The sleeves must also be long enough to cover the rubber gloves

PPE	Req.	Grade	When	Additional information
Face/eye protection (mesh)	✓	EN 1731 mesh visors	When using mechanical vegetation cutting tools (strimmers)	
Gaiters	✓	EN 381-9	When using Chainsaw, working at height or ground level	Or occasional users working in even ground where there is little risk of tripping or snagging on undergrowth or brash, worn in combination with steel toe- capped safety boots.
Leg and groin protection	✓	EN 381 – 5	All round protection for arborists working in trees	AFAG recommends Type C leg protection for aerial work, because of the high all-round chainsaw cut protection. Where wearing Type C is impractical (I.e. because of the higher risk of heat stress) it may be appropriate to use Type A, where justified by the risk assessment
Chainsaw Jacket	✓	EN 381:11:2002	When operating chainsaws at ground level, when Aborists are climbing/in the tree this is to be Risk Assessed against increased heat stress generated from physical exertion e.g. working from a rope and harness, as per HSE guidance INDG317 Rev 2.	
Protective sleeves.	✓	EN 381-10	At all times when operating a chainsaw.	

1.6 Permits and Licences

Permits and Licences required for task:

Permit or Licence required	Required	Item	Location
London Underground ICI endorsed Sentinel card.	✓	All personnel	With individual
Access Number	✓	Engineering hours	Site File/with PWT (SPC-NT)
Storage Licence	✓	For any storage area permission from the Landlord is required.	At access point to the specific storage area
Hot Works Permit	✓	When abrading/welding/ burning	Site File/with PWT (SPC-NT)
Permit to Dig	✓	When excavating or disturbing ground	Site File/with PWT (SPC-NT)

1.7 Waste

Before works commence the area will be surveyed to identify any fly-tipped rubbish. Litter and small waste must be bagged up and removed from site in a van and taken to Cleshar yard and placed in the skip. Care to be taken of needles or other sharps around the work area, gloves to be worn and bags to be carried away from operative's body.

More substantial waste must be referred to the Client Manager for an instruction. If instructed, waste must be bagged up and removed to agreed location. If hazardous waste is discovered it is to be kept separate from other waste and clients' representative contacted to ensure the correct procedure is followed for its disposal. Quantity and type of waste being removed is to be recorded on the Project Activity Sheet.

Any materials or debris arising from the works must be put into double builder's bags, secured with cable ties and removed from site by Cleshar or as agreed with the client. Where required, Cleshar will raise a request/permit for transporting the debris out of the station via the lift or escalator. For the sequence of operations with regard to waste disposal, generally follow the Waste Transfer note that has to be completed at various stages throughout the disposal process to ensure traceability. A Copy of the in date Waste Carrier Licence will be held in the site file.

2.0 Site Details

2.1 Access and Egress

Signing in and out must be done following the London Underground station signing in procedures. SPC/PWT instructions must be followed. Access to the works must be restricted to persons required to carry out the works to comply with London Underground's requirements. When entering via a station all operatives and visitors will sign in and out at the appropriate Station Supervisors Office before entering the London Underground network. Individuals must be in possession of the necessary certification, in line with London Underground requirements, to allow them to enter the area required. This will include visitors and personnel undertaking inspections/audits. The SPC/PWT will ensure that all access gates are closed and secured once inside and when leaving

the site to prevent unauthorised access. Signage to warn of the works will be displayed at the access point.
When gaining access to a work site through a London Underground access gate the SPC/PWT will inform the Line Controller. The Line Controller will be told of the location the operatives are working at, the access point, the type of works being carried out, and the distance they are from the track, and the level of protection they are providing for the shift. When works have concluded, the SPC/PWT will inform the Line Controller the gang is clear of the worksite, and the access gate is locked.

When gaining access to gates on stations on the Metropolitan Line, as well as booking on with the Line controller, the SPC/PWT will report to the Station Supervisor's office and sign the gang in on the PICER form. The SPC/PWT will inform the Station Supervisor of the nature of works taking place, the location, and the access point. When works have concluded the SPC/PWT will inform the Station Supervisor.

2.2 Site layout

Works will be carried out at various stations, compounds, embankments across the TfL infrastructure. Prior to works commencing an On-Site Risk Assessment will be carried out to include details relevant to the specific location.

2.3 Interfaces

Any possible interface with other contractors, London Underground staff, or the general public will be identified in the planning meeting before the works commence. Control measure shall be implemented to ensure all third parties are safe from any works. Should operatives arrive on site, or an interface with any third party arise when works have already commenced, the SPC/PWT will phone their Line Manager for further instruction.

2.4 Control Site Risks

2.4.1 Workers

Before any works commence, the SPC/PWT will complete an On-Site Risk Assessment detailing any hazards the worksite presents, along with control measure to mitigate the hazards. This will be fully briefed out to all operatives before works commence. The following task sheets can be referenced. If the worksite presents a risk, where the hazards cannot be sufficiently controlled, the SPC/PWT will contact their Line Manager, Health and Safety department for further guidance. The following task sheets can be referred to:

- Task sheet 01 – Access and site set up
- Task sheet 02 – Work on, or near the track
- Task sheet 03 – Site work (biological hazards)
- Task sheet 04 – Site work (Exposure to weather)
- Task sheet 17 – Access, or work on slopes, or steep embankments

2.4.2 Neighbours (e.g. Network Rail, nearby houses etc.)

Where a worksite becomes intrusive to neighbouring residential properties, a planning meeting will be held to decide how to control the safety interface with the residential area and the worksite. Letter drops will also be carried out prior to works commencing, advising residents of works that are due to commence. If Cleshar operatives notice the worksite becoming a risk, or intrusive to the residents, they will stop work, and contact their Line Manager, Health and Safety department for

further guidance. A separate method statement, and/or a Site specific Risk Assessment would be produced to control the worksite.

When working on a Network Rail work site all Cleshar operatives will be PTS trained. A Site specific Risk Assessment will be completed along with Network Rail Safe Work Pack, and Network Rail permits before works commence. These will detail the hazards and risks the worksite presents, along with control measures to sufficiently protect Cleshar operatives. A Network Rail COSS will be appointed when working on Network Rail sites.

2.4.3 Other contractors working in the vicinity

Where the Cleshar worksite will present hazards to others working in the vicinity, a planning meeting will be held with all parties to discuss and plan how to protect all from the risks involved. A separate Method Statement, and Site Specific Risk Assessment will be raised and implemented to protect all involved from the hazards and risks identified. In the event of an unplanned interface with others working in the vicinity, the SPC/PWT will temporarily stop works, and plan with the other SPC/PWT on how to control the issues. If a mutual agreement can be reached, a On-Site Risk Assessment will be produced, and re-briefed to all. In the event an agreement cannot be reached, the SPC/PWT will contact their Line Manager and/or Health and Safety department for further guidance.

2.4.4 The environment (e.g. nearby water courses)

Cleshar operatives will be briefed on ecological and other environmental issues relevant to their task and the location of the works. These are included in the risk assessments for the works, and can include issues such as sensitive receptors in the vicinity of the site, presence of protected or invasive species and protected habitats. The task briefing sheet will detail all environmental risks associated with water, ecology, contaminated land, noise, vibration and pollution.

In some cases, an ecological survey prior to any works will be required to confirm presence of high risk species, both protected and invasive, to ensure adequate control measures are implemented during the works.

Also, where sensitive receptors such as residents, schools, care homes or similar, are in close proximity to the site and may be affected by noise and other nuisances, a noise assessment may be required and the necessary mitigation measures implemented.

Environmental incidents are reported and investigated in the same manner as safety incidents. Operatives shall report to their manager if they are unable to fulfill their duties as a result of discovering any ecological issues (e.g. presence of protected species, nesting birds and reptiles).

2.4.5 LU staff

When Cleshar worksite will present hazards to London Underground staff a Site Specific Risk Assessment will be implemented to protect all involved from the hazards the worksite. In the event the risks cannot be sufficiently controlled, the SPC/PWT will contact their Line Manager, Health and Safety department for further guidance.

2.4.6 The operational railway (including infrastructure, services etc.)

Engineering Hours

When working Engineering Hours works are required, a PWT-EH will be appointed to provide protection to all operatives for that shift. The PWT-EH will book on with the Track Access Controller as per London Underground rules and procedures. All risks that arise from the worksite, when

working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions.

Traffic Hours

When working Traffic Hours works are required, a PWT-TH will be appointed to provide protection to all operatives for that shift. The PWT-TH will book on with the Line Controller as per London Underground rules and procedures. All risks that arise from the worksite, when working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions.

Working in Depots

When working in any London Underground Depot is required, a PWT-Depot will be appointed to provide protection to all operatives for that shift. The PWT-Depot will book on with the Depot Duty Manager as per London Underground rules and procedures. All risks that arise from the worksite, when working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions.

Members of the public

The worksite will, for the most part, be on London Underground premises, behind a physical barrier creating a tangible physical segregation between the worksite and the members of the public. In the event that the worksite may pose a risk to the public, the works will be planned in advance and a site specific risk assessment for that particular worksite will be raised. The site will be demarcated and cordoned off. Before any works commence the SPC/PWT will do an On-Site Risk Assessment, including managing the interface with the general public. If there is a risk of violence due to the interface with the public, then operatives will remain together and move to a place of safety, moving any tools or equipment out of the way of the potential violence, where possible. If the SPC/PWT considers it necessary, they will call the police.

2.4.7 Asbestos

During works where there is potential of disturbance of structures the project manager will request Asbestos report F3333 from the Client Hazardous Material Unit (HMU)

No works will be undertaken by Cleshar that may lead to disturbing asbestos or other unknown materials.

In the event of discovery of asbestos, ACM or suspected asbestos the following process will be followed:

- Do not disturb.
- Stop work immediately
- Clear the area of personnel, tools and equipment
- Inform other parties in the vicinity
- Evacuate the area

- Call the HMU reporting Line [redacted]

2.4.8 Buried services

It is not envisioned that contact with buried services will be part of the scope of works in this Method Statement. If this is required throughout the cycle of the contract, a Site Specific Risk Assessment will be produced, with the required trained, and competent person to carry out any cat-scanning.

2.4.9 Limited steep access embankments

When operatives are working on steep embankments a Site Specific Risk Assessment must be completed before any works commence. SPC/PWT shall ensure weather conditions do not impose a risk to the operatives, or the operational rail way. The site specific risk assessment shall include:

- Weather conditions.
- Underfoot conditions.
- Safe system of work, i.e. harness, fall arrest equipment.
- Level of protection required.
- Possible interfaces with Network Rail.
- Any London Underground assets that may need protection.
- Other contractors, or other works in the vicinity.

For further guidance refer to:

- Task sheet 17 Access or work on steep embankments.

2.4.10 Overhead lines

When works have an interface with Network Rail, and the OLE a Site Specific Risk Assessment will be produced before any works commence. All relevant Works Package Plans, permits, task briefing sheets will also be in place before any works commence. All staff will be PTS trained, under the protection of a COSS.

Refer to Task briefing sheet 12 – Working near overhead power lines.

2.4.11 Contaminated land

London Underground will inform Cleshar of areas with contaminated land. A specific Method Statement, and Site Specific Risk Assessment will be prepared for work in such areas and briefed to all the operatives.

2.4.12 Pests and weeds

All pest and weed management will be carried out as per Task sheet, risk assessment and relevant COSHH assessment by competent operatives. Areas treated with chemicals will be cordoned off where necessary and warning signs posted. Cleshar will implement provisions to prevent, as reasonably practicable, the migration of pests from site. All operatives will be made aware of the presence of rats, wasp nests, snakes, etc. during site briefing. Operatives will also be made aware of health and safety hazards associated with wildlife in tool box talks and inductions.

Hazards include:

- Bee/wasp stings,
- Leptospirosis,
- Snake bites and
- Diseases from pigeon droppings.

2.4.13 LU Operations, and sites where violence towards site staff is known.

When operatives are required to carry out works in areas where violence towards staff is known, the following must be considered.

- Informing British Transport Police, Metropolitan Police of planned works.
- London Underground Management, and Senior Cleshar Management to be made aware of the works, the time, location, duration of works.
- All operatives to be briefed to stay in groups of 2, and 3 and be advised to commute to, and from the worksite in groups.
- Nearest Police station, and other emergency services to be briefed to the operatives before any works commence.
- If operatives are confronted, or challenged they will be briefed to remain calm, talk softly, go to a place of safety, not to respond with violence.
- If operatives see any suspicious activity, they are to report it to the British Transport Police, Metropolitan Police.
- Works to be planned for daylight hours, where practicable.

2.5 Protection

All Cleshar gangs shall have the correct protection in place before any works commence. A trained, and competent PWT-EH/TH/Depot will provide protection for the works depending on when and where the works is taking place.

2.5.1 Traffic hours

The majority of the works is envisioned to take place during Traffic Hours. A PWT-TH will be appointed to each of the Utility gangs working on this contract. The PWT-TH will follow all London Underground rule books and procedures when executing their duties. The PWT-TH will book on with the Line Controller before any works commence.

2.5.2 Engineering hours

When working engineering hours a Protecting Workers on Track Engineering Hours (PWT-EH) shall provide protection to all operatives who required to carry out works. The PWT-EH will follow all London Undergrounds rule books and procedures.

2.5.3 Depot working

When working in a depot a Protecting Workers on Track Depot (PWT-Depot) shall provide protection to all operatives who required to carry out works. The PWT-Depot will follow all London Undergrounds rule books and procedures, and the rules for the depot they are working in.

2.6 Isolations

In the event the worksite is shared with Network Rail, or within a close proximity to Network Rail OLE, an isolation is required.

2.7 Communication and Contact Details

If operatives need to speak to their Managers or Health and Safety department they can call them at any time mobile phones, or through head office. If operatives need to reach anyone outside normal working hours, or in the event of an emergency Cleshar have a 24 hour HUB which is manned at all times. By using this the on-call operational Manager, or Health and Safety representative will be contacted.

The following contact details will be used for these works:

Company	Position	Responsible Person	Contact no.
TfL	**Project Manager**	Joel Baker	TBA
TfL	**H&S Advisor**	Richard Brooks	TBA
Cleshar	**Project Manager**	[redacted]	[redacted]
Cleshar	**H&S Advisor**	[redacted]	[redacted]
Cleshar	**Vegetation Manager**	[redacted]	[redacted]
Cleshar	**Vegetation Manager**	[redacted]	[redacted]
Cleshar	**Tree Inspector**	[redacted]	[redacted]

Emergency contact details:

Emergency Contacts		External number
Fire – Police - Ambulance		999
BT Police Control		0800 40 50 40
Rail Accident Investigation Board	Death or Serious Injury	01332 253 333
ORR	Fatal or Major injuries only Out of hours:	Monday to Friday, from 09:00 to 17:30 hrs - Telephone: **020 7282 3910**
		Outside these hours, weekends and public holidays please call the Department for Transport (DfT) Duty Officer on: **020 7944 5445**
Gas – Transco Emergency		0800 111 999
Electricity Emergency Line		0800 375 675
Local Water Company Emergency Line	Thames Water	0800 980 8800
Alere Toxicology	D&A screening	020 7538 1133
Cleshar HUB	24hr 7 days a week	020 8733 8552
Environmental Agency	Emergency Line	0800 807 060
Various London Hospitals		999
Network Rail Emergencies	24 hour Helpline	0345 711 4141

2.8 Emergency Arrangements

In the event of an emergency, the procedure as described in the project Emergency Plan will be followed.

Emergency procedures for first aid and fire evacuation will be briefed to all operatives prior to work commencing.

- The SPC/PWT will ensure that all operatives are aware of the assembly point, First Aider and nearest hospital.
- The SPC/PWT will ensure that the First aider is aware of the site address/location and access points in order to direct the emergency services.
- In the event of emergency the SPC/PWT will contact Station Supervisor to request emergency services (if working within the station location) or call 999.

The worksite may and will vary from shift to shift. Before each shift commences, the SPC/PWT will brief the operatives on the closest Accident and Emergency unit, with the agreed staff assembly point should emergency services need to be called.

In the event of an Aerial rescue, operatives are to refer to Task sheet 32 Aerial rescue.

There will be a fully stocked first aid kit and a qualified Emergency First Aider assigned to each gang. The First Aider will be introduced to the work group during induction. In the event of an incident / accident the First Aider must administer first aid and report to the nearest station for assistance, if required. All accidents resulting in injuries will be reported immediately to the Project Manager, Cleshar HSQE department and as per project reporting procedures.

2.8.1 Fire

A portable fire point will be set up adjacent to the work area. The first aid kit will normally be kept with the fire point, the capacity of the firefighting equipment may change if the risk assessment stipulates.

Fire prevention:

The following activities will be carried on site;

- A re-fuelling point will be allocated, with drip tray, and funnel. This will be at least 5 metres away from any hot works.
- All plant and equipment will be fuelled at the depot before works start.
- Ensuring the fire point is easily accessible before any hot works commence.
- All hot works activities areto be included on the On-Site Risk Assessment, and pre-works briefing.

The standard fire point will consist of:

- **2x AFFF (9ltr)**
- **1x CO2 (5kg)**
- **1x Fire Blanket**

No smoking or vaping is allowed on London Underground Limited premises.

Hot works will be managed in accordance with a London Underground issued Hot Work permit and overseen by a Fire Watch Person. The London Underground trained Fire Watch Person will be present on site during the hot works and for a minimum of 1 hour after completion of works. The Fire Watch Person will not be engaged in activities that would prevent them from carrying out their Fire Watch duties.

2.9 Welfare

Welfare will be provided for each location and assessed on each site, normally agreement to share station's/Depot welfare facilities. A Welfare van can be provided for larger groups (e.g. during possessions) and remote locations as agreed between Cleshar and London Underground.

3 Briefing and Reporting

3.1 Briefing Arrangements

The SPC for the works will deliver a pre works briefing. The briefing will comprise of:

- Safe System of Work.
- Method Statement, and Risk Assessment, any COSHH Assessments that would be needed for that shift.
- Roles and responsibilities, i.e. who will be doing what task.
- Plant, equipment and tools needed for the shift.
- PPE requirements.
- Daily working activities.
- Any site specific hazards and mitigation measures.

When works are being carried out during Traffic Hours, and a PWT-TH is required the operatives will receive a protection briefing from the PWT-TH. The protection briefing will consist of:

- Train movements
- Protections arrangements, if a look out or hand signalman is being used
- Direction of traffic.
- The emergency arrangements, nearest hospital, staff assembly point.
- Site specific hazards, e.g. slipping and tripping hazards.
- The Person in Charge.
- The identity of the First Aider.

When works are being carried out during Engineering Hours, and a PWT-EH is required the operatives will receive a protection briefing from the PWT-EH. The protection briefing will consist of:

- Inform and show the SPC that the traction current has been discharged.
- The call back time for the shift.
- The protections limits and the worksite for the shift.
- The emergency arrangements - nearest hospital, staff assembly point.
- Site specific hazards, e.g. slipping and tripping hazards.
- The SPC/PWT of works.
- The identity of the First Aider.

3.2 Reporting Accidents and Incidents

All accidents, incidents, near misses must be notified to the SPC/PWT and who will carry out an immediate investigation.

All accidents, incidents, near misses must be reported to the incident report operator on 0800 092 5995 (auto 682 4445) or 020 7918 4444 as soon as possible but by the end of shift at the latest and also reported to Customer Care Center 0800 590 185 and to Duty Supervisor informed on site.

- LUL Incident Line 02920 266 780
- Cleshar HUB 0208 733 8552

Environmental incidents must also be reported in the same manner as Health and Safety incidents.

If serious accident, incident or injury all operatives to remain on site until dismissed by authorised person (Cleshar Manager, London Underground Manager or Police), unless in need of medical treatment.

RIDDOR reports must be submitted by Cleshar H&S department unless reports are submitted by the client or subcontractors

On Site Risk Assessment Form

B - Task briefing sheets (incorporating risk assessments)

- Task briefing sheet 01- Access, site set up
- Task briefing sheet 02- Work on or near the track
- Task briefing sheet 03- Site work (Biological hazards)
- Task briefing sheet 04- Site hazards (Exposure to weather)
- Task briefing sheet 05- Manual Handling
- Task briefing sheet 06- Use of hand tools
- Task briefing sheet 07- Use of power tools
- Task briefing sheet 08- Driving and transportation
- Task briefing sheet 10- Use of strimmers and hedge cutters
- Task briefing sheet 11- Use of fuel powered equipment and refuelling
- Task briefing sheet 12- Working near overhead power cables
- Task briefing sheet 13- Ground disturbance, and excavation
- Task briefing sheet 16- Use of a ladder or step ladder
- Task briefing sheet 17- Access or work on steep slopes, and embankments
- Task briefing sheet 18- Japanese knotweed
- Task briefing sheet 19- Giant hogweed
- Task briefing sheet 21- Tree and shrub planting
- Task briefing sheet 22- Use of a chainsaw
- Task briefing sheet 23- Use of a Hand held blower
- Task briefing sheet 24- Use of chipping machines
- Task briefing sheet 25- Use of hedge cutters
- Task briefing sheet 26- Use of mini transporter
- Task briefing sheet 27- Use of a mini track trolley task sheet

C - COSHH Assessments

- Petrol
- Diesel

- STIHL chain oil
- Chikara herbicide
- Garlon ultra – herbicide
- Ecoplug max
- Glyphosate
- Japanese knotweed
- Eco plug max
- Generic nuisance dust
- STHIL strimmer grease
- Hedge trimmer grease
- Roundup
- Leptospirosis

Task Description/Methodology				
Applies to all activities where hand tools are being used.				
Hazards associated with the task		**Consequences**		**Pre-controls Risk Rating**
Sharps, blades and edges, impact with tools, ejection of materials and particles, ejection of tools/parts of tools, working close to electrical cabling/equipment, prolonged awkward postures.		Eye injuries, various personal injuries, cuts and abrasions, electrocution, burns, musculoskeletal injuries.		**M**
People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☐
Control Measures				**Post control Risk Rating**
• Only competent operatives to carry out works. • Where operatives or persons undergoing training (apprentices) they shall be closely supervised. • All tools shall be maintained, kept in safe condition and inspected prior to use by the user. • All cutting tools will be kept sharp. • Insulated tools to be used when working close to electrical equipment. • Hands should be kept behind, or away from sharp cutting edges or work piece edges. • All bladed knives/chisels etc should be guarded when stored safely in toolbox/bag, open blade knives are not allowed on to London Underground. • Redundant blades must be disposed of properly, for example in solid container. • Ensure no one else is close when using hand tools such as swinging hammers etc., warning is to be issued to operatives and other contractors in the vicinity. • Good housekeeping is to be ensured when using hand tools. • Task lighting to be used at all times when working in the dark. • Operatives to achieve adequate breaks from awkward position or prolonged use of hand tools (for example when, twisting or bending back, reaching upwards or kneeling when using hand tools).				**L**

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374
Safety glasses where ejection of particle is a risk	EN 166 F		
Reviewed issue 6	30/05/2019	Approved	[redacted]

TASK SHEET NUMBER 10 **USE OF STRIMMERS AND BRUSH CUTTERS**

CLESHAR

Task Description/Methodology
• Survey the area for obstacles or obstructions. • Only trained operatives shall use the equipment. • Carry out essential maintenance and pre use checks on the strimmer. • When starting your petrol strimmer, put it on the ground and hold it with one hand while you start it up with the other. Only use strimmer on grass or plant material. Strimmer must not be used above waist level. • Ensure that you can achieve good footing during the activity. Do not use strimmer if the ground is slippery and steady posture cannot be maintained. Always use PPE as per RA (below). • When the strimmer is ready, start in the most overgrown part of the location, slowly swinging it from left to right. Cut into the overgrown areas and take off small amounts at a time. • Other persons should be at least 15 meters away from the area being worked on. Set up exclusion zones. • Always turn the engine off and make sure the cutting attachment has stopped before putting the strimmer down and maintenance or refuelling. • **BRUSH CUTTERS are not permitted on AP-JNP.**

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Flying debris, particles, contact with rotating parts of strimmer, kickback, manual handling, hot parts	Injury to operators and those in vicinity (vehicles or property) Severe cuts, abrasions, entanglement, other major injuries, musculoskeletal injuries, burns and fire	**M**
Contact with electrical cabling	Electrocution, burns, fire	**M**
Biological Hazards (animal faeces, plant sap- giant Hogweed, discarded syringes etc)	Diseases, leptospirosis, burns and blistering	**M**
Noise and Vibration	Hearing loss, tinnitus, vibration white finger	**M**
Vapours from refuelling , fumes, contact with lubricants	ill health form fume inhalation, skin conditions, fire, burns and explosion	**M**
Working on uneven ground, steep embankments	Slips and falls	**H**

People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☒

Control Measures	Post control Risk Rating
Tools to be used only by the trained, competent and authorised persons. All operators must be fully conversant with the manufacturer's instructions. All strimmer's and brush cutters to be regularly maintained. Operators to carry out maintenance and pre-use checks as per manufacturer's instructions. Warning signs erected to warn others, operator exclusion zones to be set up and maintained. Where necessary barriers, protective sheeting to be erected. Lookout to warn of oncoming pedestrians or vehicles. Harness to be worn to support the strimmer during use. Regular breaks to be taken from carrying heavy equipment. Where working close to tracks the strimmer operator is to work facing oncoming trains on the closest track so that strimming can stop when the train is within 20m, preventing it being hit by any items thrown up by the strimmer. Safe system of work for working near the track to be set up by PWT.	**L**
Area must be assessed prior to any strimming operations to establish any hidden cables, and extra additional precautions, including the use of hand tools instead of strimmers while removing vegetation near or close to any cables. (On Site Risk Assessment to be carried out).	**L**
Work group must be made aware of possible presence of sharps and biological hazards, visual survey to be carried out to identify presence of biological hazards. Operatives to wear overalls in areas contaminated with biological hazards (faeces, pigeon droppings etc)	**L**

To reduce the risk of HAVS Operatives to be aware of HAVS and the risks, regular breaks from using vibrating equipment, staff rotation where necessary. Equipment to be regularly maintained as per manufacturer's instructions. Random monitoring of vibration exposure. Maintain firm grip at all times but do not squeeze the handles with constant excessive pressure. Keep hands and fingers warm, use gloves at all times. Hearing protection to be used when operating chipper, hearing protection zones to be established, mandatory hearing protection signage to be put in place. Hearing protection to be enforced.	**L**

Equipment	Vibration magnitudes (m/s^2)	Exposure Action Value (EAV)	Exposure Limit Value (ELV)
Strimmer FS 400	3.5	4 hrs 5min	16hrs 20mins

• Refer to COSHH assessment. • Refuelling to be carried out designated areas only. Refer to refuelling RA. • Petrol equipment to be used in ventilated areas only. • Fire point to be established in the vicinity of works and refuelling area	**L**
Operatives to ensure good footing during the activity. No lone working allowed when using brush cutter or strimmer. On Site Risk Assessment to be carried out to identify local conditions. Safety boots to be worn and in good condition.	**M**

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374
Face shield/visor	EN 1731	Hearing protection	EN352
Reviewed issue 6	30/05/2019	Approved	[redacted]

Task Description/Methodology

Japanese Knotweed is effectively controlled with Garlon Ultra* herbicide mixed with water, and applied through a hand-held knapsack sprayer or vehicle mounted sprayer. For road or railway siding weed control, the best treatment time is late winter or early spring. For grassy areas such as embankments, excellent results can be achieved with treatment coinciding with periods of vigorous growth.

- Area identified to be contaminated with Japanese Knotweed must be secured and cordoned off using Netlon fencing.
- Warning signs must be displayed to prevent unauthorised access and warn others.
- Where necessary additional Netlon fence must be pinned over the top of the cutting to remove the risk of the stems being blown away by strong winds and to deter would be vandals.
- Japanese Knotweed must be controlled in its original location with the use of Garlon Ultra* that is sprayed over the plant covering top and bottom of the leafs.
- At this stage no Japanese Knotweed canes must be collected and transported from the contaminated site but left within cordoned and controlled area.
- Staff handling/applying any chemicals must be specially trained in the use/handling/application if such chemicals and must wear correct and task specific PPE consisting of:
    - PPE/Safety footwear as per herbicide training
    - Level 5 Overalls to prevent chemicals penetrating the overall as per herbicide training
    - Specialist Gloves as per herbicide training (Nitrile)
    - Half face masks to prevent inhalation (not needed if face shield is used)
    - Goggles or face shield to prevent splashing into the eyes
- The applied substance is left to work for 3-4 weeks.
- The residual plant are cut and removed from site in double bags and disposed of as hazardous waste.
- It must be ensured that all PPE used for the cutting operations are brushed off and shaken free from any debris produced by these cutting operations before any operatives are permitted to remove their PPE from site to prevent rhizome spreading

**If different substance is used. SPC/PWT must ensure that COSHH assessment is available.*

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Exposure to substances (Garlon Ultra)	Ill health caused by irritant	M
Misuse of substance	Contamination of water, desirable plants	M
Japanese Knotweed rhizome	Spread of Japanese Knotweed	M
Use of hand tools and power tools	Personal injuries	M
Inserting pins into ground	Impact with services	H

People at Risk:	Operatives ☒	Other contractors ☒	Visitors to site ☒	Public ☒

Control Measures	Post control Risk Rating
• Precautions must be taken to prevent chemicals entering into rivers, streams, waterways, watercourses, drains, lakes or groundwater. • Operatives will be trained and experienced in Japanese Knotweed eradication. • All mixing up must be done on the drip trays, face shield/visor must be worn to prevent splashing into the eyes. • Spill kit to be available in case of spilages • Ensure good housekeeping at all times during and after the works.	L

• Wash hands thoroughly with soap water before eating, drinking or smoking, use antibacterial wipes when water is not immediately available, • Always refer to COSHH assessments, product safety data sheet and labels for additional information/precautions and PPE considerations. • Operatives to clean boots and equipment before leaving the area. • All waste including overalls to be disposed as hazardous waste. • Also refer to Hand Tools Task Sheet Number 06 and Power tools Task Sheet No 7. • Refer to Ground Disturbance and Excavation Task Sheet 13 when inserting pins into the ground. All control measures as listed for ground disturbance must be followed.	

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374 Nitrile
Overalls	Type 4 Hooded	Eye Protection (visor)	EN 166 Grade 3
Respiratory protection	EN 149 FFP 2		
Reviewed issue 5	30/05/2019	Approved	[redacted]

Task Description/Methodology

Giant Hogweed is effectively controlled with Garlon Ultra* or similar herbicide mixed with water and applied through a hand-held knapsack sprayer or vehicle mounted sprayer. Eradication could take number of years (3-10 years of treatment recommended); spraying with herbicides should be undertaken before plant produces seeds in early spring to early summer.

- Area identified to be contaminated with Giant Hogweed must be secured and cordoned off using Netlon fencing.
- Warning signs must be displayed to prevent unauthorised access and warn others.
- Where necessary additional Netlon fence must be pinned over the top of the cutting to remove the risk of the stems being blown away by strong winds and to deter would be vandals.
- Giant Hogweed must be controlled in its original location with the use of Garlon Ultra* or similar that is sprayed over the plant covering top and bottom of the leafs.
- At this stage Giant Hogweed must not be touched, collected and transported from the contaminated site but left within cordoned and controlled area.
- Staff handling/applying any chemicals must be specially trained in the use/handling/application if such chemicals and must wear correct and task specific PPE consisting of:
    - PPE/Safety footwear as per herbicide training
    - Level 5 Overalls to prevent chemicals penetrating the overall as per herbicide training
    - Specialist Gloves as per herbicide training (Nitrile)
    - Half face masks to prevent inhalation (not needed if face shield is used)
    - Goggles or face shield to prevent splashing into the eyes
- The applied substance is left to work for 3-4 weeks.
- The residual plant are cut and removed from site in double bags and disposed of as hazardous waste.
- It must be ensured that all PPE used for the cutting operations are brushed off and shaken free from any debris produced by these cutting operations before any operatives are permitted to remove their PPE from site to prevent seeds spreading.

**If different substance is used Person in Charge must ensure that COSHH assessment is available.*

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Exposure to substances (Garlon Ultra)	Ill health caused by irritant	M
Misuse of substance	Contamination of water, desirable plants	M
Use of Hand tools and power tools	Personal injuries	M
Inserting pins into ground	Impact with services	H

People at Risk:	Operatives ☒	Other contractors ☒	Visitors to site ☒	Public ☒

Control Measures	Post control Risk Rating
• Precautions must be taken to prevent chemicals entering into rivers, streams, waterways, watercourses, drains, lakes or groundwater. • Operatives will be trained and experienced in Japanese knotweed eradication. • All mixing up must be done on the drip trays, face shield/visor must be worn to prevent splashing into the eyes. • Spill kit to be available in case of spillages • Ensure good housekeeping at all times during and after the works. • Wash hands thoroughly with soap water before eating, drinking or smoking, use antibacterial wipes when water is not immediately available, • Always refer to COSHH assessments, product safety data sheet and labels for additional	L

information/precautions and PPE considerations. • Operatives to clean boots and equipment before leaving the area. • All waste including overalls to be disposed as hazardous waste. • Also refer to Hand Tools Task Sheet Number 06 and Power tools Task Sheet No 07. • Refer to Ground disturbance and Excavation Task Sheet 13 when inserting pins into the ground. All control measures as listed for ground disturbance must be followed.	

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374 Nitrile
Overalls	Type 4 Hooded	Eye Protection (visor)	EN 166 Grade 3
Respiratory protection	EN 149 FFP3		
Reviewed issue 6	30/05/2019	Approved	[redacted]

TASK SHEET NUMBER 20 **OAK PROCESSIONARY MOTH REMOVAL**

CLESHAR

Task Description/Methodology
• The tree inspector will identify tree with Moth contamination and instruct tree gang to remove the nest. • Exclusion zones and signage will be erected before removal of the nest commence. • The operatives will put on full PPE before commencing with the task. • Operative will climb the tree and spray the nest with strong hair spray to ensure the harmful (poisonous) hairs stick together. • Nest is then removed by hand, inserted in hazardous material bags and disposed of as hazardous material. • Before PPE is taken of it will be sprayed with hairspray. • All overalls and gloves to be disposed of as hazardous waste.

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Contact with caterpillars (larvae)	Skin rush and conjunctivitis, allergic reactions	H
Inhalation of caterpillar (larvae) hairs	Ill health, breathing difficulties	H
Climbing tree	Falls from height resulting in major injuries	H

People at Risk:	Operatives ☒	Other contractors ☒	Visitors to site ☒	Public ☒

Control Measures	Post control Risk Rating
• Any skin contact with caterpillars must be avoided. All exposed skin must be covered up with appropriate PPE. See below. • All operatives involved in the task must be trained and competent. • Sleeves of overall must be worn under gloves. • Overalls with generous cut to the arms and legs for freedom of movement. • Gloves suitable for climbing and moth removal. • All visitors to site must comply with the same PPE. • PPE to be removed and disposed of before going for breaks and at the end of the shift. • Good personal hygiene to be enforced. Skin to be clean with wipes or water immediately after work. • Any operatives known to have suffered allergic reaction to the caterpillars to be removed from the activity. • Person in Charge to consider job rotation to minimise exposure to the moths. • All climbing equipment used for Oak Processionary Moth (OPM) removal work should not be used for other work. It should be stored in an airtight container and marked for OPM use only during transport and PPE should be worn during equipment maintenance and inspection. The container should be marked with a warning label, use an exclamation mark within a yellow triangle. • All equipment and face mask, boots to be cleaned before storage. • Warning signs to be posted on the tree. • Also refer to Task Sheet 15 Tree climbing. • First aider to be briefed on symptoms and signs of exposure to OPM.	M

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat/climbing helmet	EN 397
Gloves	EN 388 or 374 Nitrile	Overalls	EN 465 Type 4 Hooded
Full face mask	EN136 class 1 or 2		

Reviewed issue 6	30/05/2019	Approved	[redacted]

Task Description/Methodology

Before any work commences adequate warning signs must be put into place. Barrier tape ropes and portable fences are to be considered to restrict access. Site must be secure to prevent unauthorised access

Survey for any cables, hidden wires of bits of fencing that may be inside a hedge; as this can cause serious injuries or damage to the hedge cutters.

Survey area for slip, trip and falls hazards, ex

Only trained and experienced operator to use hedge cutters. Operator and those in the vicinity must wear PPE as listed below.

Before start

Check equipment for maintenance and carry out pre use checks. Refer to manufacturer's manual. Spray cutters with protective spray before starting to work only with the engined stopped. Place the hedge trimmer on firm ground and maintain good footing. Always engage starting lock where applicable.
Hedge cutter to be operated in well ventilated areas only.

Cutting the sides of the hedge vertically

The first step is to cut the sides of the hedge vertically in a sweeping arc-shaped movement (bottom upwards). A hedge trimmer with double-sided blades means you will save time as you cut in both the upward and downward stroke. Walk forwards as you work, cutting along the length of the hedge.

Cutting the top of the hedge

When cutting the top of the hedge the cutter bar should be held horizontally at a slight angle (around 10°). Remove the clippings from the hedge with scything movements.

Maintenance

Keep blade sharp . If cut branch tips appear ragged or light in colour, or if blades snag on the hedge, the blades are probably blunt and tearing rather than slicing material.

Keep it clean . A blade that is not clean is not efficient. As a hedge is trimmed, sap builds up on the blades, setting hard like glue. Use an approved cleaner to keep blades in top condition.

Refuelling: Petrol hedge trimmers run on two-stroke petrol which will need to be mixed up. The correct ratio is normally 25 parts petrol to 1 part oil check with the manufacturer's instructions. Always turn the engines off and wait for the equipment to cool down. Refuel in well ventilated area, above spill tray and away from sources of ignition. Use eye protection and gloves when refuelling. Always remove clothing contaminated with fuel. Ensure that fuel caps are secured. Wipe off any spilled fuel before restarting the engine.

If you are using an electric hedge trimmer, you will need an extension lead long enough to allow you freedom of movement.

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Contact with moving parts/ blades, entanglement with vegetation or hedge cutter	Amputation, cuts, major injuries,	H
Ejection of materials, dust and particles	Eye injuries, inhalation of dust	M
Noise	Hearing loss , tinnitus etc	M
Vibration	Vibration White Finger and carpal tunnel syndrome, other HAV related ilness	L
Vapours from refuelling , fumes, contact with lubricants	ill health form fume inhalation, skin conditions, fire, burns and explosion	M

TASK SHEET NUMBER 25 **USE OF HEDGE CUTTERS**

People at Risk:	Operatives ☒	Other contractors☒	Visitors to site ☒	Public ☒

Control Measures	Post control Risk Rating
Competent and trained operator, manufacturer's safety instructions and methodology above to be followed at all times. Equipment to be maintained and tested (record of inspection available). Equipment to be secured to prevent misuse when the trained operator is not present. Protective clothing to be snug fitting but allow freedom of movement, including long trousers Operatives to avoid loose clothing, accessories and unconfined long hair. Heavy duty non slip gloves to be worn.	M
Establish exclusion zones; ensure that everybody is hedge cutters are being used and operator and those in the vicinity wear eye protections/face shield.	L
Hearing protection to be used when operating chipper, hearing protection zones to be established, mandatory hearing protection signage to be put in place. Hearing protection to be enforced.	L
Operatives to be aware of HAVS and the risks, regular breaks from using vibrating equipment, staff rotation where necessary. Equipment to be regularly maintained and sharpened as per manufacturer's instructions. Random monitoring of vibration exposure. Maintain firm grip at all times but do not squeeze the handles with constant excessive pressure. Keep hands and fingers warm, use gloves at all times.	L

Equipment	Vibration magnitudes (m/s^2)	Exposure Action Value (EAV)	Exposure Limit Value (ELV)
Hedge trimmer STIHL HS81RC	3.00	5 hrs 30 min	22hrs

• Refer to COSHH assessment • Refuelling to be carried out designated areas only. Refer to refuelling RA. • Petrol equipment to be used in ventilated areas only. • Operator to hold trimmer in such a way that he/she does not breathe in the exhaust fumes • Fire point to be established in the vicinity of works and refuelling area	L

PPE (Minimum Requirement)

Face shield /goggles	EN 1731 or EN 166	Hearing protection	EN 352
Hand protection	EN 388 (heavy duty)	Safety helmet	EN 397
Safety Boots	EN 20345	Hi Visibility vest	EN 471
Reviewed issue 6	30/05/2019	Approved	[redacted]

- **TASK SHEET NUMBER 30 Spraying of Pesticides/ herbicides and control**

CLESHAR

Task Description/Methodology
Effected area which is to be sprayed effectively controlled with Pesticide/ herbicide is mixed with water and applied through a hand-held knapsack sprayer or vehicle mounted sprayer. For road or railway siding weed control, the best treatment time is late winter or early spring. For grassy areas such as embankments, excellent results can be achieved with treatment coinciding with periods of vigorous growth. • Spot spraying and full sprays must be carried out in designated location only , area identified contaminated with weeds must be secured and cordoned off using Netlon fencing if access via the general public or other third parties, area which are not accessibly do not require barrier off, ref to an onsite risk assessment. • Alternatively, the operative when spot spraying, granular application and full sprays during Traffic hours must be positioned behind a physical barrier or cable run using insulated equipment • Warning signs must be displayed to prevent unauthorised access and warn others. • Where necessary additional Netlon fence must be pinned over the top of the cutting to remove the risk of the stems being blown away by strong winds and to deter would be vandals. • Weeds must be controlled in its original location with the use of Pesticide/Herbicide that is sprayed over the plant covering top and bottom of the leafs. • At this stage weeds must not be touched, collected and transported from the contaminated site but left within cordoned and controlled area.. • Staff handling/applying any chemicals must be specially trained in the use/handling/application if such chemicals and must wear correct and task specific PPE consisting of: ➢ PPE/Safety footwear as per Pesticide/Herbicide training ➢ Level 5 Overalls to prevent chemicals penetrating the overall as per pesticide/herbicide training ➢ Specialist Gloves as per Pesticide/Herbicide training (Nitrile) ➢ Half face masks to prevent inhalation (not needed if face shield is used) ➢ Goggles or face shield to prevent splashing into the eyes • The applied substance is left to work for 3-4 weeks. • The residual plant may be cut and removed from site in double bags and disposed of as hazardous waste. • It must be ensured that all PPE used for the cutting operations are brushed off and shaken free from any debris produced by these cutting operations before any operatives are permitted to remove their PPE from site to prevent rhizome spreading **If different substance is used. SPC/PWT must ensure that COSHH assessment is available.*

Hazards associated with the task	**Consequences**	**Pre-controls Risk Rating**
Exposure to substances	Ill health caused by irritant	**M**
Misuse of substance	Contamination of water, desirable plants	**M**
Use of Hand tools and power tools	Personal injuries	**M**
Inserting pins into ground	Impact with services	**H**

People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☒

Control Measures	**Post control Risk Rating**
• SPC –Non track or PWT to brief out all control measures, before any work including mixing of any Pesticide/ herbicide • Precautions must be taken to prevent chemicals entering into rivers, streams, waterways, watercourses, drains, lakes or groundwater, avoid these areas when filling/mixing and pouring into knapsacks etc.	**L**

- Operatives will be trained and experienced in Pesticide/Herbicide spraying/mixing/pouring.
- All mixing up and pouring into knapsacks, hand held sprayers must be done on the drip trays, face shield/visor must be worn to prevent splashing into the eyes. And masks due to strong contraction of Pesticide/Herbicide.
- Spill kit to be available in case of spillages
- Ensure all containers/knapsack/hand held sprayers are identified ref to Control of Pesticides Regulations (COPR) label guidance – August 2007
- All applications must be co-ordinated with other works to ensure that only the trained operatives with the correct levels of PPE are exposed to the substances during and shortly after application
- A comprehensive list of all substances used and stored including quantities on site must be kept on site, this list must be updated as each application is taken for audit purposes
- Upon completion of the works, all tools/equipment/pesticide must be removed from site
- Ensure good housekeeping at all times during and after the works.
- Wash hands thoroughly with soap water before eating, drinking or smoking, use antibacterial wipes when water is not immediately available,
- Always refer to COSHH assessments, product safety data sheet and labels for additional information/precautions and PPE considerations.
- Operatives to clean boots and equipment before leaving the area.
- All waste including overalls to be disposed as hazardous waste.
- Also refer to Hand Tools Task Sheet Number 06 and Power tools Task Sheet No 7.
- Refer to Ground disturbance and Excavation Task Sheet 13 when inserting pins into the ground. All control measures as listed for ground disturbance must be followed.

Pesticides for plant protection purposes include:

- weedkillers (herbicides)
- fungicide sprays
- insecticides
- plant growth regulators

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374 Nitrile
Overalls	Type 4 Hooded	Eye Protection (visor)	EN 166 Grade 3
Respiratory protection	EN 149 FFP 2		
Reviewed issue 6	30/05/2019	Approved	[redacted]

Programme Project **Track Vegetation and Fencing Renewals**
Document reference **SSoW 02 Utility Gang**

In the event of an incident to ensure that the incident report is correctly routed, please fill in the box below:	
Responsible Area/Project	TBA
Location	Various locations
Area	Track and Lineside locations
Principal contractor	Cleshar

Safe System of Work
Utilities gang

		Signature	Date
Prepared by	[redacted] Project Manager		
Reviewed by	[redacted] HSE Adviser		
Reviewed by	<Name> Client		
Distributed to	<Name>	Cleshar Site Files	
Distributed to	<Name>		

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Revision	Date	Summary of changes
Tender	24/05/19	Tender draft

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1 Work Details

1.1 Description of Work

This Method Statement covers the scope of works to be carried out by the utilities gangs. The works the utility gangs will cover are:

- Vegetation clearance
- Weed spraying
- De-icing
- Ground tree works
- Eco-plugging
- Litter picking
- Habitat installation
- Rail head scrubbing
- Fault clearance
- Wood chipping
- Leaf clearance
- Clearing fly tipping

The Following Task briefing sheets will be used to undertake these works:

- Task briefing sheet 01- Access, site set up
- Task briefing sheet 02- Work on or near the track
- Task briefing sheet 03- Site work (Biological hazards)
- Task briefing sheet 04- Site hazards (Exposure to weather)
- Task briefing sheet 05- Manual Handling
- Task briefing sheet 06- Use of hand tools
- Task briefing sheet 07- Use of power tools
- Task briefing sheet 08- Driving and transportation
- Task briefing sheet 10- Use of strimmers and hedge cutters
- Task briefing sheet 11- Use of fuel powered equipment and refuelling
- Task briefing sheet 12- Working near overhead power cables
- Task briefing sheet 13- Ground disturbance, and excavation
- Task briefing sheet 16- Use of a ladder or step ladder
- Task briefing sheet 17- Access or work on steep slopes and embankments
- Task briefing sheet 18- Japanese knotweed
- Task briefing sheet 19- Giant hogweed
- Task briefing sheet 21- Tree and shrub planting
- Task briefing sheet 22- Use of a chainsaw
- Task briefing sheet 23- Use of a hand held blower
- Task briefing sheet 24- Use of chipping machines
- Task briefing sheet 25- Use of hedge cutters
- Task briefing sheet 26- Use of mini transporter
- Task briefing sheet 27- Use of a mini track trolley
- Task briefing sheet 28- Use of a hand held auger
- Task briefing sheet 30- Use of spraying pesticides and herbicides
- Task briefing sheet 31- Use of Emergency Railhead Cleaning Unit Petrol Driven

1.2 Duration of Works

This is part of the 2019 TfL Vegetation and Fencing contract from 2019-2022. This Method Statement will be reviewed annually.

1.3 Working Hours

The works are normally planned to take place Monday - Friday 07:30-16:00 (daylight). However due to high risks in certain areas of the track environment where traffic protection cannot take place, Engineering Hours or Possession work will be implemented.

1.4 Control of Activity Risks

Upon arriving at a new site the SPC/PWT must inspect the site and complete a Site Specific Vegetation Works Risk Assessment. If additional risks are identified as work proceeds, or the local Manager makes the SPC/PWT aware of an issue, this must also be recorded and control measures set out.
Any precautions that are required to protect the public or other parties passing through or around the site must be recorded on the Risk Assessment form.

If the risk is unusual or beyond the knowledge of the SPC/PWT to deal with the SPC/PWT must contact their Line Manager or HSQE department for advice before proceeding with the task in that area.

As part of the SPC/PWT site assessment a check must be made for any wildlife or signs of wildlife, such as bird's nests, wasp's nests, badgers sets, etc.; or any Non Native Invasive Species such as Japanese Knotweed or Oak Processionary Moth. Any identified must be included in the Specific Vegetation Works Risk Assessment. The client's representative must be informed and an exclusion zone set to ensure they are not disturbed. This must be documented on the form.

The form will identify the relevant Task Briefing Sheets for the works on that site.

Once the form is completed the SPC/PWT must brief his gang on the site and the specific control measures noted on the form and Task Briefing Sheet and all operatives must sign the form on the SPC's tablet.

The form must be held in the site file while the gang are on site and returned to the Projects Manager at the end of the works.

All operatives will be competent and trained in any activity they are tasked to undertake. Training records will be held on skills cards and kept on file at head office.

Any London Underground visitors, or staff, will receive a full briefing on the activities and control measures, before being permitted access to the worksite. The worksite will be set up in such a way, that the safe system of work will minimise risk, or minimise intrusion to any London Underground staff, or assets, or others who may be working in the area. If, at any point, the worksite is likely to become intrusive to others the SPC/PWT will attempt to reach an agreement with the third party, or London Underground, with the new safe system of work being documented on an On-Site Risk Assessment. When this cannot be agreed the SPC/PWT will contact their Line Manager, or the Cleshar Health and Safety department for further instructions.

1.4.1 Neighbours (e.g. Network Rail, nearby houses etc.)

Site surveys will be carried out prior any significant works to establish access to site, any interfaces with public i.e. private & business properties, bus/trams stops or areas/building/facilities where large number of public congregate.

Means of Control may include:

- Advance communication with neighbouring property owners/occupiers
- Letter drops
- Access negotiation and consultation
- Operative briefings and toolbox talks

Where works interface with Network Rail infrastructure, Cleshar will ensure that operatives are PTS trained and the relevant safe system of work in place, i.e. Network Rail approved Work Package Plans and Permits, COSS, ALO etc.

Additionally, as works proceed On–Site Risk Assessments will be used to assess new or changing situations. PWT/SPC's are trained on preparing On–Site Risk Assessments.

1.4.2 Working on 3rd Party vegetation or land

When works are planned on a third parties land a separate site specific Method Statement, and Site specific Risk Assessment shall be produced in agreement with the third parties land owner, or land owners representative. All works will be discussed in advance during planning meetings, conference calls, and other mediums of two way communications. When the risks from working on a third parties land are different from the normal risks, or considered unusual, additional training, site specific inductions, tool box talks, and selection of experienced and trained operatives will be deployed to complete the works. Regular site inspections will be carried out by Cleshar Management and the Health and Safety department.

1.4.3 The environment (e.g. nearby water courses)

Cleshar operatives will be briefed on ecological and other environmental issues relevant to their task and the location of the works. These are included in the risk assessment and can include issues such as sensitive receptors in the vicinity of the site, the presence of protected or invasive species, and protected habitats. The On–Site Risk Assessments and Task Methodology sheet will detail all environmental risks associated with water, ecology, contaminated land, noise, vibration and pollution.

In some cases, an ecological survey prior to any works will be required to confirm presence of high risk species, both protected and invasive, to ensure adequate control measures are in place prior to and during the works.

Also, where sensitive receptors such as residents, schools, care homes or similar, are in close proximity to the site and may be affected by noise and other nuisances, a noise assessment may be required prior the works to establish if noise mitigation is required.

Environmental incidents are reported and investigated in the same manner as safety incidents. Operatives shall report to their manager if they are unable to fulfil their duties as a result of discovering any ecological issues (e.g. presence of protected species, nesting birds and reptiles).

1.4.4 Nesting season

All nesting sites will be recorded on a digitally secured spreadsheet, and will be included on the SPC/PWT's tablet. Before any works commence, the SPC/PWT will check to see if the worksite has any nests located there. The SPC/PWT will be briefed in identifying common species and will have an awareness of likely habitats of birds. Tool box talks will be delivered throughout the contract on nesting birds.

1.4.5 The operational railway (including infrastructure, services etc.)

Engineering Hours When Engineering Hours works are required, risks to the operational railway and/or London Underground infrastructure will be assessed during the planning stage of the works.

When working Engineering Hours a PWT-EH will be appointed to protect the operatives. The PWT-EH will follow all London Underground rules, and will book on with the Track Access Controller as per London Underground rule books and procedures. The PWT-EH will test the traction current has been discharged with their Current Rail Indicator Device. Before permitting the operatives access to the operational railway, the PWT-EH will deliver a full briefing to the operatives on the protection arrangements for that shift.

Traffic Hours When the works requires Traffic Hours to be worked, risks to the operational railway and/or London Underground infrastructure will be assessed during planning of the works. A PWT-TH will follow all London Underground rules, and will book on with the Line Controller prior to works commencing. Before the PWT-TH allows operatives access to the worksite, he will deliver a full briefing which will comprise of all protection arrangements for the shift.

Working in Depots When works are carried out in Depots, all risks to the operational railway, the Depots and/or London Underground infrastructure will be assessed during planning of the works. A PWT- Depot will follow all London Underground, and Depot rules, and will book on with the Depot Duty Manager prior to works commencing. Before the PWT-Depot allows operatives access to the worksite, he will deliver a full briefing which will comprise of all protection arrangements for the shift.

1.4.6 Use of lifting equipment and lifting operations

All equipment used to carry a load (such as climbing equipment, or rigging equipment) will be fit for purpose. All equipment will be identifiable and inspected at regular intervals:

Type of inspection	What is inspected	Record keeping	Inspected by
Daily Inspection	All parts of fall protection equipment (harness, lanyards, ropes)	No written record required	User
Weekly Inspection	All parts of fall protection equipment (harness, lanyards, ropes)	Written record required	User
Thorough inspection as per LOLER (6-monthly intervals)	All parts of fall protection equipment (equipment for carrying people)	Formal inspection record required	By a competent person
Thorough Inspection as per LOLER (12-monthly intervals)	All parts of fall protection equipment (rigging equipment etc)	Formal inspection record required	By a competent person

1.4.7 Use of portable tools

All portable equipment will be inspected by the operator prior to the use. Only trained and certified operatives will be permitted to use the tools. Site inspections will carried out, by a competent person will check all portable and small hand tools are fit for purpose, are being used as intended by trained and competent operatives. All equipment will be identifiable and inspected in regular intervals:

Tools	Power source	Test Record
Chainsaw(s)	2 stroke mix	3-monthly (tagged)
Pole saw	2 stroke mix	3-monthly (tagged)
Strimmer's	2 stroke mix	3-monthly (tagged)
Portable petrol generator	Petrol	3-monthly (tagged)

1.4.8 Mechanical plant

The table below will be used as part of the scope of works. All equipment will be tested and in date, and will have an attached service tag, informing the user of the next due service date. Only trained and certified operatives are permitted to operate any mechanical plant. An On–Site Risk Assessment will be produced to cover any risks operating any mechanical plant may produce under local conditions. Task sheets are available for:

- Task sheet 11 – Use of powered fuelled equipment and refuelling
- Task sheet 24 – Use of chipping machines
- Task sheet 25 - Use of a hedge cutter
- Task sheet 26 – Use of mini transporter

Tools	Power source	Test Record	Inspected by
Chipper	Diesel	Tagged or site file	User
Hedge cutters/trimmer	2 stroke mix	Tagged or site file	User
Portable generator	Diesel/petrol	Tagged or site file	User
Mini dumper	Diesel	Tagged or site file	User

1.4.9 Track mounted vehicles and plant

When the works require track mounted vehicles and plant a separate Task Methodology Sheet will be produced to control hazards that arise from the activity. When used the trolley will be in a serviceable condition clearly tagged and only be operated by suitably trained and competent operatives. The PWT-EH will inform TAC of the presence of Track Trolley on site. The use of the Track Trolley will be included on the On-site risk assessment, which will be complete before works commence.

The Track Trolley(s) will be fitted at all times with the full complement of safety devices including flashing lights. Pre-use checks will be carried out by the competent Track Trolley Controller.

NOTE: Track Trolleys are only to be used when traction current is switched off and protection arrangements are in place.

Track Trolleys will be used to minimise manual handling in areas where trackside access is required. Preference will be given to the use of Split Link trolleys to reduce the amount of manual handling of the Track Trolley itself.

There will be a sufficient number of staff to carry each part to ensure that no-one is overstretched and no damage occur whilst walking through stations (edges may be taped).

Track Trolleys will only be used in Engineering Hours and may only be placed on the track after the PWT-EH has confirmed that traction current has been discharged.

When traction current has been discharged each section of the trolley will be passed down to the track team from station platform and assembled by track trolley operators who are familiar with the type of Track Trolley used. The platform edges shall be protected with plywood or rubber mats when carrying out this task.

Plant, tools, equipment and materials will then be transported to the Track Trolley and loaded on. The load must not exceed the SWL of the Track Trolley.

Riding on a Track Trolley is prohibited.

Track Trolleys will be under the control of trained Track Trolley operators. The Track Trolley operator will need to be type specific trained.

Additional task lighting will be provided to illuminate the track ahead, where required. This will allow any hazards such as spare rails or missing covers to be seen, and help prevent slips, trips or falls.

At the start of the working shift, the PWT-EH must inform the appropriate signaller of the requirement to scotch and clip points. On completion of the working shift the PWT-EH must confirm to the appropriate signaller that all scotches and clips have been removed.

Extra care must be taken when traversing points and crossing work. Before passing over points you must:

- Make sure the Track Trolley is stationary.
- Place scotches and clips in position before allowing track trolley to proceed.

For further guidance on use of a Track Trolley refer to Task sheet 27 - Use of a Track Trolley.

1.4.10 Hazardous materials

The following will be implemented when using hazardous substances;

- A COSHH Assessment must be requested through HSQE, and be available on site before works commence.
- Chemicals and substances will not be stored on site unless specifically listed on the storage licence and agreed with the Landlord.
- All substances will be used and stored as per manufacturer's instructions and guidance and the COSHH Assessments.
- The necessary PPE must be worn in accordance with product label and COSHH assessments, i.e. checks are to be made on mask filters or face shields/goggles when carrying out dilution or pouring activities.
- All mixing/diluting/equipment filling must be done on drip trays to prevent environmental contamination. A check is to be made against the COSHH assessment for any special PPE requirements.
- All containers must be labelled, transported and stored according to manufacturer's instructions.
- Operatives using substances must understand the hazards of the chemicals or substances used.

- All spillages must be contained immediatly; a spill kit must be available on site when using chemicals or substances.
- Minimising risk to the user and others in the area must be ensured at all times. This will be carried out via adequate signage and exclusion zones, where necessary.
- Material and equipment must be positioned and handled so that it cannot fall, slip, roll or be blown onto the track, railway equipment, public highway, platforms or walkways.

The following products will be used as part of the scope of works. If any other product or substance is required, a COSHH assessment shall be provided by the HSQE department before the product or substance is to be used on site.

Material to be used	Hazardous	COSHH Assessment
Hair spray	YES	Yes in Appendices
Glyphosate	YES	Yes in Appendices
Petrol	YES	Yes in Appendices
Diesel	YES	Yes in Appendices
STIHL chain oil	YES	Yes in Appendices
STHIL Hedge trimmer grease	YES	Yes in Appendices
Pesticide roundup	YES	Yes in Appendices
Japanese knotweed clearing	YES	Yes in Appendices
Oak processionary moth	YES	Yes in Appendices
Chikara Herbicide	YES	Yes in Appendices
Garlon Ultra –Herbicide	YES	Yes in Appendices
STHIL strimmer grease	YES	Yes in Appendices
Ecoplug Max	YES	Yes in Appendices
Leptospirosis	YES	Yes in Appendices
Generic nuisance dust	YES	Yes in Appendices

1.4.11 Temporary structures and falseworks

If temporary structure is required, a specific Method Statement, and Risk Assessment will be prepared to cover the additional works.

1.4.12 Work at height

- Work at heights will be avoided, where practicable.

- All works must be planned and organised, including survey for overhead power lines and distances; tree conditions, including potential weakness caused by decay and the presence of birds' nests etc.
- On-Site Risk Assessment will be carried out to identify any additional hazards.
- The On-Site Risk Assessment will be briefed to all involved in the works.

Ladders

Ladders – must be used for access/egress only, or as an exception only for works of a short duration (5 to 10 min) when other access equipment is not suitable. Priority must be given to podiums, towers, access platforms etc.

Only industrial (130kg) class 1 ladders/stepladders conforming to BS EN 131 must be used.

The following factors must be considered when inspecting and using ladders on site:

- Stiles are not damaged, warped or buckled
- No rungs are missing
- All treads are clean
- All secure stepladder locking devices are in place and working, when extended
- Ensure ladders (both feet) are resting on firm and level surfaces
- Ensure that step ladders are fully extended
- Ensure ladders are angled outwards to avoid slipping (*Rule of thumb – "one out for every four up")*
- Where a ladder cannot be fixed ensure a second person foots the ladder whilst in use.
- Step ladders to be footed at all time whilst in use.
- If a ladder is used as regular access/egress it must be secured and not footed

For further guidance when working at height please refer to

- Task sheet 15 – Tree climbing
- Task sheet 16 – Use of ladders and step ladders

1.4.13 Excavation

When excavating works are required Task briefing sheet 13- Ground disturbance and excavation is to be followed for the management of the works.

1.4.14 Access/egress

When an activity compromises safe access and/or egress to site, an On-Site Risk Assessment will be produced to safely assess how all operatives, plant and machinery can safely access the worksite. No work will commence until the alternative safe access has been established.

If necessary works will be postponed to ensure that access / egress conditions are such that they do not pose a risk to safety of those accessing the worksite.

All operatives will receive a briefing on the On-Site Risk Assessment, regarding safe access/egress.

The SPC/PWT will contact their Line Manager/Health and Safety department for further advice, as necessary.

For further guidance refer to:

- Task briefing sheet 01- Access, site set up.

1.4.15 Transportation

Transportation will be via small vans or flatbed 7.5 tonne vehicles. It must be ensured, by the Cleshar SPC/PWT, that all deliveries are co-ordinated and all vehicles are parked in a position where they present no additional risks to both road users and passers-by.

When vehicles are off loaded, a supervised area will be marked out by cones or barriers to safeguard the interface between the work force and passers-by.

For works that require obstruction of roads a formal traffic management plan will be prepared and road closures organised.

For further guidance on driving and transportation please refer to:

- Task sheet 08 – Driving and transportation

1.4.16 Noise

Cleshar routinely measure noise levels from the most commonly used tools to evaluate the most appropriate control measures and to select the least noise polluting tools. The following control measures shall be followed when using the listed tools below.

Potentially Noisy Operation	Means of Control
Chainsaws, STIHL Blower, Hedge Trimmer, Strimmer, chipper, generator	• All works will be carried out using well-maintained equipment. SPC/PWT to assess noise levels and introduce local controls i.e. acoustic screens if required. • Hearing protection will be worn where indicated by Risk assessment. • Battery powered equipment to be selected where reasonably practicable. • Access to worksite will be limited to those involved in the works during high levels of noise. • Hearing protection zones will be established and hearing protection use enforced, where the noise level could reach 85 dB (A) • Hearing protection will be issued to all operatives using power tools or work in vicinity. • Lower noise generating equipment will be selected, where practicable. • Ensuring worksite deliveries are managed correctly and well-disciplined to reduce noise at all times. • Where deliveries can be done during the day this option must be utilised, whenever practicable. • The SPC/PWT must ensure, where practicable, that all noisy plant is kept as far away from residential properties as possible. • Extra care is taken to keep all noise to a minimum at night with the vicinity of the local residents in mind. • The Project Manager is to establish contact with local residents during prolonged noisy works in a particular location. • A Section 61 notice will be applied for, if necessary

1.4.17 Vibration

All operatives shall be made aware of the risks of a prolonged exposure to vibration. Operatives will be made aware of the symptoms of white finger, carpel tunnel syndrome and all other Hand Arm Vibration related injuries. It is not envisaged that the trigger time the operatives may be exposed to on any normal shift may cause Hand Arm Vibration exposure risk.

Potential High Vibration	Means of Control
Chainsaws, STIHL Blower, Hedge Trimmer, Strimmer	• The equipment must be tagged, tested and well maintained. • Lower vibration equipment to be selected, where practical. • User maintenance of equipment to be implemented. • The SPC/PWT must ensure that operatives take regular breaks throughout shifts and carry out non-HAV based tasks to minimise the risk of vibration white finger. • Where possible rotation of operators will be implemented • Periodic monitoring of exposure to vibration will be carried out to ensure the ELV is not exceeded. • Operatives will be briefed on the consequences of exposure to vibration. • Operatives will be briefed to keep warm and dry hands when working in winter, i.e. wearing gloves. • HAVI monitors & HAV Control Handbooks are to be used to monitor exposure levels of operators using vibrating equipment. Monitoring is to be carried out on a periodic basis or as per CCS HSQE instruction. • When operatives are at ground level chainsaw jackets/sleeves must be worn. • When operatives are using a chainsaw in a tree the use of a chainsaw jacket is to be Risk Assessed against physical exertion and the weather conditions. When it is not reasonably practical to wear a chainsaw jacket, then the protective chainsaw sleeves are to be worn. The period of usage of vibrating equipment must be reduced when: • Operative has tendency to suffer from poor circulation (symptoms include: frequently cold fingers and tingling) • The outside temperature is very low.

1.4.18 Dust and air quality

The following schedule identifies the plant or operations that emit pollution or dust with the practical means of minimising or reducing the dust and emissions:

Plant/Operations	Means of reducing emissions or dust
All fuel powered tools/equipment	• Equipment to be properly maintained • Equipment to be used according to the manufacturer's instructions • Only fuel that is specified by the manufacturer to be used • All generators to be positioned away from works and residential properties, where practicable. • Generators must be self bunded.

Plant/Operations	Means of reducing emissions or dust
Disturbing ballast/ground Handling waste material	• Area to be inspected before works commence to identify for potential locations where dust may be a problem • Suitable locations to be identified for stockpiling debris, prior to removal from site. • Areas Damped down where dust is raised, especially in very dry conditions • Skips covered where used, for removal of debris

1.4.19 Housekeeping

Before works commence the operatives will receive a pre-works briefing from the SPC/PWT. Part of the briefing will comprise housekeeping arrangements. The SPC/PWT will brief the operatives to maintain a high level of housekeeping. If there is an extensive build-up of waste during the works, the SPC/PWT will stop works, and instruct the gang to clear any waste before recommencing. The access and egress points will be kept clear at all times. The worksite will be left clear and tidy at the end of every shift. Any natural waste accumulated will be put into habitation piles. All other waste will be disposed of via Cleshars skips.

1.4.20 Electricity

When Cleshar operatives are working adjacent to Network Rail sites, there may be an interface with overheard electrified cables. If this circumstance should arise, a separate Method Statement and Risk Assessment shall be produced. Any other interfaces encountered with electrical assets on site will have a separate Method Statement, and On Site Risk Assessment. The following task sheet can be used for further guidance:

- Task sheet 12 – Working near overhead power lines.

Traction current:

When operatives are required to work in areas where traction current is live, the first option will always be to carry out the works during Engineering Hours, when traction current can be fully discharged under the protection of a PWT-EH. It is not feasible for the traction current to be discharged, works will take place during Traffic Hours under the protection of a PWT-TH.

When working in Depots the traction current will always be considered as live. Only operatives who Basic Track Awareness trained, and have received the depot induction are permitted to work there, under the protection of a PWT-D.

Cables

Where operatives are working around cables the cables will be protected and the operatives will use hand saws only (No Chainsaws). All cables, and other assets will be risk assessed before works commence

1.4.21 Asbestos

During works where there is potential of disturbance of structures the project manager will request Asbestos report F3333 from the Client Hazardous Material Unit (HMU)

No works will be undertaken by Cleshar that may lead to disturbing asbestos or other unknown materials.

In the event of discovery of asbestos, ACM or suspected asbestos:

- Do not disturb.
- Stop work immediately

- Clear the area of personnel, tools and equipment
- Inform other parties in the vicinity
- Evacuate the area
- Call the HMU reporting Line 0207 088 5615
- Call the Cleshar Health and Safety department

1.4.22 Fly-tipping

Any worksite which has fly-tipped waste, that may cause risk to the work site, the operatives, or the working activity, then the operatives must

- Stop works, and plan other works if feasible.
- Call their Line Manager/ Health and Safety department for further instructions.
- Cordon of the fly-tipped area.
- Inform London Underground of the location, type of waste, quantity of waste.
- If the waste appears to be hazardous, or the SPC cannot safely identify what it is, they are not disturb, or attempt to move the waste.
- Take photos.

1.5 Resources

1.5.1 Materials

Any materials required for the works will be planned by the Project Manager. If a product, or substance requires a COSHH Assessment it will be required before the product is used on site and be included in the site documents. All materials that are used on site will be briefed to the gang by the PWT/SPC.

1.5.2 Specifications of required plant and machinery

Only plant and equipment that has been London Underground approved is permitted to be used on the works site. The tools required for the works can be found on the task briefing sheets, and the above Portable Tools, Mechanical Plant and Track Mounted Plant sections above. All operatives will be briefed on the tools required for the works during the pre-works briefing from the PWT/SPC.

The following tools will be used in the scope of works. The list is not exhaustive and other tools and equipment may be required.

- Hand tools
- Strimmer FS 400
- Chainsaw STIHL MS 361
- Leaf blower STHL BG85
- Leaf sucker/blower STHIL SH56
- Wood chipper
- Hedge trimmer STIHL HS81RC
- Telescopic Hedge trimmer (petrol)
- Mini dumper
- Litter picker
- Back pack sprayer 16LTR
- Back pack sprayer 16LTR Berthound Vermorel 200

All tools used on the contract must be in a good condition. Electrical tools must be PAT tested and contain a label which allows a next test date to be identified. Chainsaws and strimmers to be serviced as per service schedule.

Before using any tool it should be visually inspected for any damage in accordance with their user training.

Ensuring tools are in good condition and well maintained will also reduce noise. A sharp point or blade will significantly reduce noise generation.

1.5.3 Workforce

All training will be co-ordinated by the Cleshar training department and carried out by an approved training provider. Copies of all relevant certification are maintained at Cleshar Head Office. In addition all personnel will carry details of their individual training.

Operation/Personnel	Training Required
All operatives	LU ICI Sentinel Card , Asbestos Awareness, Manual Handling training, Site Induction
Operatives working on or near track in traffic hours	Basic Track Awareness
Operatives working in Depots Working in depot area A	Basic Track Awareness Specific Depot familiarisation induction and area A training
Person in Charge in charge of site safety	Site Person in Charge -Non Track location (SPC-NT) Protecting Workers on the Track (PWT)
First Aider	Appointed Person course as a minimum
Moving Track Trolley	Track Trolley Controller (Formally known as Trolley Operator)
Protecting Workers on the Track Traffic hours (when trains are moving and current is on)	Protecting Workers on the Track Traffic Hours (PWT-TH)
Protecting Workers on the track Engineering hours	Protecting Workers on the Track Engineering hours (PWT-EH)
Protecting Workers on the track Depots	Protecting Workers on the Track Depots (PWT-Depot)
Working on the Depots	Passport to depot (Familiarisation) training in Depots
Arboricultural Works	Certificate from a recognised training establishment to prove competency and qualification
Spraying herbicides	Safe use of pesticides levels NPTC PA1 & PA6
Using strimmers/ hedge cutters/chippers/chain saws	Certificate from a recognised training establishment to prove competency and qualification
Working adjacent to Network Rail track	PTS- AC/DC

1.5.4 The PPE required by the workforce and visitors

The following PPE will be required:

PPE	Req.	Grade	When	Additional information
Safety Boots	✓	EN 20345	at all times	Steel toe capped boots with mid sole protection and ankle support
Chain saw boots	✓	EN 381-9 EN 381-3	When using chainsaw	Protective boots with good grip and protective guarding at front vamp and instep
High Visibility Jackets (with Cleshar Logo)	✓	EN 471	at all times	Except when climbing trees when Hi - Vi T-shirts are acceptable
Safety Glasses	✓	EN 166 F	at all times	
Safety Goggles	✓	EN 166 F	As per Risk assessment	
Gloves (mechanical Protection)	✓	EN 388	As per Risk assessment	Handling, carrying materials .
Gloves (Chainsaw Protection)	✓	EN 381-7	As per risk assessment	Suitable gloves for the task and subject to the operator's risk assessment. Consider the need for protection from cuts from the chainsaw, thorny materials and cold/wet conditions. Where chainsaw protection is required this should be to BS EN381-7
Gloves (Chemical Protection)	✓	EN 374	As per COSHH assessment	
Dust Masks	✓	EN149 FFP 3	During dusty operations	Face Fit Tested
Other respiratory protection	✓	As per COSHH	As per COSHH	
Ear defenders	✓	EN 352	When using power tools	Refer task risk assessment
Disposable Overalls/Coveralls	✓	EN 340	Strimming/ Spraying/ Removing waste	When using herbicides/pesticides - openings at neck and wrists must be a snug fit. The sleeves must also be long enough to cover the rubber gloves
Face/ Eye protection (mesh)	✓	EN 1731 mesh visors	When using mechanical vegetation cutting tools (strimmers)	

PPE	Req.	Grade	When	Additional information
Gaiters	✓	EN 381-9	When using Chainsaw, working at height or ground level	Or occasional users working in even ground where there is little risk of tripping or snagging on undergrowth or brash, worn in combination with steel toe- capped safety boots.
Leg and groin protection	✓	EN 381 – 5	All round protection for arborists working in trees	AFAG recommends Type C leg protection for aerial work, because of the high all-round chainsaw cut protection. Where wearing Type C is impractical (I.e. because of the higher risk of heat stress) it may be appropriate to use Type A, where justified by the risk assessment
Chainsaw Jacket	✓	EN 381:11:2002	When operating chainsaws at ground level, when Aborists are climbing/in the tree this is to be Risk Assessed against increased heat stress generated from physical exertion e.g. working from a rope and harness, as per HSE guidance INDG317 Rev 2.	
Protective sleeves.	✓	EN 381-10	At all times when operating a chainsaw.	

COSHH Assessments may require further PPE when using substances e.g specific filters or gloves.

1.6 Permits and Licences

Permits and Licences required for task:

Permit or Licence required	Required	Item	Location
London Underground endorsed Sentinel card.	✓	All personnel	With individual

Permit or Licence required	Required	Item	Location
Access Number	✓	Engineering hours	Site File/with PWT (SPC-NT)
Storage Licence	✓	For any storage area permission from the Landlord is required.	At access point to the specific storage area
Hot Works Permit	✓	When abrading/welding/ burning	Site File/with PWT (SPC-NT)
Permit to Dig	✓	When excavating or disturbing ground	Site File/with PWT (SPC-NT)

1.7 Waste

Before works commence the area will be surveyed to identify any fly-tipped rubbish. Litter and small waste must be bagged up and removed from site in a van and taken to Cleshar yard and placed in the skip. Care to be taken of needles or other sharps around the work area, gloves to be worn and bags to be carried away from operative's body.

More substantial waste must be referred to the Client Manager for an instruction. If instructed, waste must be bagged up and removed to agreed location. If hazardous waste is discovered it is to be kept separate from other waste and clients' representative contacted to ensure the correct procedure is followed for its disposal. Quantity and type of waste being removed is to be recorded on the Project Activity Sheet.

Any materials or debris arising from the works must be put into double builder's bags, secured with cable ties and removed from site by Cleshar or as agreed with the client. Where required, Cleshar will raise a request/permit for transporting the debris out of the station via the lift or escalator. For the sequence of operations with regard to waste disposal, generally follow the Waste Transfer note that has to be completed at various stages throughout the disposal process to ensure traceability. A Copy of the in date Waste Carrier Licence will be held in the site file.

2 Site Details

2.1 Access and Egress

Signing in and out must be done following the London Underground station signing in procedures. SPC/PWT instructions must be followed. Access to the works must be restricted to persons required to carry out the works to comply with London Underground's requirements. When entering via a station all operatives and visitors will sign in and out at the appropriate Station Supervisors Office before entering the LU network. Individuals must be in possession of the necessary certification, in line with London Underground requirements, to allow them to enter the area required. This will include visitors and personnel undertaking inspections/audits. The SPC/PWT will ensure that all access gates are closed and secured once inside and when leaving the site to prevent unauthorised access. Signage to warn of the works will be displayed at the access point.

When gaining access to a work site through an LU access gate the SPC/PWT will inform the Line Controller. The Line Controller will be told of the location the operatives are working at, the access point, the type of works being carried out, and the distance they are from the track, and the level of protection they are providing for the shift. When works have concluded, the SPC/PWT will inform the Line Controller the gang is clear of the worksite, the access gate is locked.

When gaining access to gates on stations on the Metropolitan Line, as well as booking on with the Line controller, the SPC/PWT will report to the Station Supervisor's office and sign the gang in on the PICER form. The SPC/PWT will inform the Station Supervisor of the nature of works taking place, the location, and the access point. When works have concluded the SPC/PWT will inform the Station Supervisor.

2.2 Site layout

Works will be carried out at various stations, compounds, embankments across the TFL infrastructure. Prior to works commencing an On-Site Risk Assessment will be carried out to include details relevant to the specific location.

2.3 Interfaces

Any possible interface with other contractors, London Underground staff, or the general public will be identified in the planning meeting before the works commence. Control measure shall be implemented to ensure all third parties are safe from any works. Should operatives arrive on site, or an interface with any third party arise when works have already commenced, the SPC/PWT will phone their Line Manager for further instruction.

1.5 Control Site Risks

2.4.1 Workers

Before any works commence, the Person in Charge will complete an On-Site Risk Assessment detailing any hazards the worksite presents, along with control measure to mitigate the hazards. This will be fully briefed out to all operatives before works commence. The following task sheets can be referenced. If the worksite presents a risk, where the hazards cannot be sufficiently controlled, the Person in Charge will contact their Line Manager, Health and Safety department for further guidance. The following task sheets can be referred to:

- Task sheet 01 – Access and site set up
- Task sheet 02 – Work on, or near the track
- Task sheet 03 – Site work (biological hazards)
- Task sheet 04 – Site work (Exposure to weather)
- Task sheet 17 – Access, or work on slopes, or steep embankments

2.4.2 Neighbours (e.g. Network Rail, nearby houses etc.)

Where a worksite becomes intrusive to neighbouring residential properties, a planning meeting will be held to decide how to control the safety interface with the residential area and the worksite. Letter drops will also be carried out prior to works commencing, advising residents of works that are due to commence. If Cleshar operatives notice the worksite becoming a risk, or intrusive to the residents, they will stop work, and contact their Line Manager, Health and Safety department for further guidance. A separate method statement, and/or a Site specific Risk Assessment would be produced to control the worksite.

When working on a Network Rail work site all Cleshar operatives will be PTS trained. A Site specific Risk Assessment will be completed along with Network Rail Safe Work Pack, and Network Rail permits before works commence. These will detail the hazards and risks the worksite presents, along with control measures to sufficiently protect Cleshar operatives. A Network Rail COSS will be appointed when working on Network Rail sites.

2.4.3 Other contractors working in the vicinity

Where the Cleshar worksite will present hazards to others working in the vicinity, a planning meeting will be held with all parties to discuss and plan how to protect all from the risks involved. A separate Method Statement, and Site Specific Risk Assessment will be raised and implemented to protect all involved from the hazards and risks identified. In the event of an unplanned interface with others working in the vicinity, the SPC/PWT will temporarily stop works, and plan with the other SPC/PWT on how to control the issues. If a mutual agreement can be reached, an On-Site Risk Assessment will be produced, and re-briefed to all. In the event an agreement cannot be reached, the SPC/PWT will contact their Line Manager and/or Health and Safety department for further guidance.

2.4.4 The environment (e.g. nearby water courses)

Cleshar operatives will be briefed on ecological and other environmental issues relevant to their task and the location of the works. These are included in the risk assessments for the works, and can include issues such as sensitive receptors in the vicinity of the site, presence of protected or invasive species and protected habitats. The task briefing sheet will detail all environmental risks associated with water, ecology, contaminated land, noise, vibration and pollution.

In some cases, an ecological survey prior to any works will be required to confirm presence of high risk species, both protected and invasive, to ensure adequate control measures are implemented during the works.

Also, where sensitive receptors such as residents, schools, care homes or similar, are in close proximity to the site and may be affected by noise and other nuisances, a noise assessment may be required and the necessary mitigation measures implemented.

Environmental incidents are reported and investigated in the same manner as safety incidents. Operatives shall report to their manager if they are unable to fulfill their duties as a result of discovering any ecological issues (e.g. presence of protected species, nesting birds and reptiles).

2.4.5 LU staff

When Cleshar worksite will present hazards to London Underground staff a Site Specific Risk Assessment will be implemented to protect all involved from the hazards the worksite. In the event the risks cannot be sufficiently controlled, the SPC/PWT will contact their Line Manager, Health and Safety department for further guidance.

2.4.6 The operational railway (including infrastructure, services etc.)

Engineering Hours

When working Engineering Hours works are required, a PWT-EH will be appointed to provide protection to all operatives for that shift. The PWT-EH will book on with the Track Access Controller as per London Underground rules and procedures. All risks that arise from the worksite, when working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions.

Traffic Hours
When working Traffic Hours works are required, a PWT-TH will be appointed to provide protection to all operatives for that shift. The PWT-TH will book on with the Line Controller as per London Underground rules and procedures. All risks that arise from the worksite, when working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions.

Working in Depots
When working in any London Underground Depot is required, a PWT-Depot will be appointed to provide protection to all operatives for that shift. The PWT-Depot will book on with the Duty Depot Manager as per London Underground rules and procedures. All risks that arise from the worksite, when working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions.

2.4.7 Members of the public
The worksite will, for the most part, be on London Underground premises, behind a physical barrier creating a tangible physical segregation between the worksite and the members of the public. In the event that the worksite may pose a risk to the public, the works will be planned in advance and a site specific risk assessment for that particular worksite will be raised. The site will be demarcated and cordoned off. Before any works commence the SPC/PWT will do an On-Site Risk Assessment, including managing the interface with the general public. If there is a risk of violence due to the interface with the public, then operatives will remain together and move to a place of safety, moving any tools or equipment out of the way of the potential violence, where possible. If the SPC/PWT considers it necessary, they will call the police.

2.4.8 Asbestos
During works where there is potential of disturbance of structures the project manager will request Asbestos report F3333 from the Client Hazardous Material Unit (HMU)

No works will be undertaken by Cleshar that may lead to disturbing asbestos or other unknown materials.

In the event of discovery of asbestos, ACM or suspected asbestos the following process will be followed:

- Do not disturb.
- Stop work immediately
- Clear the area of personnel, tools and equipment
- Inform other parties in the vicinity
- Evacuate the area
- Call the HMU reporting Line 0207 088 5615

2.4.9 Buried services
It is not envisioned that contact with buried services will be part of the scope of works in this Method Statement. If this is required throughout the cycle of the contract, a Site Specific Risk Assessment will be produced, with the required trained, and competent person to carry out any cat-scanning.

2.4.10 Limited steep access embankments,

When operatives are working on steep embankments a Site Specific Risk Assessment must be completed before any works commence. SPC/PWT shall ensure weather conditions do not impose a risk to the operatives, or the operational rail way. The site specific risk assessment shall include:

- Weather conditions.
- Underfoot conditions.
- Safe system of work, i.e. harness, fall arrest equipment.
- Level of protection required.
- Possible interfaces with Network Rail.
- Any London Underground assets that may need protection.
- Other contractors, or other works in the vicinity.

For further guidance refer to:

- Task sheet 17 Access or work on steep embankments.

2.4.11 Overhead lines

When works have an interface with Network Rail, and the OLE a Site Specific Risk Assessment will be produced before any works commence. All relevant Works Package Plans, Permits, Task briefing sheets will also be in place before any works commence. All staff will be PTS trained, under the protection of a COSS.

Refer to Task briefing sheet 12 – Working near overhead power lines.

2.4.12 Contaminated land

London Underground will inform Cleshar of areas with contaminated land. A specific Method Statement, and Site Specific Risk Assessment will be prepared for work in such areas and briefed to all the operatives.

2.4.13 Pests and weeds

All pest and weed management will be carried out as per Task sheet, risk assessment and relevant COSHH assessment/s by competent operatives. Areas treated with chemicals will be cordoned off where necessary and warning signs posted. Cleshar will implement provisions to prevent, as reasonably practicable, the migration of pests from site. All operatives will be made aware of the presence of rats, wasp nests, snakes, etc. during site briefing. Operatives will also be made aware of health and safety hazards associated with wildlife in tool box talks and inductions.

Hazards include:

- Bee/wasp stings,
- Leptospirosis,
- Snake bites and
- Diseases from pigeon droppings.

2.4.15 LU Operations, and sites where violence towards site staff is known.

When operatives are required to carry out works in areas where violence towards staff is known, the following must be considered.

- Informing British Transport Police, Metropolitan Police of planned works.
- London Underground Management, and Senior Cleshar Management to be made aware of the works, the time, location, duration of works.
- All operatives to be briefed to stay in groups of 2, and 3 and be advised to commute to, and from the worksite in groups.

- Nearest Police station, and other emergency services to be briefed to the operatives before any works commence.
- If operatives are confronted, or challenged they will be briefed to remain calm, talk softly, go to a place of safety, not to respond with violence.
- If operatives see any suspicious activity, they are to report it to the British Transport Police, Metropolitan Police.
- Works to be planned for daylight hours, where practicable.

2.5 Protection

All Cleshar gangs shall have the correct protection in place before any works commence. A trained, and competent PWT-EH/TH/Depot will provide protection for the works depending on when and where the works is taking place.

2.5.1 Traffic hours

The majority of the works is envisioned to take place during Traffic Hours. A PWT-TH will be appointed to each of the Utility gangs working on this contract. The PWT-TH will follow all London Underground rule books and procedures when executing their duties. The PWT-TH will book on with the Line Controller before any works commence.

2.5.2 Engineering hours

When working engineering hours a Protecting Workers on Track Engineering Hours (PWT-EH) shall provide protection to all operatives who required to carry out works. The PWT-EH will follow all London Undergrounds rule books and procedures.

2.5.3 Depot working

When working in a depot a Protecting Workers on Track Depot (PWT-Depot) shall provide protection to all operatives who required to carry out works. The PWT-Depot will follow all London Undergrounds rule books and procedures, and the rules for the depot they are working in.

2.6 Isolations

In the event the worksite is shared with Network Rail, or within a close proximity to Network Rail OLE, an isolation is required.

2.7 Communication and Contact Details

If operatives need to speak to their Managers or Health and Safety department they can call them at any time mobile phones, or through head office. If operatives need to reach anyone outside normal working hours, or in the event of an emergency Cleshar have a 24 hour HUB which is manned at all times. By using this the on-call Operational Manager, or Health and Safety representative will be contacted.

The following contact details will be used for these works;

Company	Position	Responsible Person	Contact no.
TfL	**Project Manager**	Joel Baker	TBA
TfL	**H&S Advisor**	Richard Brooks	TBA
Cleshar	**Project Manager**	[redacted]	[redacted]

Cleshar	**H&S Advisor**	[redacted]	[redacted]
Cleshar	**Vegetation Manager**	[redacted]	[redacted]
Cleshar	**Vegetation Manager**	[redacted]	[redacted]
Cleshar	**Tree Inspector**	[redacted]	[redacted]

Emergency contact details:

Emergency Contacts		**External number**
Fire – Police - Ambulance		999
BT Police Control		0800 40 50 40
Rail Accident Investigation Board	Death or Serious Injury	01332 253 333
ORR	Fatal or Major injuries only Out of hours:	Monday to Friday, from 09:00 to 17:30 hrs - Telephone: **020 7282 3910**
		Outside these hours, weekends and public holidays please call the Department for Transport (DfT) Duty Officer on: **020 7944 5445**
Gas – Transco Emergency		0800 111 999
Electricity Emergency Line		0800 375 675
Local Water Company Emergency Line	Thames Water	0800 980 8800
Alere Toxicology	D&A screening	020 7538 1133
Cleshar HUB	24hr 7 days a week	020 8733 8552

Emergency Contacts		External number
Environmental Agency	Emergency Line	0800 807 060
Various London hospitals		999
Network Rail Emergencies	24 hour Helpline	0345 711 4141

2.8 Emergency Arrangements

In the event of an emergency, the procedure as described in the project Emergency Plan will be followed.

Emergency procedures for first aid and fire evacuation will be briefed to all operatives prior to work commencing.

- The SPC/PWT will ensure that all operatives are aware of the assembly point, First Aider and nearest hospital.
- The SPC/PWT will ensure that the First aider is aware of the site address/location and access points in order to direct the emergency services.
- In the event of emergency the SPC/PWT will contact Station Supervisor to request emergency services (if working within the station location) or call 999.

The worksite may and will vary from shift to shift. Before each shift commences, the Person in Charge will brief the operatives on the closest Accident and Emergency unit, with the agreed staff assembly point should emergency services need to be called.

In the event of an Aerial rescue, operatives are to refer to Task sheet 32 Aerial rescue.

There will be a fully stocked first aid kit and a qualified Emergency First Aider assigned to each gang. The First Aider will be introduced to the work group during induction. In the event of an incident / accident the First Aider must administer first aid and report to the nearest station for assistance, if required. All accidents resulting in injuries will be reported immediately to the Project Manager, Cleshar HSQE department and as per project reporting procedures.

2.8.1 Fire

A portable fire point will be set up adjacent to the work area. The first aid kit will normally be kept with the fire point, the capacity of the firefighting equipment may change if the risk assessment stipulates.

Fire prevention:

The following activities will be carried on site;

- A re-fuelling point will be allocated, with drip tray, and funnel. This will be at least 5 metres away from any hot works.
- All plant and equipment will be fuelled at the depot before works start.
- Ensuring the fire point is easily accessible before any hot works commence.

- All hot works activities are to be included on the On-Site Risk Assessment, and pre-works briefing.

The standard fire point will consist of:

- **2x AFFF (9ltr)**
- **1x CO2 (5kg)**
- **1x Fire Blanket**

No smoking or vaping is allowed on London Underground Limited premises.

Hot works will be managed in accordance with a London Underground issued Hot Work permit and overseen by a Fire Watch Person. The London Underground trained Fire Watch Person will be present on site during the hot works and for a minimum of 1 hour after completion of works. The Fire Watch Person will not be engaged in activities that would prevent them from carrying out their Fire Watch duties.

2.9 Welfare

Welfare will be provided for each location and assessed on each site, normally agreement to share station's/Depot welfare facilities. A Welfare van can be provided for larger groups (e.g. during possessions) and remote locations as agreed between Cleshar and London Underground.

3 Briefing and Reporting

3.1 Briefing Arrangements

The SPC for the works will deliver a pre works briefing. The briefing will comprise of:

- Safe System of Work.
- Method Statement, and Risk Assessment, any COSHH Assessments that would be needed for that shift.
- Roles and responsibilities, i.e. who will be doing what task.
- Plant, equipment and tools needed for the shift.
- PPE requirements.
- Daily working activities.
- Any site specific hazards and mitigation measures.

When works are being carried out during Traffic Hours, and a PWT-TH is required the operatives will receive a protection briefing from the PWT-TH. The protection briefing will consist of:

- Train movements
- Protections arrangements, if a look out or hand signalman is being used
- Direction of traffic.
- The emergency arrangements, nearest hospital, staff assembly point.
- Site specific hazards, e.g. slipping and tripping hazards.
- The Person in Charge.
- The identity of the First Aider.

When works are being carried out during Engineering Hours, and a PWT-EH is required the operatives will receive a protection briefing from the PWT-EH. The protection briefing will consist of:

- Inform and show the SPC that the traction current has been discharged.
- The call back time for the shift.
- The protections limits and the worksite for the shift.
- The emergency arrangements - nearest hospital, staff assembly point.
- Site specific hazards, e.g. slipping and tripping hazards.
- The Person in Charge of works.
- The identity of the First Aider.

3.2 Reporting Accidents and Incidents

All accidents, incidents, near misses must be notified to the SPC/PWT and who will carry out an immediate investigation.

All accidents, incidents, near misses must be reported to the incident report operator on [redacted] (auto [redacted]) or [redacted] as soon as possible but by the end of shift at the latest and also reported to Customer Care Centre [redacted] and to Duty Supervisor informed on site.

- LUL Incident Line [redacted]
- Cleshar HUB [redacted]

Environmental incidents must also be reported in the same manner as Health and Safety incidents.

If serious accident, incident or injury all operatives to remain on site until dismissed by authorised person (Cleshar Manager, London Underground Manager or Police), unless in need of medical treatment.

RIDDOR reports must be submitted by Cleshar H&S department unless reports are submitted by the client or subcontractors

4 Appendix

A - On Site Risk Assessment Form

B - Task briefing sheets (incorporating risk assessments)

- Task briefing sheet 01- Access, site set up
- Task briefing sheet 02- Work on or near the track
- Task briefing sheet 03- Site work (Biological hazards)
- Task briefing sheet 04- Site hazards (Exposure to weather)
- Task briefing sheet 05- Manual Handling
- Task briefing sheet 06- Use of hand tools
- Task briefing sheet 07- Use of power tools
- Task briefing sheet 08- Driving and transportation
- Task briefing sheet 10- Use of strimmers and hedge cutters
- Task briefing sheet 11- Use of fuel powered equipment and refuelling
- Task briefing sheet 12- Working near overhead power cables
- Task briefing sheet 13- Ground disturbance, and excavation
- Task briefing sheet 16- Use of a ladder or step ladder
- Task briefing sheet 17- Access or work on steep slopes, and embankments
- Task briefing sheet 18- Japanese knotweed

- Task briefing sheet 19- Giant hogweed
- Task briefing sheet 21- Tree and shrub planting
- Task briefing sheet 22- Use of a chainsaw
- Task briefing sheet 23- Use of a Hand held blower
- Task briefing sheet 24- Use of chipping machines
- Task briefing sheet 25- Use of hedge cutters
- Task briefing sheet 26- Use of mini transporter
- Task briefing sheet 27- Use of a mini track trolley task sheet
- Task briefing sheet 28- Use of a hand held auger

C - COSHH Assessments

- Hair spray
- Glyphosate
- Petrol
- Diesel
- STHIL chain oil
- STHIL Hedge trimmer grease
- Pesticide roundup
- Japanese knotweed clearing
- Chikara herbicide
- Garlon ultra herbicide
- STHIL strimmer grease
- Ecoplugs
- Leptospirosis
- Genric nuisance dust

Task Description/Methodology				
Applies to all activities where hand tools are being used.				
Hazards associated with the task		**Consequences**		**Pre-controls Risk Rating**
Sharps, blades and edges, impact with tools, ejection of materials and particles, ejection of tools/parts of tools, working close to electrical cabling/equipment, prolonged awkward postures.		Eye injuries, various personal injuries, cuts and abrasions, electrocution, burns, musculoskeletal injuries.		**M**
People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☐
Control Measures				**Post control Risk Rating**
• Only competent operatives to carry out works. • Where operatives or persons undergoing training (apprentices) they shall be closely supervised. • All tools shall be maintained, kept in safe condition and inspected prior to use by the user. • All cutting tools will be kept sharp. • Insulated tools to be used when working close to electrical equipment. • Hands should be kept behind, or away from sharp cutting edges or work piece edges. • All bladed knives/chisels etc should be guarded when stored safely in toolbox/bag, open blade knives are not allowed on to London Underground. • Redundant blades must be disposed of properly, for example in solid container. • Ensure no one else is close when using hand tools such as swinging hammers etc., warning is to be issued to operatives and other contractors in the vicinity. • Good housekeeping is to be ensured when using hand tools. • Task lighting to be used at all times when working in the dark. • Operatives to achieve adequate breaks from awkward position or prolonged use of hand tools (for example when, twisting or bending back, reaching upwards or kneeling when using hand tools).				**L**

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374
Safety glasses where ejection of particle is a risk	EN 166 F		
Reviewed issue 6	30/05/2019	Approved	[redacted]

TASK SHEET NUMBER 07 **USE OF POWER TOOLS**

CLESHAR

Task Description/Methodology				
Applies to all activities where small electrical power tools such as drills are used.				
Hazards associated with the task		**Consequences**		**Pre-controls Risk Rating**
Faulty equipment, equipment not suitable for the task, inexperienced users, noise, vibration, impact with services, awkward postures.		Electric shock, electric burns, explosion, fire, entrapment, damage to the assets, personal injury, damaged hearing, ill health from effects of vibration, musculoskeletal injuries		**M**
People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☐
Control Measures				**Post control Risk Rating**
• Only competent operatives shall use power equipment. • Where operatives or persons undergoing training (apprentices) are working they shall be closely supervised. • All electrical tools must be PAT tested, maintained and tagged with expiry/next test date. • Equipment will be visually inspected prior to use by the operator. • Faulty equipment will not be used, taken off site and replaced. Labelled as DO NOT USE – FAULTY, and returned to Cleshar's yard to be quarantined. • Ensure all guards and other safety devices are in place. • All tools to be suitable for the task. • Dust suppression to be used during stone/concrete cutting – regular dampening down with water or extraction in place. Respiratory protection may be required (refer to COSHH assessments for guidance). • Hearing protection must be worn when using noisy power equipment for prolonged periods. • Eye protection to be worn (goggles EN 166) and enforced by the SPC/PWT. • Ensure fire systems are checked and isolated prior to cutting works. • When cutting metal (using angle grinder) ensure that a Hot Works Permit is in place and a fire watch person is in place at all times, blade to be changed/adjusted by abrasive wheels trained person. • Time spent using power tools must be limited. • Task lighting shall be used at all times when working in dark. • Operatives to achieve adequate breaks from awkward position or prolonged use of power tools tools (for example when breaking for longer periods, twisting or bending back or kneeling). • Also refer to Ground disturbance and excavation Task Sheet Number 13.				**L**

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374
Safety goggles	EN 166 F	Hearing protection	EN 352
Reviewed issue 6	30/05/2019	Approved	[redacted]

TASK SHEET NUMBER 10 **USE OF STRIMMERS AND BRUSH CUTTERS**

CLESHAR

Task Description/Methodology
• Survey the area for obstacles or obstructions. • Only trained operatives shall use the equipment. • Carry out essential maintenance and pre use checks on the strimmer. • When starting your petrol strimmer, put it on the ground and hold it with one hand while you start it up with the other. Only use strimmer on grass or plant material. Strimmer must not be used above waist level. • Ensure that you can achieve good footing during the activity. Do not use strimmer if the ground is slippery and steady posture cannot be maintained. Always use PPE as per RA (below). • When the strimmer is ready, start in the most overgrown part of the location, slowly swinging it from left to right. Cut into the overgrown areas and take off small amounts at a time. • Other persons should be at least 15 meters away from the area being worked on. Set up exclusion zones. • Always turn the engine off and make sure the cutting attachment has stopped before putting the strimmer down and maintenance or refuelling. • **BRUSH CUTTERS are not permitted on AP-JNP.**

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Flying debris, particles, contact with rotating parts of strimmer, kickback, manual handling, hot parts	Injury to operators and those in vicinity (vehicles or property) Severe cuts, abrasions, entanglement, other major injuries, musculoskeletal injuries, burns and fire	**M**
Contact with electrical cabling	Electrocution, burns, fire	**M**
Biological Hazards (animal faeces, plant sap- giant Hogweed, discarded syringes etc)	Diseases, leptospirosis, burns and blistering	**M**
Noise and Vibration	Hearing loss, tinnitus, vibration white finger	**M**
Vapours from refuelling , fumes, contact with lubricants	ill health form fume inhalation, skin conditions, fire, burns and explosion	**M**
Working on uneven ground, steep embankments	Slips and falls	**H**

People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☒

Control Measures	Post control Risk Rating
Tools to be used only by the trained, competent and authorised persons. All operators must be fully conversant with the manufacturer's instructions. All strimmer's and brush cutters to be regularly maintained. Operators to carry out maintenance and pre-use checks as per manufacturer's instructions. Warning signs erected to warn others, operator exclusion zones to be set up and maintained. Where necessary barriers, protective sheeting to be erected. Lookout to warn of oncoming pedestrians or vehicles. Harness to be worn to support the strimmer during use. Regular breaks to be taken from carrying heavy equipment. Where working close to tracks the strimmer operator is to work facing oncoming trains on the closest track so that strimming can stop when the train is within 20m, preventing it being hit by any items thrown up by the strimmer. Safe system of work for working near the track to be set up by PWT.	**L**
Area must be assessed prior to any strimming operations to establish any hidden cables, and extra additional precautions, including the use of hand tools instead of strimmers while removing vegetation near or close to any cables. (On Site Risk Assessment to be carried out).	**L**
Work group must be made aware of possible presence of sharps and biological hazards, visual survey to be carried out to identify presence of biological hazards. Operatives to wear overalls in areas contaminated with biological hazards (faeces, pigeon droppings etc)	**L**

To reduce the risk of HAVS Operatives to be aware of HAVS and the risks, regular breaks from using vibrating equipment, staff rotation where necessary. Equipment to be regularly maintained as per manufacturer's instructions. Random monitoring of vibration exposure. Maintain firm grip at all times but do not squeeze the handles with constant excessive pressure. Keep hands and fingers warm, use gloves at all times. Hearing protection to be used when operating chipper, hearing protection zones to be established, mandatory hearing protection signage to be put in place. Hearing protection to be enforced.	**L**

Equipment	Vibration magnitudes (m/s^2)	Exposure Action Value (EAV)	Exposure Limit Value (ELV)
Strimmer FS 400	3.5	4 hrs 5min	16hrs 20mins

• Refer to COSHH assessment. • Refuelling to be carried out designated areas only. Refer to refuelling RA. • Petrol equipment to be used in ventilated areas only. • Fire point to be established in the vicinity of works and refuelling area	**L**
Operatives to ensure good footing during the activity. No lone working allowed when using brush cutter or strimmer. On Site Risk Assessment to be carried out to identify local conditions. Safety boots to be worn and in good condition.	**M**

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374
Face shield/visor	EN 1731	Hearing protection	EN352
Reviewed issue 6	30/05/2019	Approved	[redacted]

Task Description/Methodology
Before commencing felling operations, a full site inspection and the Arboriculturist Tree Work Assessment form to be completed. This must be carried out taking into account the following considerations: ➢ Condition of tree base (rot, decay, fungi, cracks, splits, soil mounding , cracks near root flare, ivy etc) ➢ Condition of trunk of tree (rot, decay, fungi, cracks, splits presence of ivy ,loose bark, swelling or depression) ➢ Condition of the trees crown (deadwood, crown dieback, decay, splits, storm damage, stinging insects, animals , hidden electrical conductors etc) ➢ Weather conditions especially wind, ice, snow, wet limbs ➢ Location of power lines ➢ Location of underground utilities ➢ Public footpaths, right of ways, cycle tracks, bridle paths, roads, etc ➢ Has the use of a crane or MEWP been considered already for the hierarchy of controls against the Working at Heights regulations (WAH)? ➢ Natural lean of the tree, etc ➢ Direction tree is to be felled ➢ Gradients and steep inclines, working on embankments. • A safe method of operation must be agreed to ensure that a safe working distance can be maintained between workers **(at least 2 tree lengths)** and between workers and machinery (outside the risk zone of the machines being used). • If this is not possible due to the layout of the tree to the track or boundary, a competent arboricultural operative must carry out a Site Specific Risk Assessment and set up a safe system of work prior to felling. • When felling adjacent to overhead electric lines, a clearance of not less than twice the height of the tree must be maintained. Felling should be directed away from the electric line. Where felling is within two tree lengths the advice of the owner of the overhead electric lines must be sought. (Refer to Task Sheet No 2 & 12). • Direction of fall must be decided and suitable escape route clear of obstructions selected prior to felling. • It must be ensured that no other person is within a distance equal to twice the length of the tree or directly below on steep slopes. • Audible warning to be issued to those in the vicinity of the operations. • Always make a sink. This allows the tree to be felled on a hinge that controls the rate and direction of fall. • Arising from pruning operations will be lowered to ground level in a controlled manner or allowed to free fall where safe to do so, where ground staff will process into manageable sizes. • Brushwood will then be chipped onto the ground around the tree bases and spread to an even thickness or chipped into the rear of the vehicle. Cord-wood will then be stacked as habitat piles between the trees or removed as agreed. • Trees to be felled will be section felled to ground level or clear felled as appropriate with arising processed as above. • Once any felling cut has been started on a tree, the tree must not be left standing. Do not start a new operation until the tree has fallen. • The stems cut up in to manageable pieces and loaded onto a lorry by hand. • Upon completion the area will be made safe. Warning hazards tape and signage to be erected where necessary. **Do not:** ➢ Fell the supporting tree in an attempt to free the hung-up tree ➢ Climb a hung-up tree ➢ Fell another tree across the hung-up tree in an attempt to dislodge it ➢ Walk or work under a hung-up tree ➢ Cut pieces off the butt end of a hung-up tree in an attempt to dislodge it • If a chainsaw is to be used to fell a tree, only rear handled chainsaws are to be used. (refer to Use of Chainsaw Task Sheet) •

Hazards associated with the task	Consequences	Pre-

		controls Risk Rating
Uncontrolled or unintentional falls of trees, parts of trees or adjacent trees or structures Electrical power lines Obstructions Steep gradients Injuries caused by tools and equipment Falls from height	Strike by falling tree or tree part resulting in major injuries Major injuries, breaks, head injuries Musculoskeletal injuries Electrocution Major cuts	**H**

People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☒

Control Measures	**Post control Risk Rating**
• All operatives involved in the activity to be trained and competent. (Recognised arboricultural qualification). • Briefing and discussion of work plan before commencing the job. • Experienced operative to carry out a Site Specific Risk Assessment of the site and tree conditions. Safe system of work to be established, and communicated to all on site. • Each member of the group will have clear duties assigned to them, and will be vigilant of activities of the others in the group. Activities will be coordinated by the SPC/PWT. • Communication between members of the workgroup will be established. Clear warning signals known. • Work site to be segregated where possible, warning signs displayed on all reasonably foreseeable approaches to the work site to warn others and prevent unauthorised access. • Only recognised felling, delimbing/snedding, cross cutting and stacking techniques are to be carried out, as per training received. • All operatives to follow safe techniques for climbing, safety harness to be used. Free climbing is not permitted. (Refer to Tree Climbing Task Sheet). • Suitable escape routes to be set up and cleared of all debris. • Problems that could affect performance must be reported to management. • While climbing the operative will be tied off at all times. NO free climbing will be permitted. (Refer to Tree Climbing Task Sheet) • Aerial rescue will be implemented. • All equipment used will be suitable for purpose and maintained (Refer to equipment Task Sheets)	**M**

PPE (Minimum Requirement) Refer to Tree Climbing and the use of Chainsaw/Equipment Task Sheets

Reviewed issue 6	30/05/2019	Approved	[redacted]

Task Description/Methodology

Japanese Knotweed is effectively controlled with Garlon Ultra* herbicide mixed with water, and applied through a hand-held knapsack sprayer or vehicle mounted sprayer. For road or railway siding weed control, the best treatment time is late winter or early spring. For grassy areas such as embankments, excellent results can be achieved with treatment coinciding with periods of vigorous growth.

- Area identified to be contaminated with Japanese Knotweed must be secured and cordoned off using Netlon fencing.
- Warning signs must be displayed to prevent unauthorised access and warn others.
- Where necessary additional Netlon fence must be pinned over the top of the cutting to remove the risk of the stems being blown away by strong winds and to deter would be vandals.
- Japanese Knotweed must be controlled in its original location with the use of Garlon Ultra* that is sprayed over the plant covering top and bottom of the leafs.
- At this stage no Japanese Knotweed canes must be collected and transported from the contaminated site but left within cordoned and controlled area.
- Staff handling/applying any chemicals must be specially trained in the use/handling/application if such chemicals and must wear correct and task specific PPE consisting of:
    - PPE/Safety footwear as per herbicide training
    - Level 5 Overalls to prevent chemicals penetrating the overall as per herbicide training
    - Specialist Gloves as per herbicide training (Nitrile)
    - Half face masks to prevent inhalation (not needed if face shield is used)
    - Goggles or face shield to prevent splashing into the eyes
- The applied substance is left to work for 3-4 weeks.
- The residual plant are cut and removed from site in double bags and disposed of as hazardous waste.
- It must be ensured that all PPE used for the cutting operations are brushed off and shaken free from any debris produced by these cutting operations before any operatives are permitted to remove their PPE from site to prevent rhizome spreading

**If different substance is used. SPC/PWT must ensure that COSHH assessment is available.*

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Exposure to substances (Garlon Ultra)	Ill health caused by irritant	M
Misuse of substance	Contamination of water, desirable plants	M
Japanese Knotweed rhizome	Spread of Japanese Knotweed	M
Use of hand tools and power tools	Personal injuries	M
Inserting pins into ground	Impact with services	H

People at Risk:	Operatives ☒	Other contractors ☒	Visitors to site ☒	Public ☒

Control Measures	Post control Risk Rating
• Precautions must be taken to prevent chemicals entering into rivers, streams, waterways, watercourses, drains, lakes or groundwater. • Operatives will be trained and experienced in Japanese Knotweed eradication. • All mixing up must be done on the drip trays, face shield/visor must be worn to prevent splashing into the eyes. • Spill kit to be available in case of spilages • Ensure good housekeeping at all times during and after the works.	L

• Wash hands thoroughly with soap water before eating, drinking or smoking, use antibacterial wipes when water is not immediately available, • Always refer to COSHH assessments, product safety data sheet and labels for additional information/precautions and PPE considerations. • Operatives to clean boots and equipment before leaving the area. • All waste including overalls to be disposed as hazardous waste. • Also refer to Hand Tools Task Sheet Number 06 and Power tools Task Sheet No 7. • Refer to Ground Disturbance and Excavation Task Sheet 13 when inserting pins into the ground. All control measures as listed for ground disturbance must be followed.	

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374 Nitrile
Overalls	Type 4 Hooded	Eye Protection (visor)	EN 166 Grade 3
Respiratory protection	EN 149 FFP 2		
Reviewed issue 5	30/05/2019	Approved	[redacted]

Task Description/Methodology

Giant Hogweed is effectively controlled with Garlon Ultra* or similar herbicide mixed with water and applied through a hand-held knapsack sprayer or vehicle mounted sprayer. Eradication could take number of years (3-10 years of treatment recommended); spraying with herbicides should be undertaken before plant produces seeds in early spring to early summer.

- Area identified to be contaminated with Giant Hogweed must be secured and cordoned off using Netlon fencing.
- Warning signs must be displayed to prevent unauthorised access and warn others.
- Where necessary additional Netlon fence must be pinned over the top of the cutting to remove the risk of the stems being blown away by strong winds and to deter would be vandals.
- Giant Hogweed must be controlled in its original location with the use of Garlon Ultra* or similar that is sprayed over the plant covering top and bottom of the leafs.
- At this stage Giant Hogweed must not be touched, collected and transported from the contaminated site but left within cordoned and controlled area.
- Staff handling/applying any chemicals must be specially trained in the use/handling/application if such chemicals and must wear correct and task specific PPE consisting of:
    - PPE/Safety footwear as per herbicide training
    - Level 5 Overalls to prevent chemicals penetrating the overall as per herbicide training
    - Specialist Gloves as per herbicide training (Nitrile)
    - Half face masks to prevent inhalation (not needed if face shield is used)
    - Goggles or face shield to prevent splashing into the eyes
- The applied substance is left to work for 3-4 weeks.
- The residual plant are cut and removed from site in double bags and disposed of as hazardous waste.
- It must be ensured that all PPE used for the cutting operations are brushed off and shaken free from any debris produced by these cutting operations before any operatives are permitted to remove their PPE from site to prevent seeds spreading.

**If different substance is used Person in Charge must ensure that COSHH assessment is available.*

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Exposure to substances (Garlon Ultra)	Ill health caused by irritant	M
Misuse of substance	Contamination of water, desirable plants	M
Use of Hand tools and power tools	Personal injuries	M
Inserting pins into ground	Impact with services	H

People at Risk:	Operatives ☒	Other contractors ☒	Visitors to site ☒	Public ☒

Control Measures	Post control Risk Rating
• Precautions must be taken to prevent chemicals entering into rivers, streams, waterways, watercourses, drains, lakes or groundwater. • Operatives will be trained and experienced in Japanese knotweed eradication. • All mixing up must be done on the drip trays, face shield/visor must be worn to prevent splashing into the eyes. • Spill kit to be available in case of spillages • Ensure good housekeeping at all times during and after the works. • Wash hands thoroughly with soap water before eating, drinking or smoking, use antibacterial wipes when water is not immediately available, • Always refer to COSHH assessments, product safety data sheet and labels for additional	L

information/precautions and PPE considerations. • Operatives to clean boots and equipment before leaving the area. • All waste including overalls to be disposed as hazardous waste. • Also refer to Hand Tools Task Sheet Number 06 and Power tools Task Sheet No 07. • Refer to Ground disturbance and Excavation Task Sheet 13 when inserting pins into the ground. All control measures as listed for ground disturbance must be followed.	

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374 Nitrile
Overalls	Type 4 Hooded	Eye Protection (visor)	EN 166 Grade 3
Respiratory protection	EN 149 FFP3		
Reviewed issue 6	30/05/2019	Approved	[redacted]

TASK SHEET NUMBER 20 **OAK PROCESSIONARY MOTH REMOVAL**

CLESHAR

Task Description/Methodology
• The tree inspector will identify tree with Moth contamination and instruct tree gang to remove the nest. • Exclusion zones and signage will be erected before removal of the nest commence. • The operatives will put on full PPE before commencing with the task. • Operative will climb the tree and spray the nest with strong hair spray to ensure the harmful (poisonous) hairs stick together. • Nest is then removed by hand, inserted in hazardous material bags and disposed of as hazardous material. • Before PPE is taken of it will be sprayed with hairspray. • All overalls and gloves to be disposed of as hazardous waste.

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Contact with caterpillars (larvae)	Skin rush and conjunctivitis, allergic reactions	H
Inhalation of caterpillar (larvae) hairs	Ill health, breathing difficulties	H
Climbing tree	Falls from height resulting in major injuries	H

People at Risk:	Operatives ☒	Other contractors ☒	Visitors to site ☒	Public ☒

Control Measures	Post control Risk Rating
• Any skin contact with caterpillars must be avoided. All exposed skin must be covered up with appropriate PPE. See below. • All operatives involved in the task must be trained and competent. • Sleeves of overall must be worn under gloves. • Overalls with generous cut to the arms and legs for freedom of movement. • Gloves suitable for climbing and moth removal. • All visitors to site must comply with the same PPE. • PPE to be removed and disposed of before going for breaks and at the end of the shift. • Good personal hygiene to be enforced. Skin to be clean with wipes or water immediately after work. • Any operatives known to have suffered allergic reaction to the caterpillars to be removed from the activity. • Person in Charge to consider job rotation to minimise exposure to the moths. • All climbing equipment used for Oak Processionary Moth (OPM) removal work should not be used for other work. It should be stored in an airtight container and marked for OPM use only during transport and PPE should be worn during equipment maintenance and inspection. The container should be marked with a warning label, use an exclamation mark within a yellow triangle. • All equipment and face mask, boots to be cleaned before storage. • Warning signs to be posted on the tree. • Also refer to Task Sheet 15 Tree climbing. • First aider to be briefed on symptoms and signs of exposure to OPM.	M

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat/climbing helmet	EN 397
Gloves	EN 388 or 374 Nitrile	Overalls	EN 465 Type 4 Hooded
Full face mask	EN136 class 1 or 2		

Reviewed issue 6	30/05/2019	Approved	[redacted]

Task Description/Methodology
• **Use of Chainsaw (top handled)** **Top - handled saws are only suitable for use off the ground** These saws have the rear handle over the top of the engine. They are only suitable for use off the ground by trained competent arborists. They are not designed for use on the ground or as a substitute for small, rear-handled chainsaws. • **Use of Chainsaw (rear handled)** **Rear handled saws must be used when working on the ground** These have the rear handle projecting from the back of the saw. They are designed to always be gripped with both hands, with the right hand on the rear handle. Select chainsaws which will be suitable for the intended work. It may be necessary to have a range of saws with different guide bar lengths available. As a general rule, the operative to choose a chainsaw with the shortest guide bar suitable for the work. Training in how to use chainsaws will identify the type and size of saw most suited to a range of operations. Protective sleeves are a mandatory requirement at all times when using the chainsaw at ground level. **Use of a chainsaw in a tree** When the Arboriculturist has climbed the tree and is position he must adhere to the following. When in position and ready to dismantle/ cut a limb the Arboriculturist will tie one end of the strop to the limb which is being cut, the arboriculturist will hold the strop with one hand while making his cuts with the other hand holding the limb which is being cut. This will enable the Arb to keep his arm away from the chainsaw. Before using the chainsaw the operative to carry out pre-use check to ensure that: • All nuts and screws are tight • The chain is correctly tensioned • The throttle cannot be squeezed unless the throttle lock-out is pressed • The correct PPE is available and worn When starting the engine operator should: • Place the saw on level ground • Secure the saw firmly • Set controls as recommended by manufacturer • Pull the start cord firmly Once the saw has started the operators should rev the throttle to warm up the engine and check: • The chain stops moving when the engine rev return to idle. • Chain break is effective when applied at maximum revs • The engine continues to run when the saw is turned through 90^0 in any direction. • The stop switch stops works. • Lubrication to the guide bar and chain is working correctly. Operative to repeat these checks throughout the day in regular intervals. **LONE WORKING IS NOT PERMITTED WHEN USING CHAINSAW**

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Contact with moving parts, kick back, pendulum impact	Cuts and abrasion resulting in major injuries Musculoskeletal injuries	**H**
Noise and vibration	Hearing loss, Vibration White Finger and other carpal tunnel syndrome.	**M**

Vapours from refuelling , fumes, contact with lubricants	ill health form fume inhalation, skin conditions, fire and explosion	**M**
Work at height (climbing trees) Falling tree parts on persons Falling tree parts on track	Falls from height, falls of equipment or materials from height resulting in head injuries/derailment.	**H**

People at Risk:	**Operatives** ☒	**Other contractors** ☐	**Visitors to site** ☒	**Public** ☐

Control Measures	**Post control Risk Rating**
• All operative operating chainsaw will be trained in its use and will be deemed competent by the manager. • All equipment will be maintained as per manufacturer's instructions and specifications. • Pre-use checks to be carried out by the users. • Works to be planned so that at least 5 meter distance is created between operatives using chainsaw. • Warning signs to be erected on all reasonable approaches to the worksite. • Compliance with safety training and instructions. • Strop to be used at all times when chain saw is in use when working in trees. • The operative is not to have his arm on the branch he is cutting where reasonably practicle. • Protective PPE is to be worn at all times when the chainsaw is operational. • The protective sleeves are mandatory at all times when operatives are using a chainsaw at ground level. • When the Arboriculturist is using the chainsaw they are to wear the chainsaw jackets when at ground level. When the Arb is using the chainsaw in a tree, the wearing of a chainsaw jacket is to be Risk Assessed against weather and environmental conditions. If it's considered the chainsaw jacket may introduce additional risk due to weather conditions then the protective sleeves must be worn.	**M**
• Lowest vibration equipment to be selected/ordered from hirer • Equipment to be regularly maintained • Rest from vibration equipment to be taken, staff rotation where possible • Operatives to be trained on the risks of exposure to vibration • Health surveillance to be carried out • Exposure Action and limit values to be complied with • Monitoring of exposure to vibration • Hearing protection to be worn when using chainsaw • Hearing protection zones to be established	**L**

Priority when choosing equipment	Equipment	Vibration magnitudes (m/s^2)	Exposure Action Value (EAV)	Exposure Limit Value (ELV)
1	Chainsaw Stihl MS 361	6.3*	1 hour 16 minutes	5 hours 2 minutes
2	Chainsaw Stihl MS 260	6.6*	2 hour 9 minutes	4 hours 35 minutes
3	Chainsaw Stihl MS 660	7.4*	55 minutes	3 hours 40 minutes
4	Chainsaw Stihl MS 200T	7.8*	50 minutes	3 hours 17 minutes
5	Chainsaw Stihl MS 440	10.2	30 minutes	1 hour 55 minutes
6	Chainsaw Stihl MS 200	11.5*	23 minutes	1 hour 30 minutes
7	Telescopic chainsaw Stihl HT75	11.8*	22 minutes	1 hour 26 minutes
8	Stihl 200T	5.24	1 h 49 minutes	7 hours 17 minutes
9	Stihl MS 261	12.5	19 minutes	1 hour 17 minutes

• Refer to COSHH assessment • Refuelling to be carried out designated areas only. • Petrol equipment to be used in ventilated areas only. • Fire point set up in the vicinity	**L**
• Refer to tree climbing Task Sheet 15 for control measures whilst working at height (climbing trees). • Communication to be established with personnel on the ground, warnings to be issued before cutting. Head protection to be worn at all times. • PWT/Lookout to be in position and warn of oncoming trains. • System of work set up so that cut branches do not fall on the track. •	**L**

PPE (Minimum Requirement)

Safety Helmet or climbing helmet	EN 397	Eye Protection (mesh visor) or goggles	EN 1731 or EN 166
Hearing Protection	EN 352-1	Chainsaw trousers	EN 381-5
Chainsaw boots	EN 20345- BS EN 17249	Hi Visibility vest (t-shirts)	EN 471
Hand protection	EN 388	Chainsaw jacket	EN 381:11:2002
Protective sleeves	EN 381		
Reviewed issue 6	30/05/2019	Approved	[redacted]

Task Description/Methodology

Before any work commences adequate warning signs must be put into place. Barrier tape ropes and portable fences are to be considered to restrict access. Site must be secure to prevent unauthorised access

Survey for any cables, hidden wires of bits of fencing that may be inside a hedge; as this can cause serious injuries or damage to the hedge cutters.

Survey area for slip, trip and falls hazards, ex

Only trained and experienced operator to use hedge cutters. Operator and those in the vicinity must wear PPE as listed below.

Before start

Check equipment for maintenance and carry out pre use checks. Refer to manufacturer's manual. Spray cutters with protective spray before starting to work only with the engined stopped. Place the hedge trimmer on firm ground and maintain good footing. Always engage starting lock where applicable.
Hedge cutter to be operated in well ventilated areas only.

Cutting the sides of the hedge vertically

The first step is to cut the sides of the hedge vertically in a sweeping arc-shaped movement (bottom upwards). A hedge trimmer with double-sided blades means you will save time as you cut in both the upward and downward stroke. Walk forwards as you work, cutting along the length of the hedge.

Cutting the top of the hedge

When cutting the top of the hedge the cutter bar should be held horizontally at a slight angle (around 10°). Remove the clippings from the hedge with scything movements.

Maintenance

Keep blade sharp . If cut branch tips appear ragged or light in colour, or if blades snag on the hedge, the blades are probably blunt and tearing rather than slicing material.

Keep it clean . A blade that is not clean is not efficient. As a hedge is trimmed, sap builds up on the blades, setting hard like glue. Use an approved cleaner to keep blades in top condition.

Refuelling: Petrol hedge trimmers run on two-stroke petrol which will need to be mixed up. The correct ratio is normally 25 parts petrol to 1 part oil check with the manufacturer's instructions. Always turn the engines off and wait for the equipment to cool down. Refuel in well ventilated area, above spill tray and away from sources of ignition. Use eye protection and gloves when refuelling. Always remove clothing contaminated with fuel. Ensure that fuel caps are secured. Wipe off any spilled fuel before restarting the engine.

If you are using an electric hedge trimmer, you will need an extension lead long enough to allow you freedom of movement.

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Contact with moving parts/ blades, entanglement with vegetation or hedge cutter	Amputation, cuts, major injuries,	H
Ejection of materials, dust and particles	Eye injuries, inhalation of dust	M
Noise	Hearing loss , tinnitus etc	M
Vibration	Vibration White Finger and carpal tunnel syndrome, other HAV related ilness	L
Vapours from refuelling , fumes, contact with lubricants	ill health form fume inhalation, skin conditions, fire, burns and explosion	M

TASK SHEET NUMBER 25 **USE OF HEDGE CUTTERS**

People at Risk:	Operatives ☒	Other contractors☒	Visitors to site ☒	Public ☒

Control Measures	Post control Risk Rating
Competent and trained operator, manufacturer's safety instructions and methodology above to be followed at all times. Equipment to be maintained and tested (record of inspection available). Equipment to be secured to prevent misuse when the trained operator is not present. Protective clothing to be snug fitting but allow freedom of movement, including long trousers Operatives to avoid loose clothing, accessories and unconfined long hair. Heavy duty non slip gloves to be worn.	M
Establish exclusion zones; ensure that everybody is hedge cutters are being used and operator and those in the vicinity wear eye protections/face shield.	L
Hearing protection to be used when operating chipper, hearing protection zones to be established, mandatory hearing protection signage to be put in place. Hearing protection to be enforced.	L
Operatives to be aware of HAVS and the risks, regular breaks from using vibrating equipment, staff rotation where necessary. Equipment to be regularly maintained and sharpened as per manufacturer's instructions. Random monitoring of vibration exposure. Maintain firm grip at all times but do not squeeze the handles with constant excessive pressure. Keep hands and fingers warm, use gloves at all times.	L

Equipment	Vibration magnitudes (m/s^2)	Exposure Action Value (EAV)	Exposure Limit Value (ELV)
Hedge trimmer STIHL HS81RC	3.00	5 hrs 30 min	22hrs

• Refer to COSHH assessment • Refuelling to be carried out designated areas only. Refer to refuelling RA. • Petrol equipment to be used in ventilated areas only. • Operator to hold trimmer in such a way that he/she does not breathe in the exhaust fumes • Fire point to be established in the vicinity of works and refuelling area	L

PPE (Minimum Requirement)

Face shield /goggles	EN 1731 or EN 166	Hearing protection	EN 352
Hand protection	EN 388 (heavy duty)	Safety helmet	EN 397
Safety Boots	EN 20345	Hi Visibility vest	EN 471
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- **TASK SHEET NUMBER 30 Spraying of Pesticides/ herbicides and control**

CLESHAR

Task Description/Methodology
Effected area which is to be sprayed effectively controlled with Pesticide/ herbicide is mixed with water and applied through a hand-held knapsack sprayer or vehicle mounted sprayer. For road or railway siding weed control, the best treatment time is late winter or early spring. For grassy areas such as embankments, excellent results can be achieved with treatment coinciding with periods of vigorous growth. • Spot spraying and full sprays must be carried out in designated location only , area identified contaminated with weeds must be secured and cordoned off using Netlon fencing if access via the general public or other third parties, area which are not accessibly do not require barrier off, ref to an onsite risk assessment. • Alternatively, the operative when spot spraying, granular application and full sprays during Traffic hours must be positioned behind a physical barrier or cable run using insulated equipment • Warning signs must be displayed to prevent unauthorised access and warn others. • Where necessary additional Netlon fence must be pinned over the top of the cutting to remove the risk of the stems being blown away by strong winds and to deter would be vandals. • Weeds must be controlled in its original location with the use of Pesticide/Herbicide that is sprayed over the plant covering top and bottom of the leafs. • At this stage weeds must not be touched, collected and transported from the contaminated site but left within cordoned and controlled area.. • Staff handling/applying any chemicals must be specially trained in the use/handling/application if such chemicals and must wear correct and task specific PPE consisting of: ➢ PPE/Safety footwear as per Pesticide/Herbicide training ➢ Level 5 Overalls to prevent chemicals penetrating the overall as per pesticide/herbicide training ➢ Specialist Gloves as per Pesticide/Herbicide training (Nitrile) ➢ Half face masks to prevent inhalation (not needed if face shield is used) ➢ Goggles or face shield to prevent splashing into the eyes • The applied substance is left to work for 3-4 weeks. • The residual plant may be cut and removed from site in double bags and disposed of as hazardous waste. • It must be ensured that all PPE used for the cutting operations are brushed off and shaken free from any debris produced by these cutting operations before any operatives are permitted to remove their PPE from site to prevent rhizome spreading **If different substance is used. SPC/PWT must ensure that COSHH assessment is available.*

Hazards associated with the task	**Consequences**	**Pre-controls Risk Rating**
Exposure to substances	Ill health caused by irritant	**M**
Misuse of substance	Contamination of water, desirable plants	**M**
Use of Hand tools and power tools	Personal injuries	**M**
Inserting pins into ground	Impact with services	**H**

People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☒

Control Measures	**Post control Risk Rating**
• SPC –Non track or PWT to brief out all control measures, before any work including mixing of any Pesticide/ herbicide • Precautions must be taken to prevent chemicals entering into rivers, streams, waterways, watercourses, drains, lakes or groundwater, avoid these areas when filling/mixing and pouring into knapsacks etc.	**L**

- Operatives will be trained and experienced in Pesticide/Herbicide spraying/mixing/pouring.
- All mixing up and pouring into knapsacks, hand held sprayers must be done on the drip trays, face shield/visor must be worn to prevent splashing into the eyes. And masks due to strong contraction of Pesticide/Herbicide.
- Spill kit to be available in case of spillages
- Ensure all containers/knapsack/hand held sprayers are identified ref to Control of Pesticides Regulations (COPR) label guidance – August 2007
- All applications must be co-ordinated with other works to ensure that only the trained operatives with the correct levels of PPE are exposed to the substances during and shortly after application
- A comprehensive list of all substances used and stored including quantities on site must be kept on site, this list must be updated as each application is taken for audit purposes
- Upon completion of the works, all tools/equipment/pesticide must be removed from site
- Ensure good housekeeping at all times during and after the works.
- Wash hands thoroughly with soap water before eating, drinking or smoking, use antibacterial wipes when water is not immediately available,
- Always refer to COSHH assessments, product safety data sheet and labels for additional information/precautions and PPE considerations.
- Operatives to clean boots and equipment before leaving the area.
- All waste including overalls to be disposed as hazardous waste.
- Also refer to Hand Tools Task Sheet Number 06 and Power tools Task Sheet No 7.
- Refer to Ground disturbance and Excavation Task Sheet 13 when inserting pins into the ground. All control measures as listed for ground disturbance must be followed.

Pesticides for plant protection purposes include:

- weedkillers (herbicides)
- fungicide sprays
- insecticides
- plant growth regulators

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374 Nitrile
Overalls	Type 4 Hooded	Eye Protection (visor)	EN 166 Grade 3
Respiratory protection	EN 149 FFP 2		
Reviewed issue 6	30/05/2019	Approved	[redacted]

Depot Gangs: Generic Method Statement

Programme Project **Track Vegetation and Fencing Renewals**
Document reference **SSoW 04 Depot Gang**

In the event of an incident to ensure that the incident report is correctly routed, please fill in the box below:	
Responsible Area/Project	TBA
Location	Various London Underground Depots
Area	London Underground Depots
Principal contractor	Cleshar

Safe System of Work

Working in Depots

		Signature	Date
Prepared by	[redacted] Project Manager		
Reviewed by	[redacted] HSE Advisor		
Reviewed by	<Name> Client		

Distributed to	Cleshar	Contractors
Distributed to	<Name>	Sub-contractors

Document History

Revision	Date	Summary of changes
Tender	27/05/19	Tender draft

CLESHAR

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1 Work Details

1.1 Description of Work

This Method Statement details the vegetation maintenance, fence repair, and tree works that will be carried out by Cleshar in depots on London Underground. The type of works this Method Statement will cover are;

- Fence repair and maintenance; Please referrer to Fencing Tender Method Statement
- Tree inspections, Pollarding of trees, De-limbing trees, crown reductions, tree climbing, Please refer to Tree Method Statement
- Vegetation works, please refer to Vegetation Method Statement.
- Utility works, please refer to Utility gangs Method Statement.

1.1.1 Task briefing sheets

The below task briefing sheet describes the methodology, sequence of works for the task the gang has been assigned to undertake. Full Risk Assessment, and control measures are included within the task briefing sheets. These will be appended to the back of all Method Statements.

The following Task briefing sheets will be used for the works:

- Task briefing sheet 01- Access, site set up
- Task briefing sheet 02- Work on or near the track
- Task briefing sheet 03- Site work (Biological hazards)
- Task briefing sheet 04- Site hazards (Exposure to weather)
- Task briefing sheet 05- Manual Handling
- Task briefing sheet 06- Use of hand tools
- Task briefing sheet 07- Use of power tools
- Task briefing sheet 08- Driving and transportation
- Task briefing sheet 09- Tree inspections
- Task briefing sheet 10- Use of strimmer's and hedge cutters
- Task briefing sheet 11- Use of fuel powered equipment and refuelling
- Task briefing sheet 12- Working near overhead power cables
- Task briefing sheet 13- Ground disturbance, and excavation
- Task briefing sheet 16- Use of a ladder or step ladder
- Task briefing sheet 17- Access or work on steep slopes, and embankments
- Task briefing sheet 18- Japanese knotweed
- Task briefing sheet 19- Giant hogweed
- Task briefing sheet 21- Tree and shrub planting
- Task briefing sheet 22- Use of a chainsaw
- Task briefing sheet 23- Use of a Hand held blower
- Task briefing sheet 24- Use of chipping machines
- Task briefing sheet 25- Use of hedge cutters
- Task briefing sheet 26- Use of mini transporter
- Task briefing sheet 27- Use of a mini track trolley task sheet
- Task briefing sheet 29- Use of MEWP- machine for tree felling
- Task briefing sheet 30- Use of spraying pesticides and herbicides
- Task briefing sheet 31- Use of Emergency Railhead Cleaning Unit Petrol Driven

Depot Inductions

A Mandatory Depot Induction must be completed for each depot prior to access to the Depot environment. This is to be facilitated by the Cleshar Line Manager and must be arranged prior to the planned works commencing.

Depot Access

When booking on at the Depot where the work is to take place the SPC/ PWT will attend the General Office to obtain a Permit to work. All members of staff within the works party must sign the permit and present their track certification to the DDM prior to accessing the track, or any other part of the depot.

Risks and associated control measures not addressed within this MST will be recorded on the Permit to Work or Site Specific Risk Assessment.

1.2 Duration of Works

This is part of the 2019 TfL Vegetation and Fencing contract from 2019-2022. This Method Statement will be reviewed annually.

1.3 Working Hours

The works are normally planned to take place Monday - Friday 07:30-16:00 (daylight). However due to high risks in certain areas of the track environment where traffic protection cannot take place, Engineering Hours or Possession work will be implemented.

1.4 Control of Activity Risks

Upon arriving at a new Depot/Site the SPC/PWT must inspect the Depot/Site location and complete a Specific Vegetation Works Risk Assessment. If additional risks are identified as work proceeds, or the local Manager makes the SPC/PWT aware of an issue, this must also be recorded and control measures set out.

Any precautions that are required to protect the public or other parties passing through or around the site must be recorded on the Risk Assessment form.

If the risk is unusual or beyond the knowledge of the SPC/PWT to deal with the SPC/PWT must contact his manager or HSQE department for advice before proceeding with the task in that area.

As part of the SPC/PWT site assessment a check must be made for any wildlife or signs of wildlife, such as bird's nests, wasp's nests, badgers sets, etc.; or any Non Native Invasive Species such as Japanese Knotweed or Oak Processionary Moth. Any identified must be included in the Specific Vegetation Works Risk Assessment. The client's representative must be informed and an exclusion zone set to ensure they are not disturbed. This must be documented on the form.

The form will identify the relevant Task Briefing Sheets for the works on that site.

Once the form is completed the SPC/PWT must brief his gang on the site and the specific control measures noted on the form and Task Briefing Sheet and all operatives must sign the form on the SPC's tablet.

The form must be held in the site file while the gang are on site and returned to the Projects Manager at the end of the works.

All operatives will be competent and trained in any activity they are tasked to undertake including depot working. Training records will be held on skills cards and kept on file at head office.

Any London Underground visitors, or staff, will receive a full briefing on the activities and control measures, before being permitted access to the worksite. The worksite will be set up in such a way, that the safe system of work will minimise risk, or minimise intrusion to any London Underground staff, or assets, or others who may be working in the area. If, at any point, the worksite is likely to become intrusive to others the SPC/PWT will attempt to reach an agreement with the third party, or London Underground, with the new safe system of work being documented on an On-Site Risk Assessment. When this cannot be agreed the SPC/PWT will contact their Line Manager, or the Cleshar Health and Safety department for further instructions.

1.4.1 Neighbours (e.g. Network Rail, nearby houses etc.)

Site surveys will be carried out prior any significant works to establish access to site, any interfaces with public i.e. private & business properties, bus/trams stops or areas/building/facilities where large number of public congregate.

Means of Control may include:

- Advance communication with neighbouring property owners/occupiers
- Letter drops
- Access negotiation and consultation
- Operative briefings and toolbox talks

Where works interface with Network Rail infrastructure, Cleshar will ensure that operatives are PTS trained and the relevant safe system of work in place, i.e. Network Rail approved Work Package Plans and Permits, COSS, ALO etc.

Additionally, as works proceed On–Site Risk Assessments will be used to assess new or changing situations. PWT/SPC are trained on preparing On–Site Risk Assessments.

1.4.2 Working on 3rd Party vegetation or land

When works are planned on a third parties land adjacent to a depot a separate site specific Method Statement, and Site specific risk assessment shall be produced in agreement with the third parties land owner, or land owners representative. All works will be discussed in advance during planning meetings, conference calls, and other mediums of two way communications. When the risks from working on a third parties land are different from the normal risks, or considered unusual, additional training, site specific inductions, tool box talks, and selection of experienced, and trained operatives to be deployed to complete the works. Regular site inspections will be carried out by Cleshar Management, and Health and Safety department.

1.4.3 The environment (e.g. nearby water courses)

Cleshar operatives will be briefed on ecological and other environmental issues relevant to their task and the location of the works. These are included in the risk assessment and can include issues such as sensitive receptors in the vicinity of the site, the presence of protected or invasive species, and protected habitats. The On–Site Risk Assessments and Task Methodology sheet will detail all environmental risks associated with water, ecology, contaminated land, noise, vibration and pollution.

In some cases, an ecological survey prior to any works will be required to confirm presence of high risk species, both protected and invasive, to ensure adequate control measures are in place prior to and during the works commencing.

Also, where sensitive receptors such as residents, schools, care homes or similar, are in close proximity to the site and may be affected by noise and other nuisances, a noise assessment may be required prior the works to establish if noise mitigation is required.

Environmental incidents are reported and investigated in the same manner as safety incidents. Operatives shall report to their manager if they are unable to fulfil their duties as a result of discovering any ecological issues (e.g. presence of protected species, nesting birds and reptiles).

1.4.4 Nesting season

All nesting sites will be recorded on a digitally secured spreadsheet, and will be included on the SPC/PWT's tablet. Before any works commence, the SPC/PWT will check to see if the worksite has any nests located there. The SPC/PWT will be briefed in identifying common species and will have an awareness of likely habitats of birds. Tool box talks will be delivered throughout the contract on nesting birds.

1.4.5 The operational railway (including infrastructure, services etc.)

Working in Depots

Where works are carried out in Depots, all risks to the operational railway, the Depots and/or London Underground infrastructure will be assessed during planning of the works. A PWT- Depot will follow all London Underground, and Depot rules, and will book on with the Depot Duty Manager prior to works commencing. Before the PWT-Depot allows operatives access to the worksite, he will deliver a full briefing which will comprise of all protection arrangements for the shift.

Engineering Hours

Where Engineering Hours works are required, in association with depot works, risks to the operational railway and/or London Underground infrastructure will be assessed during the planning stage of the works. When working Engineering Hours a PWT-EH will be appointed to protect the operatives. The PWT-EH will follow all London Underground rules, and will book on with the Track Access Controller as per London Underground rule books and procedures. The PWT-EH will test the traction current has been discharged with their Current Rail Indicated Device. Before permitting the operatives access to the operational railway, the PWT-EH will deliver a full briefing to the operatives on the protection arrangements for that shift.

Traffic Hours

Where Traffic Hours are required, in association with depot works risks to the operational railway and/or London Underground infrastructure will be assessed during planning of the works. A PWT-TH will follow all London Underground rules, and will book on with the Line Controller prior to works commencing. Before the PWT-TH allows operatives access to the worksite, he will deliver a full briefing which will comprise of all protection arrangements for the shift.

1.4.6 Use of lifting equipment and lifting operations

All equipment used to carry a load (either a person, in the case of climbing equipment, or static load, in the case of rigging equipment) will be fit for purpose. All equipment will be identifiable and inspected in regular intervals:

Type of inspection	What is inspected	Record keeping	Inspected by
Daily Inspection	All parts of fall protection equipment (harness, lanyards, ropes)	No written record required	User

Type of inspection	What is inspected	Record keeping	Inspected by
Weekly Inspection	All parts of fall protection equipment (harness, lanyards, ropes	Written record required	User
Thorough inspection as per LOLER (6-monthly intervals)	All parts of fall protection equipment (equipment for carrying people)	Formal inspection record required	By a competent person
Thorough Inspection as per LOLER (12-monthly intervals)	All parts of fall protection equipment (rigging equipment etc)	Formal inspection record required	By a competent person

All portable equipment will be inspected by the operator prior to the use. Only trained and certified operatives will be permitted to use the tools. Site inspections will carried out, by a competent person will check all portable, and small hand tools are fit for purpose, are being use for the intended use, and are being used by trained and competent operatives. All equipment will be identifiable and inspected in regular intervals:

Tools	Power source	Test Record
Chainsaw(s)	2 stroke mix	3-monthly (tagged)
Pole saw	2 stroke mix	3-monthly (tagged)
Strimmers	2 stroke mix	3-monthly (tagged)
Portable petrol generator	Petrol	3-monthly (tagged)

1.4.7 Mechanical plant

The table below will be used as part of the scope of works. All equipment will be tested and in date, and will have an attached service tag, informing the user of the next due service date. Only trained and certified operatives are permitted to operate any mechanical plant. An On–Site Risk Assessment will be produced to cover any risks operating any mechanical plant may produce under local conditions. Task sheets are available for:

- Task sheet 11 – Use of powered fuelled equipment, and refuelling
- Task sheet 24 – Use of chipping machines
- Task sheet 25 - Use of a hedge cutter
- Task sheet 26 – Use of mini transporter

Tools	Power source	Test Record	Inspected by
Chipper	Diesel	Tagged or site file	User
Hedge cutters/trimmer	2 stroke mix	Tagged or site file	User

Portable generator	Diesel/petrol	Tagged or site file	User
Mini dumper	Diesel	Tagged or site file	User

1.4.8 Track mounted vehicles and plant

When the works require track mounted vehicles and plant a separate Task Methodology Sheet will be produced to control hazards that arise from the activity. When used the trolley will be in a serviceable condition clearly tagged and only be operated by suitably trained and competent operatives. The PWT-EH will inform TAC of the presence of Track Trolley on site. The use of the Track Trolley will be included on the On-site risk assessment, which will be complete before works commence.

Where a Track Trolley is required in the depot, the Duty Depot Manager, or the Production Manager must be informed. If the gang require any of the points to be moved, the PWT-Depot shall inform the signaller.

The Track Trolley(s) will be fitted at all times with the full complement of safety devices including flashing lights. Pre-use checks will be carried out by the competent Track Trolley Controller.

NOTE: Track Trolleys are only to be used when traction current is switched off and protection arrangements are in place.

Track Trolleys will be used to minimise manual handling in areas where trackside access is required. Preference will be given to the use of split Link trolleys to reduce the amount of manual handling of the Track Trolley itself.

There will be a sufficient number of staff to carry each part to ensure that no-one is overstretched and no damage occur whilst walking through stations (edges may be taped).

When traction current has been discharged each section of the trolley will be passed down to the track team from station platform and assembled by track trolley operators who are familiar with the type of Track Trolley used. The platform edges shall be protected with plywood or rubber mats when carrying out this task.

Plant, tools, equipment and materials will then be transported to the Track Trolley and loaded on. The load must not exceed the SWL of the Track Trolley.

Riding on a Track Trolley is prohibited.

Track Trolleys will be under the control of trained Track Trolley operators. The Track Trolley operator will need to be type specific trained.

Additional task lighting will be provided to illuminate the track ahead, where required. This will allow any hazards such as spare rails or missing covers to be seen, and help prevent slips, trips or falls.

At the start of the working shift, the PWT-EH must inform the appropriate signaller of the requirement to scotch and clip points. On completion of the working shift the PWT-EH must confirm to the appropriate signaller that all scotches and clips have been removed.

Extra care must be taken when traversing points and crossing work. Before passing over points you must:

- Make sure the Track Trolley is stationary.
- Place scotches and clips in position before allowing track trolley to proceed.

For further guidance on use of a Track Trolley refer to Task sheet 27 - Use of a Track Trolley.

1.4.9 Hazardous materials

The following will be implemented when using hazardous substances;

A COSHH Assessment must be requested through HSQE, and be available on site before works commence.

- Chemicals and substances will not be stored on site unless specifically listed on the storage licence and agreed with the Landlord.
- All substances will be used and stored as per manufacturer's instructions and guidance and the COSHH Assessments.
- The necessary PPE must be worn in accordance with product label and COSHH assessments, i.e. checks are to be made on mask filters or face shields/goggles when carrying out dilution or pouring activities.
- All mixing/diluting/equipment filling must be done on drip trays to prevent environmental contamination. A check is to be made against the COSHH assessment for any special PPE requirements.
- All containers must be labelled, transported and stored according to manufacturer's instructions.
- Operatives using substances must understand the hazards of the chemicals or substances used.
- All spillages must be contained immediately; a spill kit must be available on site when using chemicals or substances.
- Minimising risk to the user and others in the area must be ensured at all times. This will be carried out via adequate signage and exclusion zones, where necessary.
- Material and equipment must be positioned and handled so that it cannot fall, slip, roll or be blown onto the track, railway equipment, public highway, platforms or walkways.

The following products will be used as part of the scope of works. If any other product or substance is required, a COSHH assessment shall be provided by the HSQE department before the product or substance is to be used on site.

Material to be used	Hazardous	COSHH Assessment

Petrol	**YES**	**Yes in Appendices**
Diesel	**YES**	**Yes in Appendices**
STIHL chain oil	**YES**	**Yes in Appendices**
STHIL Hedge trimmer grease	**YES**	**Yes in Appendices**
Herbicide Round up pro	**YES**	**Yes in Appendices**
Japanese knotweed clearing	**YES**	**Yes in Appendices**
Chikara Herbicide	**YES**	**Yes in Appendices**
Garlon Ultra –Herbicide	**YES**	**Yes in Appendices**
STHIL strimmer grease	**YES**	**Yes in Appendices**
Ecoplug Max	**YES**	**Yes in Appendices**
Leptospirosis	**YES**	**Yes in Appendices**
Generic nuisance dust	**YES**	**Yes in Appendices**
	YES	**Yes in Appendices**

1.4.10 Temporary structures and falseworks

If temporary structure is required, a specific Method Statement, and Risk Assessment will be prepared to cover the additional works.

Work at height

- Work at heights will be avoided, where practicable.
- All works must be planned and organised, including survey for overhead power lines and distances; tree conditions, including potential weakness caused by decay and the presence of birds' nests etc.
- On-Site Risk Assessment will be carried out to identify any additional hazards.
- The On-Site Risk Assessment will be briefed to all involved in the works.

Ladders

Ladders – must be used for access/egress only, or as an exception only for works of a short duration (5 to 10 min) when other access equipment is not suitable. Priority must be given to podiums, towers, access platforms etc.

Only industrial (130kg) class 1 ladders/stepladders conforming to BS EN 131 must be used.

The following factors must be considered when inspecting and using ladders on site:

- Stiles are not damaged, warped or buckled
- No rungs are missing
- All treads are clean
- All secure stepladder locking devices are in place and working, when extended
- Ensure ladders (both feet) are resting on firm and level surfaces
- Ensure that step ladders are fully extended
- Ensure ladders are angled outwards to avoid slipping (*Rule of thumb – "one out for every four up")*
- Where a ladder cannot be fixed ensure a second person foots the ladder whilst in use.
- Step ladders to be footed at all time whilst in use.
- If a ladder is used as regular access/egress it must be secured and not footed

For further guidance when working at height please refer to

- Task sheet 15 – Tree climbing
- Task sheet 16 – Use of ladders and step ladders

1.4.11 Excavation

When excavating works are required Task briefing sheet 13- Ground disturbance, and excavation is to be followed for the management of the works.

1.4.12 Access/egress

When an activity compromises safe access and/or egress to site, or part of the depot, the SPC/PWT-Depot must liaise with the Depot Duty Manager, or the Production Manager to gain an agreement to any alternative access/ egress arrangements. This will be included on the On-Site Risk Assessment.

If necessary works will be postponed to ensure that access / egress conditions are such that they do not pose a risk to safety of those accessing the worksite.

The SPC/PWT-Depot will contact their Line Manager/Health and Safety department for further advice, as necessary.

For further guidance refer to:

- Task briefing sheet 01- Access, site set up.

1.4.13 Transportation

Transportation will be via small vans or flatbed 7.5 tonne vehicles. It must be ensured, by the Cleshar SPC/PWT, that all deliveries are co-ordinated and all vehicles are parked in a position where they present no additional risks to both road users, depot operations and the general public.

When vehicles are off loaded, a supervised area will be marked out by cones or barriers to safeguard the interface between the work force, depot staff and the general public.

For works that require obstruction of roads a formal traffic management plan will be prepared and road closures organised. If within the depot, this must be agreed with the Depot Duty Manager, or the Production Manager.

For further guidance on driving and transportation please refer to:

- Task sheet 08 – Driving and transportation

1.4.14 Noise

Cleshar routinely measure noise levels from the most commonly used tools to evaluate the most appropriate control measures and to select the least noise polluting tools. The following control measures shall be followed when using the listed tools below.

Potentially Noisy Operation	Means of Control
Chainsaws, STIHL Blower, Hedge Trimmer, Strimmer, chipper, generator	• All works will be carried out using well-maintained equipment. SPC/PWT to assess noise levels and introduce local controls i.e. acoustic screens if required. • Hearing protection will be worn where indicated by Risk assessment. • Access to worksite will be limited to those involved in the works during high levels of noise. • Hearing protection zones will be established and hearing protection use enforced, where the noise level could reach 85 dB (A) • Hearing protection will be issued to all operatives using power tools or work in vicinity. • Lower noise generating equipment will be selected, where practicable. • Where practicable, battery powered tools will be selected. • Ensuring worksite deliveries are managed correctly and well-disciplined to reduce noise at all times. • Where deliveries can be done during the day this option must be utilised, whenever practicable. • The SPC/PWT must ensure, where practicable, that all noisy plant is kept as far away from residential properties as possible. • Extra care is taken to keep all noise to a minimum at night with the vicinity of the local residents in mind. • In agreement with London Underground, Cleshar will establish contact with local residents during prolonged noisy works in a particular location. • A Section 61 notice will be applied for, if necessary

1.4.15 Vibration

All operatives shall be made aware of the risks of a prolonged exposure to vibration. Operatives will be made aware of the symptoms of white finger, carpel tunnel syndrome and all other Hand Arm Vibration related injuries. It is not envisaged that the trigger time the operatives may be exposed to on any normal shift may cause Hand Arm Vibration exposure risk.

Potential High Vibration	Means of Control

Chainsaws, STIHL Blower, Hedge Trimmer, Strimmer	• The equipment must be tagged, tested and well maintained. • Lower vibration equipment to be selected, where practical. • User maintenance of equipment to be implemented. • The SPC/PWT must ensure that operatives take regular breaks throughout shifts and carry out non-HAV based tasks to minimise the risk of vibration white finger. • Where possible rotation of operators will be implemented • Periodic monitoring of exposure to vibration will be carried out to ensure the ELV is not exceeded. • Operatives will be briefed on the consequences of exposure to vibration. • Operatives will be briefed to keep warm and dry hands when working in winter, i.e. wearing gloves. • HAVI monitors & HAV Control Handbooks are to be used to monitor exposure levels of operators using vibrating equipment. Monitoring is to be carried out on a periodic basis or as per CCS HSQE instruction. • When operatives are at ground level chainsaw jackets/sleeves must be worn. • When operatives are using a chainsaw in a tree the use of a chainsaw jacket is to be Risk Assessed against physical exertion and the weather conditions. When it is not reasonably practical to wear a chainsaw jacket, then the protective chainsaw sleeves are to be worn. The period of usage of vibrating equipment must be reduced when: • Operative has tendency to suffer from poor circulation (symptoms include: frequently cold fingers and tingling) • The outside temperature is very low.

1.4.16 Dust and air quality

The following schedule identifies the plant or operations that emit pollution or dust with the practical means of minimising or reducing the dust and emissions:

Plant/Operations	Means of reducing emissions or dust
All fuel powered tools/equipment	• Equipment to be properly maintained • Equipment to be used according to the manufacturer's instructions • Only fuel that is specified by the manufacturer to be used • All generators to be positioned away from works and residential properties, where practicable. • Generators must be self bunded.

Plant/Operations	Means of reducing emissions or dust
Disturbing ballast/ground Handling waste material	• Area to be inspected before works commence to identify for potential locations where dust may be a problem • Suitable locations to be identified for stockpiling debris, prior to removal from site. • Areas Damped down where dust is raised, especially in very dry conditions • Skips covered where used, for removal of debris

1.4.17 Housekeeping

Before works commence the operatives will receive a pre-works briefing from the SPC/PWT. Part of the briefing will comprise housekeeping arrangements. The SPC/PWT will brief the operatives to maintain a high level of housekeeping. If there is an extensive build-up of waste during the works, the SPC/PWT will stop works, and instruct the gang to clear any waste before recommencing. The access and egress points will be kept clear at all times. The worksite will be left clear and tidy at the end of every shift. Any natural waste accumulated will be put into habitation piles. All other waste will be disposed of via Cleshars skips.

1.4.18 Electricity

When Cleshar operatives are working adjacent to Network Rail sites, there may be an interface with overheard electrified cables. If this circumstance should arise, a separate Method Statement and Risk Assessment shall be produced. Any other interfaces encountered with electrical assets on site will have a separate Method Statement, and On Site Risk Assessment. The following task sheet can be used for further guidance:

- Task sheet 12 – Working near overhead power lines.

Traction current;

When working in Depots the traction current will always be considered as live. Only operatives who Basic Track Awareness trained, and have received the depot induction are permitted to work there, under the protection of a PWT-D.

When operatives are required to work in areas where traction current is live, the first option will always be to carry out the works during Engineering Hours, when traction current can be fully discharged under the protection of a PWT-EH. It is not feasible for the traction current to be discharged, works will take place during Traffic Hours under the protection of a PWT-TH.

Cables

Where operatives are working around cables the cables will be protected and the operatives will use hand saws only (No Chainsaws). All cables, and other assets will be risk assessed before works commence

1.4.19 Asbestos

During works where there is potential of disturbance of structures the project manager will request Asbestos report F3333 from the Client Hazardous Material Unit (HMU)

No works will be undertaken by Cleshar that may lead to disturbing asbestos or other unknown materials.

In the event of discovery of asbestos, ACM or suspected asbestos:

- Do not disturb.
- Stop work immediately

- Clear the area of personnel, tools and equipment
- Inform other parties in the vicinity
- Evacuate the area
- Call the HMU reporting Line 0207 088 5615
- Call the Cleshar Health and Safety department

1.4.20 Fly-tipping

Any worksite which has fly-tipped waste, that may cause risk to the work site, the operatives, or the working activity, then the operatives must

- Stop works, and plan other works if feasible.
- Call their Line Manager/ Health and Safety department for further instructions.
- Cordon of the fly-tipped area.
- Inform London Underground of the location, type of waste, quantity of waste.
- If the waste appears to be hazardous, or the SPC can't safely identify what it is, they are not disturb, or attempt to move the waste.
- Take photos.

1.5 Resources

1.5.1 Materials

Any materials required for the works will be planned by the Project Manager. If a product, or substance requires a COSHH Assessment it will be required before the product is used on site and be included in the site documents. All materials that are used on site will be briefed to the gang by the PWT/SPC.

1.5.2 Specifications of required plant and machinery

Only plant and equipment that has been London Underground approved is permitted to be used on the works site. The tools required for the works can be found on the task briefing sheets, and the above Portable Tools, Mechanical Plant and Track Mounted Plant sections above. All operatives will be briefed on the tools required for the works during the pre-works briefing from the PWT/SPC.

The following tools will be used in the scope of works. The list is not exhaustive and other tools and equipment may be required.

- Hand tools
- Strimmer FS 400
- Chainsaw STIHL MS 361
- Chainsaw STIHL MS 260
- Chainsaw STIHL MS 660
- Chainsaw STHIL MS 200T
- Chainsaw STHIL MS 440
- Chainsaw STHIL MS 200
- Telescopic chainsaw STHIL HT75
- Leaf blower STHL BG85
- Wood chipper
- Hedge trimmer STIHL HS81RC
- Mini transporter
- Hand held auger
- Litter picker

All tools used on the contract must be in a good condition. Electrical tools must be PAT tested and contain a label which allows a next test date to be identified. Chainsaws and strimmer's to be serviced as per service schedule.

Before using any tool it should be visually inspected for any damage in accordance with their user training.

Ensuring tools are in good condition and well maintained will also reduce noise. A sharp point or blade will significantly reduce noise generation.

1.5.3 Workforce

All training will be co-ordinated by the Cleshar training department and carried out by an approved training provider. Copies of all relevant certification are maintained at Cleshar Head Office. In addition all personnel will carry details of their individual training.

Operation/Personnel	Training Required
All operatives	LU ICI Sentinel Card, Depot inducted, Asbestos Awareness, Manual Handling training, Site Induction
Operatives working on or near track in traffic hours	Basic Track Awareness
Operatives working in Depots Working in depot area A	Basic Track Awareness Specific Depot familiarisation induction and area A training
Person in Charge in charge of site safety	Site Person in Charge Protecting Workers on the Track (PWT)
First Aider	Appointed Person course as a minimum
Moving Track Trolley	Track Trolley Controller (Formally known as Trolley Operator)
Protecting Workers on the Track Traffic hours (when trains are moving and current is on)	Protecting Workers on the Track Traffic Hours (PWT-TH)
Protecting Workers on the track Engineering hours	Protecting Workers on the Track Engineering hours (PWT-EH)
Protecting Workers on the track Depots	Protecting Workers on the Track Depots (PWT-Depot)
Working on the Depots	Passport to depot (Familiarisation) training in Depots
Arboricultural Works	Certificate from a recognised training establishment to prove competency and qualification
Spraying herbicides	Safe use of pesticides levels NPTC PA1 & PA6

Operation/Personnel	Training Required
Using strimmers/ hedge cutters/chippers/chain saws	Certificate from a recognised training establishment to prove competency and qualification
Working adjacent to Network Rail track	PTS- AC/DC

1.5.4 The PPE required by the workforce and visitors

The following PPE will be required:

PPE	Req.	Grade	When	Additional information
Safety Boots	✓	EN 20345	at all times	Steel toe capped boots with mid sole protection and ankle support
Chain saw boots	✓	EN 381-9 EN 381-3	When using chainsaw	Protective boots with good grip and protective guarding at front vamp and instep
High Visibility Jackets (with Cleshar Logo)	✓	EN 471	at all times	Except when climbing trees when Hi - Vi T-shirts are acceptable
Safety Glasses	✓	EN 166 F	at all times	
Safety Goggles	✓	EN 166 F	As per Risk assessment	
Hard Hat	✓	EN 397	at all times	For tree climbing operations HSE strongly recommends a mountaineering style helmet complying with BS EN 12492).
Gloves (mechanical Protection)	✓	EN 388	As per Risk assessment	Handling, carrying materials.
Gloves (Chainsaw Protection)	✓	EN 381-7	As per risk assessment	Suitable gloves for the task and subject to the operator's risk assessment. Consider the need for protection from cuts from the chainsaw, thorny materials and cold/wet conditions. Where chainsaw protection is required this should be to BS EN381-7
Gloves (Chemical Protection)	✓	EN 374	As per COSHH assessment	
Half face mask	✓	EN149 FFP 3	During dusty operations	Face Fit Tested
Other respiratory protection	✓	As per COSHH	As per COSHH	
Ear defenders	✓	EN 352	When using power tools	Refer task risk assessment

PPE	Req.	Grade	When	Additional information
Disposable Overalls/Coveralls	✓	EN 340	Strimming/ Spraying/ Removing waste	When using herbicides/pesticides - openings at neck and wrists must be a snug fit. The sleeves must also be long enough to cover the rubber gloves
Face/eye protection (mesh)	✓	EN 1731 mesh visors	When using mechanical vegetation cutting tools (strimmers)	
Gaiters	✓	EN 381-9	When using Chainsaw, working at height or ground level	Or occasional users working in even ground where there is little risk of tripping or snagging on undergrowth or brash, worn in combination with steel toe- capped safety boots.
Leg and groin protection	✓	EN 381 – 5	All round protection for arborists working in trees	AFAG recommends Type C leg protection for aerial work, because of the high all-round chainsaw cut protection. Where wearing Type C is impractical (I.e. because of the higher risk of heat stress) it may be appropriate to use Type A, where justified by the risk assessment
Chainsaw Jacket	✓	EN 381:11:2002	When operating chainsaws at ground level, when Aborists are climbing/in the tree this is to be Risk Assessed against increased heat stress generated from physical exertion e.g. working from a rope and harness, as per HSE guidance INDG317 Rev 2.	
Protective sleeves.	✓	EN 381-10	At all times when operating a chainsaw.	

COSHH Assessments may require further PPE when using substances e.g. specific filters or gloves.

1.6 Permits and Licences

Permits and Licences required for task:

Permit or Licence required	Required	Item	Location
London Underground endorsed Sentinel card.	✓	All personnel	With individual
Access Number	✓	Engineering hours	Site File/with PWT (SPC-NT)
Storage Licence	✓	For any storage area permission from the Landlord is required.	At access point to the specific storage area
Hot Works Permit	✓	When abrading/welding/ burning	Site File/with PWT (SPC-NT)
Permit to Dig	✓	When excavating or disturbing ground	Site File/with PWT (SPC-NT)

1.7 Waste

Before works commence the area will be surveyed to identify any fly-tipped rubbish. Litter and small waste must be bagged up and removed from site in a van and taken to Cleshar yard and placed in the skip. Care to be taken of needles or other sharps around the work area, gloves to be worn and bags to be carried away from operative's body.

More substantial waste must be referred to the Client Manager for an instruction. If instructed, waste must be bagged up and removed to agreed location. If hazardous waste is discovered it is to be kept separate from other waste and clients' representative contacted to ensure the correct procedure is followed for its disposal. Quantity and type of waste being removed is to be recorded on the Project Activity Sheet.

Any materials or debris arising from the works must be put into double builder's bags, secured with cable ties and removed from site by Cleshar or as agreed with the client. Where required, Cleshar will raise a request/permit for transporting the debris out of the station via the lift or escalator. For the sequence of operations with regard to waste disposal, generally follow the Waste Transfer note that has to be completed at various stages throughout the disposal process to ensure traceability. A Copy of the in date Waste Carrier Licence will be held in the site file

2 Site Details

2.1 Access and Egress

Signing in and out must be done following the London Undergrounds Depot signing in procedures. SPC/PWT instructions must be followed. Access to the works must be restricted to persons required to carry out the works to comply with London Underground's requirements. When entering via a station all operatives and visitors will sign in and out at the appropriate Station Supervisors Office before entering the LU network. Individuals must be in possession of the necessary certification, including specific depot training, and certification in line with London Underground requirements, to allow them to enter the area required. This will include visitors and personnel undertaking inspections/audits. The SPC/PWT will ensure that all access gates are closed and secured once inside and when leaving the site to prevent unauthorised access. Signage to warn of the works will be displayed at the access point.

When gaining access to a work site through an LU access gate the SPC/PWT will inform the Line Controller. The Line Controller will be told of the location the operatives are working at, the access point, the type of works being carried out, and the distance they are from the track, and the level of protection they are providing for the shift. When works have concluded, the SPC/PWT will inform the Line Controller the gang is clear of the worksite, and have locked the access gate.

When gaining access to gates on stations on the Metropolitan Line, as well as booking on with the Line controller, the SPC/PWT will report to the Station Supervisor's office and sign the gang in on the PICER form. The SPC/PWT will inform the Station Supervisor of the nature of works taking place, the location, and the access point. When works have concluded the SPC/PWT will inform the Station Supervisor.

2.2 Site layout

Works will be carried out at various London Underground Depots, compounds, and embankments across the TfL infrastructure. Prior to works commencing an On-Site Risk Assessment will be carried out to include details relevant to the specific location.

2.3 Interfaces

Any possible interface with other contractors, Depot staff, London Underground staff, or the general public will be identified in the planning meeting before the works commence. Control measure shall be implemented to ensure all third parties are safe from any works. Should operatives arrive on site, or an interface with any third party arise when works have already commenced, the SPC/PWT will phone their Line Manager for further instruction.

2.4 Control Site Risks

2.4.1 Workers

Before any works commence, the Person in Charge will complete an On-Site Risk Assessment detailing any hazards the worksite presents, along with control measure to mitigate the hazards. This will be fully briefed out to all operatives before works commence. The following task sheets can be referenced. If the worksite presents a risk, where the hazards cannot be sufficiently controlled, the Person in Charge will contact their Line Manager, Health and Safety department for further guidance. The following task sheets can be referred to:

- Task sheet 01 – Access and site set up

- Task sheet 02 – Work on, or near the track
- Task sheet 03 – Site work (biological hazards)
- Task sheet 04 – Site work (Exposure to weather)
- Task sheet 17 – Access, or work on slopes, or steep embankments

2.4.2 Neighbours (e.g. Network Rail, nearby houses etc.)

Where a worksite becomes intrusive to neighbouring residential properties, a planning meeting will be held to decide how to control the safety interface with the residential area and the worksite. Letter drops will also be carried out prior to works commencing, advising residents of works that are due to commence. If Cleshar operatives notice the worksite becoming a risk, or intrusive to the residents, they will stop work, and contact their Line Manager, Health and Safety department for

Further guidance. A separate method statement, and/or a Site specific Risk Assessment would be produced to control the worksite.

When working on a Network Rail work site all Cleshar operatives will be PTS trained. A Site specific Risk Assessment will be completed along with Network Rail Safe Work Pack, and Network Rail permits before works commence. These will detail the hazards and risks the worksite presents, along with control measures to sufficiently protect Cleshar operatives. A Network Rail COSS will be appointed when working on Network Rail sites.

2.4.3 Other contractors working in the vicinity

Where the Cleshar worksite will present hazards to others working in the vicinity, a planning meeting will be held with all parties to discuss and plan how to protect all from the risks involved. A separate Method Statement, and Site Specific Risk Assessment will be raised and implemented to protect all involved from the hazards and risks identified. In the event of an unplanned interface with others working in the vicinity, the SPC/PWT will temporarily stop works, and plan with the other SPC/PWT on how to control the issues. If a mutual agreement can be reached, an On-Site Risk Assessment will be produced, and re-briefed to all. In the event an agreement cannot be reached, the SPC/PWT will contact their Line Manager and/or Health and Safety department for further guidance.

2.4.4 The environment (e.g. nearby water courses)

Cleshar operatives will be briefed on ecological and other environmental issues relevant to their task and the location of the works. These are included in the risk assessments for the works, and can include issues such as sensitive receptors in the vicinity of the site, presence of protected or invasive species and protected habitats. The task briefing sheet will detail all environmental risks associated with water, ecology, contaminated land, noise, vibration and pollution.

In some cases, an ecological survey prior to any works will be required to confirm presence of high risk species, both protected and invasive, to ensure adequate control measures are implemented during the works.

Also, where sensitive receptors such as residents, schools, care homes or similar, are in close proximity to the site and may be affected by noise and other nuisances, a noise assessment may be required and the necessary mitigation measures implemented.

Environmental incidents are reported and investigated in the same manner as safety incidents. Operatives shall report to their manager if they are unable to fulfill their duties as a result of discovering any ecological issues (e.g. presence of protected species, nesting birds and reptiles).

2.4.5 LU staff

When Cleshar worksite will present hazards to London Underground staff a Site Specific Risk Assessment will be implemented to protect all involved from the hazards the worksite. In the event

the risks cannot be sufficiently controlled, the SPC/PWT will contact their Line Manager, Health and Safety department for further guidance.

2.4.6 The operational railway (including infrastructure, services etc.)

Working in Depots

When working in any London Underground Depot is required, a PWT-Depot will be appointed to provide protection to all operatives for that shift. The PWT-Depot will book on with the Depot Duty Manager/Production Manager as per London Underground Depot rules and procedures. All risks that arise from the worksite, when working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions.

Engineering Hours

When working Engineering Hours works are required, a PWT-EH will be appointed to provide protection to all operatives for that shift. The PWT-EH will book on with the Track Access Controller as per London Underground rules and procedures. All risks that arise from the worksite, when working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions.

Traffic Hours

When working Traffic Hours works are required, a PWT-TH will be appointed to provide protection to all operatives for that shift. The PWT-TH will book on with the Line Controller as per London Underground rules and procedures. All risks that arise from the worksite, when working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions.

2.4.7 Members of the public

The worksite will, for the most part, be on London Underground premises, behind a physical barrier creating a tangible physical segregation between the worksite and the members of the public. In the event that the worksite may pose a risk to the public, the works will be planned in advance and a site specific risk assessment for that particular worksite will be raised. The site will be demarcated and cordoned off. Before any works commence the SPC/PWT will do an On-Site Risk Assessment, including managing the interface with the general public. If there is a risk of violence due to the interface with the public, then operatives will remain together and move to a place of safety, moving any tools or equipment out of the way of the potential violence, where possible. If the SPC/PWT considers it necessary, they will call the police.

2.4.8 Asbestos

During works where there is potential of disturbance of structures the project manager will request Asbestos report F3333 from the Client Hazardous Material Unit (HMU)

No works will be undertaken by Cleshar that may lead to disturbing asbestos or other unknown materials.

In the event of discovery of asbestos, ACM or suspected asbestos the following process will be followed:

- Do not disturb.
- Stop work immediately
- Clear the area of personnel, tools and equipment
- Inform other parties in the vicinity
- Evacuate the area
- Call the HMU reporting Line 0207 088 5615

2.4.9 Buried services,

It is not envisioned that contact with buried services will be part of the scope of works in this Method Statement. If this is required throughout the cycle of the contract, a Site Specific Risk Assessment will be produced, with the required trained, and competent person to carry out any cat-scanning.

2.4.10 Limited steep access embankments,

When operatives are working on steep embankments a Site Specific Risk Assessment must be completed before any works commence. SPC/PWT shall ensure weather conditions do not impose a risk to the operatives, or the operational rail way. The site specific risk assessment shall include:

- Weather conditions.
- Underfoot conditions.
- Safe system of work, i.e. harness, fall arrest equipment.
- Level of protection required.
- Possible interfaces with Network Rail.
- Any London Underground assets that may need protection.
- Other contractors, or other works in the vicinity.

For further guidance refer to:

- Task sheet 17 Access or work on steep embankments.

2.4.11 Overhead lines

When works have an interface with Network Rail, and the OLE a Site Specific Risk Assessment will be produced before any works commence. All relevant Works Package Plans, permits, task briefing sheets will also be in place before any works commence. All staff will be PTS trained, under the protection of a COSS.

Refer to Task briefing sheet 12 – Working near overhead power lines.

2.4.12 Contaminated land

London Underground will inform Cleshar of areas with contaminated land. A specific Method Statement, and Site Specific Risk Assessment will be prepared for work in such areas and briefed to all the operatives.

2.4.13 Pests and weeds

All pest and weed management will be carried out as per Task sheet, risk assessment and relevant COSHH assessment by competent operatives. Areas treated with chemicals will be cordoned off where necessary and warning signs posted. Cleshar will implement provisions to prevent, as reasonably practicable, the migration of pests from site. All operatives will be made aware of the presence of rats, wasp nests, snakes, etc. during site briefing. Operatives will also be made aware of health and safety hazards associated with wildlife in tool box talks and inductions.

Hazards include:

- Bee/wasp stings,
- Leptospirosis,
- Snake bites and
- Diseases from pigeon droppings

2.4.14 LU Operations, and sites where violence towards site staff is known.
When operatives are required to carry out works in areas where violence towards staff is known, the following must be considered.

- Informing British Transport Police, Metropolitan Police of planned works.
- London Underground Management, and Senior Cleshar Management to be made aware of the works, the time, location, duration of works.
- All operatives to be briefed to stay in groups of 2, and 3 and be advised to commute to, and from the worksite in groups.
- Nearest Police station, and other emergency services to be briefed to the operatives before any works commence.
- If operatives are confronted, or challenged they will be briefed to remain calm, talk softly, go to a place of safety, not to respond with violence.
- If operatives see any suspicious activity, they are to report it to the British Transport Police, Metropolitan Police.
- Works to be planned for daylight hours, where practicable

2.5 Protection

All Cleshar gangs shall have the correct protection in place before any works commence. A trained, and competent PWT-EH/TH/Depot will provide protection for the works depending on when and where the works is taking place.

Depot working
When working in a depot a Protecting Workers on Track Depot (PWT-Depot) shall provide protection to all operatives who required to carry out works. The PWT-Depot will follow all London Undergrounds rule books and procedures, and the rules for the depot they are working in.

Traffic hours
The majority of the works is envisioned to take place during Traffic Hours. A PWT-TH will be appointed to each of the Utility gangs working on this contract. The PWT-TH will follow all London Underground rule books and procedures when executing their duties. The PWT-TH will book on with the Line Controller before any works commence.

Engineering hours
When working engineering hours a Protecting Workers on Track Engineering Hours (PWT-EH) shall provide protection to all operatives who required to carry out works. The PWT-EH will follow all London Undergrounds rule books and procedures.

2.6 Isolations

In the event the worksite is shared with Network Rail, or within a close proximity to Network Rail OLE, an isolation is required.

2.7 Communication and Contact Details

If operatives need to speak to their Managers or Health and Safety department they can call them at any time mobile phones, or through head office. If operatives need to reach anyone outside normal working hours, or in the event of an emergency Cleshar have a 24 hour HUB which is

manned at all times. By using this the on-call Operational Manager, or Health and Safety representative will be contacted.

The following contact details will be used for these works;

Company	Position	Responsible Person	Contact no.
TfL	**Project Manager**	Joel Baker	TBA
TfL	**H&S Advisor**	Richard Brooks	TBA
Cleshar	**Project Manager**	[redacted]	[redacted]
Cleshar	**H&S Advisor**	[redacted]	[redacted]
Cleshar	**Vegetation Manager**	[redacted]	[redacted]
Cleshar	**Vegetation Manager**	[redacted]	[redacted]
Cleshar	**Tree Inspector**	[redacted]	[redacted]

Emergency contact details:

Emergency Contacts		External number
Fire – Police - Ambulance		999
BT Police Control		0800 40 50 40
Rail Accident Investigation Board	Death or Serious Injury	01332 253 333
ORR	Fatal or Major injuries only Out of hours:	Monday to Friday, from 09:00 to 17:30 hrs - Telephone: **020 7282 3910**
		Outside these hours, weekends and public holidays please call the Department for Transport (DfT) Duty Officer on: **020 7944 5445**
Gas – Transco Emergency		0800 111 999
Electricity Emergency Line		0800 375 675
Local Water Company Emergency Line	Thames Water	0800 980 8800
Cleshar HUB	24hr 7 days a week	020 8733 8552
Environmental Agency	Emergency Line	0800 807 060
Various London hospitals		999
Network Rail Emergencies	24 hour Helpline	0345 711 4141

2.8 Emergency Arrangements

In the event of an emergency, the procedure as described in the project Emergency Plan will be followed.

Emergency procedures for first aid and fire evacuation will be briefed to all operatives prior to work commencing.

- The SPC/PWT will ensure that all operatives are aware of the assembly point, First Aider and nearest hospital.
- The SPC/PWT will ensure that the First aider is aware of the site address/location and access points in order to direct the emergency services.
- In the event of emergency the SPC/PWT will contact Station Supervisor to request emergency services (if working within the station location) or call 999.

The worksite may and will vary from shift to shift. Before each shift commences, the Person in Charge will brief the operatives on the closest Accident and Emergency unit, with the agreed staff assembly point should emergency services need to be called.

In the event of an Aerial rescue, operatives are to refer to Task sheet 32 Aerial rescue.

There will be a fully stocked first aid kit and a qualified Emergency First Aider assigned to each gang. The First Aider will be introduced to the work group during induction. In the event of an incident / accident the First Aider must administer first aid and report to the nearest station for assistance, if required. All accidents resulting in injuries will be reported immediately to the Project Manager, Cleshar HSQE department and as per project reporting procedures.

2.8.1 Fire

A portable fire point will be set up adjacent to the work area. The first aid kit will normally be kept with the fire point, the capacity of the firefighting equipment may change if the risk assessment stipulates.

Fire prevention:

The following activities will be carried on site;

- A re-fuelling point will be allocated, with drip tray, and funnel. This will be at least 5 metres away from any hot works.
- All plant and equipment will be fuelled at the depot before works start.
- Ensuring the fire point is easily accessible before any hot works commence.
- All hot works activities are to be included on the On-Site Risk Assessment, and pre-works briefing.

The standard fire point will consist of:

- **2x AFFF (9ltr)**
- **1x CO2 (5kg)**
- **1x Fire Blanket**

No smoking or vaping is allowed on London Underground Limited premises.

Hot works will be managed in accordance with a London Underground issued Hot Work permit and overseen by a Fire Watch Person. The London Underground trained Fire Watch Person will be present on site during the hot works and for a minimum of 1 hour after completion of works. The Fire Watch Person will not be engaged in activities that would prevent them from carrying out their Fire Watch duties.

2.9 Welfare

Welfare will be provided for each location and assessed on each site, normally agreement to share station's/Depot welfare facilities. A Welfare van can be provided for larger groups (e.g. during possessions) and remote locations as agreed between Cleshar and London Underground.

3 Briefing and Reporting

3.1 Briefing Arrangements

The SPC for the works will deliver a pre works briefing. The briefing will comprise of;

- Safe System of Work.
- Method Statement, and Risk Assessment, any COSHH Assessments that would be needed for that shift.
- Roles and responsibilities, i.e. who will be doing what task.
- Plant, equipment and tools needed for the shift.
- PPE requirements.
- Daily working activities.
- Any site specific hazards and mitigation measures.

Works will be carried within, and around London Underground Depots. A PWT-Depot will deliver a protection briefing before any works commence.

- Any live sections
- Train movements
- Direction of traffic
- Protection limits
- Identity of First Aiders, and the First Aid arrangements
- Staff assembly point
- Nearest hospital
- If the points are likely to move
- Site specific hazards.
- Person in charge of works.

When works are being carried out during Traffic Hours, and a PWT-TH is required the operatives will receive a protection briefing from the PWT-TH. The protection briefing will consist of;

- Train movements
- Protections arrangements, if a look out or hand signalman is being used
- Direction of traffic.
- The emergency arrangements, nearest hospital, staff assembly point.
- Site specific hazards, e.g. slipping and tripping hazards.
- The Person in Charge.

- The identity of the First Aider.

When works are being carried out during Engineering Hours, and a PWT-EH is required the operatives will receive a protection briefing from the PWT-EH. The protection briefing will consist of;

- Inform and show the SPC that the traction current has been discharged.
- The call back time for the shift.
- The protections limits and the worksite for the shift.
- The emergency arrangements - nearest hospital, staff assembly point.
- Site specific hazards, e.g. slipping and tripping hazards.
- The Person in Charge of works.
- The identity of the First Aider.

3.2 Reporting Accidents and Incidents

All accidents, incidents, near misses must be notified to the SPC/PWT and who will carry out an immediate investigation.

All accidents, incidents, near misses must be reported to the incident report operator on [redacted] (auto[redacted]) or [redacted] as soon as possible but by the end of shift at the latest and also reported to Customer Care Center [redacted] and to Duty Supervisor informed on site.

- LUL Incident Line [redacted]
- Cleshar HUB [redacted]

Environmental incidents must also be reported in the same manner as Health and Safety incidents.

If serious accident, incident or injury all operatives to remain on site until dismissed by authorised person (Cleshar Manager, London Underground Manager or Police), unless in need of medical treatment.

RIDDOR reports must be submitted by Cleshar H&S department unless reports are submitted by the client or subcontractors

On Site Risk Assessment Form

B - Task briefing sheets (incorporating risk assessments)

- Task briefing sheet 01- Access, site set up
- Task briefing sheet 02- Work on or near the track
- Task briefing sheet 03- Site work (Biological hazards)
- Task briefing sheet 04- Site hazards (Exposure to weather)
- Task briefing sheet 05- Manual Handling
- Task briefing sheet 06- Use of hand tools
- Task briefing sheet 07- Use of power tools
- Task briefing sheet 08- Driving and transportation
- Task briefing sheet 10- Use of strimmers and hedge cutters
- Task briefing sheet 11- Use of fuel powered equipment and refuelling
- Task briefing sheet 12- Working near overhead power cables

- Task briefing sheet 13- Ground disturbance, and excavation
- Task briefing sheet 16- Use of a ladder or step ladder
- Task briefing sheet 17- Access or work on steep slopes, and embankments
- Task briefing sheet 18- Japanese knotweed
- Task briefing sheet 19- Giant hogweed
- Task briefing sheet 21- Tree and shrub planting
- Task briefing sheet 22- Use of a chainsaw
- Task briefing sheet 23- Use of a Hand held blower
- Task briefing sheet 24- Use of chipping machines
- Task briefing sheet 25- Use of hedge cutters
- Task briefing sheet 26- Use of mini transporter
- Task briefing sheet 27- Use of a mini track trolley task sheet
- Task briefing sheet 28- Use of a hand held auger

C - COSHH Assessments

- Petrol
- Diesel
- STIHL chain oil
- Chikara herbicide
- Garlon ultra – herbicide
- Ecoplug max
- Glyphosate
- Japanese knotweed
- Eco plug max
- Generic nuisance dust
- STHIL strimmer grease
- Hedge trimmer grease
- Roundup pro Herbicide
- Leptospirosis

Task Description/Methodology				
Applies to all activities where hand tools are being used.				
Hazards associated with the task		**Consequences**		**Pre-controls Risk Rating**
Sharps, blades and edges, impact with tools, ejection of materials and particles, ejection of tools/parts of tools, working close to electrical cabling/equipment, prolonged awkward postures.		Eye injuries, various personal injuries, cuts and abrasions, electrocution, burns, musculoskeletal injuries.		**M**
People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☐
Control Measures				**Post control Risk Rating**
• Only competent operatives to carry out works. • Where operatives or persons undergoing training (apprentices) they shall be closely supervised. • All tools shall be maintained, kept in safe condition and inspected prior to use by the user. • All cutting tools will be kept sharp. • Insulated tools to be used when working close to electrical equipment. • Hands should be kept behind, or away from sharp cutting edges or work piece edges. • All bladed knives/chisels etc should be guarded when stored safely in toolbox/bag, open blade knives are not allowed on to London Underground. • Redundant blades must be disposed of properly, for example in solid container. • Ensure no one else is close when using hand tools such as swinging hammers etc., warning is to be issued to operatives and other contractors in the vicinity. • Good housekeeping is to be ensured when using hand tools. • Task lighting to be used at all times when working in the dark. • Operatives to achieve adequate breaks from awkward position or prolonged use of hand tools (for example when, twisting or bending back, reaching upwards or kneeling when using hand tools).				**L**

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374
Safety glasses where ejection of particle is a risk	EN 166 F		
Reviewed issue 6	30/05/2019	Approved	[redacted]

TASK SHEET NUMBER 07 **USE OF POWER TOOLS**

CLESHAR

Task Description/Methodology				
Applies to all activities where small electrical power tools such as drills are used.				
Hazards associated with the task		**Consequences**		**Pre-controls Risk Rating**
Faulty equipment, equipment not suitable for the task, inexperienced users, noise, vibration, impact with services, awkward postures.		Electric shock, electric burns, explosion, fire, entrapment, damage to the assets, personal injury, damaged hearing, ill health from effects of vibration, musculoskeletal injuries		**M**
People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☐
Control Measures				**Post control Risk Rating**
• Only competent operatives shall use power equipment. • Where operatives or persons undergoing training (apprentices) are working they shall be closely supervised. • All electrical tools must be PAT tested, maintained and tagged with expiry/next test date. • Equipment will be visually inspected prior to use by the operator. • Faulty equipment will not be used, taken off site and replaced. Labelled as DO NOT USE – FAULTY, and returned to Cleshar's yard to be quarantined. • Ensure all guards and other safety devices are in place. • All tools to be suitable for the task. • Dust suppression to be used during stone/concrete cutting – regular dampening down with water or extraction in place. Respiratory protection may be required (refer to COSHH assessments for guidance). • Hearing protection must be worn when using noisy power equipment for prolonged periods. • Eye protection to be worn (goggles EN 166) and enforced by the SPC/PWT. • Ensure fire systems are checked and isolated prior to cutting works. • When cutting metal (using angle grinder) ensure that a Hot Works Permit is in place and a fire watch person is in place at all times, blade to be changed/adjusted by abrasive wheels trained person. • Time spent using power tools must be limited. • Task lighting shall be used at all times when working in dark. • Operatives to achieve adequate breaks from awkward position or prolonged use of power tools tools (for example when breaking for longer periods, twisting or bending back or kneeling). • Also refer to Ground disturbance and excavation Task Sheet Number 13.				**L**

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374
Safety goggles	EN 166 F	Hearing protection	EN 352
Reviewed issue 6	30/05/2019	Approved	[redacted]

TASK SHEET NUMBER 10 **USE OF STRIMMERS AND BRUSH CUTTERS**

CLESHAR

Task Description/Methodology
• Survey the area for obstacles or obstructions. • Only trained operatives shall use the equipment. • Carry out essential maintenance and pre use checks on the strimmer. • When starting your petrol strimmer, put it on the ground and hold it with one hand while you start it up with the other. Only use strimmer on grass or plant material. Strimmer must not be used above waist level. • Ensure that you can achieve good footing during the activity. Do not use strimmer if the ground is slippery and steady posture cannot be maintained. Always use PPE as per RA (below). • When the strimmer is ready, start in the most overgrown part of the location, slowly swinging it from left to right. Cut into the overgrown areas and take off small amounts at a time. • Other persons should be at least 15 meters away from the area being worked on. Set up exclusion zones. • Always turn the engine off and make sure the cutting attachment has stopped before putting the strimmer down and maintenance or refuelling. • **BRUSH CUTTERS are not permitted on AP-JNP.**

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Flying debris, particles, contact with rotating parts of strimmer, kickback, manual handling, hot parts	Injury to operators and those in vicinity (vehicles or property) Severe cuts, abrasions, entanglement, other major injuries, musculoskeletal injuries, burns and fire	**M**
Contact with electrical cabling	Electrocution, burns, fire	**M**
Biological Hazards (animal faeces, plant sap- giant Hogweed, discarded syringes etc)	Diseases, leptospirosis, burns and blistering	**M**
Noise and Vibration	Hearing loss, tinnitus, vibration white finger	**M**
Vapours from refuelling , fumes, contact with lubricants	ill health form fume inhalation, skin conditions, fire, burns and explosion	**M**
Working on uneven ground, steep embankments	Slips and falls	**H**

People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☒

Control Measures	Post control Risk Rating
Tools to be used only by the trained, competent and authorised persons. All operators must be fully conversant with the manufacturer's instructions. All strimmer's and brush cutters to be regularly maintained. Operators to carry out maintenance and pre-use checks as per manufacturer's instructions. Warning signs erected to warn others, operator exclusion zones to be set up and maintained. Where necessary barriers, protective sheeting to be erected. Lookout to warn of oncoming pedestrians or vehicles. Harness to be worn to support the strimmer during use. Regular breaks to be taken from carrying heavy equipment. Where working close to tracks the strimmer operator is to work facing oncoming trains on the closest track so that strimming can stop when the train is within 20m, preventing it being hit by any items thrown up by the strimmer. Safe system of work for working near the track to be set up by PWT.	**L**
Area must be assessed prior to any strimming operations to establish any hidden cables, and extra additional precautions, including the use of hand tools instead of strimmers while removing vegetation near or close to any cables. (On Site Risk Assessment to be carried out).	**L**
Work group must be made aware of possible presence of sharps and biological hazards, visual survey to be carried out to identify presence of biological hazards. Operatives to wear overalls in areas contaminated with biological hazards (faeces, pigeon droppings etc)	**L**

To reduce the risk of HAVS Operatives to be aware of HAVS and the risks, regular breaks from using vibrating equipment, staff rotation where necessary. Equipment to be regularly maintained as per manufacturer's instructions. Random monitoring of vibration exposure. Maintain firm grip at all times but do not squeeze the handles with constant excessive pressure. Keep hands and fingers warm, use gloves at all times. Hearing protection to be used when operating chipper, hearing protection zones to be established, mandatory hearing protection signage to be put in place. Hearing protection to be enforced.	**L**

Equipment	Vibration magnitudes (m/s^2)	Exposure Action Value (EAV)	Exposure Limit Value (ELV)
Strimmer FS 400	3.5	4 hrs 5min	16hrs 20mins

• Refer to COSHH assessment. • Refuelling to be carried out designated areas only. Refer to refuelling RA. • Petrol equipment to be used in ventilated areas only. • Fire point to be established in the vicinity of works and refuelling area	**L**
Operatives to ensure good footing during the activity. No lone working allowed when using brush cutter or strimmer. On Site Risk Assessment to be carried out to identify local conditions. Safety boots to be worn and in good condition.	**M**

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374
Face shield/visor	EN 1731	Hearing protection	EN352
Reviewed issue 6	30/05/2019	Approved	[redacted]

Task Description/Methodology
Before commencing felling operations, a full site inspection and the Arboriculturist Tree Work Assessment form to be completed. This must be carried out taking into account the following considerations: ➢ Condition of tree base (rot, decay, fungi, cracks, splits, soil mounding , cracks near root flare, ivy etc) ➢ Condition of trunk of tree (rot, decay, fungi, cracks, splits presence of ivy ,loose bark, swelling or depression) ➢ Condition of the trees crown (deadwood, crown dieback, decay, splits, storm damage, stinging insects, animals , hidden electrical conductors etc) ➢ Weather conditions especially wind, ice, snow, wet limbs ➢ Location of power lines ➢ Location of underground utilities ➢ Public footpaths, right of ways, cycle tracks, bridle paths, roads, etc ➢ Has the use of a crane or MEWP been considered already for the hierarchy of controls against the Working at Heights regulations (WAH)? ➢ Natural lean of the tree, etc ➢ Direction tree is to be felled ➢ Gradients and steep inclines, working on embankments. • A safe method of operation must be agreed to ensure that a safe working distance can be maintained between workers **(at least 2 tree lengths)** and between workers and machinery (outside the risk zone of the machines being used). • If this is not possible due to the layout of the tree to the track or boundary, a competent arboricultural operative must carry out a Site Specific Risk Assessment and set up a safe system of work prior to felling. • When felling adjacent to overhead electric lines, a clearance of not less than twice the height of the tree must be maintained. Felling should be directed away from the electric line. Where felling is within two tree lengths the advice of the owner of the overhead electric lines must be sought. (Refer to Task Sheet No 2 & 12). • Direction of fall must be decided and suitable escape route clear of obstructions selected prior to felling. • It must be ensured that no other person is within a distance equal to twice the length of the tree or directly below on steep slopes. • Audible warning to be issued to those in the vicinity of the operations. • Always make a sink. This allows the tree to be felled on a hinge that controls the rate and direction of fall. • Arising from pruning operations will be lowered to ground level in a controlled manner or allowed to free fall where safe to do so, where ground staff will process into manageable sizes. • Brushwood will then be chipped onto the ground around the tree bases and spread to an even thickness or chipped into the rear of the vehicle. Cord-wood will then be stacked as habitat piles between the trees or removed as agreed. • Trees to be felled will be section felled to ground level or clear felled as appropriate with arising processed as above. • Once any felling cut has been started on a tree, the tree must not be left standing. Do not start a new operation until the tree has fallen. • The stems cut up in to manageable pieces and loaded onto a lorry by hand. • Upon completion the area will be made safe. Warning hazards tape and signage to be erected where necessary. **Do not:** ➢ Fell the supporting tree in an attempt to free the hung-up tree ➢ Climb a hung-up tree ➢ Fell another tree across the hung-up tree in an attempt to dislodge it ➢ Walk or work under a hung-up tree ➢ Cut pieces off the butt end of a hung-up tree in an attempt to dislodge it • If a chainsaw is to be used to fell a tree, only rear handled chainsaws are to be used. (refer to Use of Chainsaw Task Sheet) •

Hazards associated with the task	Consequences	Pre-

		controls Risk Rating
Uncontrolled or unintentional falls of trees, parts of trees or adjacent trees or structures Electrical power lines Obstructions Steep gradients Injuries caused by tools and equipment Falls from height	Strike by falling tree or tree part resulting in major injuries Major injuries, breaks, head injuries Musculoskeletal injuries Electrocution Major cuts	**H**

People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☒

Control Measures	**Post control Risk Rating**
• All operatives involved in the activity to be trained and competent. (Recognised arboricultural qualification). • Briefing and discussion of work plan before commencing the job. • Experienced operative to carry out a Site Specific Risk Assessment of the site and tree conditions. Safe system of work to be established, and communicated to all on site. • Each member of the group will have clear duties assigned to them, and will be vigilant of activities of the others in the group. Activities will be coordinated by the SPC/PWT. • Communication between members of the workgroup will be established. Clear warning signals known. • Work site to be segregated where possible, warning signs displayed on all reasonably foreseeable approaches to the work site to warn others and prevent unauthorised access. • Only recognised felling, delimbing/snedding, cross cutting and stacking techniques are to be carried out, as per training received. • All operatives to follow safe techniques for climbing, safety harness to be used. Free climbing is not permitted. (Refer to Tree Climbing Task Sheet). • Suitable escape routes to be set up and cleared of all debris. • Problems that could affect performance must be reported to management. • While climbing the operative will be tied off at all times. NO free climbing will be permitted. (Refer to Tree Climbing Task Sheet) • Aerial rescue will be implemented. • All equipment used will be suitable for purpose and maintained (Refer to equipment Task Sheets)	**M**

PPE (Minimum Requirement) Refer to Tree Climbing and the use of Chainsaw/Equipment Task Sheets

Reviewed issue 6	30/05/2019	Approved	[redacted]

Task Description/Methodology

Japanese Knotweed is effectively controlled with Garlon Ultra* herbicide mixed with water, and applied through a hand-held knapsack sprayer or vehicle mounted sprayer. For road or railway siding weed control, the best treatment time is late winter or early spring. For grassy areas such as embankments, excellent results can be achieved with treatment coinciding with periods of vigorous growth.

- Area identified to be contaminated with Japanese Knotweed must be secured and cordoned off using Netlon fencing.
- Warning signs must be displayed to prevent unauthorised access and warn others.
- Where necessary additional Netlon fence must be pinned over the top of the cutting to remove the risk of the stems being blown away by strong winds and to deter would be vandals.
- Japanese Knotweed must be controlled in its original location with the use of Garlon Ultra* that is sprayed over the plant covering top and bottom of the leafs.
- At this stage no Japanese Knotweed canes must be collected and transported from the contaminated site but left within cordoned and controlled area.
- Staff handling/applying any chemicals must be specially trained in the use/handling/application if such chemicals and must wear correct and task specific PPE consisting of:
    - PPE/Safety footwear as per herbicide training
    - Level 5 Overalls to prevent chemicals penetrating the overall as per herbicide training
    - Specialist Gloves as per herbicide training (Nitrile)
    - Half face masks to prevent inhalation (not needed if face shield is used)
    - Goggles or face shield to prevent splashing into the eyes
- The applied substance is left to work for 3-4 weeks.
- The residual plant are cut and removed from site in double bags and disposed of as hazardous waste.
- It must be ensured that all PPE used for the cutting operations are brushed off and shaken free from any debris produced by these cutting operations before any operatives are permitted to remove their PPE from site to prevent rhizome spreading

**If different substance is used. SPC/PWT must ensure that COSHH assessment is available.*

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Exposure to substances (Garlon Ultra)	Ill health caused by irritant	M
Misuse of substance	Contamination of water, desirable plants	M
Japanese Knotweed rhizome	Spread of Japanese Knotweed	M
Use of hand tools and power tools	Personal injuries	M
Inserting pins into ground	Impact with services	H

People at Risk:	Operatives ☒	Other contractors ☒	Visitors to site ☒	Public ☒

Control Measures	Post control Risk Rating
• Precautions must be taken to prevent chemicals entering into rivers, streams, waterways, watercourses, drains, lakes or groundwater. • Operatives will be trained and experienced in Japanese Knotweed eradication. • All mixing up must be done on the drip trays, face shield/visor must be worn to prevent splashing into the eyes. • Spill kit to be available in case of spilages • Ensure good housekeeping at all times during and after the works.	L

• Wash hands thoroughly with soap water before eating, drinking or smoking, use antibacterial wipes when water is not immediately available, • Always refer to COSHH assessments, product safety data sheet and labels for additional information/precautions and PPE considerations. • Operatives to clean boots and equipment before leaving the area. • All waste including overalls to be disposed as hazardous waste. • Also refer to Hand Tools Task Sheet Number 06 and Power tools Task Sheet No 7. • Refer to Ground Disturbance and Excavation Task Sheet 13 when inserting pins into the ground. All control measures as listed for ground disturbance must be followed.	

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374 Nitrile
Overalls	Type 4 Hooded	Eye Protection (visor)	EN 166 Grade 3
Respiratory protection	EN 149 FFP 2		
Reviewed issue 5	30/05/2019	Approved	[redacted]

Task Description/Methodology

Giant Hogweed is effectively controlled with Garlon Ultra* or similar herbicide mixed with water and applied through a hand-held knapsack sprayer or vehicle mounted sprayer. Eradication could take number of years (3-10 years of treatment recommended); spraying with herbicides should be undertaken before plant produces seeds in early spring to early summer.

- Area identified to be contaminated with Giant Hogweed must be secured and cordoned off using Netlon fencing.
- Warning signs must be displayed to prevent unauthorised access and warn others.
- Where necessary additional Netlon fence must be pinned over the top of the cutting to remove the risk of the stems being blown away by strong winds and to deter would be vandals.
- Giant Hogweed must be controlled in its original location with the use of Garlon Ultra* or similar that is sprayed over the plant covering top and bottom of the leafs.
- At this stage Giant Hogweed must not be touched, collected and transported from the contaminated site but left within cordoned and controlled area.
- Staff handling/applying any chemicals must be specially trained in the use/handling/application if such chemicals and must wear correct and task specific PPE consisting of:
    - PPE/Safety footwear as per herbicide training
    - Level 5 Overalls to prevent chemicals penetrating the overall as per herbicide training
    - Specialist Gloves as per herbicide training (Nitrile)
    - Half face masks to prevent inhalation (not needed if face shield is used)
    - Goggles or face shield to prevent splashing into the eyes
- The applied substance is left to work for 3-4 weeks.
- The residual plant are cut and removed from site in double bags and disposed of as hazardous waste.
- It must be ensured that all PPE used for the cutting operations are brushed off and shaken free from any debris produced by these cutting operations before any operatives are permitted to remove their PPE from site to prevent seeds spreading.

**If different substance is used Person in Charge must ensure that COSHH assessment is available.*

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Exposure to substances (Garlon Ultra)	Ill health caused by irritant	M
Misuse of substance	Contamination of water, desirable plants	M
Use of Hand tools and power tools	Personal injuries	M
Inserting pins into ground	Impact with services	H

People at Risk:	Operatives ☒	Other contractors ☒	Visitors to site ☒	Public ☒

Control Measures	Post control Risk Rating
• Precautions must be taken to prevent chemicals entering into rivers, streams, waterways, watercourses, drains, lakes or groundwater. • Operatives will be trained and experienced in Japanese knotweed eradication. • All mixing up must be done on the drip trays, face shield/visor must be worn to prevent splashing into the eyes. • Spill kit to be available in case of spillages • Ensure good housekeeping at all times during and after the works. • Wash hands thoroughly with soap water before eating, drinking or smoking, use antibacterial wipes when water is not immediately available, • Always refer to COSHH assessments, product safety data sheet and labels for additional	L

information/precautions and PPE considerations. • Operatives to clean boots and equipment before leaving the area. • All waste including overalls to be disposed as hazardous waste. • Also refer to Hand Tools Task Sheet Number 06 and Power tools Task Sheet No 07. • Refer to Ground disturbance and Excavation Task Sheet 13 when inserting pins into the ground. All control measures as listed for ground disturbance must be followed.	

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374 Nitrile
Overalls	Type 4 Hooded	Eye Protection (visor)	EN 166 Grade 3
Respiratory protection	EN 149 FFP3		
Reviewed issue 6	30/05/2019	Approved	[redacted]

TASK SHEET NUMBER 20 **OAK PROCESSIONARY MOTH REMOVAL**

CLESHAR

Task Description/Methodology
• The tree inspector will identify tree with Moth contamination and instruct tree gang to remove the nest. • Exclusion zones and signage will be erected before removal of the nest commence. • The operatives will put on full PPE before commencing with the task. • Operative will climb the tree and spray the nest with strong hair spray to ensure the harmful (poisonous) hairs stick together. • Nest is then removed by hand, inserted in hazardous material bags and disposed of as hazardous material. • Before PPE is taken of it will be sprayed with hairspray. • All overalls and gloves to be disposed of as hazardous waste.

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Contact with caterpillars (larvae)	Skin rush and conjunctivitis, allergic reactions	H
Inhalation of caterpillar (larvae) hairs	Ill health, breathing difficulties	H
Climbing tree	Falls from height resulting in major injuries	H

People at Risk:	Operatives ☒	Other contractors ☒	Visitors to site ☒	Public ☒

Control Measures	Post control Risk Rating
• Any skin contact with caterpillars must be avoided. All exposed skin must be covered up with appropriate PPE. See below. • All operatives involved in the task must be trained and competent. • Sleeves of overall must be worn under gloves. • Overalls with generous cut to the arms and legs for freedom of movement. • Gloves suitable for climbing and moth removal. • All visitors to site must comply with the same PPE. • PPE to be removed and disposed of before going for breaks and at the end of the shift. • Good personal hygiene to be enforced. Skin to be clean with wipes or water immediately after work. • Any operatives known to have suffered allergic reaction to the caterpillars to be removed from the activity. • Person in Charge to consider job rotation to minimise exposure to the moths. • All climbing equipment used for Oak Processionary Moth (OPM) removal work should not be used for other work. It should be stored in an airtight container and marked for OPM use only during transport and PPE should be worn during equipment maintenance and inspection. The container should be marked with a warning label, use an exclamation mark within a yellow triangle. • All equipment and face mask, boots to be cleaned before storage. • Warning signs to be posted on the tree. • Also refer to Task Sheet 15 Tree climbing. • First aider to be briefed on symptoms and signs of exposure to OPM.	M

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat/climbing helmet	EN 397
Gloves	EN 388 or 374 Nitrile	Overalls	EN 465 Type 4 Hooded
Full face mask	EN136 class 1 or 2		

Reviewed issue 6	30/05/2019	Approved	[redacted]

Task Description/Methodology
• **Use of Chainsaw (top handled)** **Top - handled saws are only suitable for use off the ground** These saws have the rear handle over the top of the engine. They are only suitable for use off the ground by trained competent arborists. They are not designed for use on the ground or as a substitute for small, rear-handled chainsaws. • **Use of Chainsaw (rear handled)** **Rear handled saws must be used when working on the ground** These have the rear handle projecting from the back of the saw. They are designed to always be gripped with both hands, with the right hand on the rear handle. Select chainsaws which will be suitable for the intended work. It may be necessary to have a range of saws with different guide bar lengths available. As a general rule, the operative to choose a chainsaw with the shortest guide bar suitable for the work. Training in how to use chainsaws will identify the type and size of saw most suited to a range of operations. Protective sleeves are a mandatory requirement at all times when using the chainsaw at ground level. **Use of a chainsaw in a tree** When the Arboriculturist has climbed the tree and is position he must adhere to the following. When in position and ready to dismantle/ cut a limb the Arboriculturist will tie one end of the strop to the limb which is being cut, the arboriculturist will hold the strop with one hand while making his cuts with the other hand holding the limb which is being cut. This will enable the Arb to keep his arm away from the chainsaw. Before using the chainsaw the operative to carry out pre-use check to ensure that: • All nuts and screws are tight • The chain is correctly tensioned • The throttle cannot be squeezed unless the throttle lock-out is pressed • The correct PPE is available and worn When starting the engine operator should: • Place the saw on level ground • Secure the saw firmly • Set controls as recommended by manufacturer • Pull the start cord firmly Once the saw has started the operators should rev the throttle to warm up the engine and check: • The chain stops moving when the engine rev return to idle. • Chain break is effective when applied at maximum revs • The engine continues to run when the saw is turned through 90^0 in any direction. • The stop switch stops works. • Lubrication to the guide bar and chain is working correctly. Operative to repeat these checks throughout the day in regular intervals. **LONE WORKING IS NOT PERMITTED WHEN USING CHAINSAW**

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Contact with moving parts, kick back, pendulum impact	Cuts and abrasion resulting in major injuries Musculoskeletal injuries	**H**
Noise and vibration	Hearing loss, Vibration White Finger and other carpal tunnel syndrome.	**M**

Vapours from refuelling , fumes, contact with lubricants	ill health form fume inhalation, skin conditions, fire and explosion	**M**
Work at height (climbing trees) Falling tree parts on persons Falling tree parts on track	Falls from height, falls of equipment or materials from height resulting in head injuries/derailment.	**H**

People at Risk:	**Operatives** ☒	**Other contractors** ☐	**Visitors to site** ☒	**Public** ☐

Control Measures	**Post control Risk Rating**
• All operative operating chainsaw will be trained in its use and will be deemed competent by the manager. • All equipment will be maintained as per manufacturer's instructions and specifications. • Pre-use checks to be carried out by the users. • Works to be planned so that at least 5 meter distance is created between operatives using chainsaw. • Warning signs to be erected on all reasonable approaches to the worksite. • Compliance with safety training and instructions. • Strop to be used at all times when chain saw is in use when working in trees. • The operative is not to have his arm on the branch he is cutting where reasonably practicle. • Protective PPE is to be worn at all times when the chainsaw is operational. • The protective sleeves are mandatory at all times when operatives are using a chainsaw at ground level. • When the Arboriculturist is using the chainsaw they are to wear the chainsaw jackets when at ground level. When the Arb is using the chainsaw in a tree, the wearing of a chainsaw jacket is to be Risk Assessed against weather and environmental conditions. If it's considered the chainsaw jacket may introduce additional risk due to weather conditions then the protective sleeves must be worn.	**M**
• Lowest vibration equipment to be selected/ordered from hirer • Equipment to be regularly maintained • Rest from vibration equipment to be taken, staff rotation where possible • Operatives to be trained on the risks of exposure to vibration • Health surveillance to be carried out • Exposure Action and limit values to be complied with • Monitoring of exposure to vibration • Hearing protection to be worn when using chainsaw • Hearing protection zones to be established	**L**

Priority when choosing equipment	Equipment	Vibration magnitudes (m/s^2)	Exposure Action Value (EAV)	Exposure Limit Value (ELV)
1	Chainsaw Stihl MS 361	6.3*	1 hour 16 minutes	5 hours 2 minutes
2	Chainsaw Stihl MS 260	6.6*	2 hour 9 minutes	4 hours 35 minutes
3	Chainsaw Stihl MS 660	7.4*	55 minutes	3 hours 40 minutes
4	Chainsaw Stihl MS 200T	7.8*	50 minutes	3 hours 17 minutes
5	Chainsaw Stihl MS 440	10.2	30 minutes	1 hour 55 minutes
6	Chainsaw Stihl MS 200	11.5*	23 minutes	1 hour 30 minutes
7	Telescopic chainsaw Stihl HT75	11.8*	22 minutes	1 hour 26 minutes
8	Stihl 200T	5.24	1 h 49 minutes	7 hours 17 minutes
9	Stihl MS 261	12.5	19 minutes	1 hour 17 minutes

• Refer to COSHH assessment • Refuelling to be carried out designated areas only. • Petrol equipment to be used in ventilated areas only. • Fire point set up in the vicinity	**L**
• Refer to tree climbing Task Sheet 15 for control measures whilst working at height (climbing trees). • Communication to be established with personnel on the ground, warnings to be issued before cutting. Head protection to be worn at all times. • PWT/Lookout to be in position and warn of oncoming trains. • System of work set up so that cut branches do not fall on the track. •	**L**

PPE (Minimum Requirement)

Safety Helmet or climbing helmet	EN 397	Eye Protection (mesh visor) or goggles	EN 1731 or EN 166
Hearing Protection	EN 352-1	Chainsaw trousers	EN 381-5
Chainsaw boots	EN 20345- BS EN 17249	Hi Visibility vest (t-shirts)	EN 471
Hand protection	EN 388	Chainsaw jacket	EN 381:11:2002
Protective sleeves	EN 381		
Reviewed issue 6	30/05/2019	Approved	[redacted]

Task Description/Methodology

Before any work commences adequate warning signs must be put into place. Barrier tape ropes and portable fences are to be considered to restrict access. Site must be secure to prevent unauthorised access

Survey for any cables, hidden wires of bits of fencing that may be inside a hedge; as this can cause serious injuries or damage to the hedge cutters.

Survey area for slip, trip and falls hazards, ex

Only trained and experienced operator to use hedge cutters. Operator and those in the vicinity must wear PPE as listed below.

Before start

Check equipment for maintenance and carry out pre use checks. Refer to manufacturer's manual. Spray cutters with protective spray before starting to work only with the engined stopped. Place the hedge trimmer on firm ground and maintain good footing. Always engage starting lock where applicable.
Hedge cutter to be operated in well ventilated areas only.

Cutting the sides of the hedge vertically

The first step is to cut the sides of the hedge vertically in a sweeping arc-shaped movement (bottom upwards). A hedge trimmer with double-sided blades means you will save time as you cut in both the upward and downward stroke. Walk forwards as you work, cutting along the length of the hedge.

Cutting the top of the hedge

When cutting the top of the hedge the cutter bar should be held horizontally at a slight angle (around 10°). Remove the clippings from the hedge with scything movements.

Maintenance

Keep blade sharp . If cut branch tips appear ragged or light in colour, or if blades snag on the hedge, the blades are probably blunt and tearing rather than slicing material.

Keep it clean . A blade that is not clean is not efficient. As a hedge is trimmed, sap builds up on the blades, setting hard like glue. Use an approved cleaner to keep blades in top condition.

Refuelling: Petrol hedge trimmers run on two-stroke petrol which will need to be mixed up. The correct ratio is normally 25 parts petrol to 1 part oil check with the manufacturer's instructions. Always turn the engines off and wait for the equipment to cool down. Refuel in well ventilated area, above spill tray and away from sources of ignition. Use eye protection and gloves when refuelling. Always remove clothing contaminated with fuel. Ensure that fuel caps are secured. Wipe off any spilled fuel before restarting the engine.

If you are using an electric hedge trimmer, you will need an extension lead long enough to allow you freedom of movement.

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Contact with moving parts/ blades, entanglement with vegetation or hedge cutter	Amputation, cuts, major injuries,	H
Ejection of materials, dust and particles	Eye injuries, inhalation of dust	M
Noise	Hearing loss , tinnitus etc	M
Vibration	Vibration White Finger and carpal tunnel syndrome, other HAV related ilness	L
Vapours from refuelling , fumes, contact with lubricants	ill health form fume inhalation, skin conditions, fire, burns and explosion	M

TASK SHEET NUMBER 25 **USE OF HEDGE CUTTERS**

People at Risk:	Operatives ☒	Other contractors☒	Visitors to site ☒	Public ☒

Control Measures	Post control Risk Rating
Competent and trained operator, manufacturer's safety instructions and methodology above to be followed at all times. Equipment to be maintained and tested (record of inspection available). Equipment to be secured to prevent misuse when the trained operator is not present. Protective clothing to be snug fitting but allow freedom of movement, including long trousers Operatives to avoid loose clothing, accessories and unconfined long hair. Heavy duty non slip gloves to be worn.	M
Establish exclusion zones; ensure that everybody is hedge cutters are being used and operator and those in the vicinity wear eye protections/face shield.	L
Hearing protection to be used when operating chipper, hearing protection zones to be established, mandatory hearing protection signage to be put in place. Hearing protection to be enforced.	L
Operatives to be aware of HAVS and the risks, regular breaks from using vibrating equipment, staff rotation where necessary. Equipment to be regularly maintained and sharpened as per manufacturer's instructions. Random monitoring of vibration exposure. Maintain firm grip at all times but do not squeeze the handles with constant excessive pressure. Keep hands and fingers warm, use gloves at all times.	L

Equipment	Vibration magnitudes (m/s^2)	Exposure Action Value (EAV)	Exposure Limit Value (ELV)
Hedge trimmer STIHL HS81RC	3.00	5 hrs 30 min	22hrs

• Refer to COSHH assessment • Refuelling to be carried out designated areas only. Refer to refuelling RA. • Petrol equipment to be used in ventilated areas only. • Operator to hold trimmer in such a way that he/she does not breathe in the exhaust fumes • Fire point to be established in the vicinity of works and refuelling area	L

PPE (Minimum Requirement)

Face shield /goggles	EN 1731 or EN 166	Hearing protection	EN 352
Hand protection	EN 388 (heavy duty)	Safety helmet	EN 397
Safety Boots	EN 20345	Hi Visibility vest	EN 471
Reviewed issue 6	30/05/2019	Approved	[redacted]

- **TASK SHEET NUMBER 30 Spraying of Pesticides/ herbicides and control**

CLESHAR

Task Description/Methodology
Effected area which is to be sprayed effectively controlled with Pesticide/ herbicide is mixed with water and applied through a hand-held knapsack sprayer or vehicle mounted sprayer. For road or railway siding weed control, the best treatment time is late winter or early spring. For grassy areas such as embankments, excellent results can be achieved with treatment coinciding with periods of vigorous growth. • Spot spraying and full sprays must be carried out in designated location only , area identified contaminated with weeds must be secured and cordoned off using Netlon fencing if access via the general public or other third parties, area which are not accessibly do not require barrier off, ref to an onsite risk assessment. • Alternatively, the operative when spot spraying, granular application and full sprays during Traffic hours must be positioned behind a physical barrier or cable run using insulated equipment • Warning signs must be displayed to prevent unauthorised access and warn others. • Where necessary additional Netlon fence must be pinned over the top of the cutting to remove the risk of the stems being blown away by strong winds and to deter would be vandals. • Weeds must be controlled in its original location with the use of Pesticide/Herbicide that is sprayed over the plant covering top and bottom of the leafs. • At this stage weeds must not be touched, collected and transported from the contaminated site but left within cordoned and controlled area.. • Staff handling/applying any chemicals must be specially trained in the use/handling/application if such chemicals and must wear correct and task specific PPE consisting of: ➢ PPE/Safety footwear as per Pesticide/Herbicide training ➢ Level 5 Overalls to prevent chemicals penetrating the overall as per pesticide/herbicide training ➢ Specialist Gloves as per Pesticide/Herbicide training (Nitrile) ➢ Half face masks to prevent inhalation (not needed if face shield is used) ➢ Goggles or face shield to prevent splashing into the eyes • The applied substance is left to work for 3-4 weeks. • The residual plant may be cut and removed from site in double bags and disposed of as hazardous waste. • It must be ensured that all PPE used for the cutting operations are brushed off and shaken free from any debris produced by these cutting operations before any operatives are permitted to remove their PPE from site to prevent rhizome spreading **If different substance is used. SPC/PWT must ensure that COSHH assessment is available.*

Hazards associated with the task	**Consequences**	**Pre-controls Risk Rating**
Exposure to substances	Ill health caused by irritant	**M**
Misuse of substance	Contamination of water, desirable plants	**M**
Use of Hand tools and power tools	Personal injuries	**M**
Inserting pins into ground	Impact with services	**H**

People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☒

Control Measures	**Post control Risk Rating**
• SPC –Non track or PWT to brief out all control measures, before any work including mixing of any Pesticide/ herbicide • Precautions must be taken to prevent chemicals entering into rivers, streams, waterways, watercourses, drains, lakes or groundwater, avoid these areas when filling/mixing and pouring into knapsacks etc.	**L**

- Operatives will be trained and experienced in Pesticide/Herbicide spraying/mixing/pouring.
- All mixing up and pouring into knapsacks, hand held sprayers must be done on the drip trays, face shield/visor must be worn to prevent splashing into the eyes. And masks due to strong contraction of Pesticide/Herbicide.
- Spill kit to be available in case of spillages
- Ensure all containers/knapsack/hand held sprayers are identified ref to Control of Pesticides Regulations (COPR) label guidance – August 2007
- All applications must be co-ordinated with other works to ensure that only the trained operatives with the correct levels of PPE are exposed to the substances during and shortly after application
- A comprehensive list of all substances used and stored including quantities on site must be kept on site, this list must be updated as each application is taken for audit purposes
- Upon completion of the works, all tools/equipment/pesticide must be removed from site
- Ensure good housekeeping at all times during and after the works.
- Wash hands thoroughly with soap water before eating, drinking or smoking, use antibacterial wipes when water is not immediately available,
- Always refer to COSHH assessments, product safety data sheet and labels for additional information/precautions and PPE considerations.
- Operatives to clean boots and equipment before leaving the area.
- All waste including overalls to be disposed as hazardous waste.
- Also refer to Hand Tools Task Sheet Number 06 and Power tools Task Sheet No 7.
- Refer to Ground disturbance and Excavation Task Sheet 13 when inserting pins into the ground. All control measures as listed for ground disturbance must be followed.

Pesticides for plant protection purposes include:

- weedkillers (herbicides)
- fungicide sprays
- insecticides
- plant growth regulators

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374 Nitrile
Overalls	Type 4 Hooded	Eye Protection (visor)	EN 166 Grade 3
Respiratory protection	EN 149 FFP 2		
Reviewed issue 6	30/05/2019	Approved	[redacted]

Fencing Gangs: Generic Method Statement

Programme Project **Track Vegetation and Fencing Renewals**
Document reference **SSoW 05 Fencing Gang**

In the event of an incident to ensure that the incident report is correctly routed, please fill in the box below:	
Responsible Area/Project	TBA
Location	Various locations
Area	Track and Lineside locations
Principal contractor	Cleshar

Safe System of Work

Fence maintenance and repairs

		Signature	Date
Prepared by	[redacted] Project Manager		
Reviewed by	[redacted] HSE Adviser		
Reviewed by	<Name> Client		

Distributed to	Cleshar	Contractors
Distributed to	JK Rail	Sub-contractors

Document History

Revision	Date	Summary of changes
Tender	26/05/19	First draft

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1 Work Details

1.1 Description of Work

This Method Statement has been produced to detail the extent and methods of work to be adopted for this scope of work. The Method Statement has been produced in accordance with the following documents.

- Construction (Design and Management) Regulations 2015
- Health and Safety Plan
- Project Quality Plan
- Policy for HSQE
- LU Rule Books
- LU QUENSH Conditions version A18
- Emergency Preparedness Plan
- Environmental Plan
- Site Waste Management Plan (where applicable)

All personnel will be briefed on the Site Specific Risk Assessment and method described in this document.

The SPC/PWT must assign the operatives to the tasks within the area to ensure a logical sequence of stripping and clearing operations, to keep the build-up of vegetation to a minimum. Others within the gang will remove general rubbish in bags, which will be removed from site each day and disposed of via the skips at Cleshar's Head Office.

Minor repair to barbed or razor wire:
Only limited amount of barbed/razor wire will be brought to site to minimise its handling. Where possible the barbed/razor wire will be pre-cut of site.

- Always handle barbed, or razor wire with care.
- Always use leather faced heavy duty gloves when handling barbed wire and cut resistant gloves when handling razor wire. Additional PPE may be required i.e. face shield and protective sleeves.
- Never pick up or handle barbed/razor wire hesitantly - grasp it firmly.
- When stretching barbed wire, never straddle or stand directly over the wire. Hold the wire to one side of your body and grasp firmly.
- Do not wear loose clothing, which might become entangled in the wire.
- Be careful when laying out wire so as not to kink it. Kinking will cause the wire to break when stretched it can coil quickly and trap limbs/ and or the body.
- When clipping wire to posts, do not twist excessively as this may break the wire.
- All tools to be in good condition.
- Long sleeve shirt/jacket to be worn to protect your arms from the barbs. Cut resistant jacket is recommended when handling razor wire.
- Ensure that everyone in the gang is made aware that the wire is being stretched, and is clear if they are not directly involved in the task.
- When working off a ladder or step ladder ensure that the ladder/stepladder is positioned on stable ground and footed at all times.

Post Installation and replacement

Post are to be installed in depth of 750mm. Prior to digging, the area will be surveyed for potential services. The Project Manager will request service drawings from the client. Any services present will be located and marked on the ground. Visual survey for hidden services will be carried out by the SPC/PWT. CAT scanning will be out carried by a trained operative and results recorded on the Permit to Dig or on the Site Specific Risk Assessment. Where cables are identified hand digging will be utilised with using insulated tools only.

Mixing Concrete

Pre-mix concrete will be delivered in bags no more than 25kg. Concrete is to be mixed with water by hand. Protective sheeting/tarpaulins will be used to protect surfaces during mixing. Operatives are to wear long sleeve clothing and comply with COSHH assessment control measures during mixing and application of concrete.

Expamet Security fencing repair

- Excavate holes by hand to a minimum of 750mm. Place new 60x40x3mm RHS steel box section post in same hole and level.
- Fill with concrete and compact as filling proceeds to just below ground level.
- Posts to be concreted at 3m centres.
- 1 No 40x40mm washer will be placed inside stringer and a 35mm bolt will be placed through the washer then through the stringer rail and on to pre welded lug to side of previously concreted post using 1 No M8x35 cup square bolt and permacone nut. 3 no rails are to be bolted to posts per bay.
- The new expanded metal mesh panel is then placed against the posts and rails.
- Insert latch clamp vertically through mesh into stringer slot. Turn latch 90 degrees and bolt into place using M8x25mm cup square bolt and nut. 6 No latches per stringer if practical,
- 1 no.1835mmx40x5mm clamp strip is to be bolted to face of each post, where possible, using M8x90mm security bolt and permacone nut.
- Three rows of new 2.5 mild steel barbed wire to be tensioned and tied to top of the posts using stirrup wire leaving the site secure.

Palasade and weldmesh install

- Bring all of the fence materials and tools to the fence site. Remove all packaging from the materials.
- Excavate, by hand, post holes at 2.7m centers approx. 700x300x300mm. Place post into hole, level and concrete.
- Place two horizontal railings between each set of posts. Lay out the appropriate number of panels you need for each fence section, along with the rails, between posts. The installation manual should contain information on the correct number of panels.
- Affix the horizontal rails to the fence posts using a drill and the recommended bolts. Follow manufacturer's instructions for exact placement. Use a tape measure to determine distances.

- Determine the necessary distance between the fence posts and the first pale using your tape measure and the manufacturer's installation instructions. If the horizontal rails contain bolt holes, use these as the guide for lining up the pale.
- Place the first pale vertically against the two horizontal rails so that the bolt holes in the pale line up with the rails.
- Using M8 pale bolts and shear nuts install pales to both the upper and lower horizontal rails.
- Determine the distance between your first pale and the second pale using the tape measure and installation instructions. Install the second pale as per the first, and repeat this process until all pales are installed.
- Place support footer underneath the middle pale in each section of palisade fencing. Affix it to the lower horizontal rail or middle pale using the drill. A support footer is a piece of metal or other material that is concreted into the ground and attaches to the fence to help support its weight and buffer the fence's weak middle against impact.

Weldmesh Installation

- Excavate holes by hand to a minimum of 750mm. Place new 60x40x3mm RHS steel box section post or equivalent Bi-Steel post in same hole and levelled. (refer to section 5.19 for excavation controls)
- Struts will be installed to end posts and to a two way post every 60M.
- Fill with concrete and compact as filling proceeds to just below ground level.
- Posts to be concreted at 3m centres.
- Angle cleats and winders will be installed to the end posts and 3 line wires are attached to posts and tensioned.
- The weldmesh is unrolled, and a clamp bar is used to attach weldmesh to end post using M8 nuts and bolts. The weldmesh is then pulled, tensioned and tied or clipped to line wires. On reaching other end post or two-way post a second clamp bar is attached to end post using M8 nuts and bolts to clamp weldmesh to post. Ensure enough ties/clips are installed to weldmesh/ line wires for security.
- Three rows new 2.5 mild steel barbed wire to be tensioned and tied to top of posts using stirrup wire, leaving the site secure.

Chain-link fencing

- To excavate holes by hand to a minimum of 750mm. Place new 60x40x3mm RHS steel box section post in same hole and levelled.
- The struts will be installed to end posts and to a two way post every 60M.
- Fill with concrete and compact as filling proceeds to just below ground level.
- Posts to be concreted at 3m centres.
- Angle cleats and winders will be installed to end posts and 3 line wires are attached to posts and tensioned.
- The chain link is unrolled, and a clamp bar is threaded through the chain link and is attached to end post using M8 nuts and bolts. The chain link is then pulled, tensioned and tied to line wires. On reaching other end post or two-way post a second clamp bar is threaded through the

Chain link and is attached to end post using M8 nuts and bolts. Ensure enough ties are installed to chain link / line wires for security.

- Three rows new 2.5 mild steel barbed wire to be strained and tied to top of posts using stirrup wire, leaving the site secure

1.2 Duration of Works

This is part of the 2019 TfL Vegetation and Fencing contract from 2019-2022. This Method Statement will be reviewed annually.

1.3 Working Hours

The works are normally planned to take place Monday - Friday 07:30-16:00 (daylight). However due to high risks in certain areas of the track environment where traffic protection cannot take place, Engineering Hours or Possession work will be implemented.

1.4 Control of Activity Risks

Upon arriving at a new site the SPC/PWT must inspect the site and complete a Site Specific Vegetation Works Risk Assessment. If additional risks are identified as work proceeds, or the local Manager makes the SPC/PWT aware of an issue, this must also be recorded and control measures set out.
Any precautions that are required to protect the public or other parties passing through or around the site must be recorded on the Risk Assessment form.

If the risk is unusual or beyond the knowledge of the SPC/PWT to deal with the SPC/PWT must contact his manager or HSQE department for advice before proceeding with the task in that area.

As part of the SPC/PWT site assessment a check must be made for any wildlife or signs of wildlife, such as bird's nests, wasp's nests, badgers sets, etc.; or any Non Native Invasive Species such as Japanese Knotweed or Oak Processionary Moth. Any identified must be included in the Specific Vegetation Works Risk Assessment. The client's representative must be informed and an exclusion zone set to ensure they are not disturbed. This must be documented on the form.

The form will identify the relevant Task Briefing Sheets for the works on that site.

Once the form is completed the SPC/PWT must brief his gang on the site and the specific control measures noted on the form and Task Briefing Sheet and all operatives must sign the form.

The form must be held in the site file while the gang are on site and returned to the Project Manager at the end of the works.

All operatives will be competent and trained in any activity they are tasked to undertake. Training records will be held on skills cards and kept on file at head office.

Any London Underground visitors, or staff, will receive a full briefing on the activities and control measures, before being permitted access to the worksite. The worksite will be set up in such a way, that the safe system of work will minimise risk, or minimise intrusion to any London Underground staff, or assets, or others who may be working in the area. If, at any point, the worksite is likely to become intrusive to others the SPC/PWT will attempt to reach an agreement with the third party, or London Underground, with the new safe system of work being documented

on an On-Site Risk Assessment. When this cannot be agreed the SPC/PWT will contact their Line Manager, or the Cleshar Health and Safety department for further instructions.

1.4.1 Neighbours (e.g. Network Rail, nearby houses etc.)

Site surveys will be carried out prior any significant works to establish access to site, any interfaces with public i.e. private & business properties, bus/trams stops or areas/building/facilities where large number of public congregate.

Means of Control may include:

- Advance communication with neighbouring property owners/occupiers
- Letter drops
- Access negotiation and consultation
- Operative briefings and toolbox talks

Where works interface with Network Rail infrastructure, Cleshar will ensure that operatives are PTS trained and the relevant safe system of work in place, i.e. Network Rail approved Work Package Plans and Permits, COSS, ALO etc.

Additionally, as works proceed On–Site Risk Assessments will be used to assess new or changing situations. PWT/SPC are trained on preparing On–Site Risk Assessments.

1.4.2 Working on 3rd Party vegetation or land

When works are planned on a third parties land a separate site specific Method Statement, and Site specific risk assessment shall be produced in agreement with the third parties land owner, or land owners representative. All works will be discussed in advance during planning meetings, conference calls, and other mediums of two way communications. When the risks from working on a third parties land are different from the normal risks, or considered unusual, additional training, site specific inductions, tool box talks, and selection of experienced, and trained operatives to be deployed to complete the works. Regular site inspections will be carried out by Cleshar Management, and Health and Safety department.

1.4.3 The environment (e.g. nearby water courses)

Cleshar operatives will be briefed on ecological and other environmental issues relevant to their task and the location of the works. These are included in the risk assessment and can include issues such as sensitive receptors in the vicinity of the site, the presence of protected or invasive species, and protected habitats. The On–Site Risk Assessments and Task Methodology sheet will detail all environmental risks associated with water, ecology, contaminated land, noise, vibration and pollution.

In some cases, an ecological survey prior to any works will be required to confirm presence of high risk species, both protected and invasive, to ensure adequate control measures are in place prior to and during the works.

Also, where sensitive receptors, such as, residents, schools, care homes or similar, are in close proximity to the site and may be affected by noise and other nuisances, a noise assessment may be required prior the works to establish if noise mitigation is required.

Environmental incidents are reported and investigated in the same manner as safety incidents. Operatives shall report to their manager if they are unable to fulfil their duties as a result of discovering any ecological issues (e.g. presence of protected species, nesting birds and reptiles).

1.4.4 Nesting season

All nesting sites will be recorded on a digitally secured spreadsheet, and will be included on the SPC/PWT's tablet. Before any works commence, the SPC/PWT will check to see if the worksite has any nests located there. The SPC/PWT will be briefed in identifying common species and will have an awareness of likely habitats of birds. Tool box talks will be delivered throughout the contract on nesting birds.

1.4.5 The operational railway (including infrastructure, services etc.)

Engineering Hours

When Engineering Hours works are required, risks to the operational railway and/or London Underground infrastructure will be assessed during the planning stage of the works. When working Engineering Hours a PWT-EH will be appointed to protect the operatives. The PWT-EH will follow all London Underground rules, and will book on with the Track Access Controller as per London Underground rule books and procedures. The PWT-EH will test the traction current has been discharged with their Current Rail Indicator Device, before permitting the operatives access to the operational railway, the PWT-EH will deliver a full briefing to the operatives on the protection arrangements for that shift.

Traffic Hours

Traffic Hours works are required, risks to the operational railway and/or London Underground infrastructure will be assessed during planning of the works. A PWT-TH will follow all London Underground rules, and will book on with the Line Controller prior to works commencing. When working at stations on the East zone, the PWT-TH will sign on with the Station Supervisor before accessing the worksite. Before the PWT-TH allows operatives access to the worksite, he will deliver a full briefing which will comprise of all protection arrangements for the shift.

Working in Depots

When works are carried out in Depots, all risks to the operational railway, the Depots and/or London Underground infrastructure will be assessed during planning of the works. A PWT- Depot will follow all London Underground, and Depot rules, and will book on with the Depot Duty Manager prior to works commencing. Before the PWT-Depot allows operatives access to the worksite, he will deliver a full briefing which will comprise of all protection arrangements for the shift.

1.4.6 Use of lifting equipment and lifting operations

Lifting equipment will not be used as part of the scope of this Method Statement. If work requires lifting equipment a separate specific Method Statement will be prepared.

1.4.7 Use of portable tools

All portable equipment will be inspected by the operator prior to the use. Only trained and certified operatives will be permitted to use the tools. Site inspections will carried out, by a competent person will check all portable, and small hand tools are fit for purpose, are being used as intended by trained and competent operatives. All equipment will be identifiable and inspected in regular intervals:

Tools	Power source	Test Record
Reciprocating saw	Battery	3-monthly (tagged)
Portable petrol generator	Petrol	3-monthly (tagged)
Angle grinder 5"52AH cordless 22V	Battery	3-monthly (tagged)

1.4.8 Mechanical plant

Only trained and certified operatives are permitted to use any mechanical plant. Training records will be held on the operative's skills card which they shall carry with them at all times. Health and Safety inspections will be carried out by Cleshar Management, and Cleshar Health and Safety department to ensure only trained operatives are using any mechanical plant.

Tools	Power source	Test Record
Portable generator	Diesel/petrol	Tagged or site file

1.4.9 Track mounted vehicles and plant

When the works require track mounted vehicles and plant a separate Task Methodology Sheet will be produced to control hazards that arise from this activity. When used the Track Trolley will be in a serviceable condition, clearly tagged and only be operated by suitably trained and competent operatives. The PWT-EH will inform TAC of the presence of Track Trolley on site. The use of the Track Trolley will be included on the On-site risk assessment, which will be completed before works commence.

The Track Trolley(s) will be fitted at all times with the full complement of safety devices including flashing lights. Pre-use checks will be carried out by the competent Track Trolley Controller.

NOTE: Track Trolleys are only to be used when traction current is switched off and Protection arrangements are in place.

Track Trolleys will be used to minimise manual handling in areas where trackside access is required. Preference will be given to the use of split link trolleys to reduce the amount of manual handling of the Track Trolley itself.

There will be a sufficient number of staff to carry each part to ensure that no-one is overstretched and no damage occur whilst walking through stations (edges may be taped).

When the traction current has been discharged each section of the trolley will be passed down to the track team from station platform and assembled by Track Trolley operators who are familiar with the

Type of Track Trolley used. The platform edges shall be protected with plywood or rubber mats when carrying out this task.

Plant, tools, equipment and materials will then be transported to the Track Trolley and loaded on. The load must not exceed the SWL of the Track Trolley.

Riding on a Track Trolley is prohibited.

Track Trolleys will be under the control of trained Track Trolley operators. The Track Trolley operator will need to be type specific trained.

Additional task lighting will be provided to illuminate the track ahead, where required. This will allow any hazards such as spare rails or missing covers to be seen, and help prevent slips, trips or falls.

At the start of the working shift, the PWT-EH must inform the appropriate signaller of the requirement to scotch and clip points. On completion of the working shift the PWT-EH must confirm to the appropriate signaller that all scotches and clips have been removed.

Extra care must be taken when traversing points and crossing work. Before passing over points you must:

- Make sure the Track Trolley is stationary.
- Place scotches and clips in position before allowing track trolley to proceed.

For further guidance on use of a Track Trolley refer to Task sheet 27 - Use of a Track Trolley.

1.4.10 Hazardous materials

The following will be implemented when using hazardous substances;

- A COSHH Assessment must be requested through HSQE, and be available on site before works commence.
- Chemicals and substances will not be stored on site unless specifically listed on the storage licence and agreed with the Landlord.
- All substances will be used and stored as per manufacturer's instructions and guidance and the COSHH Assessments.
- The necessary PPE must be worn in accordance with product label and COSHH assessments, i.e. checks are to be made on mask filters or face shields/goggles when carrying out dilution or pouring activities.
- All mixing/diluting/equipment filling must be done on drip trays to prevent environmental contamination. A check is to be made against the COSHH assessment for any special PPE requirements.
- All containers must be labelled, transported and stored according to manufacturer's instructions.
- Operatives using substances must understand the hazards of the chemicals or substances used.
- All spillages must be contained immediately; a spill kit must be available on site when using chemicals or substances.
- Minimising risk to the user and others in the area must be ensured at all times. This will be carried out via adequate signage and exclusion zones, where necessary.
- Material and equipment must be positioned and handled so that it cannot fall, slip, roll or be blown onto the track, railway equipment, public highway, platforms or walkways.

1.4.11 Temporary structures and falseworks

If temporary structure is required, a specific Method Statement, and Risk Assessment will be prepared to cover the additional works.

1.4.12 Work at height

- Work at heights will be avoided, where practicable.
- The hierarchy of controls will always be implemented when selecting the safest possible means of working at height
- All works must be planned and organised, including survey for overhead power lines and distances; tree conditions, including potential weakness caused by decay and the presence of birds' nests etc.
- On-Site Risk Assessment will be carried out to identify any additional hazards.
- The On-Site Risk Assessment will be briefed to all involved in the works.

Ladders

Ladders – must be used for access/egress only, or as an exception only for works of a short duration (5 to 10 min) when other access equipment is not suitable. Priority must be given to podiums, towers, access platforms etc.

Only industrial (130kg) class 1 ladders/stepladders conforming to BS EN 131 must be used.

The following factors must be considered when inspecting and using ladders on site:

- Stiles are not damaged, warped or buckled
- No rungs are missing
- All treads are clean
- All secure stepladder locking devices are in place and working, when extended
- Ensure ladders (both feet) are resting on firm and level surfaces
- Ensure that step ladders are fully extended
- Ensure ladders are angled outwards to avoid slipping (*Rule of thumb – "one out for every four up")*
- Where a ladder cannot be fixed ensure a second person foots the ladder whilst in use.
- Step ladders to be footed at all time whilst in use.
- If a ladder is used as regular access/egress it must be secured and not footed

For further guidance when working at height please refer to

- Task sheet 15 – Tree climbing
- Task sheet 16 – Use of ladders and step ladders

1.4.13 Excavation

Excavation will be limited to removal of existing fence post bases to reinstate. Only a trained, and competent operatives will carry out these works. The following precautions to prevent impact with services will be in place when excavating:

- Available services drawings will be reviewed.
- Area will be visual surveyed for services. Specifically the person in charge (PWT or SPC-NT) will look out for visual signs of services being present such installation signage, electrically powered equipment in the vicinity (lighting, signs, CCTV etc.).
- A Permit to Work (Excavations and Penetrations) TFL-125a will also have to be completed and signed before excavations proceed.
- All cables will be considered live until proved to be isolated by a competent person.
- Area to be CAT scanned prior to any excavations by a competent operative with an approved calibrated CAT scanner.
- Results of the scan will be recorded on the on- site risk assessment.
- Findings of underground services to be reported to for obtaining further instructions.

For further guidance on excavations refer to Task briefing sheet 13- Ground disturbance, and excavation is to be followed for the management of the works.

1.4.14 Access/egress

When an activity compromises safe access and/or egress to site, an On-Site Risk Assessment will be produced to safely assess how all operatives, plant and machinery can safely access the worksite. No work will commence until the alternative safe access has been established.

If necessary, works will be postponed to ensure that access /egress conditions are such that they do not pose a risk to safety of those accessing the worksite.

All operatives will receive a briefing on the On-Site Risk Assessment, regarding safe access/egress.

The SPC/PWT will contact their Line Manager/Health and Safety department for further advice, as necessary.

For further guidance refer to:

- Task briefing sheet 01- Access, site set up.

1.4.15 Transportation

Transportation will be via small vans or flatbed 7.5 tonne vehicles. It must be ensured, by the Cleshar SPC/PWT, that all deliveries are co-ordinated and all vehicles are parked in a position where they present no additional risks to both road users and the general public.

When vehicles are off loaded, a supervised area will be marked out by cones or barriers to safeguard the interface between the work force and the general public.

For works that require obstruction of roads a formal traffic management plan will be prepared and road closures organised.

For further guidance on driving and transportation please refer to:

- Task sheet 08 – Driving and transportation

1.4.16 Noise

Cleshar routinely measure noise levels from the most commonly used tools to evaluate the most appropriate control measures and to select the least noise polluting tools. The following control measures shall be followed when using the listed tools below.

Potentially Noisy Operation	Means of Control
Generator, Grinder, drill	• All works will be carried out using well-maintained equipment. SPC/PWT to assess noise levels and introduce local controls i.e. acoustic screens if required. • Hearing protection will be worn where indicated by Risk assessment. • Access to worksite will be limited to those involved in the works during high levels of noise. • Battery powered tools to be selected where reasonably practicable. • Hearing protection zones will be established and hearing protection use enforced, where the noise level could reach 85 dB (A) • Hearing protection will be issued to all operatives using power tools or work in vicinity. • Lower noise generating equipment will be selected, where practicable. • Ensuring worksite deliveries are managed correctly and well-disciplined to reduce noise at all times. • Where deliveries can be done during the day this option must be utilised, whenever practicable. • The SPC/PWT must ensure, where practicable, that all noisy plant is kept as far away from residential properties as possible.

	• Extra care is taken to keep all noise to a minimum at night with the vicinity of the local residents in mind. • In agreement with London Underground, Cleshar will establish contact with local residents during prolonged noisy works in a particular location. • A Section 61 notice will be applied for, if necessary

1.4.17 Vibration

All operatives shall be made aware of the risks of a prolonged exposure to vibration. Operatives will be made aware of the symptoms of white finger, carpel tunnel syndrome and all other Hand Arm Vibration related injuries. It is not envisaged that the trigger time the operatives may be exposed to on any normal shift may cause Hand Arm Vibration exposure risk.

Potential High Vibration	Means of Control
Grinder Drill	• The equipment must be tagged, tested and well maintained. • Lower vibration equipment to be selected. • User maintenance of equipment. • The SPC/PWT must ensure that operatives take regular breaks throughout and carry out unrelated tasks to minimise the risk of vibration white finger. • Where possible rotation of operators will be implemented • Random monitoring of exposure to vibration to ensure ELV are not exceeded. • Operatives will be briefed on the consequences of exposure to vibration. • Operatives to keep warm and dry hands when working in winter.

1.4.18 Dust and air quality

The following schedule identifies the plant or operations that emit pollution or dust with the practical means of minimising or reducing the dust and emissions:

Plant/Operations	Means of reducing emissions or dust
All fuel powered tools/equipment	• Equipment to be properly maintained • Equipment to be used according to the manufacturer's instructions • Only fuel that is specified by the manufacturer to be used • All generators to be positioned away from works and residential properties, where practicable. • Generators must be self bunded.

Disturbing ballast/ground Handling waste material	• Area to be inspected before works commence to identify for potential locations where dust may be a problem • Suitable locations to be identified for stockpiling debris, prior to removal from site. • Areas Damped down where dust is raised, especially in very dry conditions • Skips covered where used, for removal of debris

1.4.19 Housekeeping

Before works commence the operatives will receive a pre-works briefing from the SPC/PWT. Part of the briefing will comprise housekeeping arrangements. The SPC/PWT will brief the operatives to maintain a high level of housekeeping. If there is an extensive build-up of waste during the works, the SPC/PWT will stop works and instruct the gang to clear any waste before recommencing. The access and egress points will be kept clear at all times. The worksite will be left clear and tidy at the end of every shift. Any natural waste accumulated will be put into habitation piles. All other waste will be disposed of via Cleshar's skips.

1.4.20 Electricity

When Cleshar operatives are working adjacent to Network Rail sites, there may be an interface with overheard electrified cables. If this circumstance should arise, a separate Method Statement and Risk Assessment shall be produced. Any other interfaces encountered with electrical assets on site will have a separate Method Statement, and On Site Risk Assessment. The following task sheet can be used for further guidance:

- Task sheet 12 – Working near overhead power lines.

Traction current:

When operatives are required to work in areas where traction current is live, the first option will always be to carry out the works during Engineering Hours, when traction current can be fully discharged under the protection of a PWT-EH. It is not feasible for the traction current to be discharged, works will take place during Traffic Hours under the protection of a PWT-TH.

When working in Depots the traction current will always be considered as live. Only operatives who Basic Track Awareness trained, and have received the depot induction are permitted to work there, under the protection of a PWT-D.

Cables

Where operatives are working around cables the cables will be protected and the operatives will use hand saws only (No Chainsaws). All cables, and other assets will be risk assessed before works commence

1.4.21 Asbestos

During works where there is potential of disturbance of structures the project manager will request Asbestos report F3333 from the Client Hazardous Material Unit (HMU)

No works will be undertaken by Cleshar that may lead to disturbing asbestos or other unknown materials.

In the event of discovery of asbestos, ACM or suspected asbestos:

- Do not disturb.
- Stop work immediately
- Clear the area of personnel, tools and equipment
- Inform other parties in the vicinity
- Evacuate the area
- Call the HMU reporting Line [redacted]
- Call the Cleshar Health and Safety department

1.4.22 Fly-tipping

Any worksite where fly-tipped waste is encountered, that may cause risk to the work site, the operatives, or the works activity, the operatives must:

- Stop works, and plan other works if feasible.
- Call their Line Manager/ Health and Safety department for further instructions.
- Cordon of the fly-tipped area.
- Inform London Underground of the location, type of waste, quantity of waste.
- If the waste appears to be hazardous, or the SPC can't safely identify what it is, they are not disturb, or attempt to move the waste.
- Take photos.

1.5 Resources

1.5.1 Materials

Any materials required for the works will be planned by the Project Manager. If a product, or substance requires a COSHH Assessment it will be required before the product is used on site and be included in the site documents. All materials that are used on site will be briefed to the gang by the PWT/SPC. Refer to hazardous materials section

1.5.2 Specifications of required plant and machinery

Only plant and equipment that has been London Underground approved is permitted to be used on the works site. The tools required for the works can be found on the task briefing sheets, and the above Portable Tools, Mechanical Plant and Track Mounted Plant sections above. All operatives will be briefed on the tools required for the works during the pre-works briefing from the PWT/SPC.

The following tools will be used in the scope of works. The list is not exhaustive and other tools and equipment may be required.

- Hand tools
- Power tools (cordless drill, grinder)
- Hand held auger
- Reciprocating saw

All tools used on the contract must be in a good condition. Electrical tools must be PAT tested and contain a label which allows a next test date to be identified.

Before using any tool it should be visually inspected for any damage in accordance with their user training.

Ensuring tools are in good condition and well maintained will also reduce noise. A sharp point or blade will significantly reduce noise generation.

1.5.3 Workforce

All training will be co-ordinated by the Cleshar training department and carried out by an approved training provider. Copies of all relevant certification are maintained at Cleshar Head Office. In addition all personnel will carry details of their individual training.

Operation/Personnel	Training Required
All operatives	LU ICI Sentinel Card , Asbestos Awareness, Manual Handling training, Site Induction

Operation/Personnel	Training Required
Operatives working on or near track in traffic hours	Basic Track Awareness
Operatives working in Depots Working in depot area A	Basic Track Awareness Specific Depot familiarisation induction and area A training
Person in Charge in charge of site safety	Site Person in Charge -Non Track location (SPC-NT) Protecting Workers on the Track (PWT)
First Aider	Appointed Person course as a minimum
Moving Track Trolley	Track Trolley Controller (Formally known as Trolley Operator)
Protecting Workers on the Track Traffic hours (when trains are moving and current is on)	Protecting Workers on the Track Traffic Hours (PWT-TH)
Protecting Workers on the track Engineering hours	Protecting Workers on the Track Engineering hours (PWT-EH)
Protecting Workers on the track Depots	Protecting Workers on the Track Depots (PWT-Depot)
Working on the Depots	Passport to depot (Familiarisation) training in Depots
Working adjacent to Network Rail track	PTS

1.6 Permits and Licences

Permits and Licences required for task:

Permit or Licence required	Required	Item	Location
London Underground endorsed Sentinel card.	✓	All personnel	With individual
Access Number	✓	Engineering hours	Site File/with PWT (SPC-NT)
Storage Licence	✓	For any storage area permission from the Landlord is required.	At access point to the specific storage area

Permit or Licence required	Required	Item	Location
Hot Works Permit	✓	When abrading/welding/ burning	Site File/with PWT (SPC-NT)
Permit to Dig	✓	When excavating or disturbing ground	Site File/with PWT (SPC-NT)

1.7 Waste

Before works commence the area will be surveyed to identify any fly-tipped rubbish. Litter and small waste must be bagged up and removed from site in a van and taken to Cleshar yard and placed in the skip. Care to be taken of needles or other sharps around the work area, gloves to be worn and bags to be carried away from operative's body.

More substantial waste must be referred to the Client Manager for an instruction. If instructed, waste must be bagged up and removed to agreed location. If hazardous waste is discovered it is to be kept separate from other waste and clients' representative contacted to ensure the correct procedure is followed for its disposal. The Quantity and type of waste being removed is to be recorded on the Project Activity Sheet.

Any materials or debris arising from the works must be put into double builder's bags, secured with cable ties and removed from site by Cleshar or as agreed with the client. Where required, Cleshar will raise a request/permit for transporting the debris out of the station via the lift or escalator. For the sequence of operations with regard to waste disposal, generally follow the Waste Transfer note that has to be completed at various stages throughout the disposal process, to ensure traceability. A copy of the Cleshar Waste Carrier Licence will be held in the site file.

Site Details

2.1 Access and Egress

Signing in and out must be done following the London Underground station signing in procedures. SPC/PWT instructions must be followed. Access to the works must be restricted to persons required to carry out the works to comply with London Underground's requirements. When entering via a station all operatives and visitors will sign in and out at the appropriate Station Supervisors

Office before entering the LU network. Individuals must be in possession of the necessary certification, in line with London Underground requirements, to allow them to enter the area required. This will include visitors and personnel undertaking inspections/audits. The SPC/PWT will ensure that all access gates are closed and secured once inside and when leaving the site to prevent unauthorised access. Signage to warn of the works will be displayed at the access point.

When gaining access to a work site through an LU access gate the SPC/PWT will inform the Line Controller. The Line Controller will be told of the location the operatives are working at, the access point, the type of works being carried out, and the distance they are from the track, and the level of protection they are providing for the shift. When works have concluded, the SPC/PWT will inform the Line Controller the gang is clear of the worksite, and have locked the access gate.

When gaining access to gates on stations on the Metropolitan Line, as well as booking on with the Line controller, the SPC/PWT will report to the Station Supervisor's office and sign the gang in on

the PICER form. The SPC/PWT will inform the Station Supervisor of the nature of works taking place, the location, and the access point. When works have concluded the SPC/PWT will inform the Station Supervisor.

2.2 Site layout

Works will be carried out at various stations, compounds, embankments across the TfL infrastructure. Prior to works commencing an On-Site Risk Assessment will be carried out to include details relevant to the specific location.

2.3 Interfaces

Any possible interface with other contractors, London Underground staff, or the general public will be identified in the planning meeting before the works commence. Control measure shall be implemented to ensure all third parties are safe from any works. Should operatives arrive on site, or an interface with any third party arise when works have already commenced, the SPC/PWT will phone their Line Manager for further instruction.

2.4 Control Site Risks

2.4.1 Workers

Before any works commence, the SPC/PWT will complete an On-Site Risk Assessment detailing any hazards the worksite presents, along with control measure to mitigate the hazards. This will be fully briefed out to all operatives before works commence. The following task sheets can be referenced. If the worksite presents a risk, where the hazards cannot be sufficiently controlled, the Person in Charge will contact their Line Manager, Health and Safety department for further guidance. The following task sheets can be referred to:

- Task sheet 01 – Access and site set up
- Task sheet 02 – Work on, or near the track
- Task sheet 03 – Site work (biological hazards)
- Task sheet 04 – Site work (Exposure to weather)
- Task sheet 17 – Access, or work on slopes, or steep embankments

2.4.2 Neighbours (e.g. Network Rail, nearby houses etc.)

Where a worksite becomes intrusive to neighbouring residential properties, a planning meeting will be held to decide how to control the safety interface with the residential area and the worksite. Letter drops will also be carried out prior to works commencing, advising residents of works that are due to commence. If Cleshar operatives notice the worksite becoming a risk, or intrusive to the residents, they will stop work, and contact their Line Manager, Health and Safety department for further guidance. A separate method statement, and/or a Site Specific Risk Assessment would be produced to control the worksite.

When working on a Network Rail work site all Cleshar operatives will be PTS trained. A Site specific Risk Assessment will be completed along with Network Rail Safe Work Pack, and Network Rail permits before works commence. These will detail the hazards and risks the worksite presents, along with control measures to sufficiently protect Cleshar operatives. A Network Rail COSS will be appointed when working on Network Rail sites.

2.4.3 Other contractors working in the vicinity

Where the Cleshar worksite will present hazards to others working in the vicinity, a planning meeting will be held with all parties to discuss and plan how to protect all from the risks involved. A

separate Method Statement, and Site Specific Risk Assessment will be raised and implemented to protect all involved from the hazards and risks identified. In the event of an unplanned interface with others working in the vicinity, the SPC/PWT will temporarily stop works, and plan with the other SPC/PWT on how to control the issues. If a mutual agreement can be reached, an On-Site Risk Assessment will be produced, and re-briefed to all. In the event an agreement cannot be reached, the SPC/PWT will contact their Line Manager and/or Health and Safety department for further guidance.

2.4.4 The environment (e.g. nearby water courses)

Cleshar operatives will be briefed on ecological and other environmental issues relevant to their task and the location of the works. These are included in the risk assessments for the works, and can include issues such as sensitive receptors in the vicinity of the site, presence of protected or invasive species and protected habitats. The task briefing sheet will detail all environmental risks associated with water, ecology, contaminated land, noise, vibration and pollution.

In some cases, an ecological survey prior to any works will be required to confirm presence of high risk species, both protected and invasive, to ensure adequate control measures are implemented during the works.

Also, where sensitive receptors such as residents, schools, care homes or similar, are in close proximity to the site and may be affected by noise and other nuisances, a noise assessment may be required and the necessary mitigation measures implemented.

Environmental incidents are reported and investigated in the same manner as safety incidents. Operatives shall report to their manager if they are unable to fulfill their duties as a result of discovering any ecological issues (e.g. presence of protected species, nesting birds and reptiles).

2.4.5 LU staff

When Cleshar worksite will present hazards to London Underground staff a Site Specific Risk Assessment will be implemented to protect all involved from the hazards the worksite. In the event the risks cannot be sufficiently controlled, the SPC/PWT will contact their Line Manager, Health and Safety department for further guidance.

2.4.6 The operational railway (including infrastructure, services etc.)

Engineering Hours

When working Engineering Hours works are required, a PWT-EH will be appointed to provide protection to all operatives for that shift. The PWT-EH will book on with the Track Access Controller as per London Underground rules and procedures. All risks that arise from the worksite, when working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions.

Traffic Hours

When working Traffic Hours works are required, a PWT-TH will be appointed to provide protection to all operatives for that shift. The PWT-TH will book on with the Line Controller as per London Underground rules and procedures. All risks that arise from the worksite, when working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or

hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions.

Working in Depots
When working in any London Underground Depot is required, a PWT-Depot will be appointed to provide protection to all operatives for that shift. The PWT-Depot will book on with the Line Controller as per London Underground rules and procedures. All risks that arise from the worksite, when working on the operational railway, will be documented in the Site specific vegetation risk assessment, and the Arborists initial tree assessment when required. Control measures will be implemented to control the risks, and hazards, and briefed out to the operatives before works commence. If a risk, or hazard cannot be controlled on site, the SPC/PWT will contact their Line Manager/Health and Safety department for further instructions.

2.4.7 Members of the public
The worksite will, for the most part, be on London Underground premises, behind a physical barrier creating a tangible physical segregation between the worksite and the members of the public. In the event that the worksite may pose a risk to the public, the works will be planned in advance and a site specific risk assessment for that particular worksite will be raised. The site will be demarcated and cordoned off. Before any works commence the SPC/PWT will do an On-Site Risk Assessment, including managing the interface with the general public. If there is a risk of violence due to the interface with the public, then operatives will remain together and move to a place of safety, moving any tools or equipment out of the way of the potential violence, where possible. If the SPC/PWT considers it necessary, they will call the police.

2.4.8 Asbestos
During works where there is potential of disturbance of structures the project manager will request Asbestos report F3333 from the Client Hazardous Material Unit (HMU)

No works will be undertaken by Cleshar that may lead to disturbing asbestos or other unknown materials.

In the event of discovery of asbestos, ACM or suspected asbestos the following process will be followed:

- Do not disturb.
- Stop work immediately
- Clear the area of personnel, tools and equipment
- Inform other parties in the vicinity
- Evacuate the area
- Call the HMU reporting Line 0207 088 5615

2.4.9 Buried services
It is not envisioned that contact with buried services will be part of the scope of works in this Method Statement. If this is required throughout the cycle of the contract, a Site Specific Risk Assessment will be produced, with the required trained, and competent person to carry out any cat-scanning.

2.4.10 Limited steep access embankments
When operatives are working on steep embankments a Site Specific Risk Assessment must be completed before any works commence. SPC/PWT shall ensure weather conditions do not impose a risk to the operatives, or the operational rail way. The site specific risk assessment shall include:

- Weather conditions.
- Underfoot conditions.
- Safe system of work, i.e. harness, fall arrest equipment.
- Level of protection required.
- Possible interfaces with Network Rail.
- Any London Underground assets that may need protection.
- Other contractors, or other works in the vicinity.

For further guidance refer to:

- Task sheet 17 Access or work on steep embankments.

2.4.11 Overhead lines

When works have an interface with Network Rail, and the OLE a Site Specific Risk Assessment will be produced before any works commence. All relevant Works Package Plans, permits, task briefing sheets will also be in place before any works commence. All staff will be PTS trained, under the protection of a COSS.

- Refer to Task briefing sheet 12 – Working near overhead power lines.

2.4.12 Contaminated land

London Underground will inform Cleshar of areas with contaminated land. A specific Method Statement, and Site Specific Risk Assessment will be prepared for work in such areas and briefed to all the operatives.

2.4.13 Pests and weeds

All pest and weed management will be carried out as per Task sheet, risk assessment and relevant COSHH assessment by competent operatives. Areas treated with chemicals will be cordoned off where necessary and warning signs posted. Cleshar will implement provisions to prevent, as reasonably practicable, the migration of pests from site. All operatives will be made aware of the presence of rats, wasp nests, snakes, etc. during site briefing. Operatives will also be made aware of health and safety hazards associated with wildlife in tool box talks and inductions.

Hazards include:

- Bee/wasp stings,
- Leptospirosis,
- Snake bites and
- Diseases from pigeon droppings

2.4.14 LU Operations, and sites where violence towards site staff is known.

When operatives are required to carry out works in areas where violence towards staff is known, the following must be considered.

- Informing British Transport Police, Metropolitan Police of planned works.
- London Underground Management, and Senior Cleshar Management to be made aware of the works, the time, location, duration of works.
- All operatives to be briefed to stay in groups of 2, and 3 and be advised to commute to, and from the worksite in groups.
- Nearest Police station, and other emergency services to be briefed to the operatives before any works commence.

- If operatives are confronted, or challenged they will be briefed to remain calm, talk softly, go to a place of safety, not to respond with violence.
- If operatives see any suspicious activity, they are to report it to the British Transport Police, Metropolitan Police.
- Works to be planned for daylight hours, where practicable.

2.5 Protection

All Cleshar gangs shall have the correct protection in place before any works commence. A trained, and competent PWT-EH/TH/Depot will provide protection for the works depending on when and where the works is taking place.

Traffic hours
The majority of the works is envisioned to take place during Traffic Hours. A PWT-TH will be appointed to each of the Utility gangs working on this contract. The PWT-TH will follow all London Underground rule books and procedures when executing their duties. The PWT-TH will book on with the Line Controller before any works commence.

Engineering hours
When working engineering hours a Protecting Workers on Track Engineering Hours (PWT-EH) shall provide protection to all operatives who required to carry out works. The PWT-EH will follow all London Undergrounds rule books and procedures.

Depot working
When working in a depot a Protecting Workers on Track Depot (PWT-Depot) shall provide protection to all operatives who required to carry out works. The PWT-Depot will follow all London Undergrounds rule books and procedures, and the rules for the depot they are working in.

2.6 Isolations

In the event the worksite is shared with Network Rail, or within a close proximity to Network Rail OLE, an isolation is required.

2.7 Communication and Contact Details

If operatives need to speak to their Managers or Health and Safety department they can call them at any time mobile phones, or through head office. If operatives need to reach anyone outside normal working hours, or in the event of an emergency Cleshar have a 24 hour HUB which is manned at all times. By using this the on-call Operational Manager, or Health and Safety representative will be contacted.

The following contact details will be used for these works;

Company	Position	Responsible Person	Contact no.
TfL	**Project Manager**	Joel Baker	TBA
TfL	**H&S Advisor**	Richard Brooks	TBA
Cleshar	**Project Manager**	[redacted]	[redacted]
Cleshar	**H&S Advisor**	[redacted]	[redacted]

Cleshar	**Vegetation Manager**	[redacted]	[redacted]
Cleshar	**Vegetation Manager**	[redacted]	[redacted]
Cleshar	**Tree Inspector**	[redacted]	[redacted]

Emergency contact details:

Emergency Contacts		**External number**
Fire – Police - Ambulance		999
BT Police Control		0800 40 50 40
Rail Accident Investigation Board	Death or Serious Injury	01332 253 333
ORR	Fatal or Major injuries only Out of hours:	Monday to Friday, from 09:00 to 17:30 hrs - Telephone: **020 7282 3910**
		Outside these hours, weekends and public holidays please call the Department for Transport (DfT) Duty Officer on: **020 7944 5445**
Gas – Transco Emergency		0800 111 999
Electricity Emergency Line		0800 375 675
Local Water Company Emergency Line	Thames Water	0800 980 8800
Cleshar HUB	24hr 7 days a week	020 8733 8552
Environmental Agency	Emergency Line	0800 807 060
Various London hospitals		999
Network Rail Emergencies	24 hour Helpline	0345 711 4141

2.8 Emergency Arrangements

In the event of an emergency, the procedure as described in the project Emergency Plan will be followed.

Emergency procedures for first aid and fire evacuation will be briefed to all operatives prior to work commencing.

- The SPC/PWT will ensure that all operatives are aware of the assembly point, First Aider and nearest hospital.
- The SPC/PWT will ensure that the First aider is aware of the site address/location and access points in order to direct the emergency services.
- In the event of emergency the SPC/PWT will contact Station Supervisor to request emergency services (if working within the station location) or call 999.

The worksite may and will vary from shift to shift. Before each shift commences, the Person in Charge will brief the operatives on the closest Accident and Emergency unit, with the agreed staff assembly point should emergency services need to be called.

In the event of an Aerial rescue, operatives are to refer to Task sheet 32 Aerial rescue.

There will be a fully stocked first aid kit and a qualified Emergency First Aider assigned to each gang. The First Aider will be introduced to the work group during induction. In the event of an incident / accident the First Aider must administer first aid and report to the nearest station for assistance, if required. All accidents resulting in injuries will be reported immediately to the Project Manager, Cleshar HSQE department and as per project reporting procedures.

2.8.1

A portable fire point will be set up adjacent to the work area. The first aid kit will normally be kept with the fire point, the capacity of the firefighting equipment may change if the risk assessment stipulates.

Fire prevention:

The following activities will be carried on site;

- A re-fuelling point will be allocated, with drip tray, and funnel. This will be at least 5 metres away from any hot works.
- All plant and equipment will be fuelled at the depot before works start.
- Ensuring the fire point is easily accessible before any hot works commence.
- All hot works activities are to be included on the On-Site Risk Assessment, and pre-works briefing.

The standard fire point will consist of:

- **2x AFFF (9ltr)**
- **1x CO2 (5kg)**
- **1x Fire Blanket**

No smoking or vaping is allowed on London Underground Limited premises.

Hot works will be managed in accordance with a London Underground issued Hot Work permit and overseen by a Fire Watch Person. The London Underground trained Fire Watch Person will be present on site during the hot works and for a minimum of 1 hour after completion of works. The Fire Watch Person will not be engaged in activities that would prevent them from carrying out their Fire Watch duties.

2.9 Welfare

Welfare will be provided for each location and assessed on each site, normally agreement to share station's/Depot welfare facilities. A Welfare van can be provided for larger groups (e.g. during possessions) and remote locations, as agreed between Cleshar and London Underground.

3 Briefing and Reporting

3.1 Briefing Arrangements

The SPC for the works will deliver a pre works briefing. The briefing will comprise of;

- Safe System of Work.
- Method Statement, and Risk Assessment, any COSHH Assessments that would be needed for that shift.
- Roles and responsibilities, i.e. who will be doing what task.
- Plant, equipment and tools needed for the shift.
- PPE requirements.
- Daily working activities.
- Any site specific hazards and mitigation measures.

When works are being carried out during Traffic Hours, and a PWT-TH is required the operatives will receive a protection briefing from the PWT-TH. The protection briefing will consist of;

- Train movements
- Protections arrangements, if a look out or hand signalman is being used
- Direction of traffic.
- The emergency arrangements, nearest hospital, staff assembly point.
- Site specific hazards, e.g. slipping and tripping hazards.
- The Person in Charge of the works.
- The identity of the First Aider.

When works are being carried out during Engineering Hours, and a PWT-EH is required the operatives will receive a protection briefing from the PWT-EH. The protection briefing will consist of;

- Inform and show the SPC that the traction current has been discharged.
- The call back time for the shift.
- The protections limits and the worksite for the shift.
- The emergency arrangements - nearest hospital, staff assembly point.
- Site specific hazards, e.g. slipping and tripping hazards.
- The Person in Charge of works.
- The identity of the First Aider.

3.2 Reporting Accidents and Incidents

All accidents, incidents, near misses must be notified to the SPC/PWT and who will carry out an immediate investigation.

All accidents, incidents, near misses must be reported to the incident report operator on [redacted] (auto[redacted]) or [redacted] as soon as possible but by the end of shift at the latest and also reported to Customer Care Centre [redacted] and to Duty Supervisor informed on site.

- LUL Incident Line [redacted]
- Cleshar HUB [redacted]

Environmental incidents must also be reported in the same manner as Health and Safety incidents.

If serious accident, incident or injury all operatives to remain on site until dismissed by authorised person (Cleshar Manager, London Underground Manager or Police), unless in need of medical treatment.

RIDDOR reports must be submitted by Cleshar H&S department unless reports are submitted by the client or subcontractors

4 Appendix

On Site Risk Assessment Form

Risk Assessment

COSHH Assessment

- Generic cement dust
- Generic nuisance dust
- Postcrete
- Leptospirosis

Task Description/Methodology				
Applies to all activities where hand tools are being used.				
Hazards associated with the task		**Consequences**		**Pre-controls Risk Rating**
Sharps, blades and edges, impact with tools, ejection of materials and particles, ejection of tools/parts of tools, working close to electrical cabling/equipment, prolonged awkward postures.		Eye injuries, various personal injuries, cuts and abrasions, electrocution, burns, musculoskeletal injuries.		**M**
People at Risk:	**Operatives** ☒	**Other contractors** ☒	**Visitors to site** ☒	**Public** ☐
Control Measures				**Post control Risk Rating**
• Only competent operatives to carry out works. • Where operatives or persons undergoing training (apprentices) they shall be closely supervised. • All tools shall be maintained, kept in safe condition and inspected prior to use by the user. • All cutting tools will be kept sharp. • Insulated tools to be used when working close to electrical equipment. • Hands should be kept behind, or away from sharp cutting edges or work piece edges. • All bladed knives/chisels etc should be guarded when stored safely in toolbox/bag, open blade knives are not allowed on to London Underground. • Redundant blades must be disposed of properly, for example in solid container. • Ensure no one else is close when using hand tools such as swinging hammers etc., warning is to be issued to operatives and other contractors in the vicinity. • Good housekeeping is to be ensured when using hand tools. • Task lighting to be used at all times when working in the dark. • Operatives to achieve adequate breaks from awkward position or prolonged use of hand tools (for example when, twisting or bending back, reaching upwards or kneeling when using hand tools).				**L**

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374
Safety glasses where ejection of particle is a risk	EN 166 F		
Reviewed issue 6	30/05/2019	Approved	[redacted]

TASK SHEET NUMBER 13 **GROUND DISTURBANCE AND EXCAVATION**

CLESHAR

Task Description/Methodology
• Ground disturbance, excavation, tree root/stump clearance and planting using hand or power tools. • Ground penetration such as inserting pins into ground when erecting Netlon fencing or barriers. All digging will be pre planned. Cleshar will request service drawings from the client and will assess the risk of impact with hidden services.

Hazards associated with the task	**Consequences**	**Pre-controls Risk Rating**
Impact with buried services	Explosion, burns, fire, electrocution	**H**
Uneven surfaces, deep excavation	Trips and falls, falls from height resulting in major injuries	**H**

People at Risk:	**Operatives** ☒	**Other contractors** ☐	**Visitors to site** ☐	**Public** ☐

Control Measures	**Post control Risk Rating**
• Prior to works the Project Manager will request service drawings from the client, or the utility provider. • Any potential services will identified on drawings and briefed to the SPC/PWT. • Visual inspection for presence of services will be carried out. The SPC/PWT to look out for nearby electrical junction boxes, lighting columns and fitting , CCTV cameras and other electrically powered equipment as these are indicators of services being present. • CAT scan to be carried out using approved and calibrated equipment. A competent operative (trained in the use of the equipment) will carry out the scan. • Any detected services will be marked on the ground. • A Permit to Dig will be completed prior to works commencing by the SPC/PWT only when they are satisfied all precautions were taken to prevent impact with services. All control measures to be listed. • The Permit to Dig will be briefed to all operatives involved in the activity. • Hand dig only when within 0.5m of marked services. Any excavated cables will be protected and highlighted using tape or similar. Insulated tools will be used when digging close to power cables. • When cables detected in concrete surfaces, these must be isolated prior to any excavations taking place. • Upon competition of excavation the permit will be closed by the issuer. • Any open excavation and/or uneven surfaces will be protected, signage or/and barriers erected to warn of hazards. • All found cables to be considered live. • Also refer to Task Sheet for power tools if used.	**L**

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374
Reviewed issue 6	30/05/2019	Approved	[redacted]

TASK SHEET NUMBER 16 **USE OF LADDER /STEPLADDER**

CLESHAR

Task Description/Methodology
Use of access ladder to climb trees and other places at height Ladders are normally used as a means of access into the crown of the tree. Once the climber is secured to the tree by the rope and harness the ladder is to be removed. Ladder to be positioned 1 to 4 away from a vertical line dropped from point of contact with tree. The unsupported part of the ladder must not touch any obstructions, even when loaded with climber's weight. The ladder should incorporate a non slip or stabilising base and must be secured either by rope or being footed by another operative. The climber must be secured to the tree before leaving the top of the ladder or carrying out any other work. Stepladders will be used for a short duration of work only (no more than 15 minutes). Work off the ladder will be carried only if three points of contact can be established. NO equipment tools or material weighting more than 10 kg will be carried up stepladder. Stepladder will be positioned on level ground and will be footed by another operative.

Hazards associated with the task	Consequences	Pre-controls Risk Rating
Falls from height	Major injuries	H
Collapse of equipment	Major injuries	H
Falls of material from height	Head injuries, property damage	H

People at Risk:	Operatives ☒	Other contractors ☒	Visitors to site ☒	Public ☐

Control Measures	Post control Risk Rating
• Before considering using ladder or stepladder for work safer alternative must be considered i.e. podiums, mobile towers, pole saws etc. • Ladders or stepladders to be used for short duration work (up to 15 mins). • All access equipment will be industrial use standard (class 1), fit for purpose and formally inspected every 3 months. • Pre use checks on all equipment will be carried out by the users. Users will be instructed on the safe use of stepladder or ladder. • Three points of contact will be established when climbing or using ladder or stepladder unless other fall protection is used (Harness/lanyard). • Ladder/step ladder must be positioned on a firm and level surface. • Step ladder must be fully opened • Stepladder or ladder to be fixed to a stabilising base of footed by another operative at all time when in use. • Safe working area to be established (exclusion zones, barriers and warning signs as appropriate for the site).	M

PPE (Minimum Requirement)			
Safety Boots	EN 20345 (S3 or S5)	Hard Hat	EN 397
Hi-visibility vest	EN 471	Gloves	EN 388 or 374
Reviewed issue 5	30/05/2019	Approved	[redacted]

Appendix 4: Template Daily Reports

Appendix 4 Part A: Daily Pre Work Activity Sheet

Daily Pre Work Activity Checklist

LOCATION OF WORK SITE.	PWT/SPC (Print):	Signature:	DATE

Ref	PRE WORK CHECKS	TICK BOX	If any requirements are not met then you must notify management and email a copy of this form to *the relevant LU vegetation manager* PLEASE LIST ALL COMMENTS HERE
1	ALL STAFF PRESENT? ABSENCES REPORTED TO OFFICE		
2	ALL BRIEFINGS GIVEN BY PWT AND LOG BOOK FILLED OUT		
3	ALL CERTIFICATION CHECKED, IN DATE AND CARRIED AT ALL TIMES		
4	ALL PAPERWORK ON TABLETS SIGNED FOR TODAYS SHIFT		
5	ALL PPE CHECKED AND ALL STAFF WEARING CORRECT PPE		
6	FIRST AID AND FIRE POINT SET UP AND IN DATE		
7	SITE SET UP CORRECTLY? SITE BOARD,DRIP TRAY,SPILL KIT		
8	TOOLS / EQUIPMENT / LOLER CHECKED AND IN DATE BEFORE STARTING WORK		
9	WEATHER CONDITIONS SUITABLE FOR CLIMBING		
10	NO OPERATIVE APPEARS TO BE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL		
11	STEERING LOCK FITTED TO VAN		
12	ALL UNUSED MACHINES LOCKED IN STRONG BOX		

Appendix 4 Part B: Shift Report

Shift Report

LINE		Job Ticket(s)/Reference
GANG		
		DATE:
Location FROM:	TO:	
BRS		
Weather	Hours from:	Hours to:

As a Safety Critical 'A' Post holder, I am fully aware of the requirements of the LUL policies on Alcohol and Drugs and I am booking on for duty in accordance with them.

Role	Name	Signature

Tools/Type/Code

Delays / Downtime

Start Time	Finish Time	Progress

SPC SIGNATURE	DATE

Appendix 4 Part C: Specific Risk Assessment and tool box talk

SPECIFIC RISK ASSESSMENT & TOOL BOX TALK VEGETATION WORKS

GANG:
TREE
FENCE
VEG
CLEARANCE

Contract Number:	Supervisor:	Date
Site	Line:	

Areas for review by the Site Supervisor	Yes	No	Remarks
CABLE RUN/FENCE LINE/DENSE VEGETATION			
EXCESSIVE DEBRIS IN UNDERGROWTH			
WILDLIFE (FOXES/BIRDS NESTS ETC.)			
JAPANESE KNOTWEED			
STEEP EMBANKMENTS			
DANGEROUS TREES/LIMBS			
WORKING AT HEIGHT (BRIDGE ENDS/PARAPET WALLS)			
PUBLIC/STAFF PASSING			
NEEDLES/SYRINGES			
MISCELLANEOUS			

Control Measures taken to safeguard against hazards found

Supervisor Signature:

TOOL BOX TALK GIVEN ON ABOVE CONTROL MEASURES	YES	NO	Record of attendees below

Name	Signature	Name	Signature

Distribution: LU vegetation delivery unit