

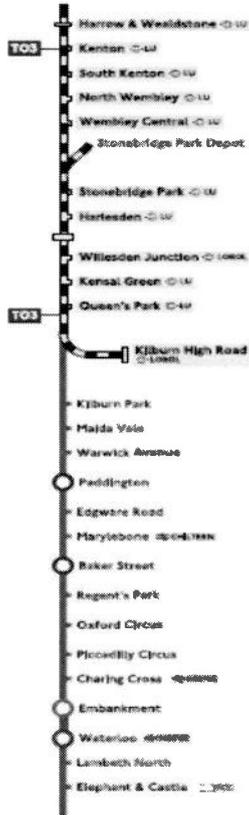
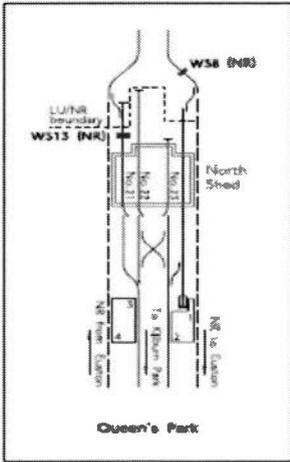
Track			
Booking Description	Booking Description	Days	Work Type Description
	Restrictive - Out-stabled Trains	56	To define an area of the LU railway where a service train is stabled (normally in platforms/sidings). May restrict the type of works that can be performed adjacent to this location.
	Restrictive - Plant / Chemicals in a confined space	56	For where access introduces the use of plant and chemicals in a confined space (e.g. platform invert). Rarely used.
Restrictive Cont'd	Restrictive - Power Cessation- Power Outages Possible	56	For where access will introduce a cessation of power (e.g. tunnel lighting, supply points) that may impact other access users (e.g. need for temporary supplies/portable lighting).
	Restrictive - Protection Area	56	To define an area of track used as a protecting or 'buffer' zone. Used in conjunction with another Exclusive booking e.g. Specified Area, Possession.
	Restrictive - Sub Station Works	56	Primarily for the use of LU Power teams requiring access to sub stations supplying power to the LU traction current system.
	Restrictive - Wheels Free Zone	56	For works that require the running rails to be free of electrically conducting plant or equipment e.g. trolleys, trains etc. Usually used for works requiring isolation of the signalling circuits e.g. commissioning.
Exclusive	Exclusive	56	For works necessitating sole access of the LU railway, and not more appropriately catered for under other categories herein. Only used sparingly and for short durations due to its restrictive nature on other works.
	Exclusive - Asbestos Exclusion Zone	56	Only issued to specialist Asbestos contractors registered with LU for asbestos works. Access for asbestos works e.g. removal for which no other parties can be present on grounds of safety.

Track			
Booking Description	Booking Description	Days	Work Type Description
	Exclusive - Current Rail Resistance Measurements	56	Primarily for the use of LU Power teams requiring controlled current measurements of the traction current delivery system.
	Exclusive - Engineers' Current Area	56	For the running of engineering vehicles on live traction current in accordance with the Rule Book.
	Exclusive - Possession	56	For the exclusive control of access to a given area of the railway. Traction current may be on or off. May involve the use of engineering trains, RRVs etc. As defined in the Rule Book
	Exclusive - Running on current, moving according to signals	56	For the running of vehicles on live traction current obeying LU signalling systems (e.g. test trains). Often referred to as 'Cancelled Engineering Hours'. As defined in the Rule Book.
Exclusive Cont'd	Exclusive - Specified Area	56	For the running of engineering machines e.g. trains, RRVs on the railway. As defined in the Rule Book
	Exclusive - Traction Current Switching During Eng Hrs	56	For access that requires traction current to be switched on and off intermittently during the engineering hours shift. Primarily used in relation to power supply testing/commissioning etc.

Appendix 9
Network Rail Interface Locations

Bakerloo line

TO3, Harrow & Wealdstone to Kilburn High Road via Queen's Park Track Agreement. LU is Network Rail's customer for track, signalling and traction current. There are shared with LORR, which also has an Agreement with Network Rail.



Station Agreements between Harrow & Wealdstone and Kilburn High Road via Queen's Park, including Willesden Junction LU in the Station Facility Owner.

LU's access to Stonebridge Park (LU) Network Rail track. There is an airway track interface between LU and Network Rail track at the depot entrance.

There are airway track interfaces between LU and Network Rail at the North end of the LU Queen's Park North Shed. LU and Network Rail tracks also run parallel through Queen's Park Station.

The route from Queen's Park to Kilburn High Road station is provided under Track agreement TO3 for covering the scope in emergency only.

Network Rail owned station with SPD, may be other TO3s
 Track Agreement
 Location of Track Agreement

Created: 30 March 2012

For details of Land and Property boundaries refer to Site Specific Engineering arrangements LNW-B, SE-B and WN-B

Produced by Infrastructure Protection 3rd Floor, Railway House - June 2012

Central line

Ealing Broadway - Station Agreement:
FGW is the Station Facility Owner
LU is the customer but owns the
Central and District line platforms.



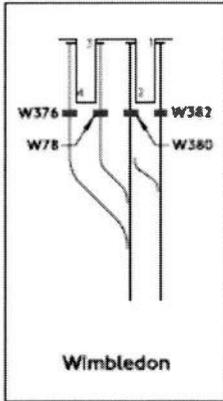
West end South Ruislip - Station Agreement:
LU is the station owner. Chiltern Railways is
LU's customer but manages its own platform.

Greenford - Station Agreement. LU is the station
owner. FGW is LU's customer.
Network Rail owns the track in the bay platform.

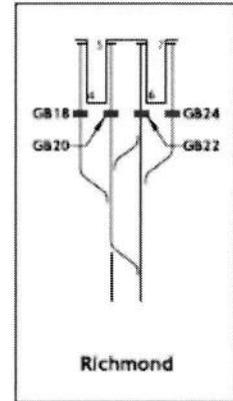
Richmond-S&K	Network Rail owned station (with SFO, may be other TOC's)
TOS	Track Agreement
—•—	Location of Track Agreement

For details of Land and Property boundaries
refer to Site Specific Engineering arrangements
GW-C, ML-C and SE-C

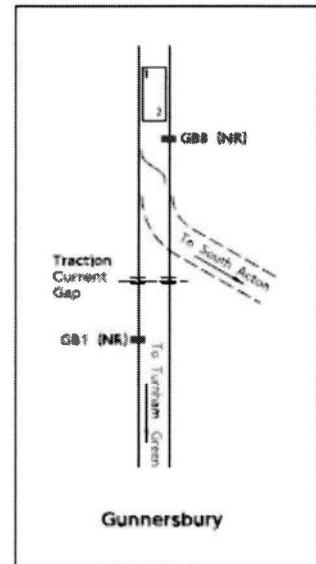
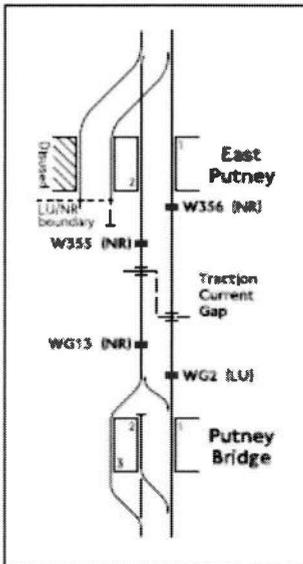
District line



T01 East Putney to Wimbledon Track Agreement. Operates South West Trains a observational and empty stock routes. Network Rail supplies the traction current and signal operation but is LU's customer for track.



Richmond Olympia - Station Agreement. LOROL is the Station Facility Owner. LU is the customer.

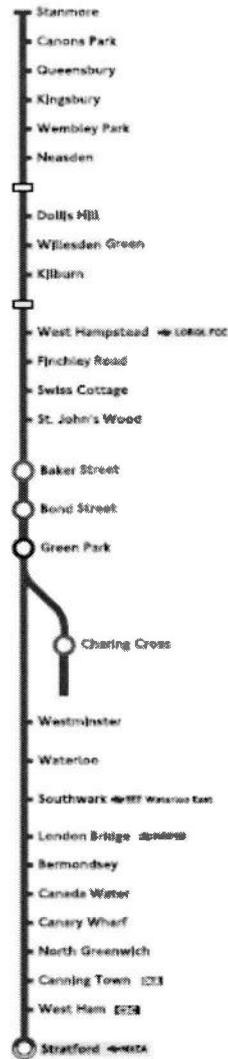


Barking and Upminster - Station Agreements. C2C is the Station Facility Owner. LU is the customer.

Network Rail owned station (with SFO, may be other TOCs)
 Track Agreement
 Location of Track Agreement

For details of Land and Property boundaries refer to Site Specific Engineering arrangements SE-D and WN-D

Jubilee line



Charing Cross - Station Agreement. LU is the Station Facility Owner. The Docklands Light Railway's access is covered by a lease but LU provides some station services.

West Ham - Station Agreement. LU is the station facility owner. CXC is the customer but manages its own platform.

Stratford - Station Agreement. High level platforms and subways. NCEA are the Station Facility Owner. LU Control line is the customer, but staff control the platform.

	Network Rail owned station (with SFO, may be other TOC's)
	Track Agreement
	Location of Track Agreement

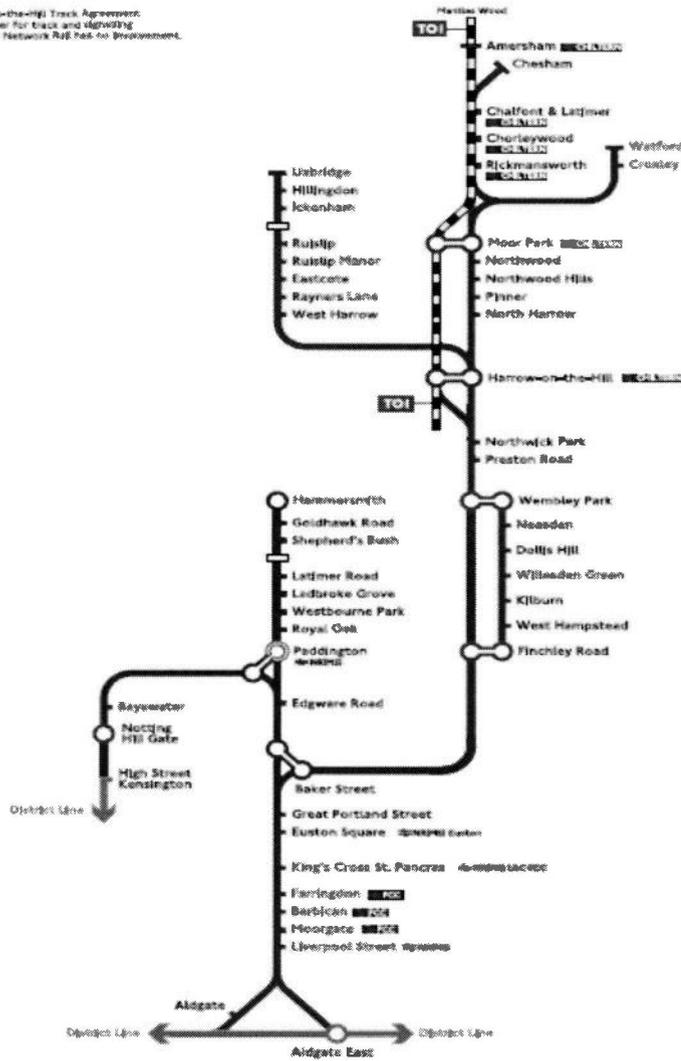
Created: 30 March 2012

For details of Land and Property boundaries refer to Site Specific Engineering arrangements SE-J and LNW-J

Produced by Infrastructure Protection Six Floor Albany House • Auto 58756

Metropolitan line

TOI: Merton Wood - Harrow-on-the-Hill Track Agreement
 Chiltern Railways is LU's customer for track and signalling
 over the Metropolitan main line. Network Rail has no involvement.



Station Agreements between Amersham and Harrow-on-the-Hill. LU is the station facility owner. Chiltern Railways is the customer. Chiltern use Moor Park in emergencies only.

Farringdon and Moorgate - Station Agreements. LU is the Station Owner. PCC is the customer at Moorgate test storage. Its own platforms.

Richmond-on-Thames: Network Rail owned station with SPO, may be other TOC's

TOI Track Agreement

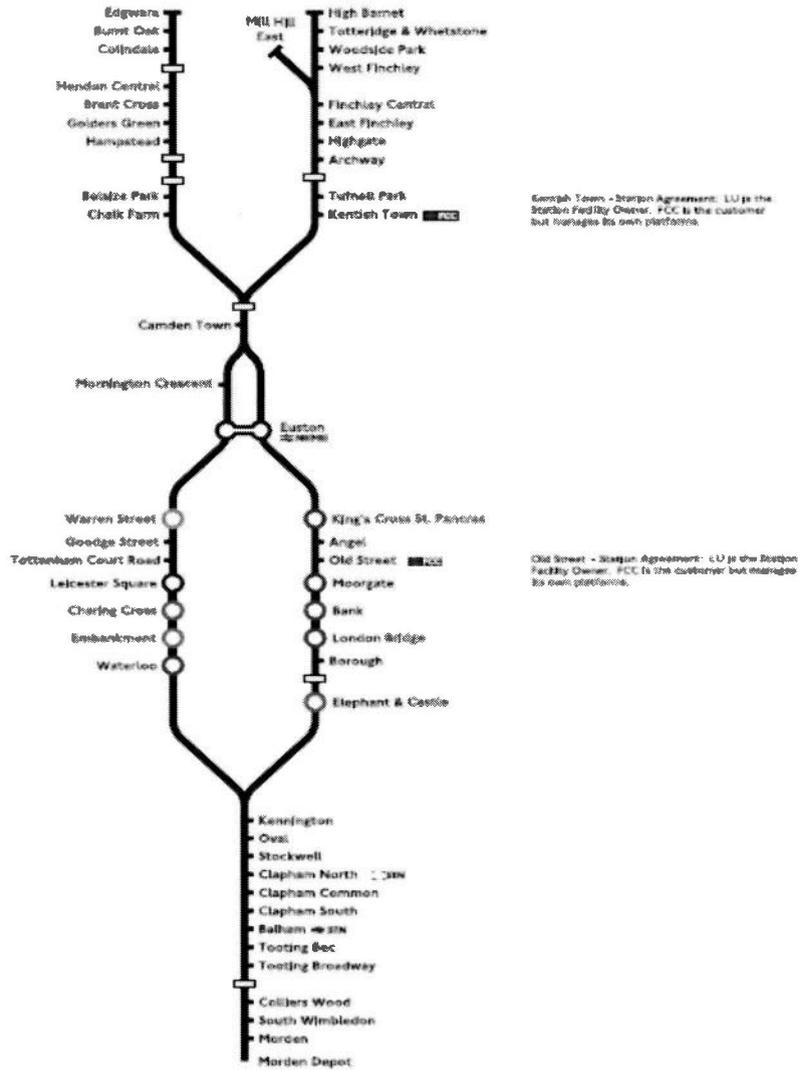
TOI+P Location of Track Agreement

Created: 20 March 2012

For details of Land and Property boundaries refer to Site Specific Engineering arrangements LNE-M, LNW-M, SE-M and WN-M

Produced by Infrastructure Protection. See Plan: Albany House - Auto: 20754

Northern line



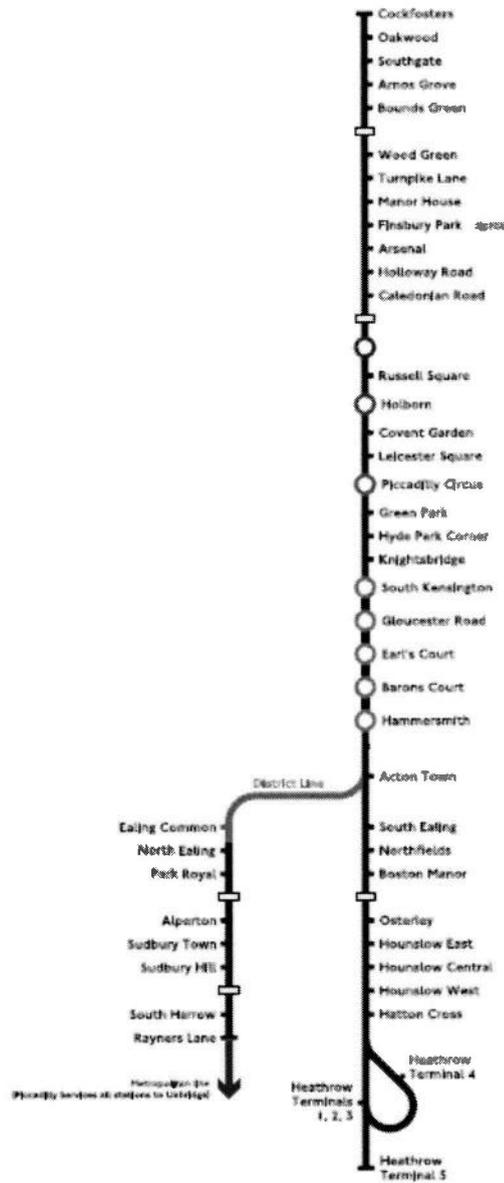
Network Rail owned station with SFO, may be other TOC's
 Track Agreement
 Location of Track Agreement

Created: 30 March 2013

For details of Land and Property boundaries
 refer to Site Specific Engineering arrangements
LN-N, LN-W-N and SE-N

Produced by Infrastructure Protection 3rd Floor Albany House • Auto 28798

Piccadilly line



Flinsbury Park Station Agreement: LU and FCC are joint Station Facility Owners. Both will work in partnership and no cross-charging will take place.

Richmond	Network Rail owned station (with SFO, may be other TOC)
TOA	Track Agreement
—	Location of Track Agreement

Created: 26 March 2013

<p>For details of Land and Property boundaries refer to Site Specific Engineering arrangements LNE-P, LNW-P, SE-P and WN-P</p>

Produced by Infrastructure Protection 3rd Floor Albany House - Aute 98795

Victoria line



Walkhamshaw Central - Station Agreement: NREA is the Station Facility Owner. LU is the customer but owns its own part of the station at sub surface level.

Blackhorse Road - Station Agreement: LU is the Station Facility Owner. LOROL Train Services is the customer but manages its own platforms.

Tottenham Hale and Seven Sisters - Station Agreement: LU is the Station Owner. NREA is the customer but manages its own platforms.

Highbury & Islington - FCC is the Station Facility Owner for NR deep level platforms. LU is the Station Facility Owner for the LOROL Train Services platforms. All other parts of the station are owned by LU.

Richmond	Network Rail owned station with SFO, may be other TOC's
TO3	Track Agreement
	Location of Track Agreements

Copyright: 26 April 2012

For details of Land and Property boundaries refer to Site Specific Engineering arrangements LNE-V, LNW-V and SE-V

Produced by Infrastructure Protection 3rd Floor Albany House • Auto 58736

Appendix 10
Charges for the Company's Engineers Trains

Standard charges for prevailing in financial year 1st April 2018 to 31st March 2019

Class/ Code	Description	Standard 2015/15 Charge
A	Class A Non-coupling Train	£6,300
B	Class B Long Welded Rail Train	£14,200
C	Class C Uncoupling train with loading gang	£11,600
D	Class D Uncoupling train without loading gang	£8,700
E	Class E Ballasted Track Replacement including T3 (price for weekend)	£229,000
H	DISAB (Ballast Sucker) 8 hour shift	£10,800
L	Technical and Operational Support (8 hour) per person	£580
LG	Loading gang 8hr shift (up to 5 operatives)	£2,900
M	Technical and Operational Support per hour per person	£71
P	Crane, Roll Loader, Track Relaying Machine	£3,000
T1	Plain Line/ P&C Tamper 8hr shift	£8,300
T2	Plain Line/ P&C Tamper 12hr shift	£11,400
T3	Plain Line/ P&C Tamper 8hr shift in train formation	£12,800
T4	Plain Line/ P&C Tamper 12hr shift in train formation	£15,200

SCHEDULE 7: CONTRACT VARIATION PROCEDURE

1. Without prejudice to paragraph 3 below, the cost of any Variation Order shall be agreed between the Parties taking account of the reasons why the Variation Order was required.
2. The Company may propose a variation by completing Appendix 1 (Form of Variation Proposal/Variation Order) of this Schedule 7 and supplying three (3) copies of it to the Supplier. Within five (5) Working Days of receipt, or such other time as may be agreed by the Company, the Supplier shall complete Part B of the Variation Proposal and shall supply two (2) copies of the Variation Proposal to the Company. The Company shall be entitled, at any time within twenty (20) Working Days of receipt, to instruct and authorise the Supplier to proceed with the variation on the terms so set out by each Party by completing and signing Part C of one (1) copy of the Variation Proposal (which, following such signature, will be referred to as a "Variation Order") and supplying such Variation Order to the Supplier. The relevant part(s) of this Framework Agreement or the relevant Call-Off Contract shall thereupon be varied accordingly.
3. For the avoidance of doubt, the Supplier shall carry out the variation in accordance with the Variation Order on the terms determined by the Company and such variation shall commence no later than five (5) Working Days (unless otherwise instructed by the Company) following receipt of the signed Variation Order by the Supplier. Where the terms are not agreed by the Supplier, or where the Supplier fails to provide Part B of the Variation Proposal to the Company within the timescales set out in paragraph 2 above, the variation shall be deemed to be agreed and the Supplier shall proceed, at the request of the Company, to implement the variation in accordance with the specified terms within five (5) Working Days (unless otherwise instructed by the Company of receipt of the original Variation Proposal by the Supplier. Where such Variation Order is disputed by the Supplier, the Supplier may refer this to the dispute resolution procedure pursuant to Schedule 14 (Dispute Resolution Procedure) but is required to implement the variation pending the outcome of the Dispute.
4. The Supplier may propose a variation, after requesting the issue by the Company of a Variation Proposal variation number, by completing Parts A and B of a Variation Proposal and supplying two (2) copies of it to the Company. The Company shall be entitled, at any time within twenty (20) Working Days of receipt, to instruct the Supplier to proceed with the variation on the terms so set out by the Supplier by completing and signing Part C of one (1) copy of the Variation Proposal (which, following such signature, will be referred to as a "Variation Order") and supplying such Variation Order to the Supplier. The relevant part(s) of this Contract shall thereupon be varied accordingly.
5. The Supplier may indicate in a Variation Proposal that the price is an estimated price but, if it does so, it shall supply a firm price to the Company in writing at least five (5) Working Days before the expiry of the time within which the Company is entitled to instruct the Supplier to proceed with the variation.
6. In all Variation Proposals, the Supplier shall ensure that:
 - 6.1 the price indicated by the Supplier is the full price and shall cover all costs associated with the variation;
 - 6.2 if appropriate, a range of prices is shown corresponding to the extent of the Services to be carried out; and
 - 6.3 the Variation Proposal includes such further information as may reasonably be required by the Company.
7. In an Emergency, both Parties shall use their reasonable endeavours to expedite the actions permitted or required under the Contract Variation Procedure.

8. The Company will not accept any retrospective claims for additional work caused by a variation which has not been approved by the Company in accordance with the Contract Variation Procedure before the commencement of such additional work.
9. All authorised additional work resulting from any Variation Proposal shall be priced in accordance with any applicable rates set out in Schedule 4 (Prices and Charging Structure).
10. The Supplier shall at all times act reasonably and shall price each Variation Proposal at the least possible additional cost to the Company that it is reasonably and economically practicable for the Supplier to offer and which has the least possible impact on the terms of this Framework Agreement and the relevant Call-Off Contract, including but not limited to, the Specification.
11. Strict adherence to the procedure described in this Schedule 7 (Contract Variation Procedure) shall be a condition precedent to any addition to the Contract Price for the Services. If the Supplier does not adhere to each paragraph in this Schedule 7 then the Supplier shall not be entitled to any addition to the Contract Price notwithstanding that the Supplier may have supplied additional or varied Services.

APPENDIX 1: FORM OF VARIATION PROPOSAL/VARIATION ORDER

To:	From:
------------	--------------

[Call-Off Contract]/[Framework Agreement] Reference:
Variation Number:
Variation Title:

PART A (TO BE COMPLETED BY THE ORIGINATOR OF THE VARIATION ORDER)		
Description of change:		
Reason for changes and impact (if any) on Framework Agreement / Call-Off Contract:		
Variation Proposal Authorised by:	Proposal Date:	
PART B (TO BE COMPLETED BY THE SUPPLIER)		
Price Breakdown Note: If a further breakdown is needed please append details as a separate sheet.		
Expected Delivery Date:		
Supplier's Representative:		
Print Name:	Signature:	Date:
Completed document to be returned to the Company's Representative		
PART C (TO BE COMPLETED BY THE COMPANY'S REPRESENTATIVE)		
Comment on Parts A and B:		
Variation Authorisation		
Company's Representative:		
Print Name:	Signature:	Date:

SCHEDULE 8: HEALTH, SAFETY, QUALITY AND ENVIRONMENTAL REQUIREMENTS

This page is intentionally blank

SCHEDULE 8: HEALTH, SAFETY, QUALITY AND ENVIRONMENTAL REQUIREMENTS

PART A: HEALTH & SAFETY

1. Summary
2. Not Used
3. LUL Health & Safety (QUENSH)

PART B: QUALITY

PART C: ENVIRONMENTAL REQUIREMENTS

SCHEDULE 8 PART A: HEALTH & SAFETY

1. SUMMARY

1.1 POLICY

At all times the Supplier shall have and shall maintain an appropriate health and safety policy ("Health & Safety Policy") which outlines a commitment to the prevention of injury, ill health and continual improvement by establishing, implementing and maintaining a programme for achieving its objectives which includes:

- Designation of responsibility and authority for achieving objectives at relevant functions and levels
- The means and time-frame by which the objectives are to be achieved
- The objectives shall include commitments to the prevention of injury and ill health, compliance with applicable legal requirements and with other requirements to which the organization subscribes, and to continual improvement

The Supplier shall demonstrate commitment by ensuring the availability of resources essential to establish, implement, maintain and improve occupational health and safety.

1.2 ORGANISATION

1.2.1 Control

The Supplier shall define roles and allocate responsibilities and accountabilities to facilitate effective health and safety management and shall ensure that persons in the workplace take responsibility and are accountable for the aspects of occupational safety and health over which they have control.

1.2.2 Competency and Training

The Supplier shall ensure that any persons under its control are competent on the basis of appropriate education, training or experience. It shall provide training or take other action to meet these needs, evaluate the effectiveness of the training or action taken, and retain associated records.

The Supplier shall designate sufficient competent staff, subject to the approval of the Company's Representative or designated deputy, to support the Supplier to assist him them in undertaking the measures they need to take to comply with the requirements and prohibitions imposed upon them by or under the relevant statutory provisions as detailed in the Management of Health and Safety at Work Regulations 1999 regulation 7 or any subsequent amendments.

As a guide, the level of competency can be assumed to be a higher (Diploma level) qualification accredited by the Qualifications and Curriculum Authority or the Scottish Qualifications Authority.

1.2.3 Communication and Consultation

The Supplier shall establish, implement and maintain procedures for effective communication both internally and with other suppliers, visitors and interested parties.

The Supplier shall establish, implement and maintain a procedure for the participation of workers in respect of hazard identification, incident investigation and development and review of health and safety policies and objectives.

The Supplier shall consult and ensure workers are represented on occupational health and safety matters. Workers shall be informed about their participation arrangements, including who is their representative.

1.3 ARRANGEMENTS FOR ASSESSING AND MANAGING RISK

1.3.1 The Supplier shall issue health and safety procedures and associated documentation, the format and content of all documentation and procedures being subject to approval of the Company.

1.3.2 The Supplier shall establish, implement and maintain a procedure for the ongoing hazard identification, risk assessment, and determination of necessary controls. The Supplier's methodology for hazard identification and risk assessment shall be defined with respect to its scope, nature and timing to ensure it is proactive rather than reactive and provide for the identification, prioritization and documentation of risks and the application of controls. They shall be:

- When determining controls, the Principles of Prevention (detailed in the Management of Health and Safety at Work Regulations 1999, regulation 4) should be applied
- The contractor shall document the significant risks and display the assessment and method statement at point of works.
- The Supplier shall keep the results of hazard identification, risk assessments and control measures up-to-date

1.3.3 The Supplier personnel and any sub-contracted personnel shall hold a current and approved health and safety certification (for example an approved industry certification such as the CSCS card) in order to undertake works on anypart of the TfL Network and Sites . The Supplier shall appoint a person with overall responsibility for managing health and safety when undertaking operational maintenance activities and other associated property works including verification and certification works and the operation of a permit to work system.

1.4 MONITORING AND REVIEW

The Supplier shall review their safety management system at regular and planned intervals, and adjusted as necessary, to ensure that the objectives set in the Supplier's Health & Safety Policy are achieved.

1.4.1 The Supplier shall develop implement and maintain monitoring and measuring processes including but not limited to:

- Independent auditing
- Workplace inspections
- Regular meetings and communications at all levels
- Feedback to staff regarding health and safety concerns

1.4.2 **Incident Investigation**

The Supplier shall establish, implement and maintain a procedure to record, investigate and analyse safety incidents in order to:

- Determine the root cause of the incident (management failings) and the subsequent underlying occupational health and safety deficiencies/other factors that contributed to the incident
- Identify the need for corrective and preventative action and opportunities for continual improvement
- All incidents occurring on TfL premises are to be reported to the Company using the TfL Accident and Incident Reporting Systems
- In respect of serious incidents which have (or could have) resulted in significant injury or property damage and those incidents where enforcement authorities are involved or have been informed, the Supplier shall ensure that procedures exist to ensure that TfL are informed immediately
- The results of incident investigations shall be documented and maintained and reported to TfL at least quarterly
- The Supplier will fully cooperate and liaise with the Company's Representative and any other parties regarding investigation into incidents in compliance with the Company's requirements.

1.4.3 The Company reserves the right to stop any works, operations or actions of the Supplier's personnel or sub-contractors, if in the opinion of the Company or his representative, the manner in which these are being undertaken constitutes a risk to the safety and or health of persons or damage to property.

1.4.4 When establishing and reviewing its objectives, the Supplier shall consider its technological options, its financial, operational and business requirements, and the views of relevant interested parties.

1.5 AUDIT

1.5.1 The Supplier shall ensure that all processes in respect of safety and health are in place during the life of the contract are documented and made available for inspection and/or audit by the Company or its representatives at all times.

1.5.2 The Company shall have the right to conduct or commission an audit of the Suppliers' health, safety, quality, and environmental management system and activities at any time.

SCHEDULE 8 PART A: HEALTH AND SAFETY

2. NOT USED

SCHEDULE 8 PART A: HEALTH AND SAFETY

3. LUL HEALTH & SAFETY (QUENSH)

F0780 A18

Contract Menu

**This Contract Menu must be used in conjunction with
Category 1 Standard S1552 "Contract QUENSH Conditions"**

Contract Menu

Contract No: TfL - 01315

Contract Name Asbestos and Hazardous Materials Services - Lot A Asbestos Services

Client: Transport for London

Supplier: Lucion Environmental

Principal Contractor: Yes No



Guidance

The menu is a tool which is used by the Client to identify conditions that apply to specific contracts and communicate these conditions to the Supplier.

How to complete the menu

- 1) The Client evaluates the scope of work and enters 'Y' or 'N' in the 'Identified by the Client' column of the menu against each condition selected as applicable or not applicable to the Contract. In the 'Other documents / comments' column the Client can make references to other documents which are supplementary information which is available although not contained within the QUENSH manual but should be considered by the Supplier when they review the conditions. Copies of any additional documents identified in the menu shall be made available to the Supplier. All documents referenced in the Menu shall be current issue, unless otherwise advised. This column can also be used to communicate information (comments) to the Supplier which may be of use to the Supplier when reviewing the conditions.
- 2) The Client fills in 'Client menu (Invitation to Tender)' section on the last page of the menu and issues the menu as part of the ITT.
 - a) The Supplier receives the ITT, evaluates the scope of work and, as a requirement of the tendering process, inserts 'Y' or 'N' in the 'Identified by the Supplier' column of the menu against each condition selected as being applicable. These selections may be different from those identified by the Client. Where the Supplier's selection differs from the Client's selection, a clear explanation of the reason for these differences shall be given by the Supplier. A reference to these explanations shall be put in the 'Reference to explanation' column on the menu.
 - b) The Supplier representative signs and dates the 'Supplier menu (Tender)' on the last page of the menu and submits it with the tender, for consideration by the Client.
 - c) Differences in the Client and Supplier menu selections will be discussed and resolved with the Client at subsequent tender review meetings. The agreed final version of the menu selections shall form a mandatory part of the Contract and shall be complied with by all Suppliers and their sub-contractors.
 - d) The menu shall be subject to project version and document control.

Queries on the menu

Any queries in relation to the Contract QUENSH Conditions selected on the menu are to be referred to the Client representative, see contact details/address on last page of the menu.

Contract menu

Requirements in QUENSH

Applicable requirements identified by Client				Applicable requirements identified by Supplier	
Section	Topic	Other documents / Comments	Y / N	Y / N	Reference to explanation - see Section 2a in attached Guidance Notes
4	Agreement of the applicable QUENSH contract conditions				
5	Supplier's selection of sub-contractors		Y	Y	
6	Identification of Safety Critical Activities		Y	Y	
7	Works Environmental Management		Y	Y	
8	Emergency Plan		Y	Y	
9	Method Statements		Y	Y	
10	Health, Safety and Environment File		Y	Y	
11	Pre-start LU health, safety and environment meeting		Y	Y	
12	Supplier's site induction		Y	Y	
13	Site Person in Charge		Y	Y	
14	Staff requirements		Y	Y	
14.1	Behaviours		Y	Y	
14.1.1	Alcohol and drugs		Y	Y	
14.2	Control of hours worked		Y	Y	
14.2.1	Working Time Regulations		Y	Y	
14.2.2	Fatigue		Y	Y	
14.3	Knowledge		Y	Y	
14.3.1	English language		Y	Y	
14.3.2	Access Card and Worksite Briefing		Y	Y	
14.3.3	Visitors to sites		Y	Y	
14.4	General competence		Y	Y	
14.4.1	Evidencing competence of safety critical staff		Y	Y	
14.4.2	Identification of safety critical staff		Y	Y	
14.4.3	Competent external safety critical personnel		Y	Y	
14.4.4	Training		Y	Y	
14.4.5	Asset specific competence		Y	Y	
14.5	Medical requirements		Y	Y	
14.6	Identification of Suppliers staff		Y	Y	
14.7	Clothing		Y	Y	
15	Permits and licences		Y	Y	
15.1	LU specific permits and licences		Y	Y	
15.2	Permits, licences and certificates for Supplier's staff		Y	Y	
16	The Principles of Access		Y	Y	

Printed copies of this document are uncontrolled.

16.1	Introduction		Y	Y	
16.2	Access to Stations		Y	Y	
16.3	Access to Track		Y	Y	
16.4	Access to depots		Y	Y	
17	Applying for Planned Access		Y	Y	
17.1	Introduction		Y	Y	
18	Applying for General Access		Y	Y	
18.1	Constraints that apply to Generic Access		Y	Y	
19	Access for fault repair		Y	Y	
20	Operational Assurance		Y	Y	
21	Closures and possessions		Y	Y	
21.1	Requirements for closures		N	N	
21.2	Requirements for possessions		Y	Y	
22	Controls at point of access		Y	Y	
22.1	Publication of works		Y	Y	
22.2	Checks at point of access		Y	Y	
22.3	Signing-on with the Station Supervisor		Y	Y	
22.4	Track specific requirements		Y	Y	
22.4.1	Person providing protection		Y	Y	
22.4.2	Possessions		Y	Y	
23	Removal of supplier's personnel from LU Premises		Y	Y	
24	Incidents		Y	Y	
25	Notification of regulatory concern or action		Y	Y	
26	Confidential Incident Reporting and Analysis System (CIRAS)		Y	Y	
27	Monitoring		Y	Y	
27.1	LU inspections		Y	Y	
27.2	Monitoring the supply chain		Y	Y	
27.3	Health, safety and environmental surveillance by the supplier's personnel		Y	Y	
27.4	Work location inspection and audit		Y	Y	
27.5	Timescales for rectifying non-compliances		Y	Y	
28	Radio transmitters and transceivers		Y	Y	
29	Mobile phones		Y	Y	
30	Knives		Y	Y	
31	Site health, safety and environment committee		Y	Y	
32	Site housekeeping and security		Y	Y	
33	Accidental damage, obstruction or interference with assets		Y	Y	
34	Delivery of materials		Y	Y	
35	Conveyance of loads		Y	Y	
35.1	Conveyance of loads on lifts and escalators		Y	Y	
35.2	Conveyance of hazardous		Y	Y	

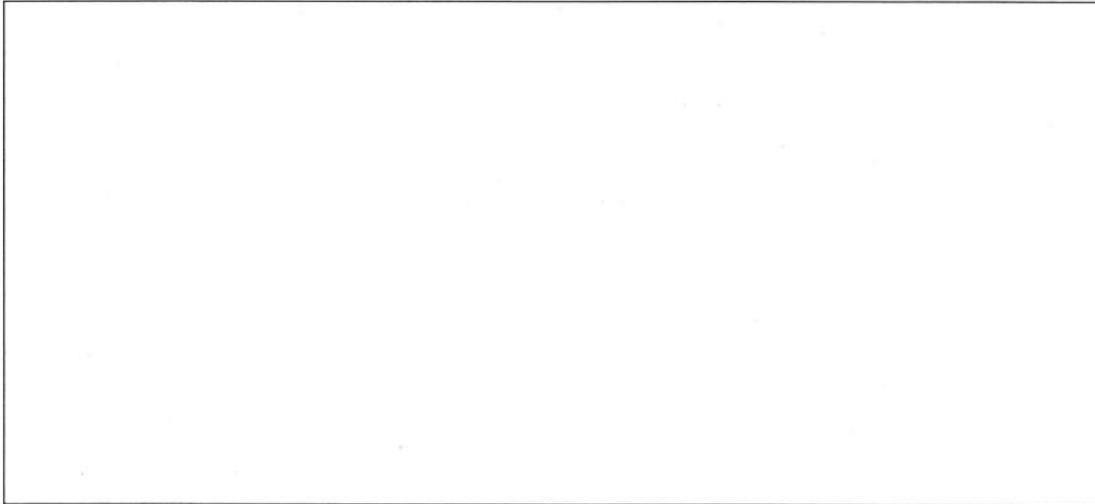
Printed copies of this document are uncontrolled.

	materials and substances				
36	Asbestos (non asbestos removal projects)		Y	Y	Scope of works includes non removal works
37	Working in or near lifts and escalators		Y	Y	
38	Work on or adjacent to utilities and High Voltage cables (buried services)		Y	Y	
39	Working on or about the track		Y	Y	
40	Access to electrical sub-stations, working equipment, relay and other secure rooms		Y	Y	
41	Entering areas with gaseous fire suppression systems		Y	Y	
42	Fire prevention		Y	Y	
42.1	General requirements		Y	Y	
42.2	Temporary fire points		Y	Y	
42.3	Timber		Y	Y	
42.4	Composites		Y	Y	
42.5	Sheeting materials		Y	Y	
42.6	Gas cylinders		Y	Y	
42.6.1	Use of gas cylinders in below ground locations		N	N	
42.6.2	Storage of gas cylinders (above ground)		N	N	
42.7	Flammable and highly flammable materials		Y	Y	
42.7.1	Use of flammable and highly flammable materials below ground		N	N	
42.7.2	Storage of flammable and highly flammable materials below ground		N	N	
43	Hot work and fire hazards		Y	Y	
43.1	Hot work		N	N	
43.2	Reasonable notice of works		N	N	
43.3	Precautions		Y	Y	
43.3.1	Buildings and assets		Y	Y	
43.3.2	Gas cylinders		N	N	
43.3.3	Gas detection		Y	Y	
44	Storage		Y	Y	
44.1	General requirements for storage		Y	Y	
44.2	Trackside storage		Y	Y	
44.3	Hazardous materials and substances		N	N	
44.4	Allocation of space on operational property		Y	Y	
45	Plant and equipment		Y	Y	
46	Clearance approvals		Y	Y	
47	Access equipment		Y	Y	
48	Temporary works		Y	Y	

49	Temporary fences and hoardings		Y	Y	
50	Temporary lighting and power supplies		Y	Y	
50.1	General requirements		Y	Y	
50.2	Lighting in tunnels and shafts		Y	Y	
51	Screening of lights and positioning		Y	Y	
52	Environmental requirements		Y	Y	
52.1	General environmental requirements		Y	Y	
52.2	Environmental nuisance		Y	Y	
52.3	Water		Y	Y	
52.4	Waste management		Y	Y	
52.5	Noise and vibration		Y	Y	
52.6	Archaeology, historical interest and listed buildings		Y	Y	
52.7	Wildlife and Habitats		Y	Y	
52.8	Resource Use		Y	Y	
52.9	Pest control		N	N	
52.10	Land and water pollution prevention		N	N	
53	Quality requirements		Y	Y	
53.1	Records		Y	Y	
53.2	Retention period		Y	Y	
53.3	Availability of records for inspection		Y	Y	
53.4	Statistical process control, audit and inspection procedures		Y	Y	
53.5	General quality requirements		Y	Y	
53.6	Quality Plan		Y	Y	
53.7	Testing and inspection		Y	Y	
53.8	Certification of conformity		Y	Y	
53.9	Quarantine		Y	Y	
53.10	Traceability		Y	Y	
53.11	Maintenance and servicing		N	N	
53.12	Design		N	N	
53.13	Computer aided design		Y	Y	
53.14	Asset commissioning and handover		N	N	

Printed copies of this document are uncontrolled.

Other requirements / comments



Client/Supplier approval

Client Menu (Invitation to Tender)

Prepared by: _____ Signature: _____

Approved by
(the Client's
representative): _____ Signature: _____

Title: _____

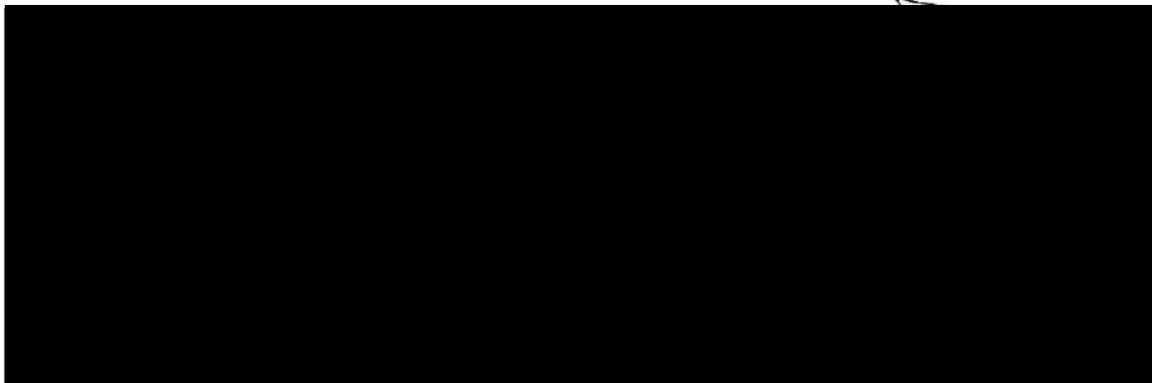
Address: _____

Phone No: _____

Email: _____

Revision of this menu: _____

Supplier Menu (Tender)



Revision of this menu: 1

Contract Menu (Final Approval of Menu)

Evidence shall be recorded of any amendments to the Client's menu which were agreed in establishing the Contract Menu.

Client's
representative
approval: _____ Signature: _____

Supplier's
representative
acceptance: _____ Signature: _____



SCHEDULE 8 PART B: QUALITY

1. Records

- 1.1 The Supplier shall maintain such records that are specified by the Company, or required under legislation, and this shall include (as a minimum):
- 1.1.1 details of any non-compliance against any Standard;
 - 1.1.2 records of audits and site inspections;
 - 1.1.3 records of the qualifications, competence and training of staff;
 - 1.1.4 quality assurance inspections conducted (including the identity of the inspector concerned);
 - 1.1.5 equipment test calibration and verification checks conducted (including the identity of the inspector or tester concerned);
 - 1.1.6 process and manufacturing data relating to the Contract, including an audit trail for material or component identity, source and status; any process, inspection or test activity so directed by special instructions or any contract quality plan invoked by the Contract (including those set out in paragraph 6.1 of this Schedule 8 Part B (Quality));
 - 1.1.7 non-conforming service or product records;
 - 1.1.8 records of all related incoming and outgoing certificates of conformity and associated release documentation;
 - 1.1.9 records of tender and contract reviews; and
 - 1.1.10 the Supplier's policy with regard to quality.

2. Retention Period

Records shall be retained by the Supplier for a minimum of twelve years unless otherwise specified by the Company, or for any longer period as required by Applicable Laws.

3. Availability of Records for Inspection

The Supplier shall make all such records available to the Company within three (3) Working Days of any request by the Company.

4. Statistical Process Control, Audit and Inspection Procedures

Where, for quality management purposes, statistical process control procedures, audit or inspection procedures are adopted, full details of the proposed procedures used by the Supplier are to be submitted to the Company for approval prior to implementation.

5. General Quality Requirements

5.1 The Supplier shall:

- 5.1.1 appoint member(s) of its management team who, irrespective of other responsibilities, have defined authority which includes:
 - 5.1.2.1 ensuring that a quality management system is implemented and maintained;
 - 5.1.2.2 reporting to senior management on the performance of the quality management system, including any areas for improvement;
 - 5.1.2.3 ensuring awareness of customer requirements throughout the Supplier; and
 - 5.1.2.4 liaison with customers on matters relating to the Supplier's management system that result from auditing or non conformances;
- 5.1.2 ensure that during internal processing and final delivery of a product or Service to the intended destination, that the identification, packaging, storage, preservation and handling do not affect conformity with that product or Service requirements;
- 5.1.3 not proceed past "hold points" until all the specified activities have been satisfactorily completed and the related documentation is available to and authorised by the Company;
- 5.1.4 following receipt of a rejection, take immediate action to inspect all stocks and work in order to assess risk and loss and advise the Company of the findings;
- 5.1.5 take preventative action to avoid a recurrence of the non-conformities;
- 5.1.6 immediately inform the Company when the Supplier has reason to suspect non-conformities with previously supplied products or Services;
- 5.1.7 be responsible for ascertaining the cause of and responsibility for non-conformance, and for taking suitable corrective action to prevent recurrence;
- 5.1.8 document all corrective actions undertaken by the Supplier;
- 5.1.9 ensure that its supply chain work to correct practices, including accepted documentation defining the techniques to be used, workmanship criteria, safety of others (including the public), health precautions, plant and equipment to be used and training and licensing requirements;

- 5.1.10 ensure that the works comply with any manufacturer's recommendations, instructions and guidelines, unless otherwise directed by the Company;
- 5.1.11 operate and maintain all plant, equipment and processes in accordance with the relevant manufacturer's or supplier's specification or procedures, unless otherwise directed by the Company;
- 5.1.12 take all necessary steps to identify, recall, re-inspect and replace any equipment or parts which have been inspected using inspection, measuring or test equipment whose calibration is found to be defective or unknown;
- 5.1.13 store and protect inspection, measuring and test equipment and materials to prevent misuse, damage and deterioration;
- 5.1.14 ensure that all equipment bears an identification of its calibration or maintenance status, in a manner that clearly indicates it is within the calibration or maintenance period; and
- 5.1.15 deliver all Services, technical and non-technical, in accordance with the Specification and relevant ISO standards.

6. Quality Plan

6.1 The Supplier shall:

- 6.1.1 provide a recognised Quality Management Plan (as required pursuant to Schedule 17 (Contract Management)) and Quality Assurance and Management System applicable to the compliant delivery of the Services, certified to the BS EN ISO 9001 2015 standard, or equivalent, by a United Kingdom Accreditation Service ("UKAS") (or equivalent accredited certification body) or to a level that meets the approval of the Company;
- 6.1.2 have in place a Quality Management Policy to the standard of BS EN ISO 9001, or equivalent or to a level that meets the approval of the Company; ensure the Quality Management Plan and Quality Assurance and Management System applied to this Contract shall be annually and independently audited and verified by a UKAS accredited body. This applies equally to environmental management, health and safety, and any other which may be included in the Contract or which may be introduced at any time;
- 6.1.3 oversee all activities and tasks needed to maintain optimisation and delivery of the Services. This includes creating and implementing quality planning and assurance, as well as quality control and quality improvement. The Supplier shall ensure that the Quality Management Plan demonstrates the Supplier's process control system as required for the Contract. It shall include the practice and fundamental principles of Total Quality Management ("TQM") including: plan, do, check act;
- 6.1.4 ensure the Quality Management Plan shall be operated by the Supplier throughout the duration of the Contract and the Supplier shall maintain and periodically revise the Quality Management Plan as required (and in accordance with Schedule 17 (Contract Management)) and provide it in its amended form to the Company each time it is amended; and

6.1.5 have in place a robust audit regime to ensure optimisation of quality and standards of the delivery of the Services.

6.2 The format of the Quality Management Plan shall be determined by the Company and should be developed in accordance with BS ISO 10005:2005 (Guidance on Quality Plans) or to a level that meets the approval of the Company.

SCHEDULE 8 PART C: ENVIRONMENTAL REQUIREMENTS

Definitions

“**BREEAM**” means the Building Research Establishment Environmental Assessment Method.

“**BREEAM New Construction Infrastructure (Pilot)**” means the Building Research Establishment Environmental method and assessment pilot Scheme

“**CEEQUAL**” means the Engineering Environmental Quality Assessment and Award Scheme.

“**Congestion Charge**” means the fee charged on most motorised vehicles operating within a defined charge zone in London under a scheme managed by TfL.

“**Environmental Management System**” or “**EMS**” has the meaning given to it in paragraph 1.2 of this Schedule 8 Part C (Environmental Requirements).

“**Environmental Management Plan**” or “**EMP**” has the meaning given to it in paragraph 1.3 of this Schedule 8 Part C (Environmental Requirements).

“**Green Infrastructure**” or “**GI**” has the meaning given to it in Schedule 3 (Specification) and is set out within Appendix A (Services Matrix) of Schedule 3 (Specification).

“**LU HSE Policy**” means the policy set out in Appendix 1 to this Schedule 8 Part C (Environmental Requirements).

“**Pollution Response Plan**” or “**PRP**” has the meaning given to it in paragraph 8.5 of this Schedule 8 Part C (Environmental Requirements).

“**Site Noise and Vibration Evaluation and Control**” means the process set out in Appendix 4 to this Schedule 8 Part C (Environmental Requirements).

“**TfL Corporate Environment Framework**” means the policy set out in Appendix 2 to this Schedule 8 Part C (Environmental Requirements).

“**TfL Specialist Services HSE Policy**” means the policy set out in Appendix 1 to this Schedule 8 Part C (Environmental Requirements).

“**Waste Management Plan**” or “**WMP**” has the meaning given to it in paragraph 7.2.1 of this Schedule 8 Part C (Environmental Requirements) and as set out in Appendix 5 to this Schedule 8 Part C (Environmental Requirements).

1. Section 1

1.1. Introduction

- 1.1.1. The Mayor wants London to be recognised as a world leader in improving the environment, locally and globally. The Greater London Authority (“GLA”) has published a number of detailed strategic aims on air quality, water, waste, climate change adaptation, and climate change mitigation and energy. These build on the GLA’s “Leading to a Greener London” [document](#)¹, published in 2009, which sets out London’s aim to be one of the greenest cities in the world. There is an ambition to cut London’s carbon emissions by 60% by 2025.
- 1.1.2. More specifically, the Company has set the following targets within the TfL Corporate Environment Framework (set out in Appendix 2 to this Schedule 8 Part C (Environmental Requirements)), to help achieve the Mayoral goals:
- 1.1.2.1. the Company will contribute towards achieving the Mayor’s target of a 60 per cent reduction in CO₂ emissions by 2025 (against a 2013 baseline) by aiming for a 40 per cent cut in TfL CO₂ emissions;
 - 1.1.2.2. the Company will further reduce the amount of carbon emitted per passenger journey by cutting emissions of CO₂ per passenger kilometre by 40 per cent by 2025 (against a 2013 baseline);
 - 1.1.2.3. the Company will seek to support the Mayor’s air quality targets for London by delivering a 50 per cent reduction in NO_x emissions from the bus fleet by 2020, against a 2013 baseline;
 - 1.1.2.4. the Company will reduce particulate matter (“PM”) emissions from the bus fleet by 25 per cent by 2020, against a 2013 baseline; and
 - 1.1.2.5. the Company will reuse, recover and recycle 99 per cent of non-hazardous waste by 2031. The Company will set interim targets to achieve this and will use 30 per cent of non-hazardous waste specifically for energy from recovery.
- 1.1.3. The Company expects the Supplier to play a leading role in helping the Company achieve its current and future environmental objectives and targets, to ensure the delivery of all current and future Mayoral policies and strategies relevant to the Company.

¹ <http://www.london.gov.uk/priorities/environment/vision-strategy/leading-to-a-greener-london>

1.2. Environmental Management System

- 1.2.1. The Supplier shall have in place an environmental management system ("EMS") that is bespoke to the Contract and which, as a minimum, meets the requirements set out below:
 - 1.2.1.1. the EMS shall be certified to the BS EN ISO14001 standard, or equivalent standard, by a United Kingdom Accreditation Service ("UKAS") (or equivalent) accredited certification body or to a level that meets the approval of the Company or the Supplier shall have an environmental management policy, and also an independently audited EMS to the standard of BS EN ISO14001, or equivalent;
 - 1.2.1.2. the Supplier shall carry out environmental aspect and impact assessments to identify all potential environmental aspects and impacts related to its activities, products and services it delivers and the Supplier shall provide details of any necessary environmental control measures to the Company. These are included in risk and benefit identification, control and mitigation measures outlined in designs and safe systems of work for any element of the works forming part of the Services;
 - 1.2.1.3. the Supplier shall review the environmental aspect and impact assessments as a minimum once a year, but must ensure they, and any associated control and mitigation measures, remain pertinent to the works forming part of the Services; and
 - 1.2.1.4. the EMS shall be consistent with and support the principles of the Rail and Underground HSE Policy, set out in Appendix 1 and the Company's Corporate Environment Framework set out in Appendix 2 to this Schedule 8 Part C (Environmental Requirements).

1.3. Environmental Management Plan

- 1.3.1. As part of the EMS, the Supplier shall develop, implement and maintain a contract specific environmental management plan ("EMP") (in accordance with the requirements of Schedule 17 (Contract Management)) for the delivery of the Services, to be submitted to and approved by the Company's Representative within three (3) months of the Commencement Date.
- 1.3.2. The EMP shall be updated annually and not later than on each anniversary of the Commencement Date.
- 1.3.3. The Supplier shall make the EMP available to the Company for regular review (but not less than annually) at the Quarterly Review meetings and Annual Strategic Review meetings held in accordance with Schedule 17 (Contract Management).
- 1.3.4. Within the EMP, the Supplier shall demonstrate its contribution towards delivering the Company's environmental objectives including, but not limited to, how the Supplier shall:

- 1.3.4.1. ensure environmental aspects are considered and incorporated in to its activities;
- 1.3.4.2. use partnership working on environmental matters (for example, regulators, environmental bodies, industry groups, client and supply chains);
- 1.3.4.3. identify all potential environmental aspects and impacts of the Contract, specific to its activities (from planning to delivery) demonstrating how the Supplier intends to minimise the potential risks and impacts;
- 1.3.4.4. ensure its environmental key performance indicators and targets contribute to the objectives and targets set out in the Company's Corporate Environment Framework (set out in Appendix 2 to this Schedule 8 Part C (Environmental Requirements)) in relation to:
 - **carbon, energy and climate resilience:** demonstrating that the Supplier is actively minimising use of energy derived from fossil fuels in performing its obligations under the Contract; setting and achieving a target/reduction in CO₂ emissions, in line with the Company's environmental objectives and targets;
 - **reduction of air pollutants:** setting and achieving targets for reduction in air pollutants (PM and nitrogen oxides) in line with the Company's environmental objectives and targets from sources under the control of the Supplier, and demonstrating how the Supplier is meeting the Company's vehicle emissions requirements;
 - **reduction of noise, nuisance and vibration:** setting and achieving a target/reduction in noise in line with the Company's environmental objectives and targets;
 - **materials, resources and waste management:** demonstrating a reduction in use of resources, such as water, minimising the generation of waste, avoiding the use and production of hazardous materials and the prevention of pollution, and achieving a % of waste diverted from landfill rate of 99% (or an equivalent reuse and recycling rate); and
 - maintaining and, where possible, enhancing the quality of the built and natural environment;
- 1.3.4.5. demonstrate that the Supplier is meeting the requirements of the Company's Sustainable Timber Policy; and
- 1.3.4.6. provide the Company with an environmental staffing plan, setting out the Supplier's environmental management organisation structure, identifying roles, accountabilities and responsibilities, and points of liaison with the Company. The environmental staffing plan must

demonstrate resources are appropriate to the scale and nature of the relevant Services.

1.4. Report on Progress

1.4.1. The Supplier shall provide the Company's Representative with an environmental performance report, including information on the performance of the EMS. The report shall be submitted annually and not later than on each anniversary of the Commencement Date, and shall contain, but shall not be limited to:

1.4.1.1. any updates to previous EMPs;

1.4.1.2. a summary of the environmental statistics for the previous year, including inter alia, environmental reviews;

1.4.1.3. a summary of findings and trends from audits, inspections and evaluations of compliance with legal and with other requirements;

1.4.1.4. a summary of any changing circumstances, including developments in legal and other requirements; and

1.4.1.5. proposed environmental improvement targets, together with commentary on the previous year's improvement targets, including status of corrective and preventative actions undertaken by the Supplier.

1.5. Environmental Planned General Inspections

1.5.1. As part of the EMP and within six (6) weeks of the Commencement Date, the Supplier must review and update the current Environmental Planned General Inspection ("EPGI") template (set out in Appendix 3 to this Schedule 8 Part C (Environmental Requirements)) with current legislation and other requirements, relevant to this Contract. The template must be kept up to date by the Supplier at all times.

1.5.2. Frequency of EPGIs must conform to the requirements of Schedule 12 (Performance Measurement) for Supplier audits but shall be suitable and sufficient to ensure all risks are mitigated.

1.6. General Requirements

Without prejudice to its other obligations contained in this Contract, the Supplier shall ensure that it carries out its obligations in response to any environmental incidents and their reporting in a manner approved by the Company.

2. Section 2

2.1. Sustainable Design and Operations

2.1.1. The Supplier shall address, as a minimum, the following principles to maximise the sustainable performance of its activities including, but not limited to:

2.1.1.1. using principles that consider the longer-term design life of the building and assets and that will offer solutions that will remain state of the art;

2.1.1.2. designing systems and installing and maintaining equipment that will reduce energy use and the operational cost of the buildings and assets. In particular the Supplier shall:

- ensure energy efficiency measures (including lighting, HVAC, building management systems) are utilised;
- ensure that the new systems are compatible with the energy system and load requirements at the existing Site;
- investigate the feasibility of incorporating renewable or decentralised energy;
- ensure designs provide natural ventilation, rather than mechanical, where possible; and
- ensure passive design measures remove heat from the asset, rather than using mechanical cooling;

2.1.1.3. designing systems and installing and maintaining equipment that minimises water use during installation and operation of the asset. Maintenance of water consuming equipment will include, but shall not be limited to, low volume taps/showers, dual flush toilets, waterless urinals, low volume urinal flush controls, rainwater and grey water recycling systems, green infrastructure irrigation systems and cooling towers.

2.2. CEEQUAL and BREEAM

2.2.1. Where the Company has already arranged for the activity to be part of CEEQUAL, BREAAAM New Construction Infrastructure (pilot), and/or BREEAM the Supplier shall compile and provide relevant evidence to support CEEQUAL, BREAAAM New Construction Infrastructure (pilot), and/or BREEAM submissions to the Company. The Supplier shall use the CEEQUAL or BREEAM processes to aid the consideration of environmental sustainability and to drive improvements in performance during the design development, installation and maintenance phases of the Services.

3. Section 3

3.1. Climate Resilience

- 3.1.1. The Supplier shall ensure that any design, installation and maintenance work it performs as part of the Services takes into account the climate parameters over the whole design life in which the building and asset must perform, to support resilience to extreme weather.
- 3.1.2. The Supplier shall ensure that the building and asset remains fit-for-purpose for the Company's needs during its design life period, taking into account the range of extreme weather and climate parameters that may occur during that time. This shall include, but shall not be limited to:
 - 3.1.2.1. keeping the buildings and assets within specified temperature tolerances as defined in the Company's standards relevant to the building and asset type applicable to this Contract; and
 - 3.1.2.2. all refits including measures to assist with keeping buildings and assets resilient during their design life including, but not limited to, water efficiency, natural ventilation and shading, greening, and sustainable drainage.

4. Section 4

4.1. Reducing Carbon Emissions and water usage

4.1.1. The Supplier shall:

- 4.1.1.1. ensure that when replacing assets, the Supplier selects assets with more energy efficient equipment. The Supplier shall notify the Company's Representative where this is not technically feasible, for example, in relation to a heritage feature;
- 4.1.1.2. measure and report on carbon emissions and develop plans to reduce carbon emissions and energy usage that supports the Company in delivering its programme to improve energy efficiency, helping decrease emissions and lower costs;
- 4.1.1.3. make use of the Company's automated Monitoring and Targeting ("aM&T") software to analyse site performance, control out of hours consumption and also suggest, measure and verify efficiency enhancement projects;
- 4.1.1.4. maintain and run on site generation equipment (including PV, wind, solar thermal, combined heat and power and absorption chillers) to reduce and optimise building carbon emissions; and
- 4.1.1.5. maintain the Company's assets in accordance with all ozone depleting substances and fluorinated greenhouse gas legislation compliance, including statutory air conditioning inspections, to optimise efficiency of cooling equipment, for current, pending and future legislation.

5. Section 5: Air Quality and Dust

5.1. Control of Vehicle Emissions

- 5.1.1. The Supplier shall ensure that in the procurement or leasing of vehicles for use in the delivery of the Services:
 - 5.1.1.1. consideration is given to CO₂, air quality and noise impacts; and
 - 5.1.1.2. a technology neutral approach is adopted.
- 5.1.2. All vehicles used in the delivery of the Services shall meet or exceed the following CO₂ limits and European emission standards at the Commencement Date:
 - 5.1.2.1. cars - maximum certified CO₂ emissions of 99 g/km and a minimum of Euro 6 emission standards;
 - 5.1.2.2. vans equal to or less than 1205 kg kerb weight – maximum certified CO₂ emissions of 115 g/km CO₂ and a minimum of Euro 6 emission standards;
 - 5.1.2.3. vans between 1205 and 1660 kg kerb weight – maximum certified CO₂ emissions of 155 g/km CO₂ and a minimum of Euro 6 emission standards;
 - 5.1.2.4. vans greater than 1660 kg kerb weight – maximum certified CO₂ emissions of 189 g/km CO₂ and a minimum of Euro 6 emission standards; and
 - 5.1.2.5. heavy duty vehicles greater than 3500 kg kerb weight – Euro 6 emission standards.
- 5.1.3. If any vehicles used in the provision of the Services are due for replacement before the Expiry Date, the Supplier shall ensure that the replacement vehicle/engine meets or exceeds the European emission standards and CO₂ limits (if applicable) for the year in which it is introduced into the fleet. Standards and the years in which they apply are set out in paragraph 5.3.3 below. If compliant vehicles/engines are not available by the specified deadline, the Company may (at its sole discretion) consider acceptance of an alternative standard proposed by the Supplier until such time as those vehicles become available.

5.2. European Emission Standards for Road Vehicles

- 5.2.1. In line with Mayoral environmental strategy and the Company's commitments to reduce CO₂ emissions, the Supplier is encouraged to include zero or ultra low carbon vehicles such as electric or plug-in hybrid or bio methane vehicles in its fleet, wherever possible.
- 5.2.2. Any necessary recharging/refuelling infrastructure required for low carbon vehicles to be supplied by the Supplier on the Company's Sites will only be permitted subject to the Company's written acceptance and by separate agreement on maintenance, installation and running costs. Where the Supplier operates such vehicles, operating experience and data will be shared with the Company on request.
- 5.2.3. The Supplier shall select vehicles for the performance of the Services which meet the highest environmental criteria and will be eligible for a 100% discount from the Congestion Charge. The Supplier shall be solely responsible for payment of any

Congestion Charge and the Company does not accept any claims for reimbursement of Congestion Charges.

5.2.4. The Supplier shall ensure that all vehicles used in the performance of the Services are operated in such a way to ensure that environmental impacts are reduced as far as reasonably practicable. Operating data for all vehicles will be shared with the Company when requested.

5.2.5. The Supplier shall:

5.2.5.1. ensure vehicles used in connection with the Services are regularly serviced in line with the Manufacturers recommendations;

5.2.5.2. ensure all faults or problems on such vehicles are repaired/addressed as soon as practicable; and

5.2.5.3. monitor and record all vehicle fuel and mileage in connection with the performance of the Services.

5.2.6. The Supplier shall report the following information to the Company on a Quarterly basis in advance of each Quarterly Review as set out in Schedule 17 (Contract Management):

5.2.6.1. vehicle make and model;

5.2.6.2. vehicle servicing frequency;

5.2.6.3. vehicle fuel (fuel type and litres used);

5.2.6.4. vehicle mileage (excluding hire vehicles); and

5.2.6.5. percentage of the fleet on hire.

The Company reserves the right to include additional monitoring requirements if required.

5.2.7. The Supplier shall ensure that all driving staff undertake a fuel efficient and safe driver training course within three (3) months of commencing performance of the Services. The Supplier shall ensure that the training course consists of theoretical training and practical implementation skills and is a minimum duration of one (1) hour.

5.2.8. The Supplier shall provide the driver training records to the Company as instructed by the Company's Representative.

5.3. Equipment and Non-Road Mobile Machinery

5.3.1. The Supplier shall ensure that the adverse impacts of emissions from equipment used in the performance of the Services are minimised. Measures to be considered for limiting emissions and avoiding nuisance will include any one or more of the following as appropriate (and as far as reasonably practicable):

5.3.1.1. ensuring that the engines of all vehicles and equipment used in connection with the Services are not left running unnecessarily;

- 5.3.1.2. using low emission vehicles and equipment fitted with catalysts, diesel particulate filters or similar devices;
 - 5.3.1.3. using ultra low sulphur fuels in plant and vehicles;
 - 5.3.1.4. requiring equipment and vehicles to be well maintained, with routine servicing to be completed in accordance with the manufacturers' recommendations and records maintained for the work undertaken;
 - 5.3.1.5. requiring all vehicles, including off-road vehicles, to hold current MOT certificates, where required by Applicable Laws (or tested to an equivalent standard) and requiring them to comply with exhaust emission regulations for their class;
 - 5.3.1.6. using routes and operating equipment away from potential receptors such as houses, schools and hospitals;
 - 5.3.1.7. avoiding the use of diesel or petrol powered generators and instead using mains electricity or battery powered equipment;
 - 5.3.1.8. maximising energy efficiency (this may include using alternative modes of transport, maximising vehicle utilisation by ensuring full loading and efficient routing); and
 - 5.3.1.9. providing all operating data which complies with the schedules, deadlines and timelines as required to the Company as part of the Supplier's Quarterly reporting obligations (as set out in Schedule 17 (Contract Management)).
- 5.3.2. All of the Supplier's non-road mobile machinery ("NRMM") must meet or exceed the emission standards relevant at the Commencement Date, which are as follows:
- 5.3.2.1. NRMM of net power between 19 and 36 kW –Stage IIIA of EU Directive 97/68/EC (as amended) emission standards;
 - 5.3.2.2. NRMM of net power between 37 and 55 kW –Stage IIIA of EU Directive 97/68/EC (as amended) emission standards;
 - 5.3.2.3. NRMM of net power between 56 and 560 kW –Stage IIIB of EU Directive 97/68/EC (as amended) emission standards; and
 - 5.3.2.4. from 1 September 2020: NRMM of net power between 37kW and 560kW used on any site within Greater London – Stage IIIB of EU Directive 97/68/EC (as amended) emission standards.
- 5.3.3. In addition, where the requirements of "The control of dust and emissions during construction and demolition - Supplementary Planning Guidance (SPG) Greater London Authority (2014)" are applicable, all of the Supplier's NRMM must comply with the following additional requirements for the NRMM Low Emission Zone detailed in the SPG:
- 5.3.3.1. NRMM used on any site within the Central Activity Zone or Canary Wharf will be required to meet Stage IIIB of EU Directive 97/68/EC (as amended) emission standards as a minimum; and

5.3.3.2. from 1 September 2020: NRMM used on any site within the Central Activity Zone or Canary Wharf must meet Stage IV of EU Directive 97/68/EC (as amended) emission standards as a minimum.

5.3.4. All NRMM must meet the applicable standards unless it can be demonstrated that the machinery is not available or that a comprehensive retrofit to meet PM10 and NOx emission standards is not feasible. In this situation, every effort must be made by the Supplier to use the least polluting equipment available, including retrofitting technologies to reduce particulate emissions.

5.3.5. The Supplier must comply with the GLA's NRMM exemption policy (which can be found at nrmm.london) for any NRMM which cannot meet the emissions requirements, The Supplier shall seek exemption from the Company's Representative for any NRMM of net power between 19 and 36 kW that cannot comply with the emissions standards.

5.3.6. The Supplier shall also:

5.3.6.1. maintain an inventory of all on-site NRMM using the GLA's nrmm.london database; and

5.3.6.2. regularly service all machinery and keep records on Site.

5.4. **Dust**

5.4.1. The Supplier shall use the best practicable means to reduce dust and other emissions at all times during performance of the Services and shall not to create a dust nuisance.

5.4.2. If the Company's Representative decides that the Supplier is not dealing adequately with the control of dust or other emissions, the Company's Representative may instruct the Supplier to carry out such additional measures as the Company's Representative considers necessary. Such measures are not subject to the Contract variation procedure set out in Schedule 6 Part A (Contract Variation Procedure) of the Contract.

6. Section 6: Noise and Vibration

6.1. General

6.1.1. The Supplier shall:

- 6.1.1.1. use the best practicable means to control and limit noise and/or vibration levels so that affected properties, and other sensitive receptors, are protected from excessive or prolonged noise and vibration associated with all activities;
 - 6.1.1.2. develop and maintain a Noise and Vibration Management Plan, as part of the EMP, for activities with the potential to generate noise and/or vibration. The Noise and Vibration Management Plan shall set out how noise and vibration requirements shall be managed and the Supplier shall undertake the Services in strict adherence to this plan;
 - 6.1.1.3. apply the best practicable means to reduce noise and vibration at all times having regard to the provisions of the latest edition of BS5228 (Code of Practice for Noise and Vibration Control) or other relevant Good Industry Practice;
 - 6.1.1.4. stipulate and ensure adherence to behavioural conditions for workers in relation to minimising impacts to neighbours, such as conduct when arriving and leaving the Company's Sites during any night works; and
 - 6.1.1.5. employ a trained and competent person to undertake noise and/or vibration monitoring if required and comply with any additional measures required including relocation or modification of equipment to reduce noise and vibration. The monitoring scope shall be agreed with in advance with the Company's Representative and monitoring results shall be provided to the Company on request.
- 6.1.2. In its performance of the Services, the Supplier shall comply with the requirements of the Company's Pathway Site Noise and Vibration Evaluation and Control (set out in Appendix 4 to this Schedule 8 Part C (Environmental Requirements)).

6.2. Prior Consent

- 6.2.1. If activity with the potential to generate noise and vibration is to be carried out outside of normal working hours, and/or the noise and vibration generated is likely to cause significant disruption or harm, the Supplier shall:
- 6.2.1.1. liaise with the Company to determine whether a Section 61 consent (under the Control of Pollution Act 1974), or other form of noise agreement, will need to be in place prior to commencing the relevant works;
 - 6.2.1.2. provide the Company with the following information to enable a decision to be made on whether a Section 61 Consent, or other form of noise agreement, is required:

- the nature of the activity being undertaken;
- the time of day the activity will be undertaken;
- the duration of the activity;
- the proximity of neighbours; and
- the sensitivity of neighbours (for example, residents, schools, hospitals and places of worship) that would likely be considered more sensitive to noise than industrial areas); and

6.2.1.3. be responsible for obtaining the consent prior to commencing the relevant works, and for complying with all aspects of the consent.

6.3. Notifications

6.3.1. The Supplier shall take a proactive approach to notifying neighbours and other relevant stakeholders in advance of the commencement of any construction or maintenance works being performed by the Supplier as part of the Services that will affect them in any way, including noise and vibration impacts, impacts from staff noise, access and welfare or staff parking and travel.

6.3.2. The Supplier shall submit to the Company's Community Relations representative (via communityrelations@tfl.gov.uk) the draft notification letters for approval no less than 14 days prior to the works commencing.

6.3.3. Notification letters shall include details of the:

6.3.3.1. location of works;

6.3.3.2. reason for the works;

6.3.3.3. information about potential impacts: noise and vibration, parking, staff access and welfare locations;

6.3.3.4. duration of the works;

6.3.3.5. working hours; and

6.3.3.6. TfL customer services details.

6.3.4. Letters shall be produced on TfL letterhead and the Company shall provide a template when required.

6.3.5. Once the details of the notification letters have been accepted by the Company's Community Relations representative, the letters shall be distributed to all properties potentially affected by the proposed works no less than 10 days prior to works commencing. In most instances, distribution will be arranged by the Company. For smaller areas of impact, the Supplier will be directed to undertake the distribution directly. In ascertaining the distribution area, the Supplier shall carefully consider potential noise and vibration, areas affected by staff parking, access or welfare requirements, delivery and loading of equipment.

- 6.3.6. A briefing note about work activities that could potentially affect the community shall be provided by the Supplier to the Company's Community Relations representative in advance of the commencement of the works. This briefing note will be used to brief key stakeholders to address any complaints or enquiries. The briefing note shall contain a copy of the notification letter, the recommended distribution area of the letter, a location map of the works, best practicable means used to mitigate potential adverse impacts and the name and contact details (for internal use only) of the Supplier's Representative, who is required to provide further information where requested in accordance with the Supplier's complaints handling process.

6.4. Noise Complaints Handling

- 6.4.1. The Supplier shall develop a complaints handling process agreed with the Company's Representative. As a minimum, the complaints handling process shall include the following:
 - 6.4.1.1. TfL's customer services details on all public facing communication;
 - 6.4.1.2. information on how complaints and enquiries will be responded to when passed on by TfL customer services;
 - 6.4.1.3. details of the emergency response system that will be employed for dealing with emergency issues; and
 - 6.4.1.4. reporting all complaints/enquiries and their responses within 24 hours of receipt to the Company using TfL customer services and to the Company's Community Relations representative.