

## Appendix 1 – Risk Review Details

Risk Id	Title	Further Description / Detail	Current Probability	Current Impact	Current Exposure	Mitigations to reduce probability and / or impact	Target Probability	Target Impact	Target Exposure
1	Breach of regulations if maintenance work not done within statutory requirements	Breach of Statutory Regulations, LU Standards etc. Increasing number of M + E assets resulting in pressure to get works done in current available time. With the imminent introduction of Night Tube and the unavailability of Friday and Saturday nights there will be no chance to recover missed works or perform tasks whose duration cannot be completed during standard Engineering Hours.	4	5	20	Extended ALL Hours enables more efficient compliance with statutory requirements and adequate time to complete all task and maintain compliance.	2	2	4
2	Isolation of circuit critical to operation of railway	Isolation of circuits affecting station radios/signals/comms etc, resulting in disruption to service/station closure.	4	5	20	Only lighting (in non public areas) and non critical circuits to be isolated during traffic hours. Isolation plan to be submitted to EIT Controller/ASSET MANAGER/TAM prior to works commencing. Any circuits not readily identifiable shall not be isolated until an investigation during closed hours and confirmation from EIT controller is received.	2	2	4
3	Frustrated access during work	Access to rooms, critical areas, no keys etc. Landlord not willing to grant early access.	3	3	9	Effective communication through Liaison Team with LU area management/Landlord to ensure staff are briefed on works being undertaken.	2	2	4
4	Unforeseeable conditions encountered on site	SSOW (Safe System of Work) in place for unforeseen conditions encountered on site.	3	3	9	Risk Assessed, to ascertain if works can be carried out.	2	2	4
5	Movement of Materials Impact Station Use	Movement of materials impacts station use by removal of lift/escalator/passageway use.	3	3	9	Identify large items of plant/materials in advance and only move in Engineering Hours.	2	2	4
6	Customer interface	Disagreement/altercation with general public.	2	3	6	Familiarisation of customer interface conflict resolution.	2	2	4
7	Activations of plant controls	Plant controls for lifts, emergency ventilation etc.	2	3	6	Check work area for plant controls and carry out SSRA in area of works to prevent unwanted activation.	2	2	4
8	Evacuation of station triggered by maintenance activity	Cleaning of dirty asset as part of maintenance creates dust which triggers fire alarm.	2	3	6	Cleaning methods employed will ensure dust is not created which could trigger alarms. This includes the use of hand held vacuum cleaners. All engineers will be in radio contact to confirm assets tested and identify any rogue asset activations. If activation occurs of devices not being tested, engineers on site will liaise with station staff/Landlord to confirm incorrect activation and prevent station evacuation	1	2	2
9	use of welfare facilities for work	All hours working on site creates requirement for toilet and mess facilities.	3	2	6	Arrangements made with Landlord/Staff to enable contractors to use on site facilities. Where this is not possible contractor to supply welfare facilities.	1	1	1
10	Water spillage	Minor spillages from HVAC maintenance.	2	2	4	Carry container to contain spillage. Use mop & bucket to mop up any spillage that occurs. If required, display appropriate signage.	1	2	2

Risk Id	Title	Further Description / Detail	Current Probability	Current Impact	Current Exposure	Mitigations to reduce probability and / or impact	Target Probability	Target Impact	Target Exposure
11	Work impacts site use.	Maintenance activity leads to disruption to Site staff/Landlord or public.	2	2	4	Liaise with LU on extent of permitted maintenance to enable Work Instructions and Workplace Risk Assessments to be updated. All activities to be undertaken in traffic hours will have risk assessments.	1	1	1
12	Co-ordination of work on site	Other work going on at same site.	2	2	4	Agree schedule with 3rd parties and landlord including any necessary re-scheduling to avoid clashes.	1	1	1
13	Work impacts other assets	Maintenance on M + E assets may be programmed where other asset areas are also working.	2	2	4	Works will be coordinated with AP ASSET MANAGER/TAM to avoid clashes. Where escalator refurbishment works co-inside with maintenance works, maintenance will be re-programmed where possible.	1	1	1
14	Work Overruns	Works not completed to agreed time scale to enable Landlord to conduct checks for planned Close/Re-open of the station/Location.	2	2	4	Works will cease at a safe point prior to agreed suspension times.	1	1	1
15	Movement of materials damages assets	Movement of materials required to carry out maintenance causes damage to other assets	2	2	4	Agree access routes with Landlord and Access Planning Team at start of shift. Any damage caused will see the Landlord notified immediately and rectification works agreed along with time scale.	1	1	1
16	Work leads to trips incidents	Equipment or materials create trip hazard.	2	2	4	Risk Assessment will be in place. Barrier works area off including plant to stop any unauthorised persons from entering. Appropriate signage to be in place, with agreement of landlord.	1	1	1
17	Asset Information/Records from Maintenance are inaccurate	Lack of clarity on site and risk of false alarms.	2	1	2	Site survey required to gain knowledge of the system. If anomalies identified, records will be updated. Compile test plan from updated records.	1	1	1

		Current Impact				
		1	2	3	4	5
Current Probability	1	1	2	3	4	5
	2	2	4	6	8	10
	3	3	6	9	12	15
	4	4	8	12	16	20
	5	5	10	15	20	25

**HIGH**

**High Risk (Risk Range 16 to 25)**

Risk totally unacceptable.

Additional control measures must be put in place and risk re-assessed

**MEDIUM**

**Medium Risk (Risk Range 5 - 15)**

Additional control measures to make risk ALARP should be assessed in the Task Specific Method Statement.

**LOW**

**Low Risk (Risk Range 1 - 4)**

With control measures in place risk is ALARP.

Likelihood	
1	Very Unlikely
2	Unlikely
3	Likely
4	Very Likely
5	Certain

**ALARP** = Risk has been assessed as **low as reasonably practicable**.

## **Appendix 2 – SCOPE : Maintenance of M + E Assets during Traffic Hours.**

### **PURPOSE**

The purpose of this appendix is to provide the detailed specific scope for the Planned Preventative Maintenance of M + E Assets during All Hours.

For locations other than stations Maintenance activities are to be agreed with the landlord.

### **Scope of Works specified below:-**

### **MECHANICAL**

*All the below to be carried out with the exception of track side assets or assets in the public domain that cannot be adequately sectioned off after carrying out a site specific risk assesment. Planned, Corrective, Emergency Maintenance to the following, all low level works will be carried out behind barriers if practicably possible and all high level works will be assessed with an on site specific risk assesments.*

#### **4.1 Air Conditioning and Ventilation**

**4.1.1 Evaporator system** – all hour access aslong as work does not impact site staff.

**4.1.2 Condenser system** - Back of house and non public locations can be worked on all hours, in the event condensers need to be blown out with OFN the appropriate equipment will be used to minimize and disruption in areas accessable to the public, if works are of an emergency nature we will utilise clever maintinace techniques i.e. wet cleans or trial innovative ideas i.e condenser socks.

Trackside and public areas while site is open will be planned for attendance when station is closed to the public.

**4.1.3 Air Cooled Chillers Direct Expansion & Water Cooled Condensers** - Back of house and non public locations can be worked on all hours, in the event condensers need to be blown out with OFN the appropriate equipment will be used to minimize and disruption in areas accessable to the public, if works are of an emergency nature we will utilise clever maintinace techniques i.e. wet cleans or trial innovative ideas i.e condenser socks.

**4.1.4 Air handling units (AHU)/ Grill & Diffusers** - Back of house and non public locations can be worked on all hours, in the event that assets require engaging constant communication will be held between engineer and site staff by way of radio or pre-agreed method.

Fire isolation to also be utilized for site open activities if required in SSRA.

Trackside and public areas while site is open will be planned for attendance when station is closed to the public.

## 4.2 Piped services

- 4.2.1 **BOILERS (LTHW HEATING/HWS)** - all hour access aslong as work does not impact site staff
- 4.2.2 **BURNERS - PRESSURE JET (GAS)** - all hour access aslong as work does not impact site staff
- 4.2.3 **BURNERS - PRESSURE JET ( OIL)** - all hour access aslong as work does not impact site staff
- 4.2.4 **CIRCULATING PUMPS** - all hour access aslong as work does not impact site staff
- 4.2.5 **PRESSURISATION UNITS** - all hour access aslong as work does not impact site staff
- 4.2.6 **Cold Water Storage Tank & Cisterns** - all hour access aslong as work does not impact site staff
- 4.2.7 **Hot Water Cylinder** - all hour access aslong as work does not impact site staff
- 4.2.8 **Water Heaters** - all hour access aslong as work does not impact site staff
- 4.2.9 **Trace Heating** - all hour access aslong as work does not impact site staff
- 4.2.10 **Gas Booster Set** - all hour access aslong as work does not impact site staff
- 4.2.11 **Showers** - all hour access aslong as work does not impact site staff
- 4.2.12 **GAS OVERHEAD RADIANT HEATERS (CERAMIC PLAQUE TYPE - SMALL)** – Genrally located in Depots and non-station locations that will be arranged with landlord before attendance
- 4.2.13 **GAS OVERHEAD RADIANT HEATERS (CERAMIC PLAQUE TYPE - LARGE)** – Genrally located in Depots and non-station locations that will be arranged with landlord before attendance
- 4.2.14 **GAS OVERHEAD RADIANT HEATERS (BLACK TUBE TYPE)** – Genrally located in Depots and non-station locations that will be arranged with landlord before attendance

## 4.3 Tunnel Ventilation

- 4.3.1 **Motor** - all hour access aslong as work does not impact site staff
- 4.3.2 **Control Panel** - all hour access aslong as work does not impact site staff

# **Electrical**

*All the below to be carried out with the exception of track side assets or assets in the public domain that cannot be adequately sectioned off after carrying out a site specific risk assessment. Planned, Corrective, Emergency Maintenance to the following, all low level works will be carried out behind barriers if practicably possible and all high level works will be assessed with an on site specific risk assessments.*

## **4.4 Lighting**

- 4.4.1 Lighting – specific to escalator lighting works.** This will be carried on pre planned works whilst site area is closed to public. Works will always be dependant on the priority if more than one use is needed i.e. L + E enginners.
- 4.4.2 Lighting - Corrective/Reactive Works** Back of house and non public locations can be worked on all hours, in the event that the work area can be significantly cordoned off we will carry out works whilst site is open as long as works does not impact on staff or public.
- 4.4.3 Lighting control systems** - all hour access as long as work does not impact site staff
- 4.4.4 Building management systems** - all hour access aslong as work does not impact site staff
- 4.4.5 Electrical Distribution Systems** - all hour access aslong as work does not impact site staff, except in cases where we will work on safety critical systems unless preauthorized by JNP ASSET MANAGER/TAM or landlord.
- 4.4.6 Electrical Isolation** - all hour access aslong as work does not impact site staff, except in cases where we will work on safety critical systems unless preauthorized by JNP ASSET MANAGER/TAM or landlord.

## **4.5 Statutory Testing**

- 4.5.1 DC circuits or equipment**
  - 4.5.2 Confined Space**
  - 4.5.3 Traction equipment**
  - 4.5.4 Signalling Equipment**
  - 4.5.5 HV switchgear or associated sub circuits**
  - 4.5.6 EDF Power-Link, Thames Water, British Gas infrastructure.**
  - 4.5.7 Network Rail Equipment**
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- 4.6 Emergency Lightning Testing** - All hour access as long as work does not impact site staff, or compromise lux levels in public areas.
  - 4.7 Portable Appliance Testing** - All hour access as long as work does not impact site staff. There are no portable appliances in public areas.
  - 4.8 Lightning Protection Inspection & Testing** - All hour access as long as work does not impact site staff. Lightning tapes/conductors are generally positioned in non public areas. Where they are not, the area of work will be cordoned off whilst testing is completed.

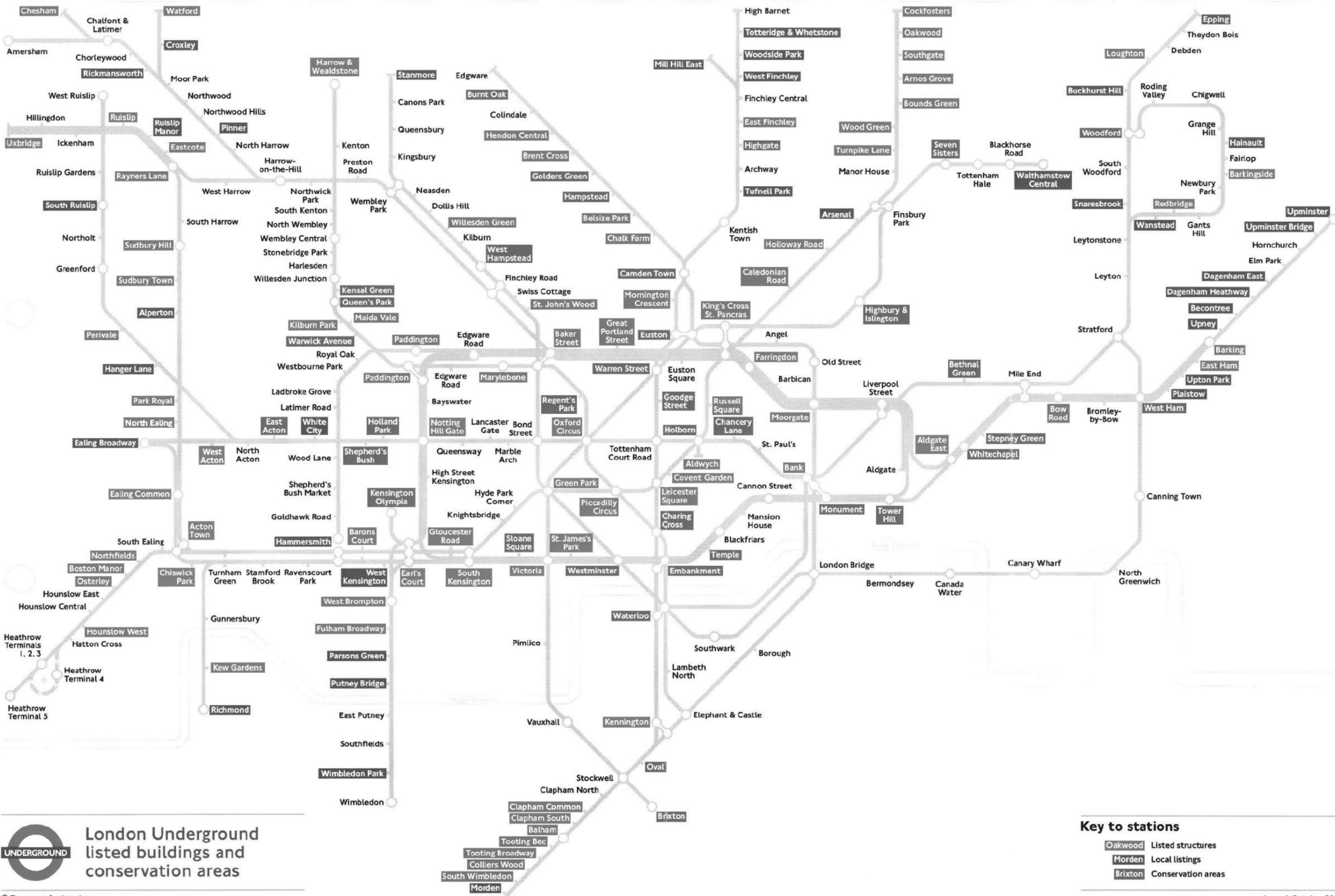
## **4.9 Electrical Installation Testing**

- 4.9.1 Measurement of Lux levels** - All hour access as long as work does not impact site staff, or compromise lux levels in public areas.
- 4.9.2 Visual inspection of assets and referencing of Distribution Boards and Schedules** - All hour access as long as work does not impact site staff.
- 4.9.3 Intrusive visual inspection of 25% under floors and above ceiling tiles** - All hour access as long as work does not impact site staff.
- 4.9.4 Electrical installation testing consisting of live and dead testing** - All hour access as long as work does not impact site staff. Only lighting (in non public areas) and non critical circuits to be isolated during open hours.

## **APPENDIX L**

### **LU HERITAGE MAP**





**London Underground**  
 listed buildings and  
 conservation areas

**Key to stations**

<span style="background-color: #ADD8E6; border: 1px solid black; padding: 2px;">Oakwood</span>	Listed structures
<span style="background-color: #FFA500; border: 1px solid black; padding: 2px;">Morden</span>	Local listings
<span style="background-color: #90EE90; border: 1px solid black; padding: 2px;">Brixton</span>	Conservation areas

## **APPENDIX M**

**NOT USED**



## **APPENDIX N**

### **ASSET MANAGEMENT INFORMATION SCHEDULE**

To be provided by the Company within 6 weeks of the Commencement Date. Provision of the Asset Management Information Schedule shall not constitute a variation and the Supplier shall not be entitled to any adjustment to the Target Cost or relief from its obligations or Abatements as a result of such provision by the Company.



## **APPENDIX O**

### **STANDARD SFG20 TASK SHEET LISTING**

Appendix O is the document titled Lot 3.1 (M&E) - Schedule 3 - Appendix O - Standard Product Descriptor and associated SFG20 Task Sheet allocation and stored on the CD-ROM at Schedule 23 (Documents on CD-ROM)



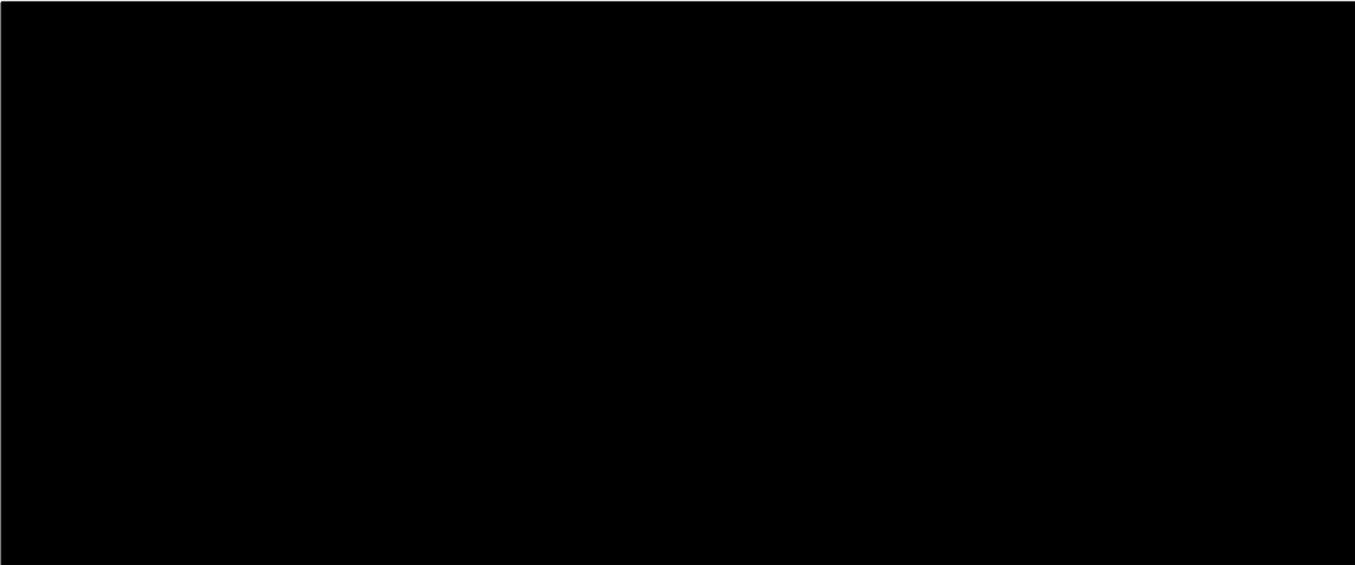
**SCHEDULE 4: PROGRAMME**

The Supplier shall show on each update to the Programme (which shall subsequently become the Programme after acceptance by the Company's Representative):

- (1) the starting date, access dates, key dates and Expiry Date;

*Services Commencement Date = As per Schedule 1*

*Expiry Date – As per Schedule 1*



- (2) the order and timing of operations which the Supplier plans to do in order to provide the Services;

*Operations will be undertaken in accordance with Schedule 3, Schedule 21 Appendix 2 and Schedule 18, Mobilisation*

- (3) the order and timing of the work of the Company and others as last agreed with them by the Supplier or, if not so agreed, as stated in the Specification;

*Services will be undertaken in accordance with Schedule 3*

- (4) the dates when the Supplier plans to meet each condition stated for any key dates and to complete other work needed to allow the Supplier and others to do their work;

*Services will be completed as detailed in Schedule 1 or pursuant to Clause 2*

- (5) provisions for float, time risk allowances and environmental and health and safety requirements;

*Provisions have been made as part of the annual programme of works*

- (6) the dates when, in order to provide the Services in accordance with its programme, the Supplier needs:

- (a) access to a part of the Site if later than its access date;

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(b) acceptances;

(c) plant and materials and other things to be provided by the Company; and

(d) information from others;

*Services will be undertaken in accordance with Schedule 3*

(7) for each operation, a statement of how the Supplier plans to do the work identifying the principal equipment and other resources which it intends to use;

*Contained within Schedule 21 Appendix 2*

(8) for each operation, a cost-loaded programme showing the forecast resources required for that operation;

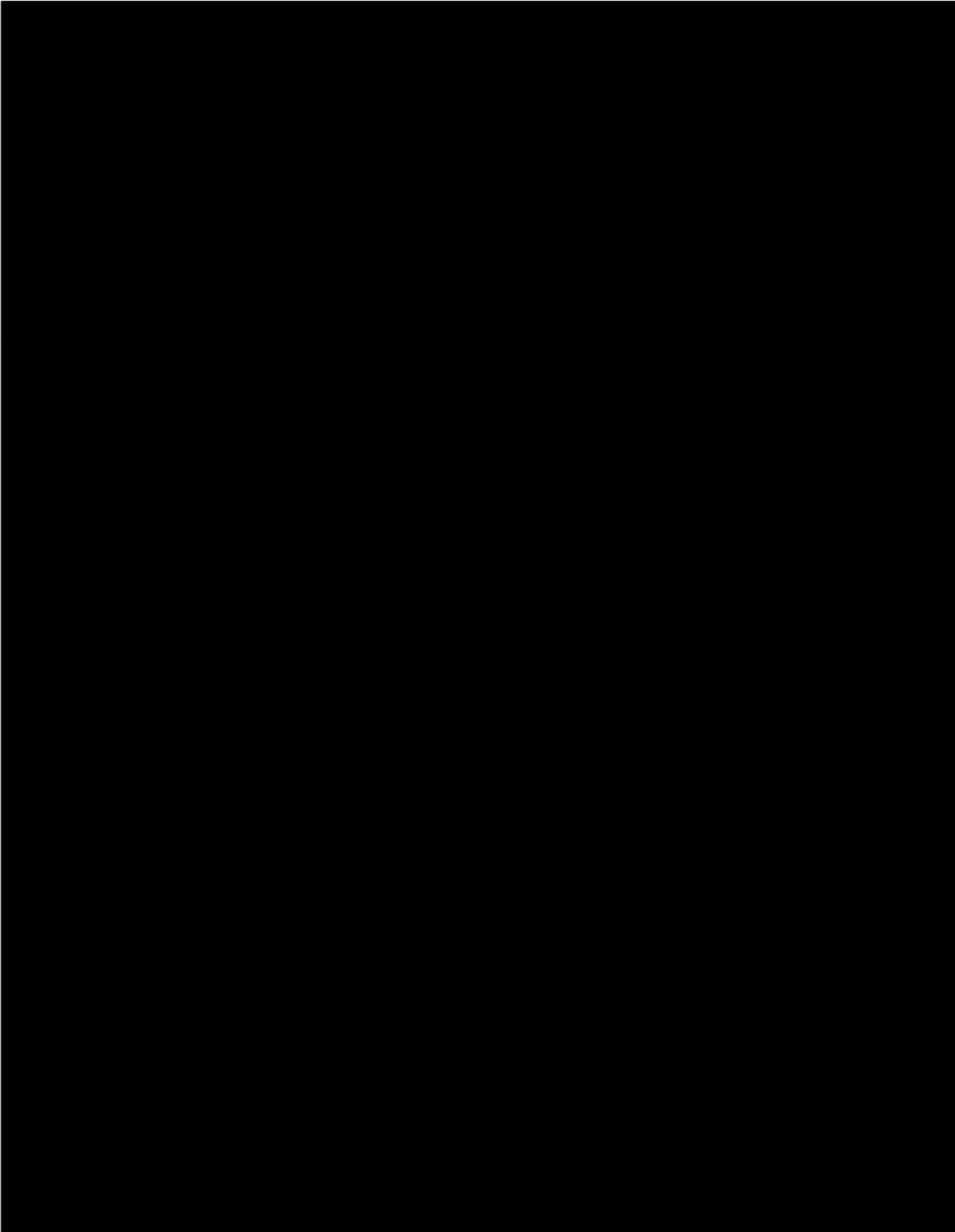
*Contained within Schedule 2*

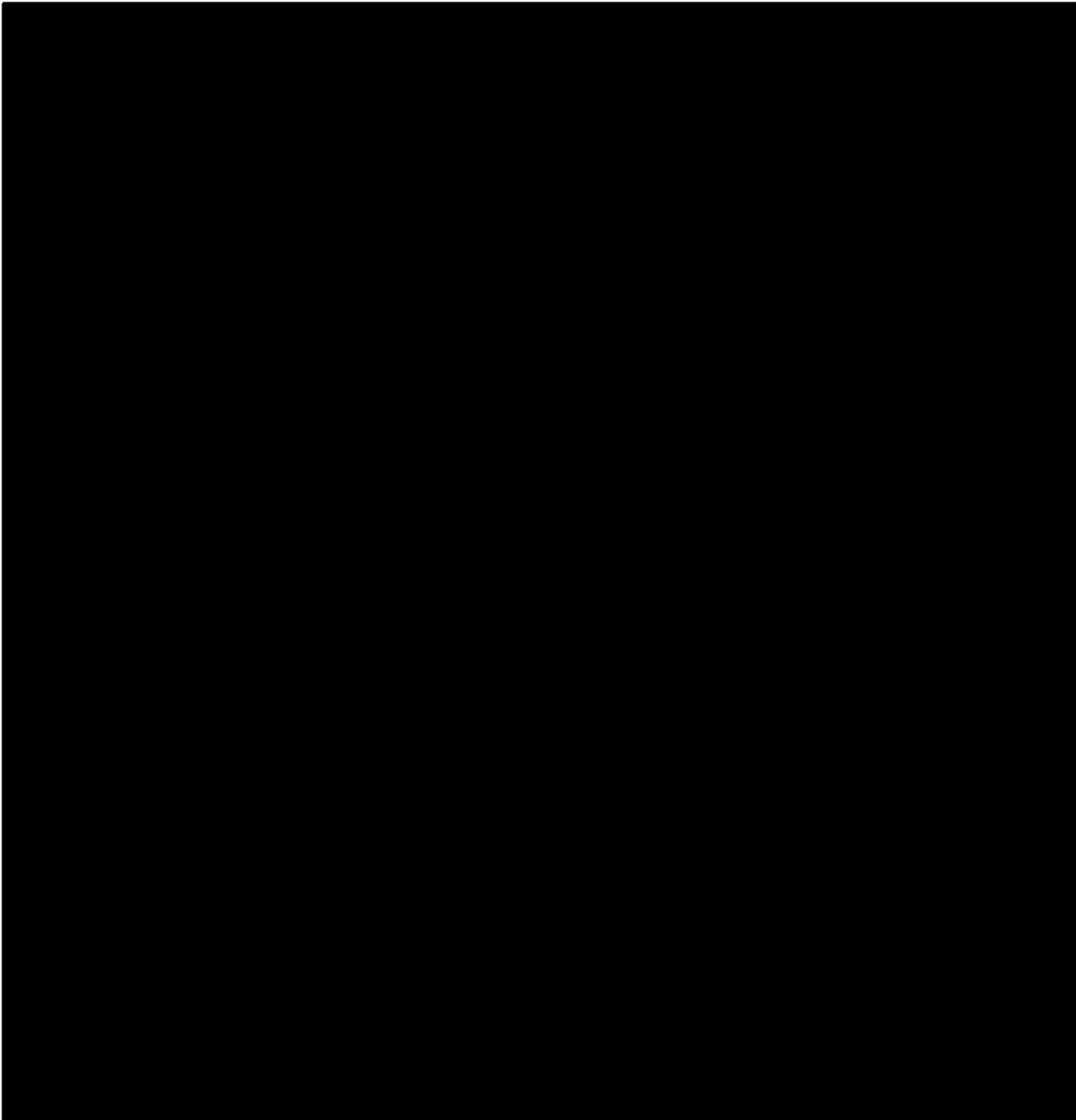
(9) its access requirements in accordance with the Specification; and

*Access shall be managed in accordance with Schedule 5*

(10) other information which the Specification requires the Supplier to show on a programme submitted for acceptance.

APPENDIX 1 - INVESTMENT IN TECHNOLOGY TO SUPPORT CONTINUOUS IMPROVEMENT





**SCHEDULE 5: ACCESS**

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Definitions

General Obligations

Access Plan

Booking and Arranging Access

Clash Checking

Types of Access

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Utilising Existing Closures

Protection

Equipment Rooms

**APPENDICES**

1. Access Plan Template
2. Application to Work Form
3. Indicative Timescales for the Publication of Notices
4. Access Subcategories
5. Network Rail Interface Locations
6. Cancelled or Delayed/Curtailed Access Form

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### 1. DEFINITIONS

**Accepted Access Plan** means the latest Access Plan accepted by the Company's Representative and the Access Manager and which supersedes previous Accepted Access Plans.

**Access** means a type of access set out in Appendix 4 (Access Subcategories).

**Access Manager** means the person designated by the Head of Access as the manager for access requests for the Services and who will act as the single point of contact for all access related matters.

**Access Plan** means the access plan prepared by the Supplier in accordance with the Access Plan Template.

**Access Plan Template** means the template provided as Appendix 1 (Access Plan Template) to this Schedule 5 (Access).

**Access Subcategories** has the meaning given in paragraph 1.9 of section 6 of this Schedule 5.

**Access Visualisation Tool** means a tool which provides a graphical overlay on a London Underground 'Harry Beck' map of planned and booked work for a user specified area (Track / Stations) for a user specified time period.

**Application to Work Form** means the form contained in Appendix 2 (Application to Work Form) to this Schedule 5.

**Bank Holiday** means a recognised UK Bank Holiday. Start and end times as per definition for "Sunday" stated below.

**Emergency Access** has the meaning given in paragraph 1.5 of section 6 of this Schedule 5.

**Engineering Hours** means any time when traction current is switched off (as published in the Guide to Switching Current On and Off subject to variance as published in an Engineering Notice) and trains are not running (ref LUL Rule Book 17 for the definition of Engineering Hours), as is applicable to the running line.

**Engineering Notice** means a publication produced and circulated within TfL at short notice containing details of engineering works, special current arrangements, engineers' possessions and engineers' trains and similar activities not included in the Traffic Circular.

**Engineering Look Ahead Notice** means a draft publication produced and circulated by TfL providing a week-view of items that, at that time, are planned to be published on the Engineering Notice for a specific shift.

**Exclusive Access** has the meaning given in paragraph 1.4 of section 6 of this Schedule 5.

**General Access** has the meaning given in paragraph 1.1 of section 6 of this Schedule 5.

**Head of Access** means the person responsible for managing access to the TfL infrastructure for the Services. This role includes but is not limited to the responsibility for the publication of safety documentation.

**Incident Officer** means the senior TfL operating officer responsible for managing an incident.

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**L&E Closures** has the meaning given in paragraph 1.8 of section 6 of this Schedule 5.

**Latest Request Date** means the last date an access request can be made in line with a given timescale.

**Local Station Access Arrangement Reference Files** means the files published by the Head of Access detailing where works may potentially be undertaken on Stations in Traffic Hours including details of possible locations for the storage of materials and equipment and Station opening and closing hours.

**LUL Network** means the stations and depots (wherever situate), assets, systems, track and other buildings which are used for the maintenance and provision of the underground service known as the London Underground.

**LUL Rule Book** means the rule books covering the operation of trains and Stations and accessing the Track.

**Major Closure** has the meaning given in paragraph 1.6 of section 6 of this Schedule 5.

**Minor Closure** has the meaning given in paragraph 1.7 of section 6 of this Schedule 5.

**Monday to Friday** means the time from start of Traffic Hours on Monday morning to the time at the end of Engineering Hours on Friday night/ Saturday morning.

**Network Rail** means Network Rail Infrastructure Limited company nr 02904587.

**Network Rail Interface Locations** means locations on the LUL Network where Network Rail infrastructure interfaces with TfL infrastructure including but not limited to the location identified in Appendix 5 (Network Rail Interface Locations) to this Schedule 5.

**Nightly Engineering Protection Arrangements (NEPA) Notice** means a publication produced and circulated within TfL at short notice containing details of safety related material for engineering Services and engineer's trains and vehicles.

**Night Tube** means the provision of a 24 hour revenue service commencing from the Night Tube Start Date.

**Night Tube Start Date** means 19 August 2016.

**Night Tube Running Period** means nominally the period between 21:00hrs Friday night and 06:00hrs Sunday morning.

**Night Tube Sections** means the sections of the TfL Network which provide Night Tube. The applicable sections of the TfL Network are:

- (a) The Central Line route between and including Hainault, Loughton and Ealing Broadway Stations (no Night Tube outside of this route)
- (b) The Jubilee Line entire network
- (c) The Northern Line route between and including High Barnet, Edgware and Morden Stations via the Charring Cross Branch (no Night Tube outside of this route)
- (d) The Piccadilly Line route between and including Cockfosters and Heathrow Terminal 5 Stations (no Night Tube outside of this route)

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- (e) The Victoria Line entire network.

**Non-Restrictive/Exclusive Access** has the meaning given in paragraph 1.2 of section 6 of this Schedule 5.

**Operational Assurance** means an Operational Assurance Notification made to TfL in accordance with the requirements of Standard 1-538 (Assurance).

**Operation Managers** means any or all of group station managers and train operations managers.

**Others** mean people or organisations who are not TfL, the Company's Representative, the Supplier or any employee, sub-contractor or supplier of the Supplier.

**Possession Meeting** means a meeting to discuss the viability of a proposed Track possession.

**Pre-Closure Request Meeting** means a meeting to discuss the viability of a proposed closure request.

**Published** means in respect of:

- (A) Restrictive Access and Exclusive Access to Track, that the works need to be notified in the Engineering Look Ahead Notice, the Engineering Notice and the Nightly Engineering Protection Arrangements (NEPA) Notice; and
- (B) Restrictive Access and Exclusive Access to Stations, that the works need to be notified in the Station Works Plan.

**Restrictive Access** has the meaning given in paragraph 1.3 of section 6 of this Schedule 5.

**SABRE** means Site Access Booking for Railway Engineering, being the system used to plan access, and any system that may supersede it at any time in the future.

**Saturday** means the time from start of Traffic Hours on Saturday morning to the time at the end of Engineering Hours on Saturday night/Sunday morning.

**Specialist Protection** means all protection arrangements in addition to the Supplier's site person in charge (SPC) (with dual protection qualifications) including but not limited to possession masters; protection resources to implement possession protection arrangements; staff to isolate traction current, technical officers to implement a set of protection arrangements and protection on Network Rail Infrastructure.

**Station Works Plan** means the general access requests; planned works weekly and planned daily publications circulated by TfL detailing the access arrangements for works planned to be undertaken at all Stations.

**Stations** means areas to which LUL Rule Book 10 applies including buildings, equipment or facilities designed to be used by customers to access or leave a train.

**Sunday** means the time from start of Traffic Hours on Sunday morning to the time at the end of Engineering Hours on Sunday night/Monday morning.

**Track** means areas to which LUL Rule Book 17 applies including Track, tunnels, embankments and other line side infrastructure.

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**Traffic Circular** means the weekly traffic circular which contains diverse information such as, infrastructure changes, train service changes, events affecting TfL, notification of restrictions to TfL operations and operational communications.

**Traffic Hours** means when traction current is switched on (as published in the Guide to Switching Current On and Off subject to variance as published in an Engineering Notice) and trains are running (ref LUL Rule Book 17 for the definition of Traffic Hours) as is applicable to the running line.

**Work Request** means the work request e-Form provided on TfL's access booking portal and which is completed by the Supplier to reflect the Access Plan and requirements for plant and equipment and specialist protection.

**Working Time** means a period of agreed access (including closures) in either Traffic Hours or Engineering Hours.

**2. GENERAL OBLIGATIONS**

1. The Supplier shall comply with its obligations under this Schedule 5.
2. The Supplier shall be responsible for supplying to the Company's Representative and the Access Manager all such information and taking all such steps as may be necessary to enable the Company's Representative to obtain where applicable Operational Assurance in respect of the Access required by the Supplier.
3. The Parties agree that:
  - 3.1 the dates and times of any Access approved may be cancelled, altered or delayed on notice (or no notice in the case of an Emergency or for safety reasons). Alternative arrangements shall be made as soon as the Company's Representative and Access Manager can permit;
  - 3.2 the provisions of Clause 30 of the Contract shall be deemed to apply during such cancellation, alteration or delay to approved Access provided that such cancellation, alteration or delay is not caused (in whole or part) by a failure by the Supplier to comply with its obligations under this Schedule 5;
  - 3.3 neither Party shall have any claim against the other as a consequence of such cancellation, alteration or delay; and
  - 3.4 the Supplier shall as soon as practicable take all reasonable steps necessary to avoid, overcome or minimise the effect of such cancellation, alteration or delay.
4. For access to Network Rail and/or train operating companies' infrastructure and stations, the Supplier is solely responsible for securing access. The Supplier shall make all necessary arrangements directly with Network Rail and/or train operating companies and shall comply with all their rules and regulations.
5. For Access, following a request to the Supplier from the Company's fault reporting centre for a part or all of the Services, the Supplier shall apply for Access in accordance with the requirements of this Schedule 5.
6. The Company shall have no responsibility to the Supplier, and the Supplier shall hold the Company harmless against any Losses that may arise out of any failure by the Supplier to comply with this Schedule 5.

**3. THE ACCESS PLAN**

1. The Supplier shall, in accordance with the timescales set out in Appendix 1 (Contract Mobilisation and Transition Plan) to Schedule 18 (Mobilisation Requirements), prepare an Access Plan with the objective of maximising the efficient use of the available Working Time and taking account of the following:
  - the information provided in the Local Station Access Arrangement Reference Files (the use of any potential storage areas identified by the Local Station Access Arrangement Reference Files remains subject to the Supplier obtaining the appropriate storage licences);
  - if the Services can be carried out in Traffic Hours (and the Supplier shall construct the Access Plan to achieve the optimisation of Working Time);
  - the minimisation of the number and duration of closures;
  - the utilisation and extension of existing planned closures;
  - the hours/shifts/days in the week required to be worked in order to comply with the Programme;
  - the timescales for booking access and closures as defined in this Schedule 5;
  - the sharing of Access with Others and the minimisation of disruption of the work of Others;
  - if the productivity of Engineering Hours working can be increased, safely, by completing the clearance of workers, materials tools and equipment tools in Traffic Hours (and the Supplier shall support its plans with method statements detailing appropriate measures for the protection of the public);
  - the maximisation of Working Time during Engineering Hours when accessing the Track through a Station (where it is safe to do so, all persons, plant and equipment may be positioned within the Station ready to access the Track immediately on confirmation of traction current being turned off);
  - a minimum call back time of twenty (20) minutes for Track access before the expiry of each shift of Engineering Hours (to allow for the safe removal of all workers, materials, tools, equipment and the like) unless a shorter period is agreed by the Company's Representative;
  - any limitation on Engineering Hours specific to the Services as may be specified by the Company's Representative;
  - the time required for the Supplier to ensure the Site is left clean and safe; and
  - Night Tube.
2. The Supplier shall submit its proposed Access Plan to the Company's Representative for acceptance. Within two weeks of the Supplier submitting an Access Plan for acceptance the Company's Representative shall either accept the Access Plan or notify the Supplier of his reasons for not accepting it. A (non-exclusive) reason for not

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accepting an Access Plan is that:

- it is not compatible with the Access Plan Template;
  - it does not take into account the information provided in the Local Station Access Arrangement Reference Files;
  - it does not optimise the Working Time;
  - it proposes an excessive number or duration of closures;
  - it does not adequately make use of existing planned closures;
  - it is not compatible with the Programme;
  - it does not comply with the timescales for booking Access and closures as set out in this Schedule 5;
  - it assumes the use of an existing closure for which an Application to Work Form has not been approved by the Access Manager;
  - it assumes an extension to an existing planned closure which has not had the prior approval of the Access Manager;
  - requests an access or closure type which is not appropriate for the Services;
  - it does not adequately provide for the work of Others;
  - it does not maximise the use of available access;
  - it does not allow for minimum call back periods or other working constraints detailed by the Company's Representative;
  - it does not provide as a minimum all the information provided in the Access Plan Template;
  - it does not allow sufficient time for the Site as a whole to be left clean and safe;
  - it does not allow for the operation of Night Tube.
3. The Supplier shall submit a revised Access Plan for acceptance in the following circumstances:
- if the Accepted Access Plan is no longer applicable in all the circumstances;
  - when a change is required to align with the Programme; or
  - within the period for reply after the Company's Representative has instructed the Supplier to do so. For the avoidance of doubt such instruction does not constitute a Variation Proposal or entitle the Supplier to apply for an extension of time.
4. Should the Supplier need to work hours additional to those stated in the Accepted Access Plan (within the constraint of the maximum working hours available within the booked access types), the Supplier shall give at least five (5) Working Days' notice and obtain the Company's Representative's prior written acceptance.

**4. BOOKING AND ARRANGING ACCESS**

1. The Supplier shall be required to book and co-ordinate access to the Site with the Access Manager in accordance with the Work Request/SABRE process and the Accepted Access Plan. The Supplier accepts that access to the Site will be refused without a valid SABRE number and the Supplier shall be responsible for checking that it is in possession of a valid SABRE number for all access requirements detailed on the Accepted Access Plan. If the Supplier is not in possession of the same it shall advise the Company's Representative accordingly.
2. The Supplier shall comply with the requirements of the use of LUCAS (London Underground Combined Access System) and Sentinel (Network Rail's Access and Competency System), particularly in the context of access control at the point of Site entry. The Supplier shall note that individuals will be refused access to Sites without a valid LUCAS or Sentinel Card.

The Supplier acknowledges that TfL is phasing out the use of LUCAS cards and is adopting Sentinel as a replacement access and competency control system. On expiry of existing LUCAS cards the Supplier shall sponsor Supplier Personnel required to work on TfL infrastructure to obtain replacement Sentinel cards if they are not already a Sentinel card holder.

**3. Training, Certificates, Identity Cards and Entry Permits**

- 3.1 The Supplier is responsible for ensuring that all staff and Supplier Personnel are suitably trained, competent and carry the appropriate and requisite certification for performing the roles required of them in carrying out the Services.

The Standards, and in particular QUENSH and the LUL Rule Book(s) set out the training and certifications required to be met by the Supplier.

- 3.2 Not used
- 3.3 The Supplier is responsible for arranging, booking, and paying for all requisite medicals, training and certification of its staff and / or Supplier Personnel.
- 3.4 The Supplier shall allow a minimum of 28 days' notice period for all TfL provided training and certification courses and will include the same on any proposed Access Plan or programme. The Supplier acknowledges that any time period less than this cannot be guaranteed, and although the Company may make efforts facilitate a shorter notice period wherever possible, the Supplier does not rely on such reduced time periods being accommodated.
- 3.5 At the Services Commencement Date, the Supplier shall produce a competency matrix for all its staff or Supplier Personnel involved in providing the Services detailing the training, certification and other competency information held on record. The Supplier shall update the matrix until the Expiry Date and make the same available on request of the Company's Representative.

**4. London Underground Access control**

4.1 LUCAS (London Underground Combined Access System) Smartcards have not been issued since 01/04/2015. Unexpired cards issued before this date remain valid until they expire or by further notification from TfL.

4.2 All Supplier Personnel require either

- A valid LUCAS smartcard OR
- A Sentinel smartcard endorsed with the Industry Common Induction (ICI) competence plus the LU-ICI endorsement

(in each case a "Smartcard")

in order to access the Sites and carry out works on London Underground operational infrastructure.

4.3 The Supplier shall register to become a Sentinel Sponsor (as such term is defined in the Rail Industry Supplier Qualification scheme (RISQs)) via the RISQs. Further details can be found at the following Achilles website address (Achilles administer the Scheme on the behalf of RISQs).

[http://www.achilles.com/en/?option=com\\_content&view=article&id=285](http://www.achilles.com/en/?option=com_content&view=article&id=285).

4.4 The Supplier will and will procure that any sponsored individuals must abide by the Sentinel Scheme Rules, the latest version of these can be found at the following Sentinel website address:

<https://www.railsentinel.co.uk/Content/Downloads/SentinelSchemeRules.pdf>

4.5 The Smartcard is specific to an individual and is not transferable.

4.6 The Supplier shall procure that Supplier Personnel carry their Smartcard at all times when working on operational TfL Network property and present their Smartcard to any authorised representative of TfL for inspection when requested to do so. Failure to produce a valid Smartcard, or requisite certification, for inspection may result in the individual being instructed to leave the Site. A Smartcard is not required when working solely on non-operational TfL Network property.

4.7 The Smartcard does not entitle the Supplier Personnel to any benefits other than permitting access to the Site for the purpose of carrying out Services during the agreed hours of work. The LUCAS Smartcard remains the property of the Company and is required to be returned immediately upon request.

4.8 Details of required courses and medicals are detailed in QUENSH.

4.9 Exceptions to the Smartcard process;

For certain exceptional access circumstances it may not always be practical or cost effective to enrol the Supplier, the Supplier Personnel or Others onto the Sentinel Scheme. In such a case, the Company shall issue a temporary LUA-LU paper certificate.

Such scenarios whereby temporary LUA-LU paper certificates are issued would be;

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- Specialised contractors requiring limited access
- Survey work requiring limited access

If the Company's Representative decides to permit exceptional access to the Site or any working areas, the Supplier must obtain the Company's Representative's written acceptance regarding the personnel and work activities prior to commencement on Site.

- 4.10 The Supplier acknowledges that any person attempting to gain access to the Site or working areas who is not in possession of a valid LUCAS or Sentinel Smartcard shall be treated as a visitor. All visitors, except for authorised collection or delivery drivers, must be escorted or supervised at all times by an authorised member of staff whilst on Site.

The Supplier shall maintain a register of all visitors including:-

- Name;
- Employer;
- Nature of business / persons being visited;
- Time in;
- Time out;
- Supervisor/escort name including signature.

The Supplier shall provide a health and safety Site briefing to each visitor and shall procure that such visitor shall sign a form to confirm that they have received the briefing and understand the Site rules and their respective responsibilities as a visitor.

The Supplier shall issue the visitor with a temporary pass that is valid for a maximum 24 hours and which clearly indicates the expiry date and time of such visit.

The Supplier shall ensure the temporary pass is returned when the visitor leaves the Site and that a list of any lost passes is maintained.

The Supplier shall ensure that lost electronic visitor passes are de-activated immediately on the Supplier being made aware of the loss.

### 5. **London Underground – Access Control**

- 5.1 When booking in and out of the Site, the Supplier shall procure that the Supplier Personnel report in, record entry and exit, and present their Smartcards when and where required, in accordance with the local access control arrangements.
- 5.2 Where a Smartcard reader is installed on Site as part of the local access control arrangements, then the Supplier shall procure that all Supplier Personnel as a mandatory requirement swipe their Smartcard on entry and egress from the Site. Any individuals found on Site where such a card-reading system is in place who have not followed such a procedure may be instructed to leave Site for the duration of the associated shift, regardless of whether they may hold the appropriate Smartcard. The Company takes no responsibility for any abortive costs or impact to schedule of any

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such instruction to any member of the Supplier's staff under such circumstances.

- 5.3 If the Supplier wishes to make a change to the Accepted Access Plan or to the Supplier's requirements for Access after being approved by the Company's Representative and Access Manager, the Supplier shall submit written request of such change and a revised programme and Access Plan to the Company's Representative and Access Manager confirming any and all revised Access requirements.

**5. CLASH CHECKING**

1. The Supplier shall be responsible for checking for clashes (Clash Checking) in respect of access booked by Others and the Company's Representative in respect of which the Company's Representative has provided the Supplier with the Access Visualisation Tool. The Supplier shall also monitor the following publications:
  - (a) Engineering Look Ahead Notice
  - (b) Engineering Notice
  - (c) Nightly Engineering Protection Arrangements (NEPA) Notice
  - (d) Traffic Circular
  - (e) Station Works Plan
2. In the event of clashes the Supplier shall notify the Company's Representative and, where instructed, submit a revised Access Plan for acceptance. The indicative publication timescales (in advance of proposed works) for the above notices are as provided in Appendix 3 (Indicative Timescales for the Publication of Notices) of this Schedule 5.
3. Clash Checking is a condition precedent in respect of any entitlement to apply for relief pursuant to Clause 30.
4. In the event that the Supplier attends the Site and access is not provided by TfL in accordance with the Accepted Access Plan the Supplier shall complete the Cancelled or Delayed/Curtailed Access Form contained in Appendix 6 (Cancelled or Delayed/Curtailed Access Form) to this Schedule 5.
5. Without prejudice to the generality of Clause 30, Clash Checking, the completion of a Cancelled or Delayed/Curtailed Access Form in full (including the obtaining of all necessary signatures) and the identification of the period of access in question on the Accepted Access Plan (with the relevant SABRE number) are all condition precedents in respect of any entitlement to apply for a Relief Event.