

Guidance On The Control of Contracted Works













LRSSB - LRG - 34.0		
Issue	1	
Revision	0	
Date	14/03/2023	
Page	1 of 45	

TITLE: GUIDANCE ON THE CONTROL OF CONTRACTED WORKS					
REF:	LRG 34.0			STATUS:	FINAL
ISSUE:	01	REVISION:	00	DATE:	14/03/2023
DEPT:	LRSSB Safety Assurance		REVIEW DUE:	14/03/2028	
DOCUMENT OWNER:		DISTRIBUTION:			
LRSSB		ALL UK TRAMI	WAYS		

DESCRIPTION:

THIS DOCUMENT PROVIDES GUIDANCE ON THE CONTROL OF CONTRACTED WORKS ON AND ASSOCIATED WITH LIGHT RAIL NETWORKS

EXPLANATORY NOTE:

The Light Rail Safety Standards Board is not a regulatory body and compliance with Guidance Notes or Approved Codes of Practice is not mandatory; they reflect good practice and are advisory only. Users are recommended to evaluate the guidance against their own arrangements in a structured and systematic way, noting that parts of the guidance may not be appropriate to their operations. It is recommended that this process of evaluation and any subsequent decision to adopt (or not adopt) elements of the guidance should be documented. Compliance with any or all the contents herein, is entirely at an organisation's own discretion.

SOURCE / RELATED DOCUMENTS:

LRG 1.0 Tramways and Principles Guidance (TPG) (LRSSB

LRG 6.0 Fatigue Management (LRSSB)

LRG 23.0 LRG 23.0 Application of the Construction (Design and Management) Regulations 2015 (LRSSB)

LRG 27.0 Confidential Reporting Guidance (LRSSB)

LRG 32.0 Testing and Commissioning Guidance (LRSSB)

LRG 33.0 Management of Drugs and Alcohol Guidance (LRSSB)

ISBN 978 0 7176 6436 8 – HSE Managing contractors a guide for employers

Selection and Management of Contractors - RDG-GN-OPS-024 – Issue 3 – October 2019

TfL Management System Standard Category S1552 Contract QUENSH (Quality, Environmental, Safety and Health) Conditions – 2015

RELATED TRAINING COURSES:	RELATED LEGISLATION:
	Construction (Design and Management) (CDM) Regulations 2015 Health and Safety at Work Act 1974 Control of Substances Hazardous to Health Regulations 2002 (COSHH) The Management of Health and Safety at Work Regulations 1999 Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS) (as amended) Reporting of Injuries, Diseases and Dangerous Occurrences
	Regulations 2013 (RIDDOR)



LRSSB - LRG - 34.0		
Issue	1	
Revision	0	
Date	14/03/2023	
Page	2 of 45	

CHANGE NOTES:				
Date of Issue	Issue No.	Revision No.	Reviewer	Details of Revision
	UNCONTROLLED WHEN PRINTED			



LRSSB - LRG - 34.0		
Issue	1	
Revision	0	
Date	14/03/2023	
Page	3 of 45	

LRSSB

DOCUMENT CODE: LRG 34.0

GUIDANCE ON THE CONTROL OF CONTRACTED WORKS

CONTENTS

1.	Introduction
2.	Scope
3.	General Principles
4.	Contractor Selection
5.	Roles and Responsibilities
6.	Emergency Plans
7.	Method Statements, Risk Assessments and the Health, Safety and Environment File
8.	General Competence
9.	Briefing, Monitoring and Supervision of
Contractors	
10.	Reporting
11.	Quality Requirements
12.	Records
13.	CDM Regulations
14.	Access
15.	Permit to Work
16.	Closures, Possessions and Isolations
17.	Environmental Requirements
18.	Additional Areas for Consideration
<u>Tables</u>	
Table A	Terms
Table B	Abbreviations



LRSSB - LRG - 34.0		
Issue	1	
Revision	0	
Date	14/03/2023	
Page	4 of 45	

TERMS AND ABBREVIATIONS

Table A – Terms

Term	Definition	
Authorisation	The process to ensure that work on or near the Light Rail system is carried out safely by obtaining authorisation from the operator or owner and agreeing a safe system of work before the work starts.	
Client	Local authority / transport authority, owner, operator or maintainer of the Light Rail system.	
Closure	A whole or partial closure of the system whereby services are suspended, and vehicles are unable to safely run in the affected area with replacement bus or alternative transportation service in place.	
Contract	A written or spoken agreement, especially one concerning employment, sales, or tenancy, that is intended to be enforceable by law.	
Contract Manager	Representative from the client organisation. One of the points of contact between the client and the contractor who is responsible for ensuring contractor compliance with the client's organisational processes. The contract manager can also be the sponsor, or another person specifically engaged for the contract.	
Contractor	The main supplier of the services and holder of the contract with the client.	
Isolation	The de-energisation of the OLE system in part or whole from the traction power source for emergency or maintenance activity and having protective earth(s) applied either automatically or manually to remove the risk of any residual voltage being present and a danger to staff or a third party.	
Method of Work Statement	Relates to work to be undertaken at a specific location and should describe the limits of the proposed work, access details, dates and working times and isolation requirements.	
Possession	Allocated Light Rail system infrastructure usually taken out of service or operational control for the purpose of maintenance or repair.	
Sponsor	A person or group who are responsible for the project who provide resources and support for the project.	
Works	The design, construction, testing, commissioning, completion and bringing into operation of the network, as defined in procurement agreement(s) including the design, construction, testing, transportation, delivery, commissioning and bringing into operation of new Light Rail vehicles, all necessary modifications to existing network and / or existing Light Rail vehicles, any temporary works and any works necessary to gain access to the Land and any widening of the Highway and the system integration works and obtaining all	



LRSSB - LRG - 34.0		
Issue	1	
Revision	0	
Date	14/03/2023	
Page	5 of 45	

necessary consents and enable the contracting parties to provide the full services.

Table B – Abbreviations

Abbreviation	Definition
AP	Access Permit
BS	British Standard
CDM	Construction Design Management Regulations 2015
CIRAS	Confidential Incident Reporting and Analysis System
COSHH	Control of Substances Hazardous to Health Regulations 2002
EN	European Norm
HSE	Health and Safety Executive
HSQE	Health, Safety, Quality and Environment
ISO	International Standard
LOTO	Lock Out, Tag Out
LRSSB	Light Rail Safety and Standards Board
MoWS	Method of Work Statement
OLE	Overhead Line Equipment
ORR	Office of Rail and Road
PIC	Person In Charge
PPE	Personal Protective Equipment
PTS	Personal Track Safety
PTW	Permit to Work
QMS	Quality Management System
RAMS	Risk Assessment Method Statement
ROGS	Railways and Other Guided Transport Systems (Safety) Regulations 2006 (as amended)
SMS	Safety Management System
SSOW	Safe System of Work
TPG	Tramways and Principles Guidance
UK	United Kingdom



LRSSB - LRG - 34.0		
Issue	1	
Revision	0	
Date	14/03/2023	
Page	6 of 45	

1. Introduction

- 1.1. This guidance supports the high level principles set out in LRG 1.0 Tramway Principles and Guidance (TPG) published by the Light Rail Safety and Standards Board (LRSSB).
- 1.2. This document provides high level guidance on the control of contracted works for those delegated this responsibility in relation to UK Light Rail systems (tramways) based on 'line-of-sight' operations only. As with all guidance, this document is not prescriptive and is intended to give advice not to set a mandatory industry standard, and it is based upon goal setting principles as best practice.
- 1.3. Much of this guidance is based on the experience gained from existing UK Light Rail systems and from published documents. It does not prescribe particular arrangements adopted by any existing UK Light Rail system and is intended to give guidance and advice.
- 1.4. This guidance is not intended to be applied retrospectively to existing Light Rail systems. However, owners and operators should consider and assess any implementation of this guidance and / or any subsequent revision, to ensure continual improvement in reducing risks, so far as is reasonably practicable.
- 1.5. All work activities are covered by health and safety law. Not all will apply to everything within this guidance, but UK Light Rail systems need to be familiar with the main points. Knowing the key Acts and Regulations and how they apply to work activities is a key responsibility. Full and concise details of information relating to these Acts and Regulations and other guidance relevant to the control of contractors, can be found on the Health and Safety Executive's (HSE's) website¹.

¹ https://www.hse.gov.uk/managing/delivering/do/organising/managing-contractors.htm



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	7 of 45

2. Scope

- 2.1. Anyone engaging contractors has health and safety responsibilities in relation to the contractors and anyone who could be affected by their activities. Contractors themselves also have legal health and safety responsibilities. As such, every party must understand the part they need to play in ensuring health and safety.
- 2.2. The purpose of this document is to assist Light Rail organisations to manage the risks associated with contractors and visitors performing work on, near or adjacent to premises they control. It is also intended to control risk along the supply chain for contracted work on Light Rail systems, including operational property or other premises which have an affect or impact upon the operational network.
- 2.3. This guidance should help enable the relevant people and bodies to identify what risks need to be considered during implementation of a package of works. The relevant requirements can then be agreed with the contractor and applied to the contract to mitigate those risks.
- 2.4. This guidance applies generally to any contract for works, activities or services supplied to the owner / authority, operator or maintainer of any UK Light Rail system ('client' as referred to in this document).
- 2.5. The client should in all cases determine the relevant conditions based on the risks associated with the works, activities or services being provided.
- 2.6. The client may apply this guidance either in its entirety or in part to any other contract that affect its own business and activities. The project scope will determine which aspects of this guidance may apply.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	8 of 45

3. General Principles

- 3.1. The adoption of a six-step process methodology for contractor safety management is appropriate as it can be applied to the health and safety, quality, economic performance and environmental management of contractors. This would align with and support the 'Plan, Do, Check, Act' principles of HSE in their guidance². This should involve the actions that are summarised below, with further detail provided elsewhere in this guidance.
- 3.2. Potential contractors can be selected through pre-qualification arrangements, which ensure that only suitably competent and financially viable contractors are registered to work for the organisation.
- 3.3. Contracts should be prepared to include the required scope as well as the relevant health, safety, quality and environmental requirements, then invitations to tenders would be issued.
- 3.4. The award of contracts should be either as a result of tendering or via a single tender action and should consider the health, safety, quality, economic performance, environmental competence and performance of the contractor as applicable to the Light Rail environment. Contracts may be subject to either public or private procurement regulations.
- 3.5. The successful contractor should be adequately familiarised and orientated with the locations and relevant health, safety, quality, economic performance and environmental risks prior to the commencement of work.
- 3.6. There should be appropriate levels of health, safety, quality, economic performance, environmental supervision and / or monitoring of contractors, including the use of performance statistics and indicators, depending on the nature of the contract and the risks involved. This applies to both the contractor's own internal arrangements and supervision and monitoring by the client.
- 3.7. There should be rating and validation of contractor health, safety, quality, economic performance and environmental performance, and then this information used to inform future contractor selection decisions.

^{2 03/13} INDG368 (rev1) Health and Safety Executive: https://www.hse.gov.uk/pubns/indg368.pdf



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	9 of 45

4. Contractor Selection

Pre-qualification

- 4.1. Consideration should be given to establishing a mechanism to permit pre-qualification of contractors. This should, as a minimum, require the applicant to provide a clear demonstration of their health and safety, quality, economic performance and environmental competence to carry out the activities for which they wish to be considered. For example, a contractor questionnaire may be used to assist qualification and to provide information to audit the contractor.
- 4.2. Pre-qualification may be based on but not limited to the following:
 - Possession of recognised and relevant quality, environmental, technical, professional and safety certifications;
 - Working to / accreditation to the relevant and applicable BS / ISO Standards and bodies as required for the work;
 - Technical and professional design, production and / or process competencies on the part of both the company and its staff;
 - A sound understanding of health and safety requirements and associated applicable legislation;
 - Demonstration of an adequate Safety Management System (SMS);
 - Identification of all safety critical activities associated with the contract, and submit details of any such activities with their tender;
 - Relevant experience / previous experience of the contractor (through provision of examples and values of similar contracts, etc.) should be demonstrated if available:
 - Demonstration of financial stability;
 - Capacity and resources (including people) to deliver the requirements of the contract;
 - Records and references of known service quality;
 - The extent to which sub-contractors are used and how they are managed;
 - Appropriate insurance and details provided;
 - Details of any prosecutions, prohibition or improvement notices within the last three years:
 - Accident and environmental records;
 - Current competency statements already held; and
 - A recognised Quality Management System (QMS), preferably ISO 90001³.

Contract Preparation

4.3. It is good practice for the client to assemble a standard information pack that can be made available to potential contractors. This would include the scope of the work and safety and security requirements, relevant policies and key contact personal, along with acceptable behaviours expected within a Light Rail environment etc.

³ The international standard for creating a Quality Management Systems



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	10 of 45

4.4. Information relating to identified hazards that may be encountered should also be provided in the invitation to tender documents circulated to prospective contractors as part of the pre-tendering process. This allows the contractor to make adequate provision for safety within their tenders.

Review of Tenders

- 4.5. On receipt of all tenders, they should be reviewed by a suitably qualified procurement professional, the sponsor, and if necessary, other appropriate specialist expert advisors, for example, relating to safety or engineering etc.
- 4.6. The review should include specific consideration of the contractor's health, safety, quality and environment (HSQE) performance, previous contract delivery and contractual arrangements.
- 4.7. Sufficient time should be allocated for the review.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	11 of 45

5. Roles and Responsibilities

The Client

- 5.1. The Client shall be responsible for ensuring the requirements outlined in this guidance document are managed in all contracts where they are applicable and appropriate.
- 5.2. A designated contract manager should be appointed with sufficient time and appropriate expertise to manage the contractual arrangements. They will be a designated individual representing the client organisation, one of the points of contact between the client and the contractor, and also responsible for ensuring compliance with the organisational processes. The contract manager can be the sponsor, or another person specifically engaged for this contract.

The Contractor

5.3. The contractor is responsible for managing the activity of their organisation as well as their supply chain to comply with the contract conditions, and will be responsible for ensuring that the associated standards are achieved.

5.4. The contractor shall:

- Be responsible for satisfying any client organisational procedures, working practices and requirements applicable to the works;
- Be responsible for satisfying any relevant statutory, legal or other third party commitments and obligations (for example, relating to any TWA / TAWS⁴);
- Have or develop a comprehensive knowledge of the client's organisational contract conditions and the associated client company standards;
- Have or develop an understanding of how the contracted works can impact on the operational network, including staff, customers, stakeholder, members of the public and asset owners etc.;
- Ensure that all contractors forming part of their supply chain (sub-contractors) comply with all applicable client organisational contract conditions and associated company standards; and
- Upon contract award, identify and nominate the point of contact who will represent the contractor's organisation and their supply chain (where applicable).
- 5.5. The contractor shall assure the client that full compliance with the above is being achieved within their organisation and supply chain, and where applicable, providing the required supporting evidence.

Sub-contractors

5.6. The contractor shall ensure that its procurement management system evaluates and selects any sub-contractors on their ability to meet the client requirements in addition to quality and cost.

⁴ Transport and Works Act (Order) for England and Wales / Transport and Works Scotland (Order)



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	12 of 45

5.7. The contractor shall provide to the client where applicable, details of the basis for the selection of all proposed sub-contractors and how they are selected.

Identification of Safety Critical Activities

- 5.8. Contractors shall identify all safety critical activities associated with the contract and submit details with their tender.
- 5.9. Client safety critical activities shall be identified as set out in any legislation, standards and / or client company procedures. Agreement shall be reached with the contractor regarding which safety critical activities are associated with the contract.
- 5.10. The contractor shall regularly review their method of work and identify any further tasks, highlighting those that are safety critical as and when they are identified, so then they can be agreed with the client before the commencement of the activity.

Works Environmental Management

- 5.11. The contractor shall develop and document arrangements for managing environmental impacts. In doing so, the contractor should:
 - Ensure that the arrangements demonstrate the approach and structure of the necessary environmental management to be employed on the contract; and
 - Maintain and periodically review the arrangements in accordance with any timescales specified in the contract and forward amendments to the client.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	13 of 45

6. Emergency Plans

- 6.1. The contractor shall prepare emergency plans relating to fire and other health, safety and environmental emergencies, and ensure that all their staff including any subcontractors are aware of the arrangements within them.
- 6.2. Emergency plans shall define the arrangements, procedures and measures that will be implemented to eliminate or minimise both identified and potential hazards, including those specified by the client.
- 6.3. Emergency plans shall provide the following:
 - Clearly state the procedures to be adopted for each identified emergency;
 - List the duties and responsibilities of contractor / sub-contractor staff on site;
 - Identify a senior site official with responsibility for liaising with the emergency services and any other specified third parties, for example, utilities, Local Highway Authority (ies), adjacent property owners etc.; and
 - Include the names and telephone numbers of the contractor's nominated representative(s) (including mobile telephone numbers if applicable) who can organise or assist with emergency action (including safety, fire or environment etc.) in the event of an incident occurring outside normal working hours or when the contractor is absent from the site.
- 6.4. All emergency plans shall reflect and be complementary to any other relevant third party evacuation procedures, including those of others in the immediate vicinity.
- 6.5. Any emergency plans shall be kept at site along with any other applicable documents, posters or notices required by Law or as directed by the client. Where the works, activities or services being provided are carried out on an ad hoc basis, for example, a fault repair, emergency plans shall always be available on site while work is in progress.
- 6.6. The contractor shall provide the client with a copy of any emergency plans.



LRSSB - LRG - 34.0	
1	
0	
14/03/2023	
14 of 45	

7. Method Statements, Risk Assessments and the Health and Safety and Environment File

- 7.1. Before any work is confirmed or takes place, the client and contractor will agree on the specific format for method statements and a system for reviewing the information supplied.
- 7.2. It is the responsibility of the person employing a contractor to ensure that all risks to the general public, staff, the contractor, as well as the Light Rail system etc. arising from the contract work are identified, assessed and controlled through an appropriate structured process.
- 7.3. Contractors should be required to provide a Method of Work Statement (MoWS) at a time agreed with the client to allow an appropriate level of scrutiny before acceptance in advance of the start of work, for example 21 days in advance. The assessment of risk within the MoWS shall relate to the specific location where the work will take place, and should describe the following:
 - Limits of the proposed work, such as very specific location details;
 - Access details;
 - Dates and working times: and
 - Any isolation requirements.
- 7.4. If the work is a day to day repetitive nature, such as routine maintenance of identified plant and equipment, only one MoWS may need be submitted to the client. However, the MoW will need to be kept under review in the event of changes.
- 7.5. The level and amount of detail provided in the MoWS will depend on the nature of the work. It is advisable that a site visit be arranged whatever the nature of the works to inform the MoWS. The complexity of the MoWS should be commensurate with the risk level of the work. However, for all MoWS, the proposed work should be checked against the following summary list of items to ensure that all critical criteria have been identified. Further detail of these items is provided subsequently in this document.
- 7.6. The description and scope of planned work shall provide details of the following:
 - Any pre-work required;
 - General description of work (and list any applicable documentation);
 - Name of contractor and listing of sub-contractors by name;
 - Proposed work start and end dates;
 - Hours of work; and
 - Specific locations (work, access, storage, etc.).
- 7.7. The MoWS shall identify hazards and include the following:
 - Public interface arrangements and diversions;
 - How the site will be segregated (for example barriers, hoarding etc.);
 - Noise and dust mitigation;
 - OLE (overhead line equipment);
 - Live electrical equipment (other than OLE);



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	15 of 45

- Vehicle movements (including crash prevention);
- Use of plant and equipment;
- Use and storage of chemicals and other hazardous substances;
- Excavations and confined spaces;
- Working at height;
- Waste storage and removal (for example, material, spoil or rubbish etc.);
- Fuel and bund / spillage retainment;
- Site compound requirements and its position;
- Site security;
- Security of materials and plant;
- Delivery arrangements, including pre-delivery and storage of plant and materials: and
- Maintaining the visibility of any signalling equipment if works are adjacent to the Light Rail system.
- 7.8. The protection of infrastructure shall be included, for example, the following:
 - Identification of any hidden services;
 - Use of laser / electrically conductive survey equipment;
 - Isolation and protective measures (sleeves) or goalposts;
 - Permits required;
 - Plant movements / routes and mechanical restrictors;
 - Fire precautions;
 - Critical services and systems that may be at risk;
 - Lighting; and
 - Bonding of temporary metallic structures to the Light Rail earthing system.
- 7.9. The MoWS shall include how tasks will be performed, such as the following:
 - Confirmation that work will not start until appropriate Access Permits (APs) and Permits to Work (PTW) have been issued;
 - What work is to be undertaken and how it will be carried out safely including its finish:
 - Control measures involved; and
 - Monitoring arrangements.
- 7.10. Staff involved and any support staff arrangements shall also include the items listed below. The HSE also provide guidance in relation to welfare facilities⁵:
 - Supervisory arrangements;
 - First aid arrangements;
 - Total number of people involved and any deputisations;
 - Medical limitations;
 - Confirmation of certification and competence arrangements for users of plant and equipment and process (for example, rail welding etc.);

⁵ https://www.hse.gov.uk/simple-health-safety/workplace-facilities/welfare.htm



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	16 of 45

- Welfare facilities, including toilets, washing facilities, rest areas, etc.; and
- Site limitations, for example, no smoking / vaping on site and designated areas
 off site.
- 7.11. Plant and equipment to be used shall include the following:
 - Powered and non-powered plant requirements;
 - Access and egress arrangements for plant;
 - Powered and hand-operated tools;
 - Intrinsically safe tools, as identified in the accompanying risk assessment;
 - Temporary lighting;
 - Power supply requirements and charging stations;
 - Compressed air plant requirements; and
 - Details of PPE (personal protective equipment) to be used.
- 7.12. Staff briefing and management (including subcontractors) shall provide details of the following:
 - How staff will be briefed and their acknowledgement;
 - Sign on / sign off site;
 - How staff / work will be supervised;
 - How staff / work will be monitored; and
 - How visitors' access is managed (including safety requirements etc.).
- 7.13. Communication and liaison arrangements shall include details of key parties and communication links, for example, in relation to the following:
 - Project management;
 - Planning supervision;
 - Duty management;
 - Safety management;
 - Third parties / relevant stakeholder, such as property owner, utilities, local authorities etc.;
 - Infrastructure management:
 - On call management; and
 - Operation control.
- 7.14. Environmental protection arrangements shall be provided as the following:
 - General housekeeping;
 - Waste disposal arrangements;
 - Noise and dust;
 - Storage of hazardous substances;
 - Washdown and pollution controls;
 - Siting and security of skips; and
 - Leptospirosis⁶.

⁶ Or Weil's Diseases - a blood infection caused by the bacteria Leptospira



LRSSB - LRG - 34.0	
1	
0	
14/03/2023	
17 of 45	

- 7.15. Hand back arrangements should be detailed and include, for example, the following:
 - Completion criteria;
 - Site hand back, including site protection arrangements when work cannot be completed; and
 - Acceptance of responsibility for ensuring site is left safe and to the required standard.
- 7.16. The following relevant and appropriate emergency arrangements need to be included:
 - Contact details for emergency services:
 - Contact details for any relevant third parties, such as utilities and local authorities etc.;
 - Out of hours contractor details;
 - On call arrangements;
 - Changes to local emergency plans required as a result of for example fire alarms being isolated, evacuation routes compromised, etc.;
 - Contingency plans; and
 - Arrangements for accident and incident reporting.
- 7.17. Supporting information to be provided may include the following:
 - Site plans;
 - Diagrams;
 - Installed equipment specifications;
 - Maintenance schedules;
 - Location of services;
 - Hydrants;
 - Isolation and earthing points;
 - Synopsis of how compliance with the Construction Design Management (CDM)
 Regulations 2015 requirements are met;
 - Monitoring and safety performance arrangements; and
 - HSQE contract review arrangements.
- 7.18. The MoWS should demonstrate that appropriate and sufficient risk assessments of the identified hazards have been carried out including, for example, injury to staff and public, damage to infrastructure, etc. A joint hazard identification exercise should be carried so hazards can be identified and mitigated as early as possible, for example, at the design stage in line with CDM.
- 7.19. It is advisable that each contractor should be required to sign a statement of competency in advance of starting work in respect of the tasks that are to be performed. This should be made available for inspection and audit by the client staff or enforcing authorities such as the ORR.
- 7.20. Arrangements should be in place to review the content of the MoWS and associated risk assessments to assess the likely impact of any proposed works. This should include the following in particular:
 - The work meets the appropriate specifications in the contract;



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	18 of 45

- Effect on emergency plans;
- Effect on local services (utilities including power supplies, fire alarm / detection systems / computer equipment, water, lighting, etc.);
- Effects on businesses, residential areas etc.;
- Effects on highways;
- Effect on staff / passenger / public access / egress;
- Restrictions on platform width or length added;
- Restrictions on passenger flows / movements including persons with reduced mobility;
- Effect or adequacy of proposed risk control measures;
- Effect on Light Rail vehicle dispatch;
- Any other areas of normal day to day operations; and
- The impact on any other unexpected contractors working at the location.
- 7.21. As and when appropriate, the MoWS should be amended and include alternative and / or contingency arrangements to be communicated.

Health, Safety and Environment File

7.22. The holder or responsible individual of stored Health, Safety and Environmental file information and any other stored health and safety information on the known or potential hazards and risks that are present at a location, from both the client and contractor organisations, shall supply the information to any relevant party requesting it who is either engaged or may be involved in work at that location. This is in line with CDM; see Section 13 for further information along with LRG 23.0 Application of the Construction (Design and Management) Regulations 2015.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	19 of 45

8. General Competence

- 8.1. There are a number of general areas in which the contractor (and any sub-contractors) shall have competence, including those summarised below.
- 8.2. The contractor shall demonstrate the competence, medical fitness, qualifications and training of safety critical staff as set out in the client's organisational procedures and / or the contract.
- 8.3. The contractor shall provide a means of identification for all safety critical staff employed for the works.
- 8.4. The services of specific skills shall only be procured / sub-contracted from organisations and / or specific staff who have demonstrated themselves to be competent to provide such specific services.
- 8.5. In relation to training, the contractor shall ensure that its staff and those of its appointed supply chain are competent in the roles they are undertaking, and that they are fully conversant with client organisational requirements and the controls and processes needed to manage the risks identified for both the works and individual staff roles.
- 8.6. Where required by the contract and before starting work on site, the contractor's staff shall attend and achieve the required standard in the courses agreed with the client. These courses will cover the areas necessary to ensure that staff are safe on or about the operating Light Rail system.
- 8.7. Training should only be provided by an appropriately accredited training provider. As attendance at any safety training courses is as part of staff working hours, staff shall not have performed work in the 11 hours preceding the start of the course, and be sufficiently alert and awake as to derive full benefit from the course.
- 8.8. Contractors shall demonstrate to the client their competency to perform works on specific assets as required by the contract / relevant standards.
- 8.9. All contractors and sub-contractors should comply with the client's organisational medical requirements as set out in its company procedures and standards.

PPE and Clothing

8.10. At all times when on or about the operational system or associated property, the contractor's staff and their sub-contractors shall wear high visibility clothing (to EN ISO 20471⁷) stating their company name. High visibility vests shall also comply with the requirements of contractor and any sub-contractor staff not to wear any garment or article that impedes their vision or hearing when working on client infrastructure, unless it is specifically required as part of a safe system of work, for example, hearing protection.

⁷ EN ISO 20471:2013 High visibility clothing — Test methods and requirements



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	20 of 45

- 8.11. The wearing of hats, clothing with hoods and any other headwear should be avoided when working on infrastructure with the exception of the following:
 - Hoods or headwear required as PPE in response of a risk assessment or foul weather protection; and
 - Headwear specifically designed:
 - o To be compatible with PPE;
 - o Not to impede vision or hearing; and
 - o Within material expiry date.
- 8.12. Client organisations will have their own requirements that the contractor and any subcontractors should adhere to before any work commences on the infrastructure.

Permits and Licences

- 8.13. Permits and licences may be required for but not limited to the following:
 - Movement of materials;
 - Storage of materials;
 - Access to sub-stations, electrical switchrooms, equipment rooms and signal equipment rooms;
 - Access to electrical sub-stations, working equipment, relay and other secure rooms;
 - Working in the lift or escalator environment;
 - Hot work and fire hazardous work;
 - Visiting operational locations;
 - Working on the OLE;
 - Working on or near the infrastructure; and
 - Noise and environment.
- 8.14. Access may be restricted to / from certain areas for contract staff, unless their work requires them to be in such restricted locations, which may require them to be accompanied by a client representative.
- 8.15. In addition, contractors shall:
 - Hold a record of all licences, permits and certificates issued to its staff and / or its sub-contractors by the client or appropriately accredited training providers;
 - Ensure that their staff carry appropriate certificates relevant to any medicines / drugs and alcohol, training and / or competency; and
 - Allow sufficient time to ensure that its staff are properly trained and registered before starting work on the contract.
- 8.16. While working on behalf of the client, the contractor's staff shall be aware of all client procedures and processes and adhere to these at all times.
- 8.17. Further detail on permits is located in Section 15 of this document.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	21 of 45

9. Briefing, Monitoring and Supervision of Contractors

Familiarisation

- 9.1. The contract manager or individual elected to represent the client during the works should, where possible, have arrangements in place to supply contractors with the following location-specific information (as is relevant to the contract) prior to the commencement of work at any client premises. This would include the following:
 - Details of any known hazard that the contractor may encounter (for example, asbestos, buried services, etc.);
 - Means of access and egress from the site (including any authorised walking route);
 - Any relevant site drawings relating to the location where work is to take place, and which are appropriate to the nature of the work; and
 - Details of evacuation procedures and local emergency plans.
- 9.2. The contract manager or individual elected to represent the client during the works should arrange a pre-start meeting with the contractor, which should include consideration of the following:
 - The scope and nature of the contract;
 - Relevant contract documentation;
 - Arrangements for managing interface risks;
 - Arrangements for communication between the contractor and the local manager;
 - Means of communicating with the local manager of the tramstop or depot;
 - Site specific safety briefing; and
 - Details of any other contractors or Light Rail operations that the contractor may encounter.
- 9.3. The contract manager should establish arrangements for communication with the contractor for the duration of the contract, including arrangements for the reporting of accidents and incidents.
- 9.4. Contract documentation and where relevant construction phase plans for CDM works should be available and include details of the contract roles and responsibilities such as contact names, telephone numbers, and detailed arrangements for emergency and out of hours communication. An overview of the CDM Regulations is provided in Section 13 and further information is also available in LRG 23.0 Application of the Construction (Design and Management) Regulations 2015.
- 9.5. Except for more basic tasks, the contractor should provide suitable risk assessments and methods of work.

Contractor's Site Induction

9.6. The contractor shall ensure that their staff and any visitors to the site are made aware of the contractor's health, safety and environmental requirements, as specified in the contract relevant to site safety.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	22 of 45

- 9.7. As part of this process, this should include a brief covering aspects that are appropriate to the place and nature of the work to be undertaken and should include the following general items:
 - Formal general safety induction;
 - Formal confirmation of the briefing phase be captured;
 - Emergency procedures (for example, what to do in the event of a fire, explosion, major incident, chemical spillage, etc.);
 - First aid arrangements (normally provided by the contractor);
 - Reporting of accidents and incidents to the location management (including damage to property, plant or equipment);
 - Confirming limitations of work, and site boundaries;
 - Personal safety and security (including signing in / out arrangements and the need for visible identification);
 - Reporting arrangements including details of key contacts;
 - Alcohol and drugs policy;
 - Correct use, maintenance and storage of tools, equipment, etc.;
 - Keeping the site tidy and secure, including removal / disposal of waste materials;
 - Carrying out of risk assessments where required;
 - Being aware of suspicious items and people (providing a specific security briefing if appropriate);
 - Location of any other contractors working on the premises;
 - Process for managing changes, for example, due to unforeseen problems; and
 - Requirements associated with any AP / PTW.
- 9.8. In addition, the briefing should also include site-specific information in a written form, including the items listed detailed below.
- 9.9. Local emergency arrangements shall be put in place, including what do in the event of a fire alarm, security alert, evacuation, etc. If the site or nature of the work is such that contractors might not be alerted through the normal mechanisms (for example, the work is taking place at a remote location or generates high levels of noise), then special emergency communication arrangements shall be put in place to ensure that contractor staff can be advised of the need to respond.
- 9.10. Specific hazards including those that may not be expected, include the following examples:
 - Trains (where a light rail system shares infrastructure with Heavy Rail);
 - OLE;
 - Conductor (third) rail (if appropriate);
 - Electric cables;
 - Gas pipes;
 - Confined spaces;
 - Hazardous materials including asbestos;
 - Noise; and
 - Slippery or uneven surfaces, etc.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	23 of 45

- 9.11. Where a contractor is to undertake work at the same location for a number of days or weeks, it will not be necessary to provide repeated safety briefings on a daily basis. The contractors should still sign in / out of the location, either as individuals or by the contract supervisor on behalf of the group each time they report to / from work. However, where there has been a change to the original scope / design by progress of the works or process, then a briefing should be given.
- 9.12. Contractors should be required to immediately advise the client of any unexpected incidents or accidents covered in the contract and to supply a subsequent written report of the subsequent investigation. This is irrespective of whether the accident occurs within or outside of the designated worksite.
- 9.13. In relation to security, contractors (and their staff) should be both empowered and encouraged to challenge any unknown or unidentified persons appearing in their work place / site. This should include people without identification in non-public areas, or anyone acting suspiciously and summon assistance from the client and / or the police / British Transport Police. They shall also be encouraged to be observant for unattended items, as well as being aware of any tools and equipment they may leave unattended.

Special Requirements

- 9.14. The client should consider whether there are additional and / or special requirements and as such, specify what restrictions are to apply in the event of them. Examples may include work involving any of the following:
 - Working close to running lines, where necessary provision should be made for lookouts, cautioning of Light Rail or other vehicles, etc.;
 - Work in public areas, for example platforms, concourses, etc.;
 - Hot works i.e. the use of flame, electric arc or any equipment capable of producing sparks, alumothermic welding equipment or any equipment capable of producing sparks;
 - Use of burning equipment (for example, oxyacetylene);
 - Entry into confined spaces;
 - Excavations;
 - Scaffolding;
 - Working at heights in general, particularly where this is in close proximity to OLE (including catenary) or is above areas used by staff and / or members of the public;
 - Working in close proximity to live electrical equipment. Where necessary, arrangements shall be made to ensure that such equipment is isolated before work commences:
 - Use of hazardous substances (or work taking place in the vicinity) including flammable, explosive, corrosive and / or radioactive materials, asbestos etc.;
 - Use of road vehicles;
 - Use of equipment where a current test or examination certificate should be provided in respect of equipment which requires statutory testing or inspection; and
 - Erection of temporary buildings and structures.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	24 of 45

9.15. The client should advise the contractor of any changes to their working practices that have been made after work has started and which may or will affect any of the above items

Staff Requirements

Alcohol and Drugs

- 9.16. The Transport and Works Act 1992⁸ sets requirements for individuals and Light Rail systems with regard to fitness for work in relation to drink and drugs (including prescribed or medicines that are available for over the counter purchase). All contractor staff and sub-contractors shall be compliant with this.
- 9.17. When required by the client, the contractor's staff shall co-operate by providing breath tests or specimens for analysis in the following circumstances:
 - Prior to starting the contract or an approved training course;
 - Annually;
 - Unannounced and on a random basis in addition to testing for any other reason;
 - When suspected of an infringement of a legal requirement; and / or
 - Following an incident.
- 9.18. Failure to comply may result in civil or criminal action against the individual and / or the contractor.
- 9.19. Testing will be undertaken at the contractor's expense. Information on laboratories approved by the organisation for alcohol and drugs screening should be made available.
- 9.20. Records of testing shall be produced by the contractor on request or at specified intervals as determined by the contract. Records of individuals who have failed to meet the organisations requirements shall be supplied to the client with the result of prohibition from the site and / or dismissal.
- 9.21. Refer to LRG 33.0 Guidance on the Management of Drugs and Alcohol for further information.

Control of Hours Worked

- 9.22. Contractors shall comply with the Working Time Regulations 1998⁹ and any subsequent amendments and as such, control the hours worked by their staff and the staff of subcontractors, including but not limited to the following items.
- 9.23. The minimum length of rest between any two shifts shall be 11 hours.
- 9.24. As determined by the contractor, the consecutive days that may be worked before a rest period shall be one of the following:
 - Six consecutive days, followed by a rest period of not less than 24 hours;

⁸ https://www.legislation.gov.uk/ukpga/1992/42/contents

⁹ https://www.legislation.gov.uk/uksi/1998/1833/part/II/made/data.pdf



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	25 of 45

- 12 consecutive days, followed by two consecutive rest days where both are not less than 24 hours; or
- Within any 14-day period, two rest periods where both are not less than 24 hours.
- 9.25. In calculating the number of hours worked by staff, the contractor shall take into account those hours worked for any other contractor.
- 9.26. The contractor shall maintain records of staff working hours and these shall be made available to the client immediately upon request, for monitoring and audit purposes.
- 9.27. Refer also to LRG 6.0 Fatigue Management Guidance in relation to hours worked.

Fatigue Management

- 9.28. Adherence to the Working Time Regulations does not negate the need for the management of the risk of fatigue and as such, contractors shall implement controls to reduce, so far as is reasonably practicable, risks arising from staff fatigue. The control of fatigue risk is necessary, even if there is no shift work, significant overtime or safety critical work being undertaken.
- 9.29. In considering the risk of fatigue, contractors shall include but not limit their controls to:
 - The maximum length of any shift in any roster shall be 12 hours. When working nightshifts, consideration to reducing the shift length shall be given due to the increased risk of fatigue: and
 - The door-to-door time (combined travel time and work time) shall not be planned to exceed 14 hours.
- 9.30. Special consideration shall be given to first night shifts due to the change in work / sleep patterns. Contractors shall have suitable fatigue risk management systems in place, such as the ROGS Nine-Stage Approach for Critical Safety Workers that is detailed in ORR guidance¹⁰ to demonstrate how they manage the risks associated with fatigue. This shall include the use of suitable fatigue assessment methods to assess proposed work patterns and actual hours worked.
- 9.31. This shall also include the identification and assessment of work patterns for any sub-contractors or other staff. Contractors shall refer to ORR guidance and / or HSE guidance¹¹ as appropriate for guidance on managing fatigue in Light Rail and non-Light Rail staff.
- 9.32. In addition, where safety critical work is defined, contractors should submit detailed rosters and associated fatigue risk management plans which will include, but not be limited to, fatigue risk assessments.
- 9.33. For further information on fatigue management please refer to LRG 6.0 Fatigue Management Guidance.

¹⁰ Section 6 of ORR's guidance 'Managing Rail Staff Fatigue':

https://www.orr.gov.uk/sites/default/files/om/managing_rail_fatigue.pdf

¹¹ Managing Shift work" (HSG256) - Managing shift work: Health and safety guidance: https://www.hse.gov.uk/pubns/books/hsg256.htm



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	26 of 45

Monitoring and Supervision

- 9.34. Responsibility for determining the level of supervision and monitoring required for the work (including its breakdown parts / phases) and assurance that contractors are complying with the arrangements should be agreed and laid down in the contract.
- 9.35. MoWSs should be provided to the contract manager or individual elected to represent the client during the works.
- 9.36. The extent and frequency of the supervision and monitoring should be proportionate to the degree of risk involved in the delivery of the works and / or the contract. The more significant the risks to health and safety and / or environment created by the work, the higher the level of supervision and monitoring of the contractor may be required.
- 9.37. Where applicable, the contract manager or elected client representative should undertake the following:
 - Co-ordinate the contractor, local managers, and other interested parties to identify any health, safety and environmental issues that need to be resolved and who will have responsibility for doing so, (for example, for providing a safe work area, for development of site rules, for training, for provision of tools, equipment, PPE, etc.);
 - Conduct recorded checks of the contractor's own processes for the monitoring of its health, safety, and environmental performance of the contract;
 - Monitor contractor health, safety and environmental performance through site inspections and audits. The extent and frequency of such monitoring should be proportionate to the degree of risk involved in the delivery of the works / contract. Compliance with any PTW conditions is a simple way to check performance if this system is used;
 - Check that accidents and incidents are correctly reported, recorded and investigated by the contractor and or sub-contractors;
 - Conduct health, safety, and environmental review meetings. These may be part of a regular contract review meeting; and
 - Carry out regular reviews of the level of supervision and monitoring and adjusting it as necessary to make sure that it reflects the ongoing risk profile of the work. Circumstances where an increase in level of supervision or monitoring may be appropriate to include the following:
 - o A significant change to the activity or equipment used; and
 - o Where there have been health, safety, or environmental incidents including incidents of non-compliance.

Sub-contractors

- 9.38. The contractor shall monitor the performance of its staff and any sub-contractors supply chain and ensure that the results are used to:
 - Control their activities;
 - Assess any work it is already undertaking; and
 - Assess its sub-contractors' suitability for future works.
- 9.39. These records shall be made available to the client upon request.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	27 of 45

Health, Safety, and Environmental Surveillance by the Contractor's Staff

- 9.40. The contractor shall submit to the client details of the contractor's proposed level of site health, safety, and environmental surveillance, together with the nomination of named health, safety and environmental supervisors and officers who will have an overview of all site health, safety and environmental matters.
- 9.41. Such details shall include programmes to an agreed level of detail and format for the following:
 - Safety tours and detailed safety inspections; and
 - The auditing of site activities to ensure that the correct health, safety and environmental management procedures are being followed.

Work Location Inspection and Audit

- 9.42. All contractors shall provide full and free access to the client (or their representatives) for the purpose of carrying out audits and site inspections to monitor compliance with the health, safety, quality and environmental conditions attached to their contract.
- 9.43. The client (or their representatives) may at any time undertake inspection of the equipment and audit or check any aspect of the contractor's performance of the contract. The client (or their representatives) shall inform the contractor of the objectives of any audit prior to its commencement.
- 9.44. When requested to do so, the contractor will promptly provide all reasonable cooperation in relation to any inspection, audit or check in a reasonable and prompt manner including the following:
 - Providing access to any premises, equipment, plant, machinery or systems used in the contractor's performance of the contract, or where such premises, equipment, plant, machinery or systems are not the contractor's own, using reasonable endeavours to procure such access;
 - Ensuring that appropriate security systems are in place to prevent unauthorised access to, extraction of, and alteration of data during the audit;
 - Making any contracts, documents and records referred to in the health, safety, quality or environment contract conditions available for inspection; and
 - Providing a reasonable number of copies of any contracts, documents and records referred to in the health, safety, quality or environment contract conditions, as are required / requested by the auditor, or granting copying facilities to the auditor for the purposes of making such copies.
- 9.45. The client (or their representatives) shall have the right to carry out such inspections or audits, as they consider necessary. The contractor shall make available any of their specialist staff as may be agreed are necessary for the performance of such inspections or audits carried out by client (or their representatives).
- 9.46. The contractor shall work closely and co-operate fully with the client and its staff (or representatives) on matters of health, safety and environment. The contractor shall



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	28 of 45

fully and unreservedly accept that responsibility for the safety of the works rests with the contractor. The participation of client staff or their representatives in inspections and audits does not in any way absolve the contractor from that responsibility.

Timescales for Rectifying Non-compliance

9.47. Areas of non-compliance should be recorded. The client (or their representatives) and the contractor shall agree the timescale for rectifying any areas of non-compliance or sub-standard conditions that have been identified during any audit or inspection.

Site Housekeeping and Security

- 9.48. The contractor shall keep the work location in an orderly condition appropriate to the avoidance of danger and risks to all persons and avoidance of adverse impacts on the environment.
- 9.49. Where applicable, the contractor shall ensure the site is safe and secure at the end of each shift unless continuous working is involved. The contractor shall ensure that the work site is free from all the contractor's equipment, materials and waste on completion of the works or when the site is returned to normal operations.
- 9.50. The contractor shall make suitable provision for disposing of any unused, redundant or waste assets and materials and are responsible for determining the correct disposal methods in line with the contract. Consideration shall be given to reusing and recycling materials, including any recuperation of cost for scrap. The contractor shall ensure that the client is informed of plans for disposing of assets and materials.

Regulatory Bodies

9.51. Contractors shall be required to accept the right of any regulatory body such as the ORR, HSE etc. to conduct monitoring, inspection, audit, and / or investigation of any work being undertaken. For protection of worksites, this can take place without prior notice, though visits within worksites should, where practicable, be undertaken with an agreed notice period.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	29 of 45

10. Reporting

Health, Safety, and Environmental Violations

- 10.1. The contractor should have their own internal reporting mechanisms, in accordance with their SMS, which should include an escalation process. These mechanisms should not be limited to events resulting in injury or property damage, but anything that has been identified in relation work activities that could endanger health or safety.
- 10.2. Any identified non-compliance with the contract and / or health, safety and environmental requirements should be recorded and drawn to the attention of the contractor, and work should be immediately stopped if necessary. Compliance with the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)¹² should be applied. Refer to LRG 12.0 Statutory Reporting of Incidents for further guidance on RIDDOR.
- 10.3. If the identified deficiencies are not rectified in an acceptable and appropriate manner, or within an acceptable or appropriate timescale, work should not resume until the deficiency has been rectified, or a suitable alternative solution has been agreed.
- 10.4. Any member of staff from the client, contractor and / or any sub-contractor organisation has the right to stop contractors from working if they believe the safety of people is being compromised.

Confidential Reporting

- 10.5. Contractors shall ensure that all staff are aware that they can contact CIRAS¹³ on FREEPHONE 0800 4 101 101 at any time, should they wish to report any matter of health, safety or environmental concern in complete confidence. This is as a complement to internal reporting, and can maximise the opportunity for the data captured from the reporting to prevent incidents before they happen.
- 10.6. For further guidance, refer to LRG 27.0 Confidential Reporting Guidance.

Accidental Damage, Obstruction, or Interference with Assets (not owned by the Contractor)

- 10.7. Should any damage, obstruction or interference occur to an asset not owned by the contractor, they shall immediately report this to the client.
- 10.8. The contractor should seek permission to rectify any damage for works out of their scope, as this may increase the risk of a consequential incident. If the damage has the capacity to affect operations, or if there is a risk to any person, the contractor shall report the details in accordance with the pre agreed organisational requirements to the client.

¹² https://www.legislation.gov.uk/uksi/2013/1471/contents/made

¹³ Confidential Incident Reporting and Analysis System



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	30 of 45

11. Quality Requirements

General Quality Requirements

- 11.1. As part of the contract, the contractors shall be required to undertake or provide the following general quality requirements as summarised below.
- 11.2. A sufficiently qualified member(s) of the management team shall be appointed with defined authority, irrespective of other responsibilities. This authority includes the following:
 - Ensuring that a quality management system is implemented and maintained;
 - Reporting to senior management on the performance of the quality management system, including any need for improvement;
 - Ensuring awareness of client requirements throughout the contractor's organisation; and
 - Liaison with the client on matters relating to the contractor's management system that result from auditing or areas that are non-compliant.
- 11.3. The contractor should ensure that during internal processing and final delivery of the work, the identification, packaging, storage, preservation and handling of any of its parts do not affect compliance with product or service requirements.
- 11.4. The contractor will not proceed past agreed milestones until all the specified activities for that phase have been sufficiently completed, and the related documentation is available and accepted and authorised by the client.
- 11.5. Following receipt of any rejection, the contractor should take immediate action to inspect all work(s) and associated activities in order to assess risk and loss, and advise the client of the findings.
- 11.6. The client should take preventative action to avoid a recurrence of any areas of non-compliance.
- 11.7. The client should be immediately informed if and when the contractor has reason to suspect any areas of non-compliance still exist with previously supplied works.
- 11.8. The contractor is responsible for ascertaining the cause of any areas of non-compliance and shall take suitable corrective action to prevent any recurrence.
- 11.9. The client should document all corrective actions.
- 11.10. The contractor shall ensure that their supply chain work to the appropriate practices, Regulations and Standards including the following (not exclusively):
 - Accepted documentation;
 - Defining any specific 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, etc.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	31 of 45

- 11.11. The contractor shall ensure that the works comply with any manufacturer's recommendations, instructions and guidelines unless otherwise directed by the client. In addition, the contractor shall operate and maintain all plant, equipment and processes in accordance with the relevant manufacturer's or contractor's specification or procedure, unless otherwise directed by the client.
- 11.12. All necessary steps shall be taken by the contractor to identify and then recall, re-inspect and replace any equipment or parts that have been inspected using any appropriate inspection, measuring or test equipment whose calibration is subsequently found to be defective or inaccurate.
- 11.13. The contractor shall store and protect inspection, measuring and test equipment and materials to prevent misuse, damage and deterioration. They shall also 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.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	32 of 45

12. Records

- 12.1. The contractor shall maintain such records that are specified by the client, some of which should be included in their health and safety file. This shall include the following as a minimum, to a sufficient level of detail and quality:
 - Details of any non-compliance against any organisational or industry Standards, Regulations or procedures;
 - Any areas of non-compliance of service or products etc.;
 - Records of all related incoming and outgoing certificates of compliance / conformity and associated release documentation;
 - Records of audits and site inspections;
 - Records of the qualifications, competence and training of staff;
 - Quality assurance inspections conducted (including the identity of the inspector concerned);
 - Equipment test calibration and verification checks conducted (including the identity of the inspector or tester concerned);
 - Process and manufacturing data relating to the contract, including an identified 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 (see below for further guidance);
 - Records of tender and contract reviews:
 - The contractor's policy with regard to quality; and
 - Technical queries.
- 12.2. Records should be made of all checks, inspections and audits, including details of any identified non-compliance. Notes of health, safety and environmental review meetings should be recorded, including identification of any actions and who is responsible for their completion, as well as when they are to be completed.
- 12.3. Records should be made available to the client within an agreed and reasonable timeframe once requested.

Quality Plan

- 12.4. The contractor shall complete and submit a Quality Plan with the tender if required by the client for review and acceptance, making sure it demonstrates the contractor's process control system as required for the contract.
- 12.5. The contractor shall maintain and periodically revise the Quality Plan and forward it to the client in its amended form. The format of the Quality Plan may be determined by the client and should be developed in line with BS ISO 10005:2018¹⁴.
- 12.6. In relation to testing and inspection, the contractor shall undertake the following:
 - Demonstrate to the client's satisfaction that acceptance sampling techniques are utilised and such sampling shall meet the requirements of BS 6001- 1:1999 /

¹⁴ BS ISO 10005:2018 Quality management — Guidelines for quality plans



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	33 of 45

ISO 2858: 1999^{15} , BS 6001-2:1993 / ISO $2859:1985^{16}$, BS $6001-3:2005^{17}$ and BS 6001-4:2005 / ISO $2859-5:2005^{18}$;

- Identify which sampling plan it intends to apply to the contract and forward it to the client for approval;
- Reference the sampling once it has been approved in all relevant contract Quality Plans submitted to the client;
- Demonstrate compliance with any requirements of manufacturer's / product owners requirements;
- Be prepared to revert to 100% inspection in such cases where the failure rate exceeds the level of acceptance identified within the sampling plan;
- Prepare for the approval of the client an inspection and test plan which shall include such hold points agreed with the client; and
- Maintain sampling inspection records in accordance with the client's requirements.
- 12.7. Further guidance on testing and commissioning is provided in LRG 32.0 Testing and Commissioning Guidance.

_

¹⁵ BS 6001- 1:1999 / ISO 2858: 1999 - Sampling procedures for inspection by attributes - Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

¹⁶ BS 6001-2:1993 / ISO 2859:1985 – Sampling procedures for inspection by attributes – Part 2: Sampling procedures for inspection by attributes. Specification for sampling plans indexed by limiting quality (LQ) for isolated lot inspection

¹⁷ BS 6001-3: 2005 - Sampling Procedures For Inspection By Attributes. System Of Sequential Sampling Plans Indexed By Acceptance Quality Limit (AQL) For Lot-By-Lot Inspection

¹⁸ BS 6001-4:2005 / ISO 2859-5: 2005 - Sampling procedures for inspection by attributes - Part 4: Specification for sequential sampling plans



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	34 of 45

13. CDM Regulations

- 13.1. The Construction Design Management (CDM) 2015 Regulations¹⁹ apply to all construction work in the UK regardless of the size of the project. It applies to all parties and their staff, as well as those who are self-employed.
- 13.2. CDM applies to the whole process on all construction works from concept to completion, including ongoing maintenance.
- 13.3. The key aim is to integrate health and safety into the management of the contract and to provide the following:
 - Encourage everyone involved to work together to improve the planning and management of the works from the outset;
 - Identify hazards early on so they can be eliminated or reduced at the design or planning stage and the remaining risks can be properly managed;
 - Target effort where it can have maximum impact in terms of health and safety; and
 - Discourage unnecessary bureaucracy.
- 13.4. CDM is intended to focus attention on planning and management throughout construction works from design concept onwards. The aim is for health and safety to be treated as an essential standard part of a project's development.
- 13.5. For further information, refer to LRG 23.0 Application of the Construction (Design and Management) Regulations 2015 Guidance.

LRSSB

¹⁹ https://www.legislation.gov.uk/uksi/2015/51/made



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	35 of 45

14. Access

Depots

- 14.1. All operators / maintainers will have their own requirements in relation to access to depots and facilities. Generally, a depot induction will be carried out highlighting conduct and restricted areas for contractors.
- 14.2. The contractor's staff will be required to formally notify the operator / maintainer of their presence, and should be required to sign-in before entering the depot area / site and sign-out when leaving in accordance with visitor / contractor procedures. Groups of contractors may sign in either as individuals or by a contractor supervisor on behalf of the group. On occasion, contractors may require an escort or some form of supervision either for general access or for certain areas of the depot.

Track

- 14.3. Each contractor shall ensure all relevant staff have sufficient and relevant Light Rail Personal Track Safety (PTS) in accordance with the client requirements. A PTS for a Light Rail system includes different elements to any mainline railway PTS as there are additional and / or different risks.
- 14.4. All contractors working within the stipulated minimum distance of the nearest running rail should undergo Light Rail PTS training and be issued with some form of validated ticket as proof of completion. In addition, contractors should be notified that they are subject to inspection at any time by the client or accredited third party safety organisations.
- 14.5. Access points should be agreed as part of setting up the contract and in doing so, the contractor should be notified of any particular routes or entrance points when travelling around the infrastructure and accessing the track / Light Rail system.

Substations

- 14.6. Where contractors are required to access substations, they shall be competent in having sufficient and appropriate technical knowledge and experience. They should usually be given access with an escort by an operator / maintainer representative following a safety briefing prior to entry.
- 14.7. The works are authorised under a Limitation of Access safety document that defines the nature and limits of work allowed where verbal instructions are not considered sufficient and where a PTW is not applicable.
- 14.8. Where contractors are required to access substations, for example, for testing and commissioning, protection setting validation etc., they shall be qualified in an appropriate electrical discipline and shall follow the safety rules of the contactor leading the works.
- 14.9. Generally, if the works involve switching and isolation of apparatus, this is not authorised and is undertaken by an operator / maintainer representative, unless the contractor has been appropriately trained on the operators / maintainers apparatus and procedures. Safety documents and a PTW will also be required along with the



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	36 of 45

appropriate wearing and use of approved anti arc flash PPE where safety rules are imposed by either the contactor or client.

15. Permit to Work

Purpose

- 15.1. All work on site (other than that for which systems and procedures are already in place) should be controlled by a PTW. This PTW can be an overarching permit or a number of multiple permits linked / referenced to each other.
- 15.2. It should be noted that in Law, there is a mandatory requirement for PTW systems for certain types of activity that are categorised as high-risk in nature. Examples include but are not limited to the following:
 - Work on or near live electrical equipment (that has been suitably isolated and locked out of service);
 - Work in confined spaces;
 - Working at height; and
 - Work involving fire hazard, for example, welding operations.
- 15.3. Study of the appropriate Regulations is advised in the above situations.
- 15.4. The purpose of the PTW is to ensure that there has been an appropriate and sufficient assessment of the risks and measures taken to provide appropriate and sufficient mitigation, for example, isolation or a disabled condition of infrastructure and plant so that it can be worked on safely and without undue risk to those undertaking the task.
- 15.5. The PTW system may also be used to control the activities of the client's staff when the work is not covered by a standard operating procedure.
- 15.6. The PTW remains valid only when there is compliance with the conditions and specifications within it.

Issue

- 15.7. The PTW should be issued by the person in charge of the workplace, or their designated deputy. The issuer is responsible for ensuring that the conditions specified on the PTW are monitored and that the PTW is withdrawn in the event of non-compliance or any other factor that may compromise safety.
- 15.8. The PTW should be issued at the work site or immediately following a visit of the issuer to the work site to ensure that all local and current risks have been assessed, with contractors briefed on the practical requirements of the PTW. A copy of the PTW should be retained by the issuer in an agreed format.
- 15.9. The PTW should not be issued until the following has occurred:
 - The MoWS supplied by the contractor has been received by the client and is accepted;



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	37 of 45

- All other persons whose work may be affected by the activities described on the PTW have been advised of this particular work. The work should not commence until a PTW has been authorised and issued by the client; and
- Sufficient isolation of infrastructure has been undertaken and has been proven to be safe for work to commence (Lock out, tag out (LOTO) / testing or removal/ disconnection of pipe / hose (hydraulic and pneumatic systems)).
- 15.10. The PTW should be countersigned by the contractor's senior representative on site to demonstrate their understanding of the work involved and their acceptance of the responsibilities of the precautions required within it.
- 15.11. The PTW shall be readily available for inspection at the work site at all times when the work is under way and any requirements stated on the PTW shall be adhered to at all times.
- 15.12. PTWs that have expired should be retained and made available for inspection for a minimum of 12 months following date of expiry.
- 15.13. Further guidance on PTW is available from the HSE^{20} .

²⁰ https://www.hse.gov.uk/comah/sragtech/techmeaspermit.htm



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	38 of 45

16. Closures, Possessions and Isolations

General

- 16.1. Due to the nature of some of the works required on and around Light Rail systems, it may be necessary to close part of the system or reduce services / operations to allow works to be undertaken by not only a contractor, but also the operator, the operator's contractor, a utility provider or an independent third party. These can be in the form of closures, possessions, and / or isolations.
- 16.2. A closure is a whole or partial closure of a Light Rail system whereby services are suspended, and vehicles are unable to safely run in the affected area, with replacement bus or alternative transportation service in place. It can be required, for example, due to an accident / incident or for the undertaking of maintenance, and may include a possession and isolation of the OLE.
- 16.3. **A possession** is where a specific part of the Light Rail system infrastructure is taken out of service or operational control for the purpose of maintenance or repair. The possession can be planned or non-planned and part of a routine maintenance schedule and will have defined work site boundaries with stop boards or special protective measures employed to prevent access by still in service Light Rail vehicles unless:
 - It is an open line possession with vehicles still running at reduced speed through the site, directed by a person in charge (PIC) or lookout; and / or
 - It is during a period when no vehicles are running.
- 16.4. When a contractor possession is taken or released, or where a PTW is issued / cancelled, for the purpose of recording and verification, safety critical communication with the Operational Control Centre shall be made. The same procedure should apply to in house staff.
- 16.5. An application or request for work is the submission of a work package plan that details the safe system of work (SSOW) including the following:
 - The work to be carried out;
 - Method statements;
 - Risk assessments;
 - COSHH²¹;
 - The contractor(s); and
 - Where applicable, traffic / pedestrian management and any lifting plan, etc.
- 16.6. The SSOW shall recognise that the third parties have considered the impacts of working on or near the Light Rail system infrastructure (including OLE), with measures in place to avoid an accident or incident. This is not an authorisation to work.
- 16.7. An authorisation to work should minimise the safety risks involved with working on or near the Light Rail system. It is necessary to obtain authorisation from the operator or owner, and agree a safe system of work before any commencement of any work.

²¹ Control of Substances Hazardous to Health Regulations 2002: https://www.legislation.gov.uk/uksi/2002/2677/made/data.pdf



LRSSB - LRG - 34.0	
1	
0	
14/03/2023	
39 of 45	

- 16.8. Works can be short term i.e. overnight or are extended over several days and can be required for the following:
 - Planned works;
 - Unplanned works due to an incident i.e. de-wirements; and
 - Unplanned works due to external influence affecting system operation and infrastructure, for example, due to a significant building fire, weather etc.
- 16.9. Where works are planned for a long duration and require a closure of the line, for example, track replacement works, the application should be escalated to the appropriate authority, concessionaire, or owner of the system along with a pre-planned works strategy.
- 16.10. As soon as a work package is approved, the following stakeholders (not exhaustive) should be informed and meetings arranged as appropriate so information can be freely distributed:
 - Relevant Local / City Council Highways;
 - Relevant Local / City Council environmental department;
 - Emergency services;
 - Utility services affected by works;
 - Business affected by works;
 - Businesses adjacent to works;
 - Residents / neighbours likely to have disruption or disturbance;
 - Local transport operators: bus, rail, taxi etc.;
 - Operations and communications / media; and
 - Other relevant third parties such as sensitive receptors, for example hospitals, churches, schools, theatres, etc.
- 16.11. As planning progresses, additional and regular meetings with some stakeholders may be necessary in order to establish or define changes required that affect the parties. An implementation plan should be developed that will explore, define and agree all works and any appropriate mitigation measures etc.

Planned Works

- 16.12. When planning the works, the contractor or third party should contact the operator requesting an application for work, allowing adequate time for planning the works and the review of the application. It is reasonable to state a period of time, usually a minimum of 3-6 weeks prior to the works. However, in some instances, 12 months notice or more is required depending on the works.
- 16.13. Once the application has been submitted and is accepted by the recipient, a site meeting can be requested, involving the various parties involved in the works to establish the impacts of the proposed works on the affected infrastructure. This will determine the exact nature and extent of the works and the required mitigation measures that need to be implemented and by which party, in order to seek to allow the system to maintain operations. If operations cannot continue during the works, financial displacements for loss of revenue / operation or other such arrangements should be considered against the cost of the work during the works.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	40 of 45

- 16.14. A work package plan / SSOW shall be submitted and escalated to the authority, concessionaire, or owner (as appropriate) if significant disruption and a planned closure is required. This should agree an emphasis that the works should take place without affecting the operation of the system. However, if this is not possible and operations will be affected, the contractor shall not undertake the works or make any amendments to plans without the agreement of the relevant parties. The impacts of this could include curtailment of operations or a delayed start of the service to allow enough time for the contractor to undertake the works.
- 16.15. When an agreement to works has been established, planning of closure or possessions can then be undertaken. This will consist of the time and date for the contractor or third party to agree all measures, staff, and resources and have them in place to complete the work scope in accordance with the agreed schedule. This may consist of several small possessions either side of the operational service.
- 16.16. A full assessment should be undertaken by both client and contractor before the commencement of the works. This will establish what infrastructure is affected and / or needs to be replaced or reinstated to a pre agreed prescribed standard that usually will be, as a minimum, to the level of the original design and build. If the original materials are not suitable for reinstatement, replacement materials could be used as agreed between the operator, owner, authority and contractor (as appropriate) and will include agreement on what costs will be met by the operator.
- 16.17. Once the works have been completed to the operator's / owner's scope and satisfaction, the process of re-establishing the operation of the system will commence with a sign off on site with checking, system parameter validation, handover / hand back documents, of permits, and reenergisation, etc. as required.

Unplanned Operator Works

- 16.18. The contactor or third party appointed by the operator to undertake unplanned works, either as part of an incident recovery programme or an ad hoc activity, should have an established SSOW credentials with the operator, including any PTS competent staff.
- 16.19. The operator shall arrange for isolation of OLE power if required, as well as safe access and possession or closure depending on the nature of work.
- 16.20. Once the works have been completed to the operator's scope and satisfaction, the process of re-establishing the system will commence with system parameters validation, the signing off permits, site checking and re-energisation if required.

Unplanned Works Due to External Influence

- 16.21. Where a third party affects an operational system, it is likely that as part of their incident management, they may engage contractors who have never worked on or near a Light Rail system. As this can introduce risk, the third party should contact the operator so they can advise on safety and other procedures including a SSOW. A closure will be undertaken if the third party's contractor is not familiar with or appropriately certified to work on or near a Light Rail system or possess the appropriate PTS.
- 16.22. As part of the above process, the operator will need to establish very quickly the nature of the incident, timescales and liaise with the operational and maintenance staff and / or emergency services as required.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	41 of 45

Isolations

- 16.23. This is the de-energisation of the OLE system in part or whole from the traction power source for emergency or maintenance activity, and having protective earth(s) applied either automatically or manually to remove the risk of any residual voltage being present and therefore a danger to staff or third party. A LOTO and PTW scheme shall be implemented to safeguard the procedure against failure. Stop boards or special protective measures shall also be employed at the boundary of the worksite.
- 16.24. To allow third party contractors to undertake works safely on non-Light Rail infrastructure around the system, possessions of track, isolations of OLE (or a combination of both) etc. may be required. The operator should have a scheme to manage isolations, which may consist of specific times or weeks where isolations are held to permit these works.
- 16.25. Isolations can include the following:
 - Pre-planned works inside isolation weeks (or sessions);
 - Pre-planned works outside of isolation weeks; and / or
 - For an emergency.
- 16.26. When a contractor or external third party is planning works under isolation of the track or OLE either as part of a maintenance programme or ad hoc activity, they should contact the client to request an application for work, allowing adequate time for planning the works and the application process. It is reasonable to state a period of time, usually a minimum of 3-6 weeks prior to the works. However, in some instances this can be several months ahead or more depending on the works.
- 16.27. Once the application has been submitted and accepted by the recipient, a site meeting can be requested including the various parties involved in the works to establish the impacts of the proposed works on the infrastructure. This will determine the required mitigation measures that need to be implemented, including in respect of any damage to OLE or other infrastructure or contractor injuries etc. These should be included in Risk Assessment Method Statement (RAMS) / SSOW.

Pre-planned Isolation Weeks

- 16.28. The provision of isolation weeks, either monthly or a time-based schedule to allow third party works can give a contractor scope to undertake the work as necessary without affecting the operation of the Light Rail system. It can also provide an operator with the opportunity to group works together, minimising the duration or number of disruptions to operations / maintenance schedules. For example, this can assist the erection of significant scaffolding over several sessions if there are constricted timescales, such as during night time and / or after service curtailment.
- 16.29. There is also the opportunity for several contractors to work under one isolation, each one having a PTW which are linked or reference each other. In this instance, before the designated re-energisation time, all PTWs should be cancelled on site, site checked, and contractors to leave the system.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	42 of 45

- 16.30. Clauses shall be included in the contract to include costs for the contractor if they give an unreasonably late notice for not attending site, fail to turn up, leave site without cancelling the permit etc. to cover costs incurred by reworks or loss of service.
- 16.31. Additional contract clauses should be included in respect of the operator having to cancel isolations due to weather or unforeseen circumstances where they would try to reschedule as soon as reasonably practicable.

Pre-planned Non-isolation Weeks

16.32. Where a contractor is unable undertake the work in a pre-planned week, additional isolation weeks should be available to be purchased for a pre agreed fixed sum per shift. This allows the contractor (including maintainers) to plan work around additional isolations and take advantage to undertake specific maintenance should it be deemed necessary.

Emergency Isolations

- 16.33. Emergency isolations by their nature are undertaken where required and can include those required for emergency services and utility providers etc.
- 16.34. These isolations are usually turned into LOTO isolations once the nature of the works has been established / defined. All parties involved will need to have linked or referenced PTWs which can include later additional contractors who are to enter the work site.
- 16.35. A procedure should be in place for the transfer and control of PTWs where the work extends beyond the time specified, including the authorised and responsible person.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	43 of 45

17. Environmental Requirements

General Environmental Requirements

- 17.1. There are a number of factors to consider in relation to environmental requirements which might be relevant to the works being undertaken that are summarised below. In general terms, the client should be aware of them and where applicable and appropriate, support, encourage and enforce the contractors to comply.
- 17.2. The contractors shall undertake the following:
 - Use industry good practice to minimise the environmental impact of all activities;
 - Apply for all permits, agreements, consents and licences as required and abide
 by the conditions within the permits, agreements, consents and licences. No
 work shall commence until all permits, agreements, consents and licences are
 obtained. A copy of the licences, agreements, consents and permits should be
 made available to the client upon request;
 - In the event of a breach of any permit, agreement, consent or licence conditions the contractor's representative and regulatory body / bodies shall be informed;
 - Exercise a duty of care and be liable for all claims, costs, expenses incurred directly or indirectly by any relevant party as a result of any breaches of the applicable environmental laws; and
 - Employ competent sub-contractors with proven environmental performance.
- 17.3. In relation to site investigations, the contractor shall:
 - Ensure those undertaking the investigations are aware of all environmental conditions and hazards on site; and
 - Undertake investigations and evaluations at such a stage in the project that the implications of any findings can be incorporated into the design, program of works and method statements as necessary.
- 17.4. Mitigation and Processes shall include the following:
 - Appropriate mitigation of any impacts from the works on the environment;
 - Adherence to arrangements and submission to the client of any method statements that outline and demonstrate how the contractor will manage environmental performance and impact; and
 - Notifying the client immediately of any changes to method statements or environmental arrangements which result in significant changes to the environmental risk profile.
- 17.5. Additional environmental factors for consideration by the contractor might include but are not limited to the following:
 - Environmental nuisance;
 - Water:
 - Waste management including controlled waste such as Japanese knotweed and giant hogweed;
 - Noise and vibration;



LRSSB - LRG - 34.0	
1	
0	
14/03/2023	
44 of 45	

- Archaeology, historical interest and listed buildings / structures;
- Wildlife and habitats including any protected species and bird nesting seasons;
- Conservation areas / Sites of Special Scientific Interest (SSSIs);
- Resource use;
- Pest control;
- Land and water pollution prevention;
- Quality requirements;
- Temperature and weather protection; and
- Unexploded ordnance.



LRSSB - LRG - 34.0	
Issue	1
Revision	0
Date	14/03/2023
Page	45 of 45

18. Additional Areas for Consideration

- 18.1. There are numerous activities and areas of a works that might need to be considered for agreement with the contractor / inclusion within the contract dependent on the nature of the contracted works being carried out. Where relevant, the contractor will have to supply sufficient evidence to demonstrate compliance.
- 18.2. Additional aspects might include the following (not exclusively):
 - Fire prevention;
 - Site management including security;
 - Site storage;
 - Plant and equipment;
 - Clearance approvals;
 - Access equipment;
 - Temporary hoardings and fencing;
 - Temporary lighting and power supplies;
 - Operational capabilities during works;
 - Emergency routes and exits;
 - Parking;
 - Cooperation between parties including communications to / from affected parties / communities etc.;
 - Provision of a supportive, inclusive, and healthy workplace including autonomy / escalation of decision making; and
 - Responsibilities for parts and materials procurement (for example, there may be parts which are free issue from the client).