

VITAL ENERGI UTILITIES LIMITED



VC50626 MMU Birley Fields

CONTRACTOR

CDM CONSTRUCTION PHASE PLAN

50724-VE-SW-ZZ-HS-PM-01

Revision C.02

on behalf of

Vital Energi Ltd

APPROVAL

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The signatures below certify that this CDM Construction Phase Plan has been reviewed and accepted and demonstrates that the signatories are aware of all the requirements and are committed to ensuring their provision.

	Name	Signature	Position	Date
Prepared By	L McDonald		Contracts Manager	31/07/2023
Reviewed By	G Moffitt		Regional SHEQ Manager	XX/XX/2023
Approved By	P Davies		Head of Engineering	XX/XX/2023

*Signatures are required for the first construction issue only before work commences. After that, the Project Lead can approve changes recorded in the amendment record section below.

AMENDMENT RECORD

This document is reviewed to ensure its relevance to the described systems and processes. A record of contextual additions or omissions is given below:

Revision	Date	Comments / Amendments
P.01	31/7/23	Initial draft for comment
C.01	4.8.23	Comments incorporated, construction issue
C.02	29.8.23	Updated to reflect drilling works

DISTRIBUTION RECORD

Copy	Issue To / Holder's Name	Organisation	Position
1	Paul McCullough	MMU	Senior Project Manager
2	Craig Nelson	Summers Inman	Principle Designer
3			
4			
5			
6			
7			
8			

COMPANY PROPRIETARY INFORMATION

The electronic version of this document is the latest revision. The individual's responsibility is to ensure that any paper material is the current revision. The printed version of this CDM Construction Phase Plan is uncontrolled, except when provided with a document reference number and revision.

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1. Introduction

As required by the Construction (Design & Management) Regulations 2015, Vital Energi CDM Construction Phase Plans are established for each project to identify significant hazards and the specific organisation/arrangements to be implemented to eliminate or reduce risks to protect the environment and protect people in accordance with current legal requirements, Company procedures and management systems.

As a Contractor, we will complete the plan using all relevant site-specific information about significant hazards taken from [Vital Energi Utilities Ltd] CDM Construction Phase Plan.

2. Revision and Update

The CDM Construction Phase Plan is a working document. It shall be used as a reference when planning and executing work and to control Safety, Health, Environment and Quality (SHEQ) issues during the project's lifecycle. The Project Team's responsibility, in conjunction with the Regional SHEQ Manager, is to develop and produce this plan using all relevant site-specific information about significant hazards taken from the Contract Specification, Customer Requirements and [Vital Energi Utilities Ltd] CDM Construction Phase Plan.

This plan is subject to ongoing review and revision as part of a continual improvement process inherent in all effective SHEQ management systems. The management measures detailed in this document will be monitored on an ongoing basis via field observations and first-party audits to assess their effectiveness and application.

Project Team and other Vital Energi personnel are encouraged to provide feedback and input to the document so that procedures can be updated and improved, as necessary, to achieve the best quality outcome. Once completed, the plan should then be reviewed by SHEQ Business Partner and issued to [Vital Energi Utilities Ltd] name for comment.

Note 1: CDM Construction Phase Plan developed in conjunction with the Project Quality Plan, Project Environmental Plan and the Commissioning Plan (as relevant).

Note 2: Vital Energi Utilities Limited and [Vital Energi Utilities Ltd] are referred to as '**Vital Energi**' and '**Principal Contractor**', respectively, within this document.

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3. Project Details

3.1 Location

Manchester Metropolitan University
All Saints Building
Manchester
M15 6BH

3.2 Scope of Works

Enabling works to the energy centre will be undertaken to ensure that the main strip out works can commence as per programme unhindered.

The project has a requirement for 2 possibly 3 open loop ground source boreholes to be drilled to enable the subterranean aquifer to be utilised for the heat pumps.

To this end 2 drill sites have been identified on campus, works will be commencing with the drilling activities in the month of August.

Once drilling is underway the main project will begin to ramp up with works such as below:

- Stripping out of a CHP
- Stripping out of 2 no gas boilers
- Installation of a number of ground and water source heat pumps
- Installation of electric boilers
- Fitting of a water transfer network between the new boreholes
- Replacement DH pipework to campus grounds
- Associated electrical and control works
- New transformer and RMU located at EC
- Commissioning and testing activities

3.3 List of Parties Involved in the Project

Duty holder:	Company Name & Address:	Contact	Telephone
Client	Manchester Metropolitan University All Saints Building Manchester M15 6BH	Paul McCullough	Email: P.Mccullough@mmu.ac.uk Tel: +44(0) 7553 660017
Principal Designer	Summers Inman Bevan House, Sir Bobby Robson Way, Newcastle upon Tyne NE13 9BA	Craig Nelson	Email: Craig.Nelson@summers-inman.co.uk Tel: (0) 7706 345 268

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Principal Contractor	Vital Energi Utilities Ltd Century House Roman Road Blackburn BB1 2LD	Lee McDonald	Email: lee.mcdonald@vitalenergi.co.uk Tel: 07464542489
Designer	Vital Energi Utilities Ltd Century House Roman Road Blackburn BB1 2LD	Jonathan McMorro	Email: Jonathan.mcmorrow@vitalenergi.co.uk Tel: M: 07968948730

3.4 Programme

Construction Start Date	7 th August 2023
Construction Programme	62 weeks
Completion Date	29.11.24

3.5 Project Aims

Our objectives for this project are to carry out our work safely with no detriment to the health of our employees, sub-contractors and third parties, to take due care of the environment and produce a quality product sustainably, efficiently and economically, to deliver our Customer's requirements.

Vital Energi specific SHEQ goals for this project are to:

- Achieve zero injuries;
- Ensure safe access and egress to and from the site;
- Ensure all significant risks are identified and controlled;
- Provide a safe working environment;
- Provide competent personnel;
- Ensure communication is maintained between all parties;
- Learn from incidents;
- Ensure legal compliance;
- Consult with our workforce on health & safety matters.
- Prevent environmental incidents and damage;
- Eliminate or minimise waste streams; and
- Maintain Quality Assurance at all times.

4. Management and Arrangements of the Work

This Plan has been developed about pre-construction information provided by the Principal Designer and will be used by Vital Energi when appointed as Contractor for the project.

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This plan does not seek to reproduce information already produced by forming the pre-construction information for clarity. This plan may be viewed as a development of the pre-construction information and indicates the procedures by which identified hazards are safely managed and controlled as part of our arrangements for monitoring and reviewing health and safety performance.

These can be outlined as follows:

- Regular liaison between parties on-site;
- Consultation with the workforce;
- Exchange of design information between the Client, Principal Designer, Designer and Principal Contractor and contractors on-site;
- Handling design changes during the project;
- Selection and control of contractors;
- Exchange of health and safety information between contractors;
- Site induction;
- Identify needs and arrangements for competent training;
- Reporting and investigation of accidents and incidents, including near misses;
- Production and approval of risk assessments and written systems of work;
- Site rules, including Principal Contractor's requirements.

A summary of the established management procedures, which will be used to safely deliver the project and associated work in accordance with The Construction (Design and Management) Regulations 2015 Part 3, Regulation 13 are contained within Vital Energi's Integrated Management Systems (IMS).

A synopsis of the key elements within the management systems is provided in the forthcoming sections of this plan and are available to interested parties for deeper inspection upon request as part of our appointment process for contractors.

4.1 Responsibilities & Reporting

Vital Energi personnel with responsibilities for Health and Safety on this project are:

	Person(s) Responsible	Contact No:
Contracts Manager	Lee McDonald	07464542589
Project Manager (Main works)	Ben Gibson	
Site supervisor	Dave Kantor	07585968906
Vital Energi First Aider	Dave Kantor	As Above
Vital Energi Fire Warden	Dave Kantor	As Above
Regional SHEQ Manager	Grant Moffitt	07818596820

**Delete if the role is not required on the project*

Project Manager

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Vital Energi's Project Manager has overall responsibility for SHEQ on this project; as such, they must be made aware of all issues to SHEQ in the order they can allocate the correct resource to deal with the situation. Ensuring supervisors have the correct information to carry out their tasks with their teams.

Each Line Manager is responsible for ensuring that relevant health and safety information is passed on to their subordinates.

Records of toolbox talks, safety instructions/warnings and corrective actions etc., must be recorded in the site diary and within the Vital Energi health and safety management system.

Project Supervision

Vital Energi's Supervisors and those from within our supply chain are responsible for ensuring the effective implementation of this plan in all areas under their direct control. Levels of supervision shall be appropriate to the hazards and risks faced by employees on site. A supervisor must be present at all times whilst working on the principal Contractor owned or maintained properties. Supervisor shall manage the Contractor's activities and must be aware of all company policies and procedures in respect of safe working and, in particular, be aware of the requirements of the Principal Contractor.

The Supervisor is responsible for ensuring that a Risk Assessment has been carried out for all work. The Risk Assessments and relevant Method Statements are reviewed by all those involved in the task **PRIOR** to the commencement of work.

All supervisors will be responsible for starting accident investigations within the work areas under their control and completing incident forms with the aid of the Regional SHEQ Manager. As a minimum, all Supervisors will be required to carry out a weekly SHEQ Inspection.

Those with Supervisory responsibilities on-site are additionally required to hold appropriate certification to prove they have received training from a recognised organisation to perform supervisory duties, i.e. SSTS or MSTs Certificates, CCNSG Safety Passport (Supervisor level), CSCS Supervisory gold card, CISRS Supervisor or IOSH Managing Safely.

Regional SHEQ Manager

Vital Energi's Regional SHEQ Manager will complete a minimum monthly programme of visits during which they will have the following responsibilities:

- Perform the duties of Health and Safety and environmental advisor in accordance with the relevant statute.
- Foster, with Vital Energi, understands that safety and accident prevention are integral to business and operational efficiency.
- Assist with safety training for all levels of employees and promote awareness of safety and accident prevention.
- Keep up to date with recommended codes of practice, safety literature and changes in legislation.
- Maintain contact with official and professional bodies, e.g., Health and Safety Executive, Environmental Health Officer, Fire Authorities, Institute of Occupational Safety and Health and other safety organisations.

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- Set an example through high personal standards in the application of health and safety.
- Advise all levels of management on:
 - Preventing injury to personnel and damage to plant and equipment
 - Further existing safe working methods
 - Legal requirements are affecting safety, health, welfare and the environment.
 - Provision and use of protective clothing and equipment.
 - Potential hazards arising from new contracts before work starts on site, including safety organisation arrangements and fire precautions
 - Changes in legislation.
- Assist in providing input into Vital Energi CDM Construction Phase Plan.
- Liaise with internal and external Principal Designers to ensure compliance with Construction (Design and Management) Regulations 2015.
- Carry out site inspections, in association with project management, to ensure only safe methods of working are in operation and that company and statutory requirements are being observed.
- Investigate and determine the cause of accidents or dangerous occurrences, report accordingly and make recommendations to prevent a recurrence.
- Advise on action to be taken on the issue of a statutory notice.
- Ensure that all employees have the relevant health and safety training and qualifications.
- Ensure that all employees are made aware of any project-specific health and safety requirements.
- Attend health and safety meetings as necessary.

The above list is not exhaustive, and other duties may be required.

The Individual

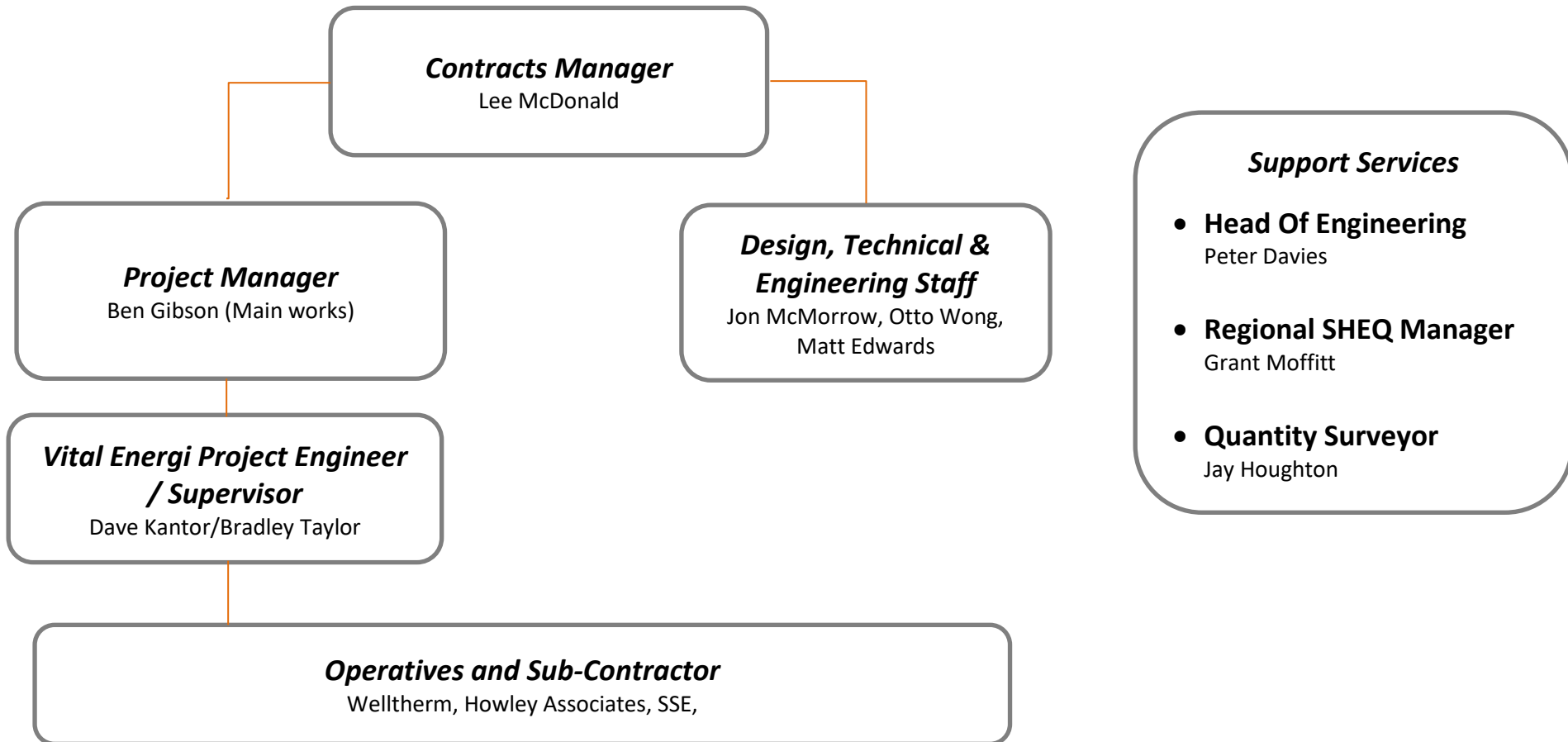
Every person on the project is required to co-operate and work safely and efficiently at all times. Operatives must report unsafe acts or conditions using the hazard observation reporting process via the **“SHE Assure online reporting platform”**; Principal Contractor near-miss system, supervisor or speaking directly to their line manager/supervisor.

They are also required to adhere strictly to the safe systems of work dictated in risk assessments & method statements and any supporting Permit to Work requirements (if one is in place) and use the Personal Protective Equipment provided by their employer. All operatives must sign onto the job-specific risk assessment and method statement for the task to be performed (where required) prior to the commencement of any task. The individual will sign in/out daily, and all adhere to the site-specific rules whilst at work.

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4.2 Project Management Structure Chart



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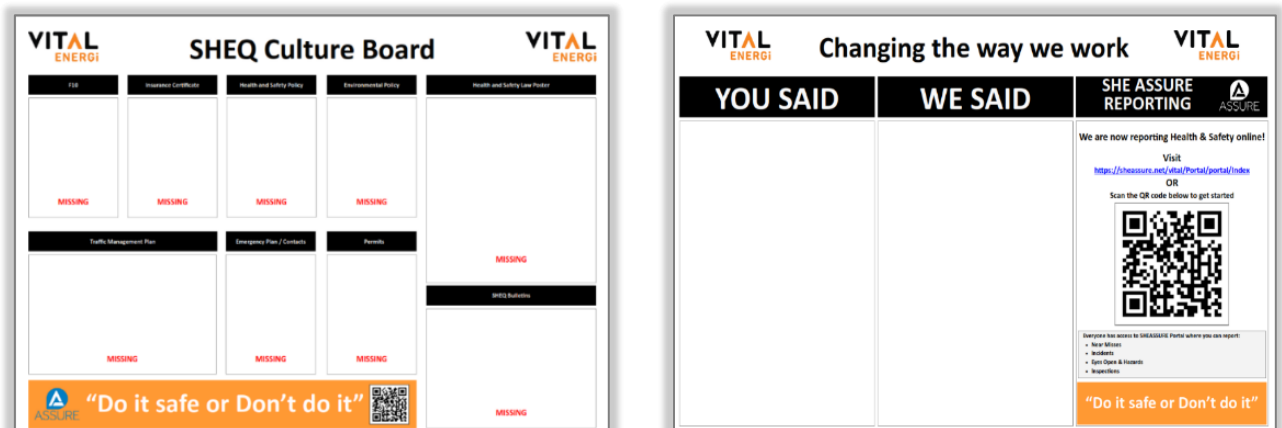
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4.3 Communication and Consultation with the Workforce

The Project Management Team will implement several effective methods of workplace communication and consultation channels, including:

- SHEQ Noticeboards – The site will be equipped with a 'SHEQ Culture Board', where possible. The board displays, among other things: H&S Policy, HSE Law poster, SHEQ site rules, additional site-specific rules, Vital Energi insurance certificates, fire safety - escape and evacuation procedures, nominated first aiders and fire wardens, Vital Energi open door safety policy details, site safety meeting details and also HSE CDM notification forms if required;
- Site inductions, including bespoke site SHEQ measures and site rules;
- Regular meetings and pre-start briefings;
- Toolbox talks, as a minimum, pre-works for the first time and then weekly;
- SHE Assure near miss and incident reporting system;
- Open Door Policy – encourage to bring forward suggestions, comments and improvements ideas on any SHEQ matters as employees see fit;
- Risk assessment and method statement briefings;
- Communication of Vital Energi CDM Construction Phase Plan;
- Product and process performance data analysis and audit results;
- Corrective action and non-conformance reports;
- Website, intranet, SHEQ Bulletins and internal e-mails.
- Health, Safety and Environmental committees – as a minimum monthly and;
- Subcontractor health and safety performance meetings – as minimum monthly
- Monthly progress meetings between Principal Contractor and Vital Energi

In addition, the site will engage all personnel to take corrective actions when observing unsafe acts and conditions using immediate intervention and reporting.



4.4 Designers Appointed to Work on Behalf of Vital Energi

In accordance with Vital Energi procedure CDM 2015 (VE-SOP-0601), Vital Energi recognises Designers are required to provide evidence of competence. To ensure demonstrable compliance with the requirements of the Construction (Design and Management) Regulations 2015. The Design Manager for the project is responsible for providing all designers (Vital Energi Included) are vetted and approved.

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As part of the design process for construction projects, there is often a requirement to make minor changes; the Management of Change explains the process and procedures we will adopt when something different is required. This can be as simple as changing personnel or their role or as wide-ranging as changing a piece of equipment. It allows a structured approach ensuring management is aware of the changes and consistency is achieved in terms of recognising and assessing the risks to health and safety with respect to buildability, operability, maintainability and end-of-life disposal within Vital Energi's Tollgate system.

4.5 Selection and Control of Contractors

Vital Energi recognises its duties and obligations under the Construction (Design and Management) Regulations 2015. We must ensure that a contractor is competent to perform the task safely and without unacceptable risk to other employees, members of the public, and others on the site.

In line with Vital Energi procedure *Control of Purchasing & Procurement* (VE-SOP-0012), Vital Energi uses established subcontractors to supply and install equipment and services. These subcontractors have been assessed and vetted through a pre-qualification process controlled and managed by an independent and industry-recognised Accreditation Company, "**Safe Contractor**".

Vital Energi will monitor subcontractors throughout the Project to comply with the conditions specified in the "**SHEQ Conditions Contractors & Sub-Contractors**" and the "**Project Rules**", including the requirement for Risk Assessment and attendance at any training or instruction provided by us.

Subcontractors will be issued with relevant SHEQ information, including a copy of the Project Quality Plan if required, to allow them to resource and plan their works accordingly.

Subcontractors are prohibited from further sub-contracting work without the written authority of the Project Management Team and only then to contractors who meet the Vital Energi vendor pre-qualification approval process.

Subcontractors and relevant third parties on-site will attend regular Project Health, Safety and Environment Co-ordination meetings to review current activities, all site accidents and incidents, disciplinary action, visits by external professional bodies such as the HSE, and staff resources ensuring that roles and responsibilities are constantly updated to accommodate holidays and changes of personnel, thus ensuring full consultation, co-operation, co-ordination and participation by all parties.

The meetings are also a forum for feedback to the Project Management Team on current affairs and suggestions for improvement to safe systems of work.

The following subcontractors will be used on this project by Vital Energi:

Sub-contractor	Trade & contact details	Vital Energi point of contact	Date
SSE	BMS	Lee McDonald	31/7/23
Welltherm	Borehole Drilling	Lee McDonald	31/7/23
Howley Associates	Hydrological consultants	Lee McDonald	31/7/23

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4.6 Competency and Training Needs

Vital Energi requires contractors to ensure that their employees are competent to undertake the work needed and have received the appropriate training. Where formal authorisation is necessary to perform a specific task, mechanical or electrical works, the Contractor must ensure that only employees with the correct certificates perform the work. Evidence of qualifications and training must be provided and confirmed at induction.

Minimum Training Needs

Vital Energi requires contractors to ensure that their employees are competent to undertake the work needed and have received the appropriate training. Where formal authorisation is necessary to perform a specific task, mechanical or electrical jobs, the Contractor must ensure that only employees with the correct certificates perform the work. Evidence of qualifications and training must be provided and confirmed at the Project Site Induction, including identification of membership to any industry association, i.e. NICEIC/ECA.

All persons employed in roles covered by approved competency schemes will be trained to the appropriate standard and hold the current competency card, i.e. CPCS, CISRS, CSCS, etc. All plant operators must be CPCS registered unless otherwise approved by the Regional SHEQ Manager. All personnel on-site must be CSCS registered for the operations conducted.

All employees are trained to the following UK Contractors' Group's training standards:

- All directors have trained to the IOSH: Safety for Senior Executives standard;
- All managers/engineers are trained to the CITB Site Management Safety Training Scheme (SMSTS) standard;
- All supervisors are trained to the CITB Site Supervisor Safety Training Scheme (SSSTS) standard; and
- All site operatives are trained to CITB Health and Safety Awareness standard.
- All banksman to be trained in CPCS
- If using any lifting equipment or MEWPS, a minimum of IPAF/PASMA will be required.

Project Teams, assisted, where appropriate, by Senior Management and SHEQ Management, will identify additional training needs of operatives, both collectively and individually.

Project Team and Senior Management will identify additional individual training needs of subcontractors through the subcontractor selection process and Pre-Start Meetings.

Where shortfalls in personnel training have been identified, we must deliver appropriate health and safety training following the Control of Competence and Awareness procedure (VE-SOP-0008).

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Toolbox Talks

Project Management, either from Vital Energi or contractor supervision, will deliver interactive Toolbox Talks to their teams weekly unless circumstances require additional talks. Subject choice can be applied through the Annual Toolbox Talk Calendar or a suite of toolbox talks available on [SHEQ Knowledge Hub](#).

Specified subjects will be agreed upon at SHEQ meetings and reflect on on-site activities and near misses or incidents that have recently occurred. Copies of weekly *Toolbox Talk Records* (VE-FRM-0642) and the attendance sheet will be held on-site and reported via the “*SHE Assure Online Reporting Platform*” at www.sheassure.net/ve.

4.7 Site Security

On-site security, including access/egress control, is the responsibility of the Principal Contractor and must be observed at all times.

4.8 Specific Project Site Induction

Before any person (direct employee or subcontractor) commences work on-site, they will receive a project-specific Induction. Designated individuals will conduct the induction at planned times in designated locations.

The induction will include:

- Project management leadership and responsibilities;
- Supervisory arrangements;
- Worker consultation and open-door policy;
- Scope of work on-site;
- Significant hazards and risks associated with the project;
- Control measures for reducing significant risks;
- Mechanisms for communication of risk assessments and method statements;
- Site working hours;
- Health and welfare requirements
- Site security and access requirement – Inc. daily signing in and out of site etc.
- Welfare arrangements;
- Minimum training/competency requirements;
- Vital Energi SHEQ Conditions for Contractors and Subcontractors booklet and any ancillary site rules;
- Emergency procedures – including fire and first aid;
- Incident and near-miss reporting procedures;
- COSHH;
- Permit-to-work procedures;
- Confined space requirements;
- Noise, dust, nuisance and disruption;
- Environmental controls Inc. waste management;
- PPE standards on-site;
- Traffic management plan;
- Electrical supply on-site;
- Manual handling procedures;

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- Lone working policy;
- Work at height policy;
- Red card and yellow card policy and procedures.

Each person will confirm their attendance and understanding of the project induction by signing the Project Induction Form (VE-FRM-0640).

4.9 Specific Project Visitor Inductions

The Project Management Team will make suitable arrangements to ensure that persons visiting the project on an infrequent basis receive a visitors' induction and are escorted/accompanied by a fully inducted member of the Project Management Team or by relevant fully inducted subcontract personnel (this will include delivery drivers for one-off/infrequent visits). The primary duties of the escort will be to ensure that non-inducted personnel are made aware of and follow the project-specific health and safety rules and emergency arrangements whilst visiting the project.

4.10 Personal Protective Equipment

The use of Personal Protective Equipment (PPE) is mandatory on-site at all times. As a minimum, Vital Energi adopts a minimum Mandatory 5 Point Basic PPE Policy with respect to site requirements, i.e.:

- S3 standard Safety Footwear – No Rigger Boots, exposed metal toe caps or sole plates
- Safety Helmet
- Mandatory Light Eye Protection (Safety glasses/prescription safety glasses)
- Class 2 high visibility vest/jacket/coveralls or trousers/tee-shirt/jacket – must be flame retardant when undertaking Hot Works
- Cut levels 1-5 Traffic-Gloves
- Vital Energi/UoSA Hi-Viz vest comprising of ID Badge must be worn at all times on-site. ID Badge must be shown to any person requesting.

Specialist PPE requirements such as Hearing Protection are required in designated areas (areas signposted as having noise levels of 80dB or more). The risk assessment must determine them to ensure the provision is appropriate to the task. Copies of risk assessment will be required to be shown on site.

Significant emergencies may include fire, explosion, confined space incident, gas leak, fatality, major injury, first aid injury, fall from height, bomb threat, unexploded ordnance, flood, major fuel/ chemical spill, disc, road traffic accident, injury to a member of the public or pandemic or similar events such as swine or avian flu.

The Principal Contractor developed the site emergency procedure and will be communicated to all operatives during Principal Contractor site inductions. The site emergency procedure will be controlled by the Principal Contractor, who is responsible for maintaining the alarm system and conducting regular practice drills.

HAVS should be monitored throughout to prevent the overuse and vibration causing equipment, operatives should wherever possible utilise reduced vibration or damped tools and all utilisation of vibration causing

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equipment should be monitored using the HSE INDG175(rev3) guidance leaflet and the HAVS exposure calculation tool available from the HSE website.

4.11 Accident / Near Miss Reporting

All personal injuries, accidents, incidents, near-misses, or anything likely to endanger life should be reported to Vital Energi via the ***"SHE Assure Online Reporting Platform"*** at www.sheassure.net/ve.

To ensure compliance, the following rules will be applied:

- Injured persons, whether direct employees or contractors are accordingly required to report all incidents, including near misses, personal injuries, vehicle collisions or incidents that result in property damage. Alternatively, the first aider to report the accident to the designated person gives all relevant details.
- The designated first aiders for the project must enter the details in the accident book (SHE Assure) to ascertain exactly what occurred.
- Injuries, which require the first aider to refer the injured person to a hospital or their doctor, should immediately notify the senior company representative on-site and notify the Vital Energi Health and Safety by telephone.
- In such cases, the senior company representative on-site, accompanied by a representative of the employees, must investigate all the circumstances of how the injury was sustained. A company accident investigation report should be completed and sent to Vital Energi's H&S department.
- The senior company representative will examine the investigation findings to identify measures to avoid repetition.
- The senior representative with staff on-site will introduce these control measures after consultation.
- Injuries or incidents at work leading to ill health which result in an absence from work of more than seven days along with other injury/incident/illness reportable under the Reporting of Injuries, Diseases and Dangerous Occurrence Regulations 2013 (as amended) must be notified to the Health and Safety Executive using form F2508 or form F2508A (obtainable online on the HSE website - <http://www.hse.gov.uk/riddor/index.htm>).
- This report will be reported by Vital Energi's Regional SHEQ Manager and SHEQ Director.
- Following injuries of a significant nature, the accident location should be barriered off and statements taken from all witnesses pending a full investigation into the circumstances of the incident, which led to the injuries. An investigation team lead will conduct this investigation by Vital Energi's Regional SHEQ Manager. Any plant or equipment involved in the incident should not be touched nor moved until the investigation has been concluded.

All persons on site will be informed of the processes for the accident, incident and near-miss reporting through attendance at Site Induction, Pre-Start Meetings and by the issue of Vital Energi ***"SHEQ Conditions for Contractors and Sub-Contractors"*** booklet.

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4.12 First Aid

The Health and Safety (First Aid) Regulations 1981 require employers to provide adequate and appropriate equipment, facilities and personnel to ensure their employees receive immediate attention if they are injured or taken ill at work. The number of first aid personnel on-site will be decided through a risk assessment based on the tasks undertaken.

As a minimum, at least one first aider will be present on-site whenever works are in progress, and a first aid kit will be provided in the Vital Energi site accommodation. Contractors are reminded of the need to provide first aid cover where activities require the same.

Vital Energi has appointed the following designated site first aiders for the construction works.

Name	Title	Contact No:
Dave Kantor	Site Supervisor	
Bradley Taylor	Assistane Project Engineer	

They are responsible for receiving personal injury and other incident reports, including completing the necessary entries in the Accident book/Vital Energi ***"SHE Assure Online Reporting Platform"***.

Details of first aid treatment and copies of intercompany accidents reports and/or RIDDOR reports must be notified and provided to Vital Energi and the Principal Contractor. All Accidents, incidents and near misses must be investigated.

4.13 Risk Assessments and Method Statements (RAMS)

All works posing a significant risk will require a RAMS. As a minimum, the project team will implement the requirements of significant Risk Management.

All RAMS will be communicated through a briefing. The project team will ensure that all persons working under a RAMS give acknowledgement signatures using the *RAMS Operative Acceptance form*. (VE-FRM-0627a)

The project team will ensure that subcontractor RAMS are evaluated using the *RAMS Evaluation form* (VE-FRM-0627). All subcontractors will be requested to give additional information to ensure RAMS is suitable and sufficient.

All copies of RAMS will be issued to the Vital Energi project team for evaluation and acceptance, and copies will be sent to the Principal Contractor where required.

N.B. No works may begin on site until Vital Energi have reviewed and agreed to contractors' risk assessments.

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4.14 Site Rules

All work under Vital Energi's control will be subject to the rules identified within Vital Energi's health, safety and environmental management systems; specifically the Vital Energi **"SHEQ Conditions for Contractors and Sub-Contractors"** booklet issued with each order and available in Vital Energi site office.

The contractor's attention is drawn to the following site safety rules, which have been identified explicitly to **Vital Energi**:

- All visitors and operatives working on the project must attend a site induction at the Vital Energi Site Offices, where they will be required to present a valid CSCS card that supports their role in the project.
- All visitors and operatives must sign in and out each day at the Site Offices.
- No works on-site must commence unless Vital Energi has approved the RAMS, and this safe system of works has been briefed to the site teams, and briefing sheets have been returned. No deviation to the RAMS is permitted unless approved by Vital Energi.
- Suitable PPE must be worn at all times. Minimum requirements are hardhat, high-vis and steel toecap laced boots, gloves and glasses.
- Operatives and site visitors will not involve themselves in unnecessary or inappropriate dialogue with members of the public.
- Foul language will not be tolerated. If you have any complaints, contact the Vital Energi Project Manager.
- Vital Energi enforces a strict zero-tolerance approach to the use of alcohol and drugs. Random testing will be performed.
- Under no circumstances are persons working on-site to put themselves or others in danger
- Observe pedestrian access routes and vehicle route restrictions.
- Good housekeeping to prevent slips, trips and falls and remove material that can fuel fires
- Do not leave any tools or materials out/unsecured overnight
- Observe and respect site safety signage
- No smoking (except in designated areas)
- No lone working is permitted
- Fixed and tied ladders to be used to access specific work areas where there is a substantial change in level
- The use of mobile phones on site is discouraged for personal use, and contractor supervisors are expected to ensure compliance by their workforce whilst on site. Failure to comply may result in the person being asked to leave the site.

4.15 Fire and Emergency

All offices/welfare/storage units under Vital Energi's control will require a Fire Risk Assessment to be conducted. The project team will use Fire Risk Assessment [VE-FRM-0624].

The following Vital Energi specific fire arrangement will be implemented:

Flammable liquids

Flammable liquids can give off large volumes of flammable vapours at room temperature. These vapours, when mixed with air, can ignite, often violently. Spilt flammable liquids can, if not contained, flow a long

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way to an ignition source and then flashback to the source of the leak. Spills on clothing can represent a serious risk of injury if ignited.

To help control these risks, contractors must:

- Store flammable liquids in a separate storage area or purpose-made bin or cupboard
- Dispense and use them in a safe place where there is good ventilation and no source of ignition
- Keep containers closed when not in use. If possible, use safety containers which have self-closing lids
- Dispense liquids over a tray and keep some non-flammable absorbent material handy to mop up spills
- Dispose of contaminated materials safely or call in disposal experts.

Flammable dust

Finely divided flammable dust dispersed in the workplace atmosphere can, if ignited, explode violently and cause a lot of damage.

To help control these risks, contractors must:

- Keep plant dust-tight;
- Keep the working area dust-free by regular cleaning and vacuuming spillages as they occur
- Some dust handling plant has special safety features built in. The purpose of these needs to be properly understood, and they should be maintained in good working order.

Flammable solids

Some types of plastic foam, packaging materials, polyester wadding and textiles will ignite easily and burn fiercely, giving off a lot of dense black smoke.

To help control these risks, contractors must:

- Not store these materials close to heaters or electrical equipment which could run hot and act as a local ignition source;
- Make sure that gangways and exits from storage and working areas are kept clear of packaging materials, finished products containing flammable solids etc. In a fire, gangways and exits could become obscured by smoke, so the easier they are to find, the better.

Flammable gases

Gases in cylinders are often stored at very high pressures, so their uncontrolled release can be physically dangerous. A small amount of released gas can fill a large area with a potentially explosive mixture. This is particularly true of liquefied gases, such as LPG.

The following points need to be considered:

- Stored cylinders need to be suitably restrained and their valves protected from impact damage
- Gas cylinders may need special valves, fittings and hoses. Always check the manufacturers' or suppliers' instructions and fit the correct equipment

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- Protect hoses from potential causes of damage that could cut, scuff or weaken them. Examine them regularly and replace them if they show signs of damage or wear that could lead to a leak.

Oxygen

Although oxygen is necessary for life and is an essential ingredient in controlled burning, such as in a gas fire or oxy-fuel gas welding and cutting, its misuse can lead to serious consequences. Materials that ordinarily will burn only slowly under normal circumstances will burn very vigorously in an oxygen-enriched atmosphere. Others such as greases and oils may burst into flames in this atmosphere.

As well as the precautions outlined above for flammable gases, the following points should be applied:

- Never use oxygen instead of compressed air
- Never use oxygen to sweeten the air in a working area or confined space
- Never use grease or oil on equipment containing oxygen.

Reactive chemicals

Some products contain chemicals, such as organic peroxides, which can explode if not stored and handled correctly. Other substances can react vigorously with incompatible materials or contaminants. For example, oxidising chemicals can cause flammable materials to ignite, and some substances, such as sodium, react violently with water and can ignite.

The following points need to be considered:

- Storage and process temperatures may need to be carefully controlled to prevent dangerous decomposition or reaction.
- Check labels and safety data sheets for physical properties and incompatibility with other materials.

Whenever working with flammable substances, there is the potential for something to go wrong. You need to think about possible problems and ensure everyone knows what to do in an emergency. Instructing staff in emergency procedures is an important part of their job training and should be ongoing.

Hot Works

- Contractors undertaking Hot works are required to provide suitable fire extinguishers for the equipment and any Class A Fires
- Any Hot works required to take place on-site, including welding, grinding, or Stihl Saws will require a task-specific risk assessment and the completion/execution of a Hot works Permit.
- All Hot works must cease no later than 1 hour before site closure to allow for suitable checks to be carried out to ensure there is no fire risk after the site has ceased work.
- **As far as possible Vital will look to remove the need for hot works on site, any hot works required will necessitate a permit being issued by the University estates team, permits must be signed on and off each day and will include a "Fire watching" period of standstill.**

Contractors need to:

- make sure workers know enough to prevent the mixing of incompatible chemicals;
- operate procedures (including the use of spill kits) to be followed if there is a leak or spill of flammable material;
- Ensure people know are trained and understand the procedures to be followed;
- If special first-aid facilities or equipment are required, staff need to be trained.

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The following fire safety arrangements have been identified in the Principal Contractor's CDM Construction Phase Plan:

- Please refer to Fire Safety Plan for this project.
- The Fire Safety Plan can be found: In the Site office and canteen
- Muster point located at visitor's carpark

4.16 Location of nearest accident and emergency department

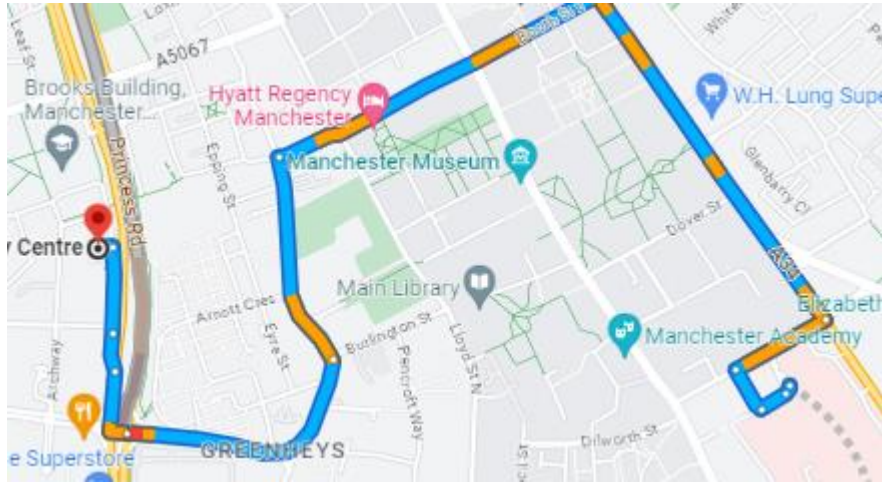
An ambulance must be called to transport the injured person(s) to the hospital in a serious accident. Please be aware that using private cars can be dangerous, particularly as there may be injuries that cannot be seen.

Police Local Station	Greenheys Police Station, Charles Halle Rd, Manchester M15 6NP
Accident / Fire	Dial 999 and ask for the relevant service (Police/Ambulance/Fire Brigade)
Reportable Accident	Health & Safety Executive 0845 345 0055
Gas Emergency	Emergency Contact (24 hours) 0800 111 999
Electricity Emergency	Emergency Contact (24 hours) ENW 0800 195 4141
Water Emergency	Emergency Contact (24 hours) UU 0345 672 3723
Flood Line	Environmental Agency (24 hours) 0345 988 1188

Name of Hospital	Manchester Royal Infirmary
Address	Oxford Rd, Manchester
Postcode	M13 9WL
Telephone number	0161276 1234
Distance in miles	2.1

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5. Arrangements for controlling significant health and safety hazards associated with Vital Energi's scope of works

Hazards (See guidance document for examples)	Arrangements to eliminate/reduce risk (List all the applicable controls from the pre-construction information pack / CDM construction phase plan / VITAL ENERGI health and safety management procedures)	What needs to be done (List all actions that need to be taken)
Working at height	Requirements of the Management of Working at Height Regulations 2005 will be applied to all work at height Use the HSE wait tool assessment for the works to be carried out as guidance good practice for selection of suitable access equipment Works at height will be eliminated if possible. If the risk cannot be eliminated, then works will be minimised through Risk Assessments and Method Statements. Each task will be risk assessed separately and work at Height equipment selected on suitability for task. All working at height activities planned & supervised in accordance with all current regulations. Works will be segregated/fenced (secured, inspected daily and fitted with external lighting as required and appropriate to location) Equipment used to be maintained in a safe condition and inspected daily to ensure it is correctly assembled, and does not subsequently deteriorate Used to be restricted to only those people who have received instruction and training for mobile work equipment and power presses information, Suitable trained operatives adequate	Minimise working at height activities. Before use/Daily and Weekly checks to all access equipment Develop access equipment register to confirm LOLER testing /certification date Only trained and certified operators to erect scaffolding and operate powered access equipment Daily check on ground and weather conditions Any/all scaffolding will be designed, erected and inspected by suitably qualified & competent personnel. Scaffold Inspections will be undertaken every 7 days or after any significant changes. MEWPs will be inspected daily and operated by suitably qualified and competent operatives in accordance with LOLER/PUWER. A daily pre-use inspection will be undertaken for all other work at height equipment.

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	Equipment to be Scaf-tagged, inspected daily before use/maintained/tagged & in good condition	
Deep excavations	There will be a requirement to excavate for both trenches and foundational supports. A temporary works co-ordinator will be appointed to mitigate any risks from excavations collapsing in or becoming unstable. All work activities fully planned, programmed and risk assessed in conjunction with the MMU Estates Department and the Key Building Stakeholders through daily/weekly communication meetings. Roving traffic management will be employed to ensure safe segregation between operatives and users.	Pre use inspections of all plant Fully certified plant operators Signed off temporary works designs if required for trenching and excavations Ground and weather conditions to be continuously monitored
Interface with General Public/and Staff in Live Operational/Environment	Working on a restricted site. The access roads are narrow and are shared, deliveries will cause some challenges whilst maintaining pedestrian and critical emergency access. All work activities fully planned, programmed and risk assessed in conjunction with the MMU Estates	All work areas to be segregated with Heras fencing and signed with suitable warnings. Lighting to be fitted as required to ensure safe access and egress for any routes where existing lighting is isolated/removed/required.

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	Department and the Key Building Stakeholders through weekly communication meetings. Vital Energi Site Inductions, Toolbox Talks, Eyes Open Reporting & Supervision. To segregate the area from staff, visitors and public we have erected a screen around our construction areas in which only workers inducted by Vital staff may enter. Access route plans to be developed and issued, denoting the routes for Vital Energi employees and MMU employees within the boiler house /Energy Centre. (copy of these to be kept in Vital Energi Site offices and posted in boiler house and communicated to all staff requiring access) Any MMU staff requiring access will need to adhere to site safety procedures, be inducted and wear appropriate PPE within the area. Eyes Open cards are available at the entrance to the construction works area and the workers have been shown how to use them during their induction	Implement daily pre-work and post work examination regime for all fenced off areas to ensure protection of the public/prevent unauthorised entry. Access Permits & Controlled Access Keys All work carried out or undertaken in ducts, tunnels, confined spaces or controlled areas such as switchrooms etc. requiring a 'Controlled Access Key' will require the issue of an 'Access Permit' by the Estates POC. All Access Permits must be signed on and signed off each day.

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Manual Handling	Risk of manual handling injuries whilst lifting heavy and bulky loads. Work related upper limb disorders (WRULDS) while holding tools Workers may strain their backs or pull other muscles while using or manoeuvring heavy tools	1. Minimise all manual handling tasks where possible 2. Use mechanical handling methods instead of manual handling (where possible) e.g. trolleys, levers, etc. 3. Ensure that all mechanical lifting aids are maintained in good working order and are serviced regularly 4. Team lifting should be adopted where possible when lifting large or awkward weights, persons carrying out team lifts should be of similar height and build, so that the raised load doesn't become unbalanced or unevenly distributed 5. Ensure all operatives use correct manual handling techniques, and do not lift more than they are capable of 6. Instruction and training of operatives in safe handling techniques are to be carried out 7. Regularly review manual handling assessments
Lifting Operations - including work involving the slinging, lifting and movement of equipment or materials using forklift trucks, Telehandlers, Cranes, Gin Wheels, Stair lifts or Genie Hoists (see VE -SOP-0600)	Specialist Lifting Contractor will be appointed to develop Risk Assessments & Method Statement specific to the lifting operation. RAMS must be supported with a specific lifting plan, training certificates etc. and both reviewed by VE as the Principal Contractor. A lifting AP holding a valid CPCS qualification will be provided by the specialist. Thorough examination certificates are held on site for plant and machinery that will undertake lifting operations. Lifting accessories are visually inspected before each use and tested/replaced every 6 months. Suitably qualified banksman and slingers will control lifting operations and tag lines are used to control loads whilst lifting.	Standard and high risk/complex lifts to be identified and specialist contractors sourced to undertake these operations. Lifting plans to be produced and agreed with VE before commencing works. The siting and positioning of mobile cranes (including excavators FLT etc.) must be carefully considered to identify risk from poor ground, local services, proximity of other hazards and access. Required permits/consents to be sought. The temporary works co-ordinator must be consulted on the bearing capacity of the ground or floor slabs on which cranes may be positioned.

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	Thorough site investigations to be carried out to identify the pipework route and determine the most feasible and practical route.	The temporary works co-ordinator must be consulted on or check the design of spreader beams or mats required under outriggers, axles or crane tracks. A full Stage 2 ground survey and a Ground Point Load Test will be completed on the crane site, to allow the lifting AP to appropriately size the crane and mats
Electric Shock/Electrocution from Electrical Works	All works to comply with Electricity at Work Regulations 1989. Any works required with existing services are to be surveyed by electrical contractor and electrical VE/REW estates team. Any personnel working on or near electrical services must be deemed competent – holding both a technical qualification and relevant experience.	All conductors are to be treated as live until demonstrated to be dead and shown to be securely isolated and locked out / tag out. Permits will be issued to operatives when isolation of services are needed on any new connections.

6. Arrangements for controlling significant environmental hazards associated with Vital Energi's scope of works

Hazards (See guidance document for examples)	Arrangements to eliminate/reduce risk (List all the applicable controls from the pre-construction information pack / CDM construction phase plan / VITAL ENERGI environmental management procedures)	What needs to be done (List all actions that need to be taken)
Construction and building sites can cause problems to local residents. Statutory Nuisance can include fumes or gases emitted from site, any dust, steam or smell so as to be prejudicial to health or a nuisance.	Vital Energi aims to work with University to ensure that the impact is minimised and controlled, where possible. Permitted hours of work will normally be:	Establish and apply a monitoring system to determine noise levels that supports planning restrictions/ client requirements for quiet times and maximum noise levels. Raise operatives' awareness to issue through tool box talks.

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	- Monday to Friday – 07.00 – 18.00 - Saturday 08.30 – 1300 (authorisation required) Sundays & Bank Holidays – No Working	
Noise pollution i.e. excessive noise that may harm the activity or balance of human or animal life.	Apply controls such as controlling generation / suppression of noise at source, acoustic zoning and sound insulation around noise generators such as cooling fans, power generators etc.	Develop separate Environmental Risk Assessment to consider effects of all works. Communicate details and raise Operatives awareness to issues through toolbox talks/RAMS.
Generation/emission of dust from site.	Minimise the generation of dust by: - carefully siting cutting stations - Minimise cutting on site - Use wetting down techniques - Use of mechanical rather than abrasive tools - adjusting working methods - storing loose material under cover	Take all reasonable steps to minimise noise. The use of radios and personal music players <u>are not permitted</u> on site. Communicate plan and raise Operatives awareness to issue through toolbox talks/RAMS.
Artificial light emitted from works so as to be prejudicial to health or a nuisance	This is usually where light is excessive in relation to its purpose or where the source of the lighting is poorly designed or directed.	In many cases the problem can be solved by altering the direction of the light or by screening it.

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Any accumulation or deposit (such as waste) which is prejudicial to health or a nuisance	Develop and implement a waste management plan that includes defined waste storage on site using segregated lockable skips and statutorily accredited waste carriers/waste disposal services.	Engage Waste management specialist – via Go Green waste broker and implement waste plan siting and placing notices above skips in suitable areas. Communicate plan and raise Operatives awareness to issue through toolbox talks/RAMS. Monitor use.
Spills – Ground pollution due to storage, fuelling of plant or leaching of substances into soil due to hydraulic oil from burst feed pipes on machinery. Discharge/leaching of liquid wastes included contaminated rainwater into drains, surface watercourses or foul water/sewers without consent. Disturbance of habitats due to excavation, removal of trees/bushes and other flora	Double skin bowers for fuel storage. All work areas will have spill kits appropriate to works strategically sited in case of spill. Staff training and awareness on use. Regular plant checks and maintenance in line with manufacturer's instructions/PUWER requirements. Production of inventory of materials used/stored on site (including quantity and nature of storage) and check material data sheets for environmental impacts in event of spillage. An environmental permit to discharge liquid effluent or waste water (poisonous, noxious or polluting matter, waste matter, or trade or sewage effluent) into surface waters, for example, rivers, streams or into or onto the ground via an infiltration system. Ensure brushes and tree cutting is undertaken during outside of the nesting season and trees	Spill kits to be on site. Double skin bowers and bunded tanks to be used. Communicate plan and raise Operatives awareness to issue through toolbox talks/RAMS. Machines to be checked daily with any repairs undertaken if required in designated area using bunds/pads/socks. Communicate plan and raise Operatives awareness to issue through toolbox talks/RAMS.

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	are suitably protected with barriers and ensure Tree preservation orders are not breached. Ensure spoil is stored away from tree trunks and trees are protected by barriers	
Air pollution	No waste fires on site. Ensure machinery is well maintained and no black smoke is emitted.	Communicate plan and raise Operatives awareness to issue through toolbox talks/RAMS
Parking	There is no on-site parking within the site compound. The site compound is within a pedestrianised area. Additional parking is available on designated car parks situated around the campus that the University have permitted.	Where possible, operatives will travel together to site on a morning to reduce number of vehicles to site. Contractor's trade vehicles or private vehicles belonging to Contractor's employees must not be parked in staff areas.
Waste management	All waste will be segregated into mixed, timber and metal waste skips. Materials will be utilised as best practice to minimise the amount of waste produced. All items used have been assessed in terms of the precautions and risk in terms of COSHH. Risk	Waste skips provided within the site compound to ensure all waste is disposed of correctly. Ensure waste is segregated if possible If spill kits are used, they will be disposed of in the correct waste skip and a new kit to replace

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	assessments are held on file within the H&S filing system within folder 6.4 within the VE site office. All substances will be in clearly marked, suitable containers on site in line with Vital Energi procedures	the used one / then disposed of safely. All spill kits to be located beside works being undertaken
Working in and around live services	The energy centre will remain live throughout the works to ensure a heat source is maintained for the University. Eliminating or mitigating these risks is paramount for the safety of operatives in the vicinity. Risks include: • Live power • Gas mains • Plant and machinery • Existing alarms and infrastructure	Operatives should as a minimum: • Mark any live power systems as "Live" with identifying signage or hazard tape when working near said services. • Ensure correct procedures are adopted for draining down and time for cooling before removing insulation. • Any isolated electrical services should be marked using the "Lock out, tag out" method by a competent person and the safe isolation/energisation procedures adopted. • Ensure daily isolations are sought from the estates team for the isolation of any alarms or sensors.

7. Arrangements for controlling quality activities associated with Vital Energi's scope of works

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What can go wrong	Arrangements to eliminate/reduce defects (List all the applicable controls)	What needs to be done (List all actions that need to be taken)
Ambiguous Information	Request for Information will be issued to the Principal Contractor with areas of ambiguity or incorrect information.	All information requests will form part of the Monthly Principal Contractor progress meetings.
Incorrect Information on Drawings/Drawing Amendments	Drawings will be checked before the issue of the documentation by the engineer, and any changes to drawings will be issued under instruction in accordance with the contract requirements.	All drawing submittals will form part of the Project Collaboration System process within the contract. All drawings issued will be discussed with Vital Energi and the Principal Contractor and commented on at the regular monthly meetings with the project management team – any comments will be incorporated into the drawing amendments / then reissued with a drawing revision and drawing register update.
Faulty Equipment/Equipment not to specification	Technical Submissions will be issued to the Principal Contractor to give information on all product specifications for approval using the <u>Technical Submissions Register</u> (VE-FRM-0310) Witness Testing at the Manufacturer's works will be conducted as requested by the Principal Contractor and recorded using the <u>Certificate of Test form</u> (VE- FRM-0436)	Technical submissions for major plant and equipment will be issued via the Project Collaboration System process.
Nonconformities	Materials and Equipment will be checked upon receipt against the order, placed in a suitable storage container, and protected as required. A receipt will be recorded on the <u>Goods Received Register</u> (VE-FRM-0425)	Suitable lockable storage areas set up on-site.

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	Any nonconforming products (i.e. Materials and equipment) will be identified and segregated.	
Installation Defects	To achieve 'Zero defects,' an inspection regime will be put in place from day one to carry out regular inspections of the materials and works ongoing and will be recorded and issued for action and closeout. We will advise the Principal Contractor where we cannot proceed with regular progress reports.	Ensure the correct management team member carries out the visual inspections at the appropriate time of completed works to ensure works are completed with no defects.
Commissioning Programme	All testing/commissioning will be witnessed by the respective engineers for the project and offered to the Principal Contractor promptly in accordance with the contract requirements.	Testing/Commissioning/Witnessing/Validation Documentation to compile and issue in line with the contract documentation.
Services not working correctly	An inspection and test plan will be issued to the Principal Contractor to advise him of all the tests to be undertaken.	ITP to be compiled and issued.
Unsatisfied client	As part of our strive for continual improvement, the Customer Care Programme will provide feedback on any adverse comments. An improvement plan will be implemented to ensure that they are rectified before completing the project. All lessons learned will be recorded through the <u>Control of Customer Satisfaction procedure</u> (VE-SOP-0016).	Customer services will contact the client during and near completion of the project to review and benchmark Vital Energi's performance.

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8. Site Establishment and Welfare

8.1 Site Welfare / Accommodation

The Principal Contractor will ensure that appropriate welfare facilities are provided according to the size of the workforce and the nature of the work. Accommodation will include First aid, Changing & Drying rooms, Canteen & Messing facilities, and Toilet & Washing facilities to meet the requirements of the workforce. All facilities will be cleaned and maintained.

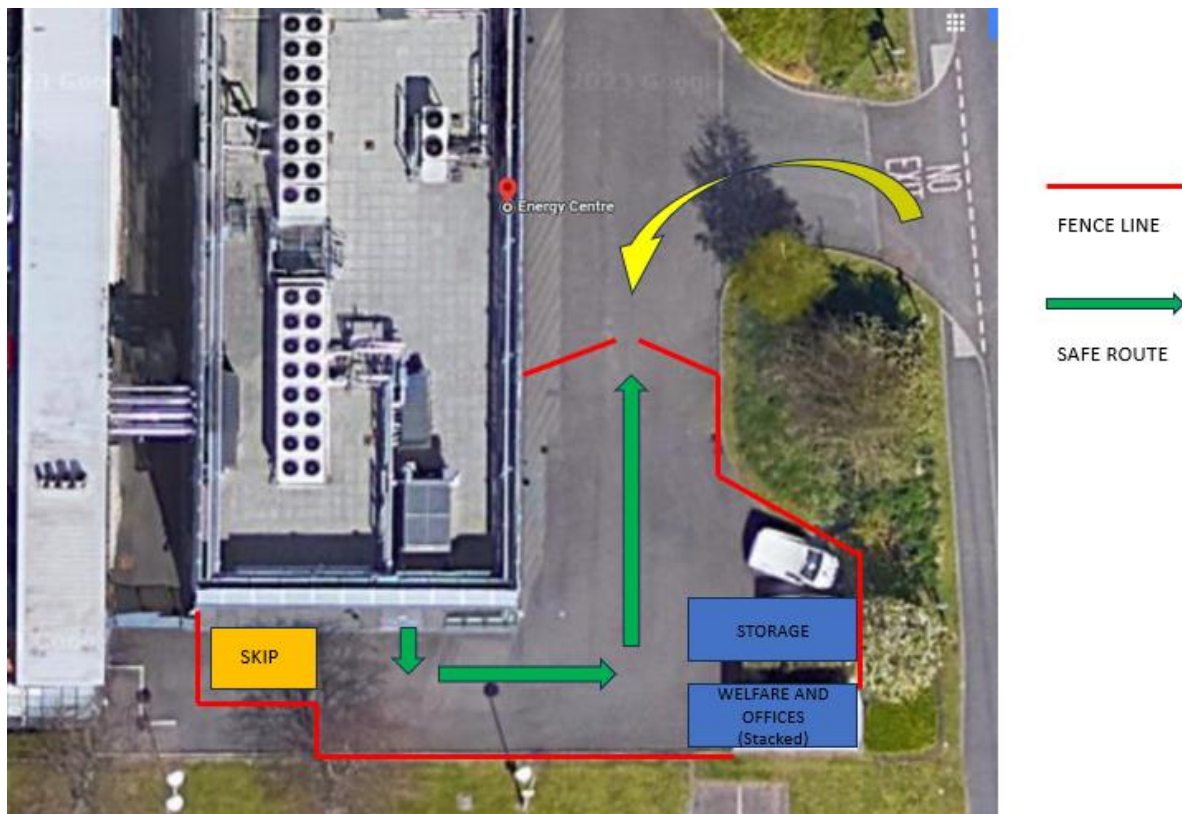
Any person found to be abusing such facilities may be dismissed from the site and subject to disciplinary action. Any person found urinating on the site other than in the allocated facilities will be dismissed from the site and face disciplinary action.

8.2 Car Parking

Car parking control is the responsibility of the Principal Contractor and must be observed at all times, all construction traffic must observe the traffic management and parking plan.

8.3 Traffic Management plan and site plan

Traffic Management Plan is the responsibility of the Principal Contractor and must be observed at all times, the agreed TMP is as below alongside our proposed site set up. Extract below:



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TRAFFIC ACCESS STRATEGY



General access to drill site No.1 will be via the access road from Bonsall Bridge



General proposed route of test pipe, TBA with client including ramps and barriers where required.

General access to drill site No.2 will be via the access road from Princess Parkway

8.4 Material Storage

Vital Energi requires the Principal Contractor to provide a designated laydown area to store equipment and materials. This area must have firm, level ground, free from potholes, etc., to ensure forklift trucks' stability and prevent trip/slip incidents. Upon receipt on a needs basis designated storage area will be allocated to contractors before delivery of materials.

8.5 Smoking

Smoking is not permitted in or on any building or land except within the designated smoking shelter(s). Smoking is only allowed in these designated areas.

8.6 Delivery Time / Restrictions on Working

Deliveries or collections will be restricted to between 9:30 am and 3:30 pm. Permitted hours of working are:

- Monday to Friday 7:00 am to 5:00 pm
- Saturday 8:00 am to 1:00 pm (By arrangement only)
- No work is permitted outside these times without written approval from the Principal Contractor.

Clear signage will be displayed on the roads surrounding the site to warn of the presence of construction vehicles.

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8.7 Access Permits and Controlled Access Keys

All work carried out or undertaken in ducts, tunnels, confined spaces or controlled areas such as roofs and plant rooms etc., requiring a 'Controlled Access Key' will require the issue of an 'Access Permit' by the Principal Contractor. Should it be necessary for the Contractor to 'borrow' a controlled access key, this will need to be agreed upon in writing with the Principal Contractor.

All 'Access Permits' must be 'signed on' and 'signed off' daily. All 'Controlled Access Keys' must be returned daily unless agreed in writing with the Principal Contractor.

8.8 Excavations

All excavations will be undertaken within a permit-to-work system. A competent person will use a cable avoidance tool as part of the permit-to-work system. Work will be conducted in accordance with HSG 47, "Avoiding Danger from Underground Services".

Where a competent person makes it necessary to batter or shore an excavation, a record will be kept of regular inspections in accordance with Regulation 22 of the Construction (Design and Management) Regulations 2015.

- at the start of the shift in which the work is carried out;
- after any event likely to have affected the strength or stability of the excavation. And
- after any material unintentionally falls or is dislodged; and

All excavations will; be adequately protected by physical barriers. No person shall enter the excavation without a suitable rescue plan being produced and discussed in the RAMS assessment briefing.

8.9 Temporary Works

The temporary works listed in the table below are allowed for the project. A Temporary Works register will be used to control and monitor this element of the project. The procedure of the temporary work will be based on BS 5975, and the table within the document will be used for the risk category.

If a Contractor requires other temporary works, this must notify the Vital Energi Project Manager, who will update the Temporary Works Register.

Temporary Works	Temporary Works Complexity risk [L M H]	BS 5975 Design Check category	Designer	Independence of checker

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8.10 Waste Management Plan

Waste Management is the responsibility of the Principal Contractor and must be observed at all times.

8.11 Work at Height

The Work at Height Regulations 2005 defines Work at Height as including “work in any place, including a place at or below ground level; where obtaining access to or egress from the such place while at work, except by a permanent staircase could result in a person falling a distance liable to cause personal injury”. Vital Energi seeks to ensure the application of safe practices for relevant tasks and activities relating to work at height, thus ensuring:

- where possible, work at height is avoided;
- where unavoidable, all work at height is adequately assessed, planned and organised;
- work equipment selected and used is suitable and appropriate for identified risks;
- those involved in work at height are competent to use selected equipment;
- risks from work at height are assessed;
- risks associated with work on fragile surfaces are properly controlled;
- equipment for work at height is appropriately inspected and maintained.

Before commencing any work that may be construed as Work at Height (WAH), including access to an unprotected work area at the same level, i.e., an excavation with open edges, and the RAMS for the work being completed, a plan must also be produced. As part of the acceptance process, the plan must be reviewed by the project team, Regional Safety Manager, or similarly competent person.

A rescue plan must also be developed whenever fall arrest systems are in use or when personnel would not be able to self-rescue should a fall at height occurs.

8.12 Assessment of Risk Associated with Work at Height

A Risk Assessment must be undertaken for each individual scaffold or access platform intending to be used on site. Where possible, works at height will be eliminated. If the risk can't be eliminated, then work will be minimised through the use of controls which give preference to collective rather than individual protection methods. Including the use of fixed handrails to prevent falls from height and segregation of works to prevent any items that could be dropped from hitting others - including site employees, Principal Contractor's staff or Visitors. Each task will be risk assessed separately and work at height equipment selected on suitability for the task.

All are working at height activities planned and supervised in accordance with all current regulations. Works will be segregated/fenced (secured, inspected daily and fitted with external lighting as required and appropriate to location)

8.13 Use of Scaffolds

All scaffolding activities will be carried out in compliance with HSE guidance. The relevant Contractors supervisor will identify requirements for scaffolding. Trained and competent scaffolders who hold a current

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CISRS card will assemble all scaffolds. Any work carried out at height will comply with the guidelines set out in SG4.

Vital Energi operates a 100% clip-on regime, and all operatives are provided with a twin tail lanyard. Any scaffold, which is not covered by the standard design in the scaffolding procedure, will require input from a qualified appointed scaffold designer.

Upon completion of the erection, a nominated competent scaffold inspector will inspect the scaffold and, as a minimum, within every seven days after that. The scaffold's status will be identified by the Scaff-tag system and recorded in a scaffold register. All scaffolds will be erected and modified according to the current industry standard.

8.14 Use of MEWPS (Scissor Lifts/Mobile Booms) & Other Work at Height Equipment

Those in control of any work at height activity must make sure work is appropriately planned, supervised and carried out by competent people. When deciding on which access equipment to use, fixed guarding systems incorporating handrails and a working platform, such as MEWPS, Push around Vertical Access Equipment, Tower Scaffolds, and Podiums, MUST be considered before equipment without fixed guard rails like steps, ladders, "hop-ups" etc. High level works at, or >5m should be completed from a fixed scaffold or MEWP; Medium level works 1.5 – 5m should be completed from MEWPs or preparatory work at height equipment like mobile towers or fixed scaffold; Low level works <1.5m

- Equipment use is restricted to competent operatives who have received adequate training (IPAF, PASMA or equivalent).
- All work at height equipment must be maintained in a safe condition.
- All Work at Height equipment must be tagged and inspected daily to ensure it is correctly assembled and does not subsequently deteriorate.
- All access equipment must be itemised in Vital Energi's site Plant Register. Contractors must provide a copy of an in-date (six-monthly re-inspection period) LOLER testing certification to confirm compliance with LOLER/PUWER.
- A daily pre-use inspection will be undertaken for all other work at height equipment and checks made on the working environment, e.g., ground and weather conditions to ensure suitability for use.
- Any work at height equipment found on inspection to be defective must be immediately removed from use and quarantined/removed from the site for repair.
- When using work-at-height equipment, employees must ensure they do not overload or overreach when working at height; work must be completed from within the boundaries set by handrails around work platforms or, if on steps, the centre of gravity of the particular item of equipment.
- Any person working at height must review and operate the safe system of work provided by the method statement (RAMS) for the task. The employee will have been briefed and sign off the RAMS to confirm acceptance.

8.15 Lifting & Slinging

In conjunction with any contractor undertaking lifting operations, Vital Energi will develop and communicate a Work at Height Plan, including appropriate arrangements for rescue in the event of an emergency.

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The following are all requirements in the law that must be considered when developing a lifting plan and undertaking work at height:

- Take account of weather and workplace conditions that could compromise worker safety or impact lifting operations
- Check that the place where work at height is to be undertaken is safe
- Ensure each place where people will work at height is checked every time, before use and following any significant stoppage or significant change
- Stop materials or objects from falling or, if it is not reasonably practicable to do, take suitable and sufficient measures to make sure no one can be injured, e.g., use exclusion zones to keep people away
- Ensure scaffold has toe boards and meshes on it to stop materials and tools from falling
- Store materials and objects safely so they won't cause injury if they are disturbed or collapse
- Plan for emergencies and rescue, e.g., agree on a set procedure for evacuation.

9. Plant and Equipment

9.1 PUWER.

Contractors must provide the Vital Energi Project Team with a list of all plant on site. It is the responsibility of the Vital Energi Project Manager to ensure, in conjunction with the Vital Energi Regional SHEQ Manager, that a complete list is compiled and maintained detailing all work equipment onsite. A schedule of required inspections and certifications will be identified from this list. The Project Manager's responsibility is to ensure that the site supervisors are aware of the inspection requirements under PUWER and that the relevant inspections are completed at the appropriate time.

Consideration for PUWER requirements must be given for all hired equipment used on site. This will be supported by calibration/test certification and training certification. Full certification must be available and be reviewed by a competent person before that equipment can be used on site.

9.2 LOLER

All Contractors must comply with LOLER requirements, including a LOLER register and certification. All lifting equipment will be inspected and tested as required before being used. The Project Manager will nominate a responsible person to check the certificate and data provided.

9.3 Fire Extinguishers

Site fire extinguisher supply and service is the responsibility of the Principal Contractor, or they will nominate a responsible person to check and inspect the equipment. All Vital Energi owned fire extinguishers are the responsibility of the Vital Energi Fire Warden.

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9.4 Safety Harnesses and Lanyards

Safety harnesses and lanyards will be inspected before issue and worn at all times whilst working at height operations when there is a risk of a fall through an unprotected leading edge. All operatives are responsible for checking their harness and lanyard for defects at the beginning of any working shift, after break times. There is a requirement for harnesses and lanyards to have a documented inspection every three months and recorded on the Vital Energi fall arrest equipment inspection form. All are working at height operations will be supported by the relevant rescue plan.

9.5 Electrical Equipment/Electrical Works

It is to be inspected and maintained in compliance with the Electricity at Work Regulations. The Project Manager will nominate a responsible person to check and record the inspection and labelling of electrical equipment.

All Electrical Contractors must be approved and registered with the NICEIC.

Live working must not be undertaken without written permission. Vital Energi must submit a written request to the Principal Contractor to work on the electrical system, which has to be approved by an Authorised Person who will control the work under the issue of a "Certificate for Live Working".

No electrical connection may be made to the electrical supply, including fire detection systems, without first being approved by one of the Principal Contractor's Electrical Authorised Persons or the Principal Contractor's Fire Safety Advisor regarding fire alarms.

No existing electrical circuit is to be isolated without prior approval by one of the Electrical Authorised Persons. Vital Energi must submit a written request for the isolation with a minimum notice of ten working days, emergencies excluded.

No electrical circuit may be taken into commission unless the necessary test certificate and associated electrical test results sheet(s) have first been provided and approved by one of the Principal Contractor's Electrical Authorised Persons, all in accordance with BS7671 2018, current edition, including all amendments. A Minor Works Certificate will be accepted where no circuits have been altered with the addition of electrical accessories (e.g., 13A socket outlets, etc.). A full Completion and Inspection Certificate will be required for all other work.

10. Control of Substances Hazardous to Health (COSHH)

All chemicals or other hazardous substances will not be used on-site without a specific safe system of work produced following a COSHH assessment detailing the hazards and precautions required to ensure the user's safety.

This also applies to using substances such as lubricants, cleaning materials, aerosols and any imported materials and materials already in offices. All hazardous substances and chemicals should be used, stored and disposed of in compliance with the assessment and Material Safety Data Sheet (MSDS), which may include all hazardous material being kept within a locked storage area or cupboard and access to these

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materials restricted to those who have viewed and understood the COSHH Assessment for the particular material.

Vital Energi Project Manager will ensure that relevant personnel are briefed on COSHH Assessments. All clearly understand and comply with these briefings, with records of the briefings being maintained within the site files.

All subcontractors (where required) shall provide Vital Energi with a set of COSHH Assessments and supporting MSDS covering all hazardous material contained within their work activities'.

11. Health & Welfare Requirements for Contractor's Staff

11.1 Health Screening

Health surveillance is needed to protect workers at an increased risk of identified work-related ill health. Accordingly, the Principal Contractor requires all contractors attending the site to ensure that their employees have adequate access to health screening and are healthy and fit for the task being undertaken. All contractors attending the site must therefore furnish at induction an in-date (max three years), Constructing Better Health "Fit for Work" medical certificate before commencing work.

11.2 Drug & Alcohol Testing

To ensure that the use of drugs or alcohol by any employee (direct or non-direct) does not impair the safe and efficient running of the business or put at risk the health, safety and wellbeing of employees, customers, suppliers or members of the public both Random and For Cause Drug and Alcohol testing will take place.

For Cause Testing - When it is suspected that an employee is in contravention of Vital Energi's Drug & Alcohol Policy or when it is suspected that an employee is impaired due to the use of drugs or alcohol, testing may be used as part of an assessment process. If an employee is suspected of being under the influence of alcohol and/or drugs, contact the HR team and seek their advice. The HR Team will then manage the process; under no circumstances should Managers arrange a test themselves.

Post-Accident/Incident Testing - As part of an accident/incident investigation, testing may be carried out on those employees involved, when possible, to determine whether drugs or alcohol may have been a contributory factor.

Random Unannounced Testing - Employees will be randomly selected and tested at Vital Energi's Sites and/or premises throughout the year. This process is regardless of the employee's job function. This

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12. Project Responsibilities

The actions identified in sections 5.0, 6.0 and 7.0 will be allocated to the following roles:

What needs to be done	Person Responsible
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On site safety monitoring and reporting	Dave Kantor/Brad Taylor
Safety management and reporting	Project manager
External audits	Grant Moffitt/Lee McDonald

13. Monitoring the CDM Construction Phase Plan

13.1 Vital Energi UK monitoring arrangements

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The Project Team will implement the Control of Auditing procedure (VE-SOP-0018). As a minimum, the following monitoring will be implemented:

- Hazard observation reports via the **“SHE Assure Online Reporting Platform.”**
- Site Safety Set-Up Audit – conducted in the first week
- SHEQ inspections – conducted weekly by Project Team
- SHEQ inspections – conducted monthly by Contract/Operation Managers
- SHEQ management system inspection – conducted in the first three months
- SHEQ targeted audits – as per Company Action Plan
- Senior management safety tours – as per Company Action Plan

All copies of Vital Energi monitoring systems will be discussed and issued to the Principal Contractor.

13.2 SHEQ Audit programme

The SHEQ Team, in conjunction with the project team - will conduct the SHEQ audits as per the following programme:

The process to be audited	Date audit will be conducted											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Health and Safety												
Grant Moffitt	x	x	x	x	x	x	x	✓	✓	x	x	x

13.3 Other monitoring arrangements

The following monitoring arrangements have been identified as part of the Vital Energy CDM Construction Phase Plan:

- Regular progress meetings with all site contractors and key stakeholders
- Monthly audits focused on key aspects of the project
- Weekly project manager site inspection reports
- Monthly director site inspection report
- Monthly Principal Contractor/Vital Energi meetings

14. Communication of the CDM Construction Phase Plan

The following persons have been appointed to carry out the responsibilities outlined in Section 9.0.

PLEASE NOTE: by signing this document, the appointee confirms that the project leader, or designate, has briefed them on the duties of their appointment and that they accept the work.

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Person (name)	Project Role	Signature	Date
Dave Kantor	Site supervisor		31/7/23
Brad Taylor	Assistant Project Engineer		4/9/23
Ben Gibson	Project Manager		4/9/23

15. Health and Safety File

Vital Energi recognises its duties and obligations under the Construction (Design and Management) Regulations 2015 and will comply with all reasonable requests from the Principal Designer for information.

The control and issue of information will be planned and, where possible, will be passed to the Principal Designer at the earliest opportunity. It should not be left until the completion of the project. Information passed onto the Principal Designer] may be recorded on the Monthly Progress meeting with the Principal Contractor.