

**Construction (Design and Management)
Regulations 2015**

**Construction Management Plan
(CPHSP)**

George Kenyon



HENRY BROTHERS



The University of Manchester

Prepared By: K.F. 24.01.24 – Issue No1
Henry Brothers Construction Ltd
32 Eldon Rd
Beeston
Nottingham
NG9 6DZ

INTRODUCTION

This Construction Phase Health and Safety Plan has been produced from information contained within the pre-construction information pack produced by the University of Manchester works information and all other supporting tender documentation provided in order to satisfy the requirements within the Construction (Design and Management) Regulations 2015.

The aim of this Construction Phase Health and Safety Plan primarily is to highlight:

- (a) Arrangements to ensure, so far as is reasonably practicable, the health and safety of those carrying out the construction work and anyone else who may be affected by it. The arrangements will include, where necessary, management of construction work and monitoring of compliance with health and safety law.*
- (b) Sufficient information about welfare arrangements to enable any contractor to comply with welfare requirements under health and safety law and Approved Codes of Practice.*

This Construction Phase Health and Safety Plan will continue to develop throughout the duration of the Project. Ownership of the Plan on commencement becomes that of the Project Team including those employed by the Principal Contractor and his contractors.

Any amendments to this Safety Plan must only be made by the author or anyone approved to act on their behalf. All amendments must be registered on the "Record of Amendments to the Health & Safety Plan" register on the following page. It is the responsibility of the individual who makes the amendment to ensure that all those who hold a copy of the Plan are made aware of the amendments.

1.00 DESCRIPTION OF THE PROJECT

1.01 Project description and programme details

Location of Works:

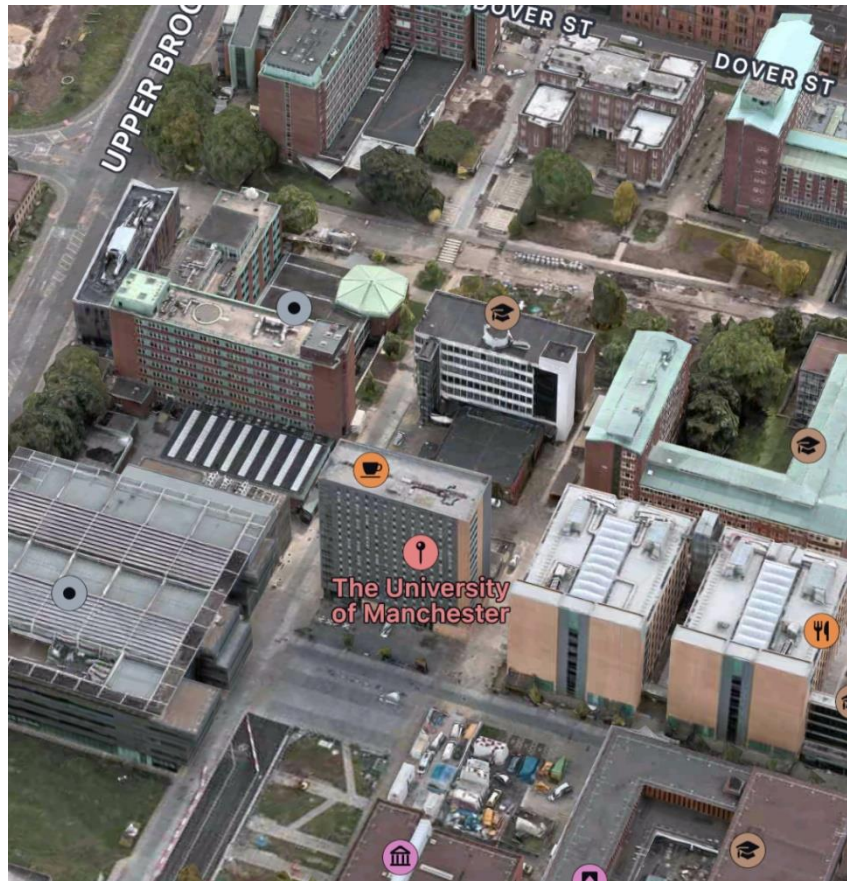
George Kenyon Halls of Residents,
Wilton St,
Manchester,
M13 9PY



Description of Works:

The removal of insulation materials contained within the external cladding system to all elevations. As a consequence of the works, all external cladding will need to be replaced to the building. In addition the upgrading of the external insulation to the building to exceed current standards and replace the external brickwork skin. Allowing for a uniform approach to meeting required insulation levels. It is also proposed to replace the external roof coverings.

1.02 Extent and location of existing records and plans



George Kenyon Building is situated approximately 0.1 miles from the centre of Campus, University Place. The CDM area will be the building itself with a Compound area located opposite the building.



Proposed Compound Area

Existing Structures

The George Kenyon building is a University of Manchester Halls of Residence and as such, is typically let for 51 weeks. In order to undertake the works, the University has agreed for the building to be vacated for a 12-month period.

Existing Services

Plans of existing services should be made readily available for referring to. Existing drawings cannot be guaranteed to be precisely accurate. Henry Brothers shall be responsible for ascertaining the positions of all services whether shown on drawings or not and should make their own enquiries regarding existing services prior to commencement of work and shall be fully responsible for establishing the exact location of the same. O&M files are available from UoM Estates from previous projects.

This information is indicative only. No assurance can be given for the accuracy of this information. Positions of existing services must be confirmed by the Site operatives. Unknown and/or uncharted services may also be present on Site.

Henry Brothers Ltd shall undertake all surveys and testing they deem necessary to satisfy themselves of the capacity and condition of ground conditions and existing services to enable the provided at the Site.

Underground Services

Henry Brothers Ltd will liaise with the district network owners (DNO's) during the planning of the project to ensure assets will not be affected by enabling works. Henry Brothers Ltd will develop a strategy with the base for dealing with underground services that are impacted by the construction activities.

Henry Brothers Ltd will carry out a radar scan to verify the location of existing services.

- Comply with all guidance from DNO's.
- Ensure that access to DNO apparatus is maintained at all times.
- Prevent the placing of heavy construction plant, equipment, materials or the passage of heavy vehicles over DNO apparatus unless specifically agreed with us in advance.
- Exercise extreme caution if slab (mass) concrete is encountered during excavation works as this may be protecting or supporting DNO apparatus.
- Maintain appropriate clearances between gas apparatus and the position of other buried plant.

1.03 Project Stakeholders

Role	Organisation	Contact
Client Representative	University of Manchester (UoM) E&F Room G.003 Beyer Building University of Manchester Oxford Road Manchester M13 9PL	Contact: Tel: TBC Email: TBC
Project Manager	Gardiner & Theobald 17-19 Whitworth St W, Manchester M1 5WG	Contact: TBC Tel: TBC Email: TBC
Principal Designer	Halliday & Meecham 111 Piccadilly Manchester M1 2HY	Contact: TBC Tel: TBC Email: TBC
Principal Contractor	Henry Brother Construction Ltd 32 Eldon Rd Beeston Nottingham NG9 6DZ	Contact: Justin Hicklin Tel: 07920 832261 Email: justin.hicklin@henrybrother.co.uk
		Contact: Colin Patterson Tel: 07968 085823 Email: colin.patterson@henrybrothers.co.uk

1.04 Access and Security

Access will be gained via the vehicle barrier located at the end of Rumford St. Deliveries and waste removal are to be co-ordinated taking into account third-party protection measures. The movement of vehicles, plant, construction materials and waste will be closely monitored by suitably trained banksman employed through the process. No construction waste will be left out in open for long periods or overnight as this will create fire and slips, trips, fall hazards. Waste on site will be monitored and managed, and subject to frequent housekeeping inspections.

Deliveries

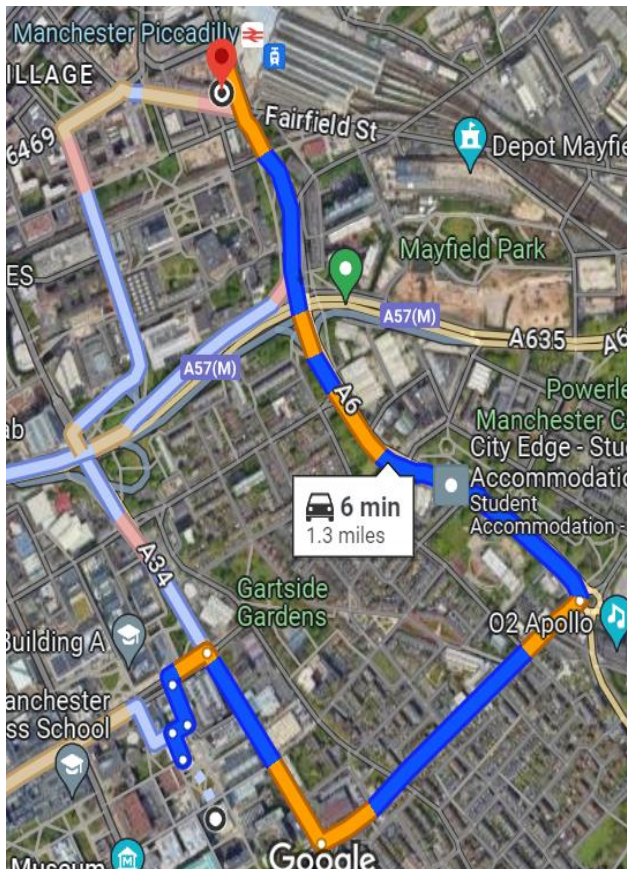
Our trained Traffic Marshal will escort all deliveries and visitors, drivers/visitors will access the CDM as previously mentioned through the vehicle barrier. Deliveries will not be taken at the vehicle barrier so not to cause unnecessary congestion, Drivers will then be escorted to the working site compound and dropped at a previously approved location within the site boundary.

We will comply with all University security requirements, with deliveries to be scheduled to arrive between Client approve timings. HB plan on providing the client with a weekly lookahead which will include anticipated deliveries. HB will provide a Traffic Marshal who will escort delivery vehicles and visitors whilst on site.

Local Fire and Hospital

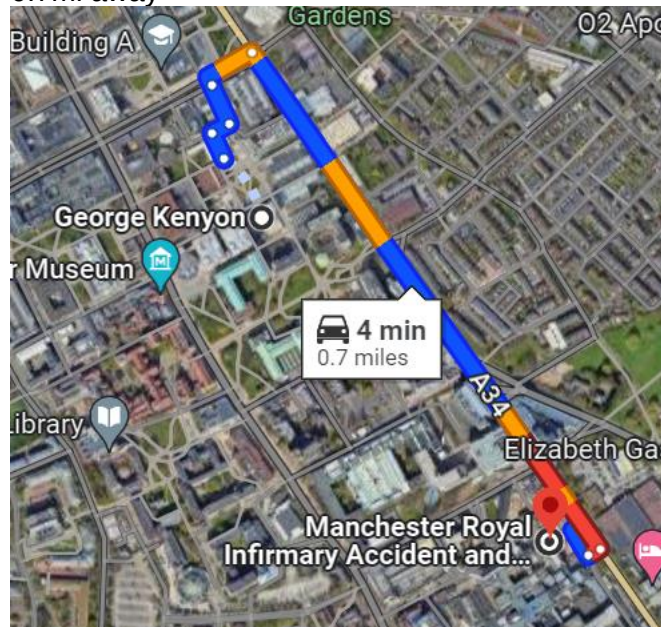
Fire

London Road Fire Station, 50 London Rd,
Manchester M1 2PH approx. 1.3mi away



Hospital (A&E Facilities)

Manchester Royal Infirmary Accident and
Emergency Dept, Manchester Royal Infirmary,
Upper Brook St, Manchester M13 9NZ approx.
0.7mi away



1.05 Details of Project Emergency Response Team

First Aiders

<u>Name</u>	<u>Mobile No.</u>
Colin Patterson	07968085823
Mark McCaskie	07717652589

First Aid Arrangements

On this Project the following first aid arrangements will be in place: -

- The names of the two first-aiders named above and their contact numbers will be posted at prominent locations i.e., notice boards in canteen and office facilities.
- The location of first-aid points will be posted as indicated above.
- Communication of first aid arrangements will form part of the site induction.
- First-aiders will be identified by means of a sticker stating “first-aider” which will be fixed to their safety helmet.

Colin Patterson the Construction Manager, Mobile: 07968085823, is the Project Lead for all Emergency planning. He will ensure that effective emergency planning is put in place so that in the event of an accident, incident, near miss or dangerous occurrence, appropriate arrangements are agreed.

Reporting and Investigation of Accidents and Incidents including Near Misses

It is Project policy that site management will report to Head Office all accidents/incidents, near misses and dangerous occurrences. This includes those involving sub-contractors. In the event of any accident/incident, near miss or dangerous occurrence the following procedure will be adopted:

- Site management team will ensure that adequate first-aid is given to any injured party.
- Site management team will complete the Company two-page Incident Report and forward it to Head Office.
- The SHEQ Department on receipt of the Incident Report will initiate a full investigation using the Company Investigation Report. This will require the taking of statements from all relevant parties.
- All accidents/incidents, near misses or dangerous occurrences will be discussed on a weekly basis at the Company SHEQ Department meeting chaired by the SHEQ Director and corrective action agreed.
- Findings of all accidents/incidents, near misses or dangerous occurrences will be discussed with site management and the Client (if present) at the monthly Project health and safety meetings.
- All RIDDOR accident/incident, near misses or dangerous occurrences will be reported to the HSE and the Employer by the SHEQ Director. Subcontractors will be required to submit their own reports following a RIDDOR accident/incident involving their own employees.
- Project health and safety performance including accident performance will form part of the Project and Framework monthly reports.

Fire Marshal

<u>Name</u>	<u>Mobile No.</u>
Karl Denton	T.B.C

Fire Prevention

The Project Fire Action Plan prepared will be the responsibility of the Project Manager.

All hot works will be controlled by Henry Brothers Ltd permit to work system. These will be managed by the Site Supervisor.

The fire plan developed will be co-ordinated with the Client.

The fire plan produced will consider the following:

- Any existing fire procedures.
- Storage area for materials.
- Implementation of Company "No Smoking" Policy.
- Activities which could cause fire e.g. hot work and ensure it is controlled under a Permit to Work system.
- Allocation of appropriate firefighting equipment subject to risk and siting of same.

- Contact numbers for emergency services.
- Means to raise the alarm if a fire starts.
- Escape routes.
- Defined muster point(s).
- Signage.
- Inspection of all firefighting equipment (should be tested by a competent person annually).
- Review procedure.

Contents of the fire plan will be communicated at site induction.

Client Fire Officer **T.B.C** must review construction phase fire documentation in advance (minimum one week notice).

Henry Brothers Ltd will liaise with the University in order to establish processes and procedures to maintain the fire escape and emergency evacuation of all areas during the works.

Henry Brothers Ltd will confirm the fire precautions for the area they are working in to include in the site safety induction.

Henry Brothers Ltd will ensure that there is access for emergency services vehicles during the works. All other buildings are accessible.

2.00 Site Rules & Client Goals

2.01 Site Rules

Site Management will ensure that the following rules are communicated to all workers entering the site area (including sub-contractors) during site induction and posted on Site Safety Notice Boards.

- Comply with the requirements of the Clients requirements as highlighted during site induction including Fire Safety Plan, Spillage Response, Emergency Medical Care, Accident and Emergency Procedures and Security Briefing.
- No work on Client property or equipment should be undertaken without approval from Henry Brothers Ltd Site Supervisor to ensure compliance with Safety Rules and Procedures.
- No personnel, including visitors are to have access to the site without fully complying with site access requirements. Visitors must be accompanied at all times. All personnel including visitors are required to attend a site induction.
- All personnel will be deemed competent for the work on which they are employed. Employees will be required to provide evidence to confirm competence.
- Personal protective equipment (PPE) appropriate to the task being carried out shall be worn at all times. Project is a hard hat, safety footwear, high vis and glove site. All other PPE as highlighted as part of the risk assessment process must be worn.
- No drugs or alcohol will be allowed on the site or any person who is considered to be under the influence of drugs or alcohol.
- Smoking only at designated areas.
- Site operatives are to comply with Company mobile phone policy.
- All dust and pollution will be prevented; all measures are to be taken to prevent any nuisance to the general public and building occupiers.

- All site operatives and personnel including visitors will be aware of the evacuation procedures in the case of an emergency.
- All escape routes must be kept clear at all times and must be left unobstructed.
- Hours when Henry Brothers Construction Ltd is permitted to work must be strictly adhered to.
- Radios prohibited on university premises.

2.02 Client Goals

Reference should be made to document 'Health & Safety Arrangements, Chapter 29' available at [Health and Safety Services \(manchester.ac.uk\)](http://Health and Safety Services (manchester.ac.uk)).

3.00 ARRANGEMENTS FOR CONTROLLING SIGNIFICANT SITE RISKS

3.01 Project Specific Safety Risks

The arrangements noted in this section reflect hazards identified in the tender stage pre-construction information (PCI) and additional hazards identified by Henry Brothers as part of their review of tender stage information provided.

The following is a summary of significant risks which have been considered.

- Uneven ground, level of changes (trips, slips and falls)
- Existing buried services (known and unknown unmarked services)
- Plant movement and maintenance
- Working at height
- Noise and vibration (plant and machinery)
- Loading, unloading and movement of equipment.
- Fire and uncontrolled release of dangerous substance within the facility
- Manual handling, heavy lifts, materials, and equipment
- Site security (including welfare, laydown areas)
- Collision due to restricted site, restriction of access for emergency services
- Working on/in a busy University Campus.

Those involved in the coordination of design on behalf of Henry Brothers will ensure that information relating to Henry Brothers design elements are forwarded to the Principal Designer to consider any health and safety implications.

Detailed below are general controls to manage key hazards which should be considered and form part of the HB's RAMS process.

Hazard Element 1	Working at Heights
Potential Residual Risks	▪ Personnel falling from heights (inc. into open excavations) ▪ Materials falling and striking personnel (including non-construction personnel) ▪ Non-construction personnel entering work areas not clearly defined. ▪ Environmental factors including high winds

On the George Kenyon Building project there are several high-risk works at height activities

Henry Brothers Operating Procedure IMS-HBS-OHS37 "Working at Height" will be used to ensure adequate measures are in place.

The hierarchy below sets out the means of preventing falls from heights from Henry Brothers preferred option of guardrails to the least preferred option of working off ladders:

1. Guardrails, toe-boards, barriers or similar means of protection.

2. Provide a working platform.
3. A net, airbag or other collective safeguard for arresting falls which is not part of a personal fall protection system.
4. A personal fall protection system.
5. A work positioning system.
6. Rope access and positioning techniques.
7. A fall arrest system.
8. A ladder.

Management will ensure when planning work at heights that:

- A specific risk assessment developed into a safe method of work has been produced.
- Workers are made aware of the content of the above and have taken ownership of same
- Consideration has been given to preventing non-construction personnel from entering work at height areas.
- Temporary edge protection systems should comply with TG1:22 and BS EN 13374 for Temporary Edge Protection Systems.

HB acknowledges that scaffold contractors appointed to the project must be NASC registered.

Hazard Element 2	Temporary Works
Potential Residual Risks	▪ Uncontrolled collapse resulting in personal injury ▪ Overloading of structure ▪ Unauthorised interference with temporary works measures put in place ▪ Environmental factors

There will be some very low to medium-risk temporary works which will require careful planning with design input. This will likely include:

- Site fencing
- Work platforms
- Temporary edge protection systems

Henry Brothers' Project Manager Mark McCaskie will be the Temporary Works Co-ordinator (TWC) for the George Kenyon Building project and will be supported by Henry Brothers Construction Manager, Colin Patterson in the role of Temporary Works Supervisor (TWS).

Henry Brothers Operating Procedure IMS-HBS-OHS33 "Temporary Works" will be used to ensure adequate measures are in place.

The requirements of CDM2015 Regulation 19 "Stability of structures" will be considered at planning stage as well as BS5975:2019 "Code of Practice for Temporary Works".

The definition of temporary works is wide-ranging and in addition to measures required for the erection of the timber structure could include the design of measures for;

All temporary works will be designed by a competent person. The detail of any design will be subject to the complexity of the temporary works being carried out. Detailed guidance on what constitutes a designer is included in the CDM 2015.

Principal Designers have a duty to ensure co-operation between permanent and temporary works designers, to ensure that arrangements are in place to ensure that designs are compatible and that the permanent works can support any loadings from temporary works.

Henry Brothers site management will assist the Principal Designer by ensuring information is passed by those involved in design. This will be achieved in several ways including design meetings, technical meetings, health and safety meetings and progress meetings. Where amendments must be made to the Construction Phase Health and Safety Plan these will be done as soon as is reasonably practicable and recorded.

Further information relating to site hoarding is detailed within the Temporary Works Forum (TWF) 'Hoardings, a guide to good practice' revised April 2014 and the 'Competencies of the Temporary Works Co-ordinator (TWC)' revised March 2012, which can be found at the following website:

<http://www.twforum.org.uk/>

Hazard Element 3	Existing Services
Potential Residual Risks	▪ Risk of electrocution ▪ Fire or explosion ▪ Unplanned interruption to Employer services including critical equipment ▪ Locating actual placement of utilities in relation to plans and drawings

The following Henry Brothers Operating Procedures will be used to ensure adequate measures are in place.

- IMS-HBS-OHS26 "Permits to Work"
- IMS-HBS-OHS39 "Working with Electricity"

Reference will be made by management to guidance issued by the HSE and the utility providers including HS (G) 47 "Avoiding danger from underground services".

Isolation of electrical equipment: If isolation of existing services is considered necessary, then Henry Brothers will request isolation certificates and location plans from the Employer AP. Henry Brothers will be in possession of these certificates and plans prior to any works commencing that may disturb utility supplies. Henry Brothers will work closely with George Kenyon Building's in-house AP throughout the duration of the project. HB will go through the Estates Office for booking appointments with the AP and adhere to lead-in times, providing sufficient notice for services required.

Work on existing or newly installed services (including testing and commissioning)

All services will be presumed to be live unless they are locked-off / tagged-out by a competent person or there is evidence to prove the isolation is effective and secured.

Henry Brothers will presume all services to be live within the site unless there is strong and verified evidence to suggest otherwise.

It is essential that, before any excavation or sub-level work commences, all underground services are identified and considered. Services could include electricity cables, drains, water pipes and gas. Site management must determine the nature of these services, their position, and necessary controls to safeguard / isolate them prior to any excavating work. Site plans, manhole positions, junction boxes, cable locators and local information will assist in this process. Where services are found that are not on drawings, this information shall be passed on to the client.

The safe methods of work produced when working on existing services should be specific to the works being carried out and will define roles and responsibilities including those responsible for obtaining Permits to Work and lock-off procedures. Test certificates will be provided for all newly installed services (including temporary supply).

Gas Safe

All personnel engaged for work on commercial gas systems (including LPG) will comply with the Approved Code of Practice, Safety in the installation & Use of Gas Systems and Appliances. In addition, all such personnel (business or self-employed) will be required to be registered with **Gas Safe**, and to provide copies of registration together with ID cards and approvals for all operatives who may undertake work on the specified Projects. This is to ensure that the scope of works being undertaken falls within the competency of the individual operatives.

Any potential work to existing gas infrastructure will involve liaison with the Employer and the utility provider.

Hazard Element 4	Hot Works
Potential Residual Risks	▪ Fire and explosion ▪ Proximity of existing Employer buildings

All hot works will be managed in accordance with the University Hot Works Procedures, and Henry Brothers permit to work system.

Work activities controlled by Henry Brothers hot works permits will cease a minimum of 1 hour before the end of each working day. Such permits will be for a defined area. Thermal imaging technology can be used to detect hot spots once hot works have been completed for reassurance.

Hazard Element 5	Fire and uncontrolled release of dangerous substance within the facility
Potential Residual Risks	▪ The spread of fire to surrounding areas ▪ A release of a substance that may pose a risk to the health and well-being of barracks' staff (including soldiers) and visitors.

Controls to manage the above:

Greater Manchester Fire and Rescue Service shall be consulted during the planning of the project to provide them with knowledge of the project which will help execute an effective emergency response in event of a fire.

A thorough Fire Risk Assessment (FRA) will be carried out by a competent person before construction work begins and will ensure appropriate and sufficient control measures are implemented to mitigate the fire risks. Control measures should be periodically assessed, and the FRA should be continuously reviewed. The FRA process should be used to address any new, emerging, or changing risks and hazards, and any additional mitigating actions and/or control measures should be put into place as soon as practically possible.

Henry Brothers personnel with site responsibility such as fire marshals have received specialised fire safety training.

In order to identify risks early and implement control measures or safe systems of work to reduce the risk, rigorous checking and monitoring of site activity should be carried out. This will include any steps required for daytime opening (the beginning of the day) or daytime closing (the end of the day).

Local fire service: London Road Fire Station; Address. 50 London Rd, Manchester M1 2PH

Hazardous substances will be subject to strict storage and stocks will be minimised as much as possible with just on a just-in-time delivery basis. Substances will be stored in suitable COSHH containers in a secure area and incompatible substances will be segregated. Information on substances will be provided via MSDS and COSHH assessments. These documents can be passed on to the University team for their information.

Hazard Element 6	Slips, Trips and Falls
Potential Residual Risks	▪ Build-up of construction waste ▪ Change in ground / floor conditions. ▪ Non-construction personnel entering work areas. ▪ Employer's personnel ▪ Visitors to the campus

Controls to manage the above:

Slips, trips and falls on the same level are statistically the most common cause of major injuries at work. Given that this project is being undertaken within an operational environmental consideration will also be given to Employer personnel e.g., condition of road surfaces.

Henry Brothers Operating Procedure IMS-HBS-OHS18 "Management of Slips, Trips and Falls" will be used to ensure adequate measures are in place.

The main causes of injury from a slip, trip or fall are:

- Walking over uneven ground, particularly when carrying large or unwieldy and awkward objects.
- Tripping over building materials not stacked correctly or waste materials carelessly disregarded.
- Tripping over trailing cables.
- Slipping caused by wet, gritty or icy surfaces.
- Falling over due to soft and poor ground conditions.
- Trips caused by small or sudden changes in level or surface type.

Everyone has a role to play to reduce the potential for slips, trips and falls; good housekeeping is one of the main ways to reduce the potential for them to happen. Management will monitor site conditions to ensure that construction issues likely to produce slips, trips or falls are managed where reasonably practicable. Employees are expected to play their part by helping to maintain good standards of housekeeping and highlighting to management any issues of concern. **Waste must be disposed of immediately using appropriate and secure receptacles.**

Attention will also be paid to access routes used by construction traffic outside the defined site boundary to prevent potential mud and dirt.

Hazard Element 7	Working within an occupied University Building
Potential Residual Risks	• Chemistry Building occupants/construction workforce interaction

Controls to manage the above:

Existing fire alarm system to be maintained in such a way so that it is not accidentally tampered with or damaged during construction works. Any alteration to the fire alarm system should be controlled using a Client issued permit to work.

Henry Brothers will implement separate access and egress routes where possible.

Keeping the existing University's evacuation routes clear and identify any exiting disabled staff/students' routes to ensure they are not affected during construction works. Partially obstructed corridors must allow room to pass.

Signage to warn of construction works and emergency contact details.

Liaise with student and staff representatives to ensure they can share concerns relating to the construction process and those concerns can be addressed effectively. Representatives will be invited to monthly safety meetings to provide a voice for students and staff.

Persons required to access occupied areas of the building will have to have had a relevant induction.

Hazard Element 8	Heavy plant and equipment
Potential Residual Risks	▪ Collisions with barracks buildings and structures ▪ Likely interface between plant and pedestrians ▪ Security of plant and equipment

HB operates a mobile plant and pedestrian segregation procedure (Document MPPS01) which will be adhered to on the George Kenyon Building project. This includes a barrier system to prevent pedestrians from walking into the machine's operating area, and the use of a suitably trained banks

person. HB will ensure those required to operate mobile plant and equipment appropriate training and certification.

Mobile plant and machinery will be parked up in a secure location and immobilised when not in use; brake systems applied, and keys removed from the ignition.

Hazard Element 9	Manual Handling
Potential Residual Risks	▪ Musculoskeletal injuries ▪ Cuts/lacerations

HB will work with design teams to design out manual handling of material as much as possible and reduce the size and weight of the material selected.

HB site management will scrutinise subcontractor risk assessments to ensure that occupational health issues such as manual handling have been identified and that adequate control measures are in place and will monitor manual handling and general performance.

Among the workforce, HB will have a sufficient amount of first aiders to treat anyone who has been injured as a result of manual handling (cuts, lacerations etc).

Hazard Element 10	Traffic Management
Potential Residual Risks	• Potential collision between site user vehicle/delivery vehicle and pedestrian/campus user vehicle entering the campus • Collision between campus personnel and construction related plant and vehicles.

Traffic Management

Due to the significance placed on traffic management issues on this Project, it is proposed that HB will implement a 4-point traffic management plan that will be produced by the project Manager campus d on risk. Traffic management arrangements put in place will consider the Roads and Street Works Act as well as Chapter 8 of the Traffic Signs Manual, and any campus specific requirements.

Factors which will be considered in the development of the traffic management plans will include:-

- Regular deliveries and collections for George Kenyon Building services and operations.
- Heavy pedestrian traffic around the working area & roads leading to it
- Established speed limit of 5mph, traffic signs and orders which must be strictly observed.
- Congestion created by the processing of arriving vehicles.
- Turning areas within the compound to prevent reversing.