CONSTRUCTION STAGE HEALTH & SAFETY PLAN

RENOVATION AND TWO STORY EXTENSION TO HOUSE

636 Whitechurch Road
Rathfarnham
Dublin 16

Appendices (contained in site safety onsite)

- Induction Talk Records
- Site inspection Reports
- Statutory reports
- Accident Reports Forms
- Risk Assessment / Method Statement
- Sub-contractors Safety Statement
- Personal Protective Safety Statements
- Health & Safety Training Records
- Appointment of Site Safety Representative (s)
- Tool Box Talk Records
- Health & Safety Meetings

Safety and Health Plan

This Safety and Health Plan is prepared in accordance with the Safety, Health and Welfare at Work (Construction) Regulations 2013 and the "Guidelines to the Safety Health and Welfare at Work (construction) Regulations 2013" Published by the Health and Safety Authority. It is a working document that will evolve during the course of the construction phase. All those involved with the construction phase have a statutory duty to comply with its requirements and to provide the Project Supervisor for Construction with any relevant information needed to keep the plan up to date.

All persons involved with this project have a duty to comply with Safety and Health Plan and with any directions given to them by the Project Supervisor for Construction Stage.

1. General Description

1.1. Summary and Objectives

The Safety, Health and Welfare Work (Construction) Regulations 2013 places duties on the clients, designers and contractors with respect to health, safety and welfare provisions, so as to ensure that they are co-ordinated and managed effectively throughout all stages of the construction project.

This Health and Safety Plan set out to ensure that the construction of this Project is managed and constructed in a safe manner and complies with current legislation.

The Project Supervisor for the construction is under a legal duty to implement and update, as required by changes in design or circumstances, Safety & Health Plan throughout the Project lifetime.

1.2. Organisational Structure and Responsibilities

Dutyholders: (include name address and contact details)	**Project Details: Details of Safety Management** 1.**Client** Ciaran & Catherine Mc Cabe **2.Project Supervisor Design Process** Wilson Hill Architects No 15, The Seapoint Building, 44/45 Clontarf Road, Clontarf, Dublin **3.Architect** Wilson Hill Architects No 15, The Seapoint Building, 44/45 Clontarf Road, Clontarf, Dublin **4.Structional Engineer** OBA Consulting Engineers, The School Yard, 1 Grantham Street, Dublin 8 5.**Project supervisor Construction Stage** Mc Cabe Construction Dublin Ltd 208 Grange Road

	Dublin 16

The parties responsible for the compilation and implementation of the Safety & Health Plan are as follows:-

Project Supervisor for the Design Process

The person appointed by the client to co-ordinate the Health and safety aspects of the project's design at the planning stages, including the preparation of the preliminary Safety & Health Plan.

Project Supervisor for the Construction Stage:

The person appointed by the client to manage the construction work, control, co-ordinate and implement the Health and Safety requirements during the Construction Phase.

Contractor / Sub-Contractor

Any person engaged by Main contractor to carry out construction work under the direction of the main contractor / project Supervisor for the construction phase.

Designers

Any person who carries on a trade, business or other undertaking in connection with which he (a) Prepares a design (b) arranges for any person under his control to prepare a design, relating to a structure to be erected by competent contractor.

.1.1.5. Description of project

The work shall consist of a two storey extension to rear garden & internal refurbishment works. See Architects details drawings and specifications

1.6. Project Description

The project consist of extension to rear of existing cottage.

Programme details: To be completed in one phase, and the PSCS will supervise the project from start to finish.

1.7. Timescale / Phasing of Project

Project to Start onsite 20/02/2023

For a period of 16-18 Weeks.

1.7.1 Phasing

The Project will be phrased as per the Architects drawing within the tender documents.

1.8. Health and Safety Legislation for the Project

All work must be carried out in accordance with the:-

- Safety, Health and Welfare at work (General Application) Regulations 2007 (S.I 299 of 2007)
- The Safety, Health and Welfare at work (Construction) Regulations 2013
- The Safety, Health and Welfare at Work Act 2005
- The Safety, Health and Welfare at Work (chemical agents) Regulations 2001, and the current code of practice.
- European Communities (Protection of workers)(Exposure to Chemical, Physical and Biological) Regulations 1989

And all other associated health and Safety Legislation

It is intended that the project will progress in such a manner as to avoid or control foreseeable risks to the health and safety of those involved in the construction work and third parties who may be affected by such work

1.9. Restrictions affecting the project

Access prohibited to neighbouring properties. Contractor will select suitable set down and storage area in agreement with client.

1.9.1 Restrictions on the work site / Access

- There will be one entrance to the site.
- STRICITLY NO WORK is permitted to be undertaken outside the site boundary without the permission of the project supervisor for the construction stage.
- Visitors will identify themselves to the site office personnel at the main site entrance. The site manager Ciaran Mc Cabe will highlight any specific hazards on site to the visitor and issue him relevant PPE required for his visit. He will instruct the visitor to report to him before leaving site.
- Visitors / delivery persons report to site office.
- **All persons wishing to enter the site must sign in and out accordingly.**
- Deliveries to the site will be scheduled so as to reduce interference with traffic or pedestrians.
- All loading and unloading operations will be carried out within the site itself so far as is practicable.
- Dust levels will bel kept to a minimum, so far as is practicable.

1.9.2 Restrictions on working hours

Mon to Friday 0730 to 1830 Saturday 0800 to 1400

1.9.3 Noise / Dust / Vibration

Traffic routes to be established off existing entrance. So far as possible pedestrian traffic and vehicular traffic will be kept separate

STRICTLY NO WORK is permitted to be undertaken outside the site boundary without the permission of the project supervisor for the construction stage. Construction traffic at site entrance will be managed by designated signaller.

1.9.5 Liaison with contractors

Health and Safety will be discussed at all Health and Safety Meetings. The Meetings will be attended by representatives of contractors as required.

In addition regular tool box talks shall be conducted for the duration of the project. All personal instructed to attend such meetings must attend these meetings.

1.10 Drawings / Existing services

PSCS will note of any services and advice M&E consultant for the purpose of as built drawings. Extent of existing services will be determined on site.

2. Safety Management

2.1 Site Management

2.1.1 Main contractor / Project Supervisor for the Construction Stage

The Site Manager will be present on site, as far as practicable, at all times while construction is being carried out. Should the site manger have to leave the site for short periods of time (i.e. up to ½ day), then a competent person will be appointed to monitor health and safety on site. A suitably qualified person will cover longer absences.

2.1.2 Sub-Contractor

All sub-contractors must nominate an individual who will co-ordinate Health and Safety and liaise with the project supervisor for construction.

If the project supervisor for construction deems that any activity constitutes a high level of risk, then the relevant sub-contractor will be required to produce a detailed **Risk Assessment** and **Method Statement** for the work that they intend to carry out. **Work should not commence until this method statement has been agreed.** Sub-contractors must comply with any directions given to them by project supervisor for Construction in relation to safety and health matters.

Sub-contractors must comply with the provisions of the construction Regulations 2013, this Safety and Health Plan, and the site rules set out herein and must ensure that all their employees have received the appropriate level of health and Safety training / information for the work which they are engaged in.

Only contractors who have satisfied the PSCS Health and Safety requirements will be considered for this project.

2.2 Safety Documentation Required on Site

The following Health and Safety Document is required to be kept on site

- An accident book.
- Statutory Registers (GA3, GA2)
- Risk assessment / Methods Statement, as required
- Sub-Contractors Safety Statement.
- Training Records as set out in the Safety, Health & Welfare at work(Construction) Regulations 2013

2.3 Emergency Procedures (to be posted in the main site office / notice board)

2.3.1 First Aid

A First aid box is to kept onsite

2.3.2 Emergency Assistance

The Site Manager, will contact the following in the event of an emergency

Fire Brigade / Gardai / Ambulance – 999 or 112

Local Garda Station: Ratharnham

Hospital: St Vincent's

ESB- Emergency Service – 1850 372 999

Bord Gais – Emergency Service – 1850 20 50 50

Health and Safety- (01) 662 0400

2.3.3 Emergency plan

This Emergency Plan shall be put into operation in the following instances:-

- A fire within the site cannot immediately be brought under control with the fire extinguishers provided on site.
- An accident involving a member of the public or third party.
- An explosion on the site
- Any situation where persons are trapped, and there is an immediate risk to their health and safety.
- A structural collapse that results in persons being trapped within the structure, or has the potential to pose a danger to the health or safety of persons on, or affected by the site.

Alarm

The alarm will be raised by person discovering the fire.

Control

The Site Manager who will remain at the main assembly point throughout and will exercise control over any incident. The Site Manger will detail one person to act as a guide for the emergency services. The guide should be positioned at the main entrance.

The assembly point will be at the entrance to 636 Whitechurch Rd .

2.3.4 Action in Case of Fire / Emergency

A person discovering the fire will: -

- Alert other personnel
- If the fire is small, attempt to put it out using a fire extinguisher.
- Inform Site Management.
- Go to the Assembly point

Site Managers will: -

- On being alerted of an incident, raise the alarm.
- Obtain outline details of the emergency and alert he emergency services
- Detailed a guide to direct the emergency services onto the site

- Detail a member of the management team to man a telephone
- Go to the assembly point and assess the situation
- Check with the contractors if any operatives are missing
- Receive and brief the emergency services, giving location of the emergency water supplies / hydrants (as appropriate).

All Contractors will: -

- Isolate any plant / equipment, **only if it is safe to do so.**
- Go directly to the assembly point, and report to the site Management.
- The senior person from each contractor must check if anyone is missing

First Aid

A first aid kit must be taken to the assembly point. Trained First Aiders must report to the Assembly point.

Emergency services

At the assemble point, Site Management will receive and brief the emergency services, giving details of any missing personal.

The site entrance must be unobstructed at all time as this is the only access for fire tenders and emergency vehicles into site.

2.4 Reporting of Accidents and Dangerous Occurrences

All accidents will be reported to the site manager, for inclusion in the accident book. Any reportable accidents or dangerous occurrences will be notified to the contracts Manager, who will submit Form IR1 or IR3 to the Health and Safety Authority. In the event of H.S.A immediately and then notify Management as above.

A copy of the IR1/ IR3 Form will be kept on site. Sub-contractors are required to submit to the project Supervisor for the Construction Stage, copies of all IR1/IR3 forms arising from this project. However the responsibility for submitting these forms rest with the sub-contractor concerned. In no case shall an employee be permitted to resume work while still on certified sick leave. Should a member of the public be involved in any incident this will be reported to site Management immediately.

2.5 Liaison / Site Monitoring / Review of Projects.

2.5.1. Liaison

A) Contractors' representatives / safety officers will meet with Site Management on a regular basis until the completion of this project.

Any design changes will discussed at these meeting sand in such instances, the project Supervisor for design will provide such information as is required to ensure a safe working environment.

B) Sub-Contractors will advise site management and the project Supervisor for construction of any deviation from methods of work or materials used and seek approval before proceeding.

2.5.2 Site Monitoring

A) The Project Supervisor for Construction will inspect the site at regular intervals, and will record any hazards, defects or breaches of legislation observed during the inspection.

All items identified will be corrected immediately.

The Project Supervisor for Construction Reserves the right to stop work until corrective action has been taken.

- A report of inspection will be included in the Health and Safety plan, and contractors identified in this report will be directed to take corrective action identified.
- These Reports will be discussed at the site meetings
- Where an activity / process is not covered by this PIAN or by the Sub-Contractor's Safety Statement the Sub-Contractor's representative will complete a risk Assessment

2.6 Welfare

The following welfare facilities will be provided and maintained on the project

- Eating room with chairs, tables, drinking water and facilities for boiling water.
- Drying room / Changing room with heaters
- Washing facilities with hot and cold water

2.7 Safety File

All contractors working on this project will be required to provide PSCS with information on the safe maintenance of this installation in compliance with the safety, health and Welfare at Work (Construction) Regulations 2013.

3.0 Safety Meetings / Safety Information

Health & Safety Meetings will be held at regular throughout the lifetime of this Project. Site Management and Contractors' representatives will be required to attend these meetings.

3.2 Re-Design Work, New Design Work

The architect must provide to the project Supervisor for construction / the Site Management Team with details of all risk and hazards associated with the re-design or new design. The Architect must also provide to the project Supervisor for Construction suggestions on how to reduce or eliminate the risks / or hazards identified.

3.3 Site Safety Induction

All persons on the site will be given induction talk so that they read, understand, and sign off on the site rules. Site Management will be required to carry out these inductions. Records of the Induction Talk shall be completed and filled in site folder.

3.4 Toolbox Talks / Consultation with Employees

Toolbox talks will be held on regular basis. Record of all toolbox talks held on project will included in the site folder these talks shall be used as means of consulting with personnel on site. Where there is specific Safety, Health or Welfare concerns on the project these shall be raised at the Toolbox Talks.

At the end of every Toolbox Talk held on site employees / operatives shall have the opportunity of raising Health, Safety and Welfare issues they may have.

3.5 Display of Statutory Notices

The following notices are displayed prominently in the site office:-

- The particulars to be notified to the HAS (AF2 form)
- The Major Accident- Emergency Plan
- The Site Rules- Posted onsite and at site entrance.

4. Particular Risks-

Hazard Identification / Risk Assessment & / Control Measures

4.1 Procedure for identifying Hazards

4.1.1 Initially: PSCS will carry out a risk assessment for the works that can be identified at this time. The level of risk of each operation will be assessed according to the system outlined below. The control measures required will depend on the level of risk identified and will be outlined in the risk control measures.

4.1.2 Ongoing Assessment:

A) Ongoing Work – the work activities for the next period will be identified at the site meetings. Once the work has been identified, the risks will be assessed as per above and the required control measures identified and communicated to relevant parties.

B) New Sub contractors – new subcontractors will meet worth the project Supervisor for construction prior to starting work to discuss their work package and the risks associated with that work. The control measures required will be agreed at this meeting and the documentation that must be submitted.

(SECTION B)

Risk Assessments

Every hazard in the workplace must be assessed for the likelihood of it happening and the consequence of it occurring.

A hazard may be defined as anything that can potentially cause harm. Hazards can be divided into two main categories, "Health Hazards" and "Physical hazards".

"Health hazards" generally are those with the potential to cause internal damage.

"Physical Hazards" involve potential harm to the body structure which must be eliminated where practicable and body protection used to avoid or minimise the risk.

1. The risk of the hazard occurring has been rated as –**High ,Medium, Low**
2. The consequence of accident occurring has been rated as,
    - **Minor** (Cuts and Bruises)
    - **Severe** (Broken bones, amputation, temporary loss of systems, loss of work)
    - **Fatal** (Death, Complete loss of systems, Loss of Work)

The hazards in this safety and health plan have been identified with:

- Consultation with management
- Work site analysis

Additionally, risks have been coded under the Risk Assessment Criteria (RAC)

Consequence	Minor(I)	Severe(II)	Fatal(III)
Risk			
Low(a)	(Ia)	(IIa)	(IIIa)
Medium(b)	(Ib)	(IIb)	(IIIb)
High(c)	(Ic)	(IIc)	(IIIc)

(Ia) represents a low risk of minor injury

(IIIc) represents a high risk of fatal injury

1.0 Movement of Vehicles and Machinery

1.1 Hazards and Risks

There may be extensive movement of vehicles and machinery within and around the working area. This movement has been classified as a High risk (IIIc). The hazards include injury from contact with moving lorries, forklifts, front loaders, excavators, teleporter, site dumpers, employees' vehicles etc.

1.2 Arrangements and Controls

The risks to employees, contractors and visitors at the working site are minimised by the impletion of the following controls:

- All operators of machinery onsite must ensure that they are maintained in a safe and roadworthy condition.
- Authorised competent persons may only operate vehicles and the must ensure that no unauthorised persons are on/in the vehicle.
- All loads must be properly secured and vehicles must never be reversed in a confined space unless an attendant is present to ensure safe clearance
- Vehicles must never be left unattended with the engine running
- All vehicles moving on site must travel at a safe speed and adhere to any speed limits or route restrictions as may be imposed by the supervisor in charge
- All drivers must be 18 years old or over and hold a current driving licence
- Drivers and operators must carry out adequate start up , setting off and end of day safety checks on their machines and report any defects found immediately to a supervisor
- Passengers are not to be carried on mobile plant equipment/machinery unless there is a seat provided for this purpose
- Driving, loading and parking areas must be clearly identified and these must be observed. Where regular routes are used on site, these must be clearly marked and kept free from obstruction
- Employees and visitors must follow the designated traffic routes and speed restrictions. All subcontractors will park in designated areas
- When trucks are required to reverse the driver must ensure his traffic route is clear and it is safe to do so, it is necessary to seek assistance to guide the machine or vehicle when the drivers view is restricted
- All workers onsite are instructed to keep clear whilst machines are moving, especially where the drivers view is restricted and to wear high Visibility Clothing
- All operators of machinery must have CSCS Certification.

2.0 Hand Tools

2.1 Hazard and Risks

Although hand tools do not immediately appear to be dangerous, they must be used properly at all times. Risks include injuries to the hands primarily, but also to other parts of the body from sharp tools or edges, generally caused by an attitude that they are simple devices that can be picked up and used by anyone. There is also a risk of muscular strain to wrists and hands. Accidents may occur during the use and carrying of the tools. Hand tools are classified as carrying a LOW RISK (IIa).

2.2 Arrangements and Controls

- Pointed tools must never be carried point up in any pocket or point down in any front pocket, but carried with the sharp edge away from the body in a pouch or purpose made belt
- Tools must not be carried if they interfere with the use of both hands whilst climbing a ladder or structure
- Tools must not be thrown or dropped from one worker to another
- Tools must not be abused or misused as minor defects may have serious consequences
- Always select the correct type , size and weight of tool for the job and pay particular attention to the manufactures instructions
- All handles and fittings will be secure and no damaged tools will be used
- Files must never be used without handles. Screwdrivers must never be used as chisels or wedges, punches etc.
- Defective or unsuitable tools cause accidents and therefore proper maintenance is crucial. Grease and dirt should be regularly cleaned off
- Cutting edges of tools should be kept sharp and protected when not in use, handles of equipment should be smooth finished and maintained in good condition
- Proper and suitable protective will be provided and worn at all times (goggles gloves etc)
- Any employee before starting to use any hand tool must ensure that he is in a safe position. Any other workers who may be effected must stand clear of the area and wear the required personal protective equipment
- When hand tool work is completed the tool should be stored in the appropriated toolbox or other designated area so as to not present a tripping hazard
- Defective tools should not be used

3.0 Portable Power Tools

3.1 Hazards and Risks

Power tools increase the hazards to workers who can experience electric shock, eye injuries, noise induced hearing loss. Tripping over trailing cables, entanglement, entrapment, amputation when coming into contact with moving parts, burns, cuts and strains during their use. Portable Power tools used include skill saws, chop saws, power drills, kangoo hammers, nail guns, generators and angle grinders which carry a High Risk(IIc).

3.2 Arrangements and Controls

- Portable electric tools must be operated only on a 110V power supply
- All electrical equipment with metal casing is properly earthed and all other tools are double insulated
- Any defective tools must be replaced immediately
- A Residual Current Circuit breaker (RCCB) should be used at the socket or mains
- Electric tools which are not 110V must not be used when the operator is wet or standing on wet ground or flooring
- Electric cables must be kept out of areas where debris is being dropped and ensure they are not dragged, buried or driven over
- Cables, plugs or connectors should be in good condition and free from cracks, breaks or exposed wires
- Tools should be inspected prior to use
- Manufacturer's instructions for the operation of tools should be followed
- ALL POWER TOOLS SHOULD BE SWITCHED OFF BEFORE BEING PLUGGED IN
- The power supply will be disconnected before making adjustments or repairs or fitting new blades or points and replace guards before reconnection
- All rotating blades and disks are guarded and guards maintained in good condition
- Portable Electric Tools should only be used for their designed purpose
- Cables must not be allowed to dangerously trail on the floor especially not in water, chemicals, near sharp edges or heat sources
- All cables are kept tidy and away from access routes and walkways
- Portable electric tools must never be connected to lighting sockets
- Personal Protective Equipment (gloves goggles etc) should be worn as required
- Portable electric tools must also be subject to regular service and maintenance programme carried out by a competent electrician
- When not in use Portable Power Tools must be safely stored

4.0 Paslode Gun/Nail Gun

4.1 Hazards and Risks

It has been identified that work carried out using the Paslode nail gun or other type of nail gun present a High Risk(IIc) of misfiring and injuring oneself or co-workers

4.2 Arrangements and Controls

- Fully read and understand the operators manual supplied with this tool before you attempt to use the Paslode gun/nail gun
- Wear ear defenders to protect your ears and safety glasses to protect your eyes
- Keep the tool, nails and fuel cells in a safe place out of reach of unauthorised users
- Only use this tool for its intended purpose. This tool is designed to nail timber to a timber base material
- This tool is extremely dangerous if handled in an irresponsible manner
- **NEVER POINT THIS TOOL AT ANYONE**
- **NEVER CARRY THIS TOOL WITH YOUR FINGER ON THE TRIGGER**
- **NEVER COMPRESS THE WORK CONTACT ELEMENT WITH YOUR HAND**
- **NEVER ADJUST THE TOOL WHEN LOADED WITH THE BATTERY**
- Always handle the tool as if it was loaded
- Always remove any nails, fuel cell and battery before attempting to service the tool
- Always return the tool to its carry case when not in use

4.3 Workplace Precautions

- Do not use the tool in rainy or excessively humid conditions
- Do not use the tool in extremely cold conditions
- Only operate this tool in well ventilated areas
- Never fire tool into any base material which may contain any pipes or wiring

5.0 Angle Grinders and Consaws (Abrasive wheels)

5.1 Hazards and risks

Abrasive wheels can disintegrate if they are improperly fitted or used, with the risk of serious injury to the user and others nearby. Such appliances include the Angle Grinder and Consaw. It is a statutory requirement that only persons who have been specifically trained in the requirements can fit or use a tool with an abrasive wheel and all regulations must be complied with. Work with abrasive wheels carries a High Risk of injury (IIIc).

5.2 Arrangements and Controls

- All persons operating angle grinders are fully instructed in safe mounting of the blades and safe use of the equipment
- Equipment is in good repair, any defects are reported and any defective tools must be replaced immediately
- All guards are fitted and are in good condition
- All personal protective equipment such as goggles , boots, gloves and overalls are worn where necessary
- The correct type of disk is used for the correct type of material that is being worked on
- Discs or blades are mounted correctly, following all manufactures instructions
- The mounting nuts are not damaged and are in good condition, replace if necessary
- The correct mounting tools are used and never over tightened as the wheel itself will tighten itself as it spins
- The spindle wheel on the machine and disk are marked clearly and match up with each other
- A grinding disk is never used for cutting or vice versa
- The grinder is used at the correct angle and doesn't get choked causing excessive stress to the blade
- Direct hot sparks and flying material away from any combustible material or other people working in the vicinity
- Keep all trailing cables tidy and away from access routes and walkways
- The blade must be capable of running without risk at the rotation speed of the tool
- All blades must be inspected for cracks or scratches before each use and if found to be defective ,replace it

6.0 Welding and Hot Works

6.1 Hazards and Risks

Arc welding onsite can cause risk of burns, electrocution, injury to eyes, inhalation of toxic fumes as well as property damage. Arc Welding is therefore classified as High Risk(IIc)

Arrangements and Controls

- Welding operations must be properly monitored and controlled
- Welding leads must be maintained in good condition, with good insulation, clamps and electrode holders fitted
- Good ventilation must be provided
- Correct PPE must be provided and worn while welding
- Equipment must be checked before and after use
- Suitable screens, fire blankets and fire extinguishers for each type of situation will be readily available
- Welding should not take place in the presence of flammable or explosive materials without specific assessment. A permit to work system may apply
- The minimum number of gas cylinders will be kept in the workplace, and these will be kept upright and secured by chains or similar restraints
- A check of the work area will be carried out by management on completion of the shift or the work for any possibility of latent heat hazards, including smouldering
- Insulated materials will be provided
- Operators carrying out this type of work will receive safety training

7.0 Electrical Safety

7.1 Hazards and Risks

Electricity is a safe and efficient form of energy, but if electricity is misused it poses one of the greatest hazards in the workplace. Some knowledge of electricity is therefore essential for all personnel because the injuries are usually more severe than those resulting from other hazards and also because misuse of electricity or poor maintenance is responsible for a large proportion of fires. Electricity is used to operate machines, power tools, lighting, office equipment etc

Electricity represents a High Risk (IIIc)

7.2 Arrangements and Controls

- Only competent authorised personnel are permitted to work on electrical systems or maintain electrical equipment
- Be aware of all buried services and cables and trace the position of the cables as accurately as possible with cable plans and cabling locating devices
- Render all overhead cables harmless where possible or provide warning devices. Avoid flashover by ensuring that no parts of any machine, ladder or vehicle go within 10m of a power line unless authorised
- Plan ahead and ensure that all electrical supplies are properly insulated and maintained by a competent electrician
- Use 110V electrical systems with double insulated cables and all insulated tools
- The project supervisor will ensure that residual current devices are provided where equipment is used at mains voltage and screened cables are also used
- Ensure that plugs, sockets and all such fittings are of a high standard and sufficiently robust for their proposed use
- Ensure the fuses, circuit breakers, and other devices are correctly rated for the circuit they protect
- Prevent the access to electrical dangers, keep distribution boards covered and closed and if possible locked, with a key held by a responsible person. A lock out procedure must be implemented
- Signs warning of an electrical hazard will be displayed on electrical units, conforming to safety sign regulations
- Ensure that main switches are readily accessible and clearly identified and that everyone knows how to use them in an emergency
- Suspect or faulty appliances must be taken out of use and put in a safe place until attended by a competent electrician
- Unauthorised use repair or maintenance must not be attempted
- Tools and power sockets must be switched off before plugging in
- BEFORE ATTEMPTING TO RESCUE AN ELECTRIC SHOCK VICTIM ENSURE THAT THE SOURCE IS ISOLATED

8.0 Fire Safety

8.1 Hazards and Risks

Three factors are essential for combustion

- The presence of fuel e.g.: wood, paper, petrol etc
- The presence of oxygen, natural or in pressurised form.
- The source of ignition, often electrical and/or build-up of heat

Without all three, fire cannot burn, so as a single rule keep combustible material away from ignition sources. Fire is therefore classified as a Medium (IIb) to High Risk(IIIC)

8.2 Arrangements and Controls

- Provide clear fire escape routes with appropriate signage and lighting and free access for fire fighters in and about all work areas
- Ensure all firefighting equipment is regularly maintained, free from obstructions and are clearly marked at all times.

  All employees to be made aware of the location of firefighting equipment
- Store all hazardous material and substances separately in clearly designated areas
- Store all flammable in a securely locked store at a safe distance from other stores and structural buildings
- Create clearly marked fire points and ensure all personnel are aware of fire escape and emergency procedures
- Ensure that all electrical appliances are not overloaded and are protected from incorrect voltage or use, with suitable cable transformers and fittings
- Arrange regular cleaning of combustible waste materials from all work areas
- Ensure personnel are aware of any hazardous areas marked with clear notices
- Only suitable non sparking tools are to be used in places where flammable liquids or substances are kept or in use
- Provide sealable metal containers for oily rags, paint rags and similar fire inducing wastes
- Provide adequate firefighting equipment and training, and ensure that extinguishers are suitable for their requirements
- Arrange and maintain fire prevention checks, daily to all buildings and weekly to general areas
- Install and make known a good alarm and evacuation procedure

9.0 Storage and Use of Gas Cylinders

9.1 Hazards and Risks

Correct storage and use of gas cylinders is very important for the safety of workers onsite in order to prevent fire and explosion, fumes and burns. Gas cylinders present Medium Risk (IIb) of injury to employees

9.2 Arrangements and Controls

- Gas cylinders must be treated with care. Damaged cylinders to be clearly identified and returned to suppliers
- Cylinders are to be kept away from electrical apparatus and out of range of sparks, flames, hot slag or any other heat source
- Never use cylinders as rollers, supports or jacks
- Cylinders containing fuel gases must be kept in an upright in storage and use and secured from falling. Oxygen cylinders can be stored horizontally but never more than 4 high and they must be secured preferably by chokes
- Do not handle cylinders with greasy, oily or dirty rags
- Propane should not be stored near ducts etc. as propane is heavier than air
- Use a trolley when moving cylinders. If cylinders have to be moved by crane the load must be properly slung
- When not in use all cylinders whether full or empty must be safely stored – oxygen separate from fuel gases
- It is preferable to store fuel gases in a well ventilated area or in the open air but protected from ice and direct sunlight
- Adequate warning notices must be displayed in the storage areas
- Before fitting regulators to cylinders make sure the valves and regulators are free from oil, grease and dirt
- Clear out loose dirt and water from the cylinder valve by letting out a short burst of gas before fitting the regulator, but stand clear of valves while doing so and wear goggles
- Always open valves slowly. Check for leaks with soapy water and never a naked flame
- If a cylinder valve becomes frozen, thaw it with warm water not a naked flame
- A cylinder should be on a trolley when in use. If there is no trolley make sure the cylinder is well secured
- Keep cylinder valve key close to hand or in the valve so that you can turn the gas supply off quickly if necessary
- Make sure the correct regulator is used
- Never force a regulator that does not fit easily and never grease or oil threads as this can cause explosions
- Do not use regulators with damaged or faulty gauges as the pressure readings may be wrong
- Never stand too close to a regulator gauge while opening the cylinder valve- extra internal pressure may cause the gauge to burst
- Non-return valves should be fitted in hose lines against the possibility of back feed
- Flashback arrestors should be fitted where necessary as an additional precaution

10.0 Temporary Site Buildings

10.1 Hazards and Risks

All temporary site buildings can present a fire hazard. This may present a Medium Risk(IIb) of fire resulting in serious injuries

10.2 Arrangements and Controls

- The location of fire precautions must be agreed with the project supervisor
- All temporary buildings must be sited with adequate clearances to prevent a fire hazard
- All electrical wiring in temporary site buildings must be properly installed and maintained (by competent persons) in good working order
- No smoking
- Storage of highly flammable materials and/or gases in temporary site buildings is strictly forbidden
- Storage of combustible materials in temporary buildings must be carefully controlled

11.0 Concrete Dust

11.1 Hazards and Risks

Work causing dust hazards include the mixing process of placing cement, lime into cement mixer both outside during windy weather and in confined areas. This dust presents the risk of inhalation, ingestion, and injuries to the eyes. This process presents a Medium Risk (Ib)

11.2 Arrangements and Controls

When mixing cement

- Protective clothing , eye protection, mask and gloves must be worn
- The area must be well ventilated especially when working inside the building
- Place the mixer outside in a suitable area to avoid dust blowing back to operators working area as much as possible
- Wet down working area inside if possible when cleaning
- All areas of site should be thoroughly cleaned on a regular basis

When using saws ensure the following

- There is adequate space around the machine
- Eye protection is worn
- High visibility clothing, helmet and boots are worn
- Work is carried out at the safest level for cutting wood
- No dangling clothing or other items which are likely to get caught in the blade
- Operator is trained in the safe use of the saw
- Operator is aware of the importance of consideration

Control of dust from use of machinery in dry weather

- Protective clothing, eye protection and masks may be worn if necessary
- The area must be well ventilated especially when working inside machinery
- Use machinery in a suitable area to avoid dust blowing back to operators working area as much as possible
- Wet down the area if possible
- All areas of the site should be thoroughly cleaned on a regular basis
- Regularly wash down machinery as a build-up of dust can cause fires

12.0 Company Vehicles and Trailers

12.1 Hazards and Risks

It has been identified that the transportation of equipment/materials to sites caries a High Risk(IIC) of serious injury to the driver or other persons in the vicinity as a result of unsafe loading of the trailer, risk to road users from loads becoming loose, collision with other vehicles

12.2 Arrangements and Controls

- Only qualified persons that hold the appropriate licence are allowed to drive the company vehicles
- All loads are to be secured in accordance with the requirements of the legislation and best practice, taking into account the shape and the weight of the load
- Loads must be secure with straps which are attached at secure anchor points and tensioned
- The driver is responsible for securing the load on the trailer and the load must be secure before moving the vehicle
- The driver must be made aware of the height and the weight of the load before setting out on the journey. They must also check the trailer for road worthiness
- Flashing warning lights on vehicles may be used to warn other traffic as appropriate
- During transportation the driver must drive with all due care and attention and drive at a safe speed and at a safe distance from other vehicles
- If there is a requirement to park the vehicle and the trailer during the transportation of equipment/materials, this must be at a designated safe area which will not obstruct road traffic
- Driver checks that the load has not become unstable during transport, and before removing chains/straps
- The driver is responsible for the checking of the safety of the load on the trailer before/during transport
- The managing director is responsible for the maintenance and repair of the company vehicle and trailer
- Always ensure that when the machine is not being used it is left secure so as to prevent unauthorised use
- Wear suitable and appropriate PPE

13.0 Crane

13.1 Hazards and Risks

A crane can cause serious injuries on site due to the collapse of the crane and falling loads causing crushing, entrapment of personnel. Cranes used represent a Medium (IIb) to High Risk(IIIc)

13.2 Arrangements and Controls

Crane jibs should be erected and altered by trained personnel under the control of a trained and competent supervisor

Cranes should be operated by trained and competent drivers only. Banksmen must be experienced and trained

Every mobile crane should have an up to date CR2, CR3 (certificate of examination) and a form CR4 part A and part B in which the weekly maintenance and statutory examinations should be recorded

Ensure that equipment is maintained in prime condition. A system of preventive maintenance should be in place for all cranes

Avoid walking under or too close to a raised load. The crane itself must only be operated by someone who is fully trained and over 18 years of age. It must be inspected each week and regularly examined by a competent person

The weight of the load must be carefully estimated

The crane itself must be positioned on a hard level base

A crane with a capacity of more than one tonne must have a safe working load indicator and this must be maintained and inspected weekly

The load must be properly fixed and secured

The banksman must be trained to give clear signals. Walkie-talkies will be used where required to ensure safe lifting at all times

All loads irrespective of their size or shape should be slung so that their centre of gravity falls immediately below the crane hook. Slings may need to be of different lengths to achieve proper balance

Detailed survey to be carried out to determine best and safest position for the erection of crane by competent persons

Crane drivers and crane to be equipped with hooters, sirens, and wind speed dials, crane driver's emergency exit, latch way fall arrest systems on jibs

Crane to be fitted with narrow beam halon lights at double capacity on the jibs on towers and flashing lights on top and end of jibs if required

Slewing with loads attached over adjacent buildings or public areas will be restricted. Trained banksman to operate with driver at all times

Continued monitoring by main contractor of cranes with regards to operational activities and safety

Safe working loads and corresponding radaii must be known and considered before any lifting begins

Cranes must be inspected regularly (at least weekly) and thoroughly inspected by a competent person every 14 months

Records must be kept of all inspections etc.

All lifting apparatus must have current and valid test certificate

14.0 Chains, Blocks and Hoists

14.1 Hazards and Risks

Hoists are used for many jobs around sites. However serious hazards are caused to people who work near this equipment such as crushing due to falling objects, unplanned release of load or collapse of equipment. Chains, Blocks and Hoists represent a Medium (IIb) to High Risk (IIIc) of injury

14.2 Arrangements and Controls

Appropriate CR forms will be completed and available for inspection for Chains, Blocks and Hoists

All lifting operations will be under the control of an appointed person

Chains, Blocks and Hoists will be visually inspected before each use

All hoists must have a substantial enclosure to prevent a person from being struck by moving parts of the hoist or from falling down the hoist way

Suitable and sufficient gates must be provided at all landings, including ground level

All gates must be kept shut except when the platform is at the landing

All hoist controls must be arranged so that the hoist can be operated from one position only

The hoist must be marked with Safe Working Load (SWL) and this must never be exceeded

If the hoist is for materials only a warning notice must be posted on the platform or the cage to prevent people riding in it

No one must be allowed ride on a material only hoist

Lifting equipment will be selected considering the weight and stability of the load

Damaged hoists will be removed from service, marked as requiring attention and sent for repair

Repaired hoists will be fully checked and certified before being returned for service

Particular attention should be given to the lower hook on the chain, as this will spread first when overloaded

All personnel involved in lifting operations will wear safety helmets, gloves and safety footwear

The hoist must be inspected regularly (at least weekly) and thoroughly examined every six months by a competent person and written records must be kept

15.0 Working at Heights

15.1 Hazards and Risks

Many activities in are done using ladders, platforms and different types of scaffolds. These are a major cause of serious accidents if not used properly or as instructed. The use of such equipment carries a Medium to High Risk as they can result in serious or even fatal injuries from falling from Heights.

15.2 Arrangements and controls

Safety on Scaffolding

- All workers must be trained in the safe use of scaffolding, best practice procedures and is aware of the precautions for safe work at heights.
- A competent person must ensure that the scaffolding is safely erected.
- Notices concerning its unfinished or unsafe condition are displayed.
- Scaffolding is made stable by providing at least one tie for every 32m^2 of scaffolding pipe work
- Uprights must be always rest on steel plates. Bricks and other loose materials are not accepted for bases.
- Scaffold itself must be adequately braced to prevent collapse and provide a firm-working platform.
- Scaffold platforms of all types form which a person is liable to fall and cause injury to oneself must have guard rails and toe boards.
- Brick Guards or other suitable vertical protection should be provided should be provided where material may fall from the scaffold.
- Platforms are prepared with boards of sounds Building Services, free of defects, decay or damage.
- The working platforms should be of sufficient width to accommodate the worker, his tools and materials and provide clear passageway without danger of fall.
- All boards of the platform must rest evenly on transoms at 1.2m intervals, each board with at least three supports. Boards are butted and double transoms used where this occurs.
- Safe access and egress ,must be provided be properly lowered or carried down when dismantling the scaffold structure
- Scaffolds are only designed, erected, altered or dismantled under direction of a competent person and by competent and experienced workers.
- Care is taken never to overload a scaffold and a competent person supervises loading.
- Materials must be sacked so that they cannot be knocked or blown over the side of a working platform.
- The Surface on which heavy material stand must be checked to ensure that it is strong enough to take load.
- Protective covers are used where a possibility of materials is falling on to workers.
- NO PERSON IS REQUIRED TO WORK WHERE HE IS LIABLE TO BE STRUCK BY FALLING OBJECT
- Nothing is to be thrown, tipped or shot down from a scaffold unless there are adequate arrangements to protect the people working underneath e.g.: fencing off the vicinity.
- Materials must be lowered using lifting apparatus or a chute.

- Persons competent to do so must regularly inspect scaffolds; scaffolds are inspected before use, after modifications and weekly. During spells of bad weather, scaffolds are kept under constant inspection as unfavourable weather may affect their stability.
- The result of each inspection must be recorded and kept in scaffold register.

Safety on Ladders- Ladders to be used as last resort, where the risk is low and work of short duration.

ENSURE THAT:-

- Ladders are secured from slipping preferably by tying them securely at the top. Alternatively secure at the side or with stop blocks at the foot
- People are aware that a second person standing at the foot to prevent slipping is effective only with ladders less then 5m long.
- Only one person is allowed on a ladder at any time.
- All ladders are kept in good conditions free from splits, cracks and defects.
- Ladders are inspected before use and that faulty ladders are never used.
- Always report defective ladders to management and take them immediately out of use.
- Ladders must extend 1 meter above landing place.
- Methods exist to carry tools and materials up and down so that both hands are free to grip [the ladder safety.
- Ladders are never placed against fragile surfaces.
- Ladders are never placed where there is danger from moving vehicles, overhead cranes or electricity lines
- Ladders have level and firm footings, other items must never be used to provide greater height
- Barricades to protect ladders, which project into passage ways or doorways, where personnel, moving equipment or material could strike them.

16.0 Mobile Elevated Working Platforms (MEWPs)

16.1 Hazards and risks

Mobile Elevated Work Platforms are very common in the Building Services industry and can provide a safe temporary working platform if used and maintained correctly. However serious hazards are caused to people who work near this equipment such as crushing due to falling objects or collapse of equipment. Accidents involving MEWPs can be fatal and operators need to be trained in the safe use of the specific machine to be used and hazards associated with it. Examples of MEWPs are Boom hoists & Scissors lifts. Use of Boom hoists & Scissors lifts represents a Medium (II b) to High Risk (III c)

15.2 Arrangements and controls

- All lifting operations will be under the control of an appointed person.
- Hoists and Scissors Lifts will be visually inspected before each use.
- Damaged hoists and scissors lifts will be removed from service, marked as requiring attention and sent for repair
- Repaired Hoists and Scissor Lifts will be fully checked and certified before being returned for service.
- All personal involved in lifting operations will where safety helmets, gloves and Safety footwear.
- Selection of the boom Hoist and Scissor Lift must be based on suitability for the task and ground conditions
- Only competent and trained operators should control the movement of these Hoists & Scissors Lift
- Before work commences pre-plan the work to check for the following:
- Close proximity to excavation / embankment
- Soft surfaces
- Wind conditions
- The work platform must stand in such a manner that the outriggers are fully extended and set to the manufacturer's instructions.
- Operator must have training
- Safe working load must be adhered to
- Operator must not stand on guardrails
- Operator must stand on platform only
- No side loads allowed
- Safety Harness worn at all times and attached only to the purpose anchor point.
- Mobile Elevated Working Platform must not be used in wind speeds specified by the manufacturer's instructions

16.0 Working from tower scaffold

16.1 Hazards & Risks:

Tower scaffolds can provide a safe means of working at a height provided that they are properly constructed and used. However tower scaffolds have been associated with serious accidents due to overturning or contact with overhead electricity lines and therefore represent a High Risk (III c). Injuries include eye injuries, cuts or bruises from striking against objects, slips, trips & falls and back injuries. Other hazards include falls from a height. The hazard of falling objects is highly probable in the carrying out of this task.

16.2 Arrangements & Controls

- Where there is potential of falls from a height only work from a safe working platform with correct and adequate guardrails.
- Operators must ensure that their work platforms or scaffolding are in good condition and have been erected by competent persons. Competent supervision should also be provided.
- Keep area beneath work platform clear. Do not throw objects off the work platform. Keep work platform neat and tidy.
- Keep work area in organised and tidy conditions
- Regularly inspect machinery and electrics to ensure they are in safe condition.
- Clean up spills immediately, investigate cause and rectify the problem.
- Maintenance on machinery may only be carried out be a competent person.
- Manufacturer's instructions should be available to persons erecting and using these scaffolds and they should be followed.
- Appropriate measures should be taken to ensure that the tower would not overturn. Where there is a danger of overturning, prevention should be obtained by the provision of stabilisers, outriggers, kentledge, guys or ties to adjoining structures.

Tower Scaffold- Continued

- The ground surface should be suitable for the type of tower to be used. Where castors are to be used the surface should be securely fenced or covered.
- Where the surface is sloping the tower should be prevented from slipping.
- Scaffolds towers should be erected on firms ground, however where the ground is soft use base plates and sole boards. Also ensure that the scaffold tower is not set up adjacent to trenches or manholes etc.
- Prefabricated tower should be braced on all four sides and be braced in plan at every alternative lift.
- Castors should be fitted with adequate brakes and they should be securely fitted to each leg of the tower to prevent accidental uncoupling.
- The deck units or boards should be securely fixed to the frame. Toe-boards and guardrails should be provided. The platform should not be overloaded.
- Access should be provided to the tower by the use of ladders. Ladders should be attached to the shorter side of the rectangular towers and within the base area of the tower. External ladders should not be used
- Tower scaffolds should not be used adjacent to overhead power lines. Physical barriers and warning notices should be provided to prevent them coming close to the lines

- Access to the working platform must be by means of a ladder fixed securely to the tower. A clearance must be left at the bottom to prevent contact with the ground.

4.0 PARTICULAR RISKS

The following is a non-exhaustive list of particular risks to the safety and health of persons. It should be noted that many of the risks on the project may arise out of working methods which are at the discretion of the Contractor and as such cannot be determined by the designer.

Note that in relation to the following:

(a) Items 1 and 2 of the second schedule only those risks which would not be evident and reasonably deductible from drawings or other support documentation to a competent project supervisor(construction stage) are listed

(b) Items 3 to 10 of the second schedule only those risks, which are reasonably foreseeable, by the designer.

(c) Other work which may involve risks only those risks which would not be evident and reasonably deducible from drawings or other supporting documentation to a competent PSCS are listed

4.1	"Work which put persons at work at risk of burial under earth falls ,engulfment in swampland or falling from a height, where a risk is particularly aggravated by the nature of the work or processes used or by the environment at the place of work or site"	Risk of collapse of unstable elements of structure during excavation Temporary supports may be required
4.1.1	The dwelling will remain occupied during at least some of the works by a family of 5. Their safety and comfort is a priority during the works. (Dwelling may be vacated during the later stages of the works	The contractor must address provisions for the safety and comfort of the occupants in the safety plan for the works. To ensure that fire safety system is maintained and working at all times.
4.1.2	Burial under earth falls, for example deep foundations, deep cuttings, work in excavations, which are in or adjacent to unstable ground or hazardous underground services or there is a risk of undermining existing foundations.	Risk of collapse of unstable elements of structure during excavation Temporary supports may be required
4.1.3	Works on or near site boundaries or existing structures which will require excavation. The project supervisor construction stage is to review and implement temporary supports to be provided by the contractor for the following works	Works in vicinity of adjoining buildings which will be affected structurally by these works.
4.1.4	Engulfment in swampland, for example unstable ground , works adjacent to lakes and ponds or reclaimed ground	N/A
4.1.5	Falling from heights for example: Where the risk associated with working at a height is likely to be aggravated by the presence of another significant hazard then a particular risk may be present for example:	Roof work, work at leading edges
4.1.6	Work on or adjacent to fragile roof materials, New rooflights must be non-fragile in accordance with class B as defined by ACR(M)(001)2000 and maintained in	Roof lights must not be walked on

	accordance with the manufactures written instructions.	
4.1.7	Installation of scaffolding The project will require scaffolding, a site specific method statement, which will include how the scaffolding will be managed, planned, installed, checked and removed will be required. The use, purpose and maximum loading shall be clearly communicated to the designers, the installers and the users of scaffolding. The health and safety plan shall be updated during the project to reflect the status of the scaffolding including GA forms "scaffolders report of Inspection"	Scaffolding and working platforms must have edge protection
4.1.8	Operations where the nature of the work or other restrictions make it impracticable to provide standard scaffolding or other suitable and sufficient means of support	N/A
4.2	"Work which puts persons at risk from chemical or biological substances constituting a particular danger to the health of such persons or involving a legal requirement for health monitoring"	PPE and hand wash facilities should be in place
4.2.1	Where certain materials or substances are to be used, or materials in existing buildings are to be modified, a particular risk in relation to chemical or biological substances may exist. Any work which involves the renovation of buildings, which were initially constructed prior to late 1980's should have an asbestos survey carried out by a competent person. The competent person should have training in asbestos surveying and identification	N/A
4.2.2	The circumstances of the use of certain materials or substances may give rise to particular risks based on their toxicological or physio-chemical properties, for example Presence of explosive atmospheres Work in confined spaces	N/A
4.2.3	There may be a specific legal requirement for health monitoring, where a work activity puts a person's health at risk from hazardous substances or preparations. Where such a requirement exists the activity must be regarded as involving a particular risk. The striping of lagging which contains or is likely to contain asbestos or the and removal of insulating boards and tiles is likely to contain asbestos where the "action level" as defined in the European Communities (protection of works)(Exposure to asbestos) (amendment)regulations 1993 and 2000 is likely to be reached or exceeded.	

	Where friable asbestos is identified and remains in place the PSCS is required to to develop a method statement to remove asbestos at the earliest possible time where the risk exists that asbestos will be disturbed during the course of the project Demolition involving the flame cutting or shotblasting of painted steel where the paint is likely to contain lead and where an assessment reveals any conditions referred to in regulations 4(7) of the European Communities (protection of workers)(exposure to lead) regulations 1988 Work involving the use of substances which must be labelled with the risk phrases R45 "may cause cancer" or R49"may cause cancer by inhalation" and where a risk assessment in accordance with Regulation 4(b) of the Safety Health and Welfare at Work regulations 2001 reveals a risk to safety or health Work involving the use of substances or preparations which must be labelled with the risk phrase R42"may cause sterilisation by inhalation" and where a risk assessment in accordance with regulations 3(2) and 3(8) of the Safety Health and Welfare at Work regulations 1994 reveals a risk to health Any other work activities involving the use of any chemical or biological agents where a risk assessment in accordance with Regulations 3(2) and3(8) of the above mentioned 1994 Chemical Agents Regulations or Regulations 4 and 10 Safety Health and Welfare at Work(biological agents) regulations 1994 and 1998 reveal a risk to safety or health	Where any subcontractor intends using any chemicals or biological agents where risk assessments is required in accordance with the regulations 3(2), 3(8) of the 1994 Chemical Agents Regulations then it is necessary that this be communicated to the main contractor and Material Safety Data sheets must be provided.
4.2.4	All hazardous substances and preparations must be labelled with appropriate hazard symbols and the suppliers must provide a safety data sheet when requested by any person. The labels and safety data sheets must include risk phrases, which indicate the specific risks associated with the substance. The requirements are set out in the European Communities (Classification, packaging and labelling of dangerous substances) Regulations 1994 and 2000 and the European Communities (Classification, packaging and labelling of dangerous substances) regulations 1995 and 1998	Checking of all substances and materials on site and ensure that where a substance or material possess a particular risk that the appropriate symbols are applied and that operatives are fully familiarised with any precautions which have to be taken in the use of such substances or materials
4.3	"Work with ionising radiation requiring the designation of controlled or supervised areas as defined in article 20 of the Directive 80/836 Euratrom such as: radioactive lighting conductors , radioactive smoke detectors , other disused radioactive materials or plant , radioactive	N/A

	installations , work near x/ray machines ,in hospital radiotherapy or nuclear medicine department"	
4.4	"Work near high voltage power lines" The category includes all high voltage power lines, including overhead and buried lines. It also includes high voltage cables supplying fixed plant where a significant risk of breaching cable insulation exists. The Safety, Health and welfare at Work (general application) Regulations 2007 define high voltage as any voltage exceeding 1000 volts alternating current or 1500 volts direct current	N/A
4.5	Work exposing people at work to the risk of drowning For example work over or near water where there is a risk of persons falling into the water. Works significantly below water table, work to bridges ,culverts, work on or near the sea, lakes, etc	N/A
4.6	"Work on wells, underground earth works and tunnels"	N/A
4.7	"Work carried out by divers at work using a system of air supply"	N/A
4.8	"Work carried out in a caisson with a compressed air atmosphere"	N/A
4.9	"Work involving the use of explosives"	N/A
4.10	"Work involving the assembly or dismantling of heavy precast components "for example heavy steel structural frame elements, heavy precast concrete frame elements or heavy prefabricated plant items	General construction work – safe systems of work to be implemented.
5.0	Continuing liaison	
5.1	Procedures for dealing with unforeseen eventualities during the stage of the project execution resulting in substantial design change, which might affect the contract period and other resources. To be informed to the PSCS	Project Supervisor Design Process to be kept fully advised of any changes that might affect the contract period or where there may be health and safety implications
5.2	Procedures for consideration Health and Safety aspects of the design elements by the PSCS who must then inform the project supervisor design stage	Contractor to put in place procedures for addressing Health and Safety issues where they are responsible for the design element