DEVELOPMENT BANK OF SOUTHERN AFRICA

HEALTH AND SAFETY SPECIFICATIONS

DBSA SCHOOLS INFRUSTRUCTURE UPGRADES, REPAIRES AND RENOVATIONS

Popano Secondary School

Scope Defined In Tender 42.2.1 and Project BOQ

MAY 2026

Prepared For:

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1 PREAMBLE

In terms of Construction Regulation 5(1) of 2014 of the Occupational Health and Safety Act, (Act 85 of 1993), Development Bank Of Southern Africa, hereinafter referred to as 'DBSA' as the Client, is responsible to prepare Health & Safety Specifications for the intended Schools Infrastructure Upgrades, Repairs And Renovations and provide the Principal Contractor who is making a bid or appointed to perform construction work at the School with the same.

Development Bank Of Southern Africa further duties are as described in the Occupational Health and Safety Act, (Act 85 of 1993), and the Regulations made there-under. The Principal Contractor shall be responsible for the Health & Safety Policy for the site in terms of Section 7 of the Act and in line with Construction Regulation 5 as well as the Health and Safety Plan for the project.

This 'Health and Safety Specification' document is governed by the "Occupational Health and Safety Act, (Act No. 85 of 1993), hereinafter referred to as 'the Act'. Notwithstanding this, cognizance should be taken of the fact that no single Act or its set of Regulations can be read in isolation. Furthermore, although the definition of Health and Safety Specifications stipulates 'a documented specification of all health and safety requirements pertaining to associated works on a construction site, so as to ensure the health and safety of persons', it is required that the entire scope of the Labour legislation, including the Basic Conditions of Employment Act be considered as part of the legal compliance system. With reference to this specification document, this requirement is limited to all health and safety issues pertaining to the site of the project as referred to here-in.

Due to the scope and the nature of the intended construction work, every construction activity will be different, and circumstances and conditions may change even daily. Therefore, due caution is to be taken by the Principal Contractor when drafting the Health and Safety Plan based on these Health and Safety Specifications. Prior to drafting the Health and Safety Plan, and in consideration of the information contained here-in, the contractor shall set up a risk assessment program to identify and determine the scope and details of any risk associated with any hazard at the construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard. This risk assessment and the steps identified will be the basis or point of

departure for the Health and Safety Plan. The Health and Safety Plan shall include applicable methods statements, e.g. for demolition work, detailing the key activities to be performed in order to reduce as far as practicable, the hazards identified in the risk assessment.

Development Bank Of Southern Africa intends to perform Schools Infrastructure Upgrades, Repairs And Renovations. In this, a high premium is to be placed on the health and safety of the most valuable assets of DBSA. These are its personnel, the personnel of its stakeholders and the physical assets of which it is the custodian and may also include the public as well. The responsibilities of DBSA and relevant stakeholders have towards its employees and other people present on the site are captured further in this specification document. These responsibilities stem from both moral, civil and a variety of legal obligations. The Principal Contractor is to take due cognisance of the above statement.

Every effort has been made to ensure that this specification document is accurate and adequate in all respects. Should it however, contain any errors or omissions they may not be considered as grounds for claims under the contract for additional reimbursement or extension of time, or relieve the Principal Contractor from his responsibilities and accountability in respect of the project to which this specification document pertains. Any such inaccuracies, inconsistencies and/or inadequacies must immediately be brought to the attention of The Development Bank Of Southern Africa.

2 DESCRIPTION OF THE WORKS

The project comprises of the following:

Schools Infrastructure Upgrades, Repairs And Renovations

	Project Description	Scope
1	Structural Repair Work	Building repair work per the Engineer's recommendation which includes: • Foundation under-pinning • Crack repair to floors & walls • Reconstruction of walkways & staircases • Replacement of roof trusses, covering and beams (if required) on existing block • Replacement of defective floors, surface beds, aprons etc on existing building • New desks, furniture and equipment

2	Admin Block	● Construction of reinforced strip footings, ground slabs, structural masonry walls and prefabricated timber roofing to Engineer's specifications. ● Construction of all new brickwork & selected face brick. ● New smooth and textured plaster and paint internally and externally ● New powder coated aluminium windows. (Colour to be confirmed on site by Architect) ● New selected roof sheeting brandering on timber purlins and trusses. ● New barge flashing and ridge capping and fascia boards. ● New suspended ceiling. ● New hardwood timber frames and doors and ironmongery. ● New aluminium rainwater goods with new seamless gutters and uPVC downpipes, elbows, bends and shoes. ● New selected vinyl sheet flooring to floors. ● New selected porcelain floor tiles & wall tiles to all male & female and paraplegic toilets and kitchens. ● Electricity supply and distribution as per Engineer's specifications. ● Construction of stormwater management system and construction of V Drains and walkways as per Engineer's specifications. ● Construction of sewer pipelines and potable water pipelines to Engineer's specifications. ● Firefighting equipment, wet works and escape designs by Engineer. ● Plumbing - complete vent pipes, toilet pans and seats, hand wash basins, taps, urinals, and paraplegic facilities ● New desks, furniture and equipment.

3	Multipurpose/ Media Centre/ Store Rooms	● Construction of reinforced strip footings, ground slabs, structural masonry walls and prefabricated timber roofing to Engineer's specifications. ● Construction of all new brickwork & selected face brick. ● New smooth and textured plaster and paint internally and externally ● New powder coated aluminium windows. (Colour confirmed on site by Architect) ● New selected roof sheeting brandering on timber purlins and trusses. ● New barge flashing and ridge capping and fascia boards. ● New suspended ceiling. ● New hardwood timber frames and doors and ironmongery. ● New aluminium rainwater goods with new seamless gutters and uPVC downpipes, elbows, bends and shoes. ● New selected vinyl sheet flooring to floors. ● New selected porcelain floor tiles & wall tiles to all female and paraplegic toilets. ● Electricity supply and distribution as per Engineer's specifications. ● Construction of stormwater management system and construction of V Drains and walkways as per Engineer's specifications. ● Construction of sewer pipelines and potable water pipelines to Engineer's specifications. ● Firefighting equipment, wet works and escape designs by Engineer. ● Plumbing - complete vent pipes, toilet pans and seats, hand wash basins, taps and paraplegic facilities ● New desks, furniture and equipment.
4	4 Classroom Block (3 blocks on-site)	● Construction of reinforced strip footings, ground slabs, structural masonry walls and prefabricated timber roofing to Engineer's specifications. ● Construction of all new brickwork & selected face brick. ● New smooth and textured plaster and paint internally and externally

		● New powder coated aluminium windows. (Colour confirmed on site by Architect) ● New selected roof sheeting brandering on timber purlins and trusses. ● New barge flashing and ridge capping and fascia boards. ● New suspended ceiling. ● New hardwood timber frames and doors and ironmongery. ● New aluminium rainwater goods with new seamless gutters and uPVC downpipes, elbows, bends and shoes. ● New selected vinyl sheet flooring to floors. ● Electricity supply and distribution as per Engineer's specifications. ● Construction of stormwater management system and construction of V Drains and walkways as per Engineer's specifications. ● Firefighting equipment, wet works and escape designs by Engineer. ● New desks, furniture and equipment.
5	3 Classroom Block (4 blocks on-site)	● Construction of reinforced strip footings, ground slabs, structural masonry walls and prefabricated timber roofing to Engineer's specifications. ● Construction of all new brickwork & selected face brick. ● New smooth and textured plaster and paint internally and externally ● New powder coated aluminium windows. (Colour confirmed on-site by Architect) ● New selected roof sheeting brandering on timber purlins and trusses. ● New barge flashing and ridge capping and fascia boards. ● New suspended ceiling. ● New hardwood timber frames and doors and ironmongery. ● New aluminium rainwater goods with new seamless gutters and uPVC downpipes, elbows, bends and shoes. ● New selected vinyl sheet flooring to floors. ● New selected porcelain floor tiles & wall tiles to all male, female and paraplegic toilets.

		● Electricity supply and distribution as per Engineer's specifications. ● Construction of stormwater management system and construction of V Drains and walkways as per Engineer's specifications. ● Construction of sewer pipelines and potable water pipelines to Engineer's specifications. ● Firefighting equipment, wet works and escape designs by Engineer. ● Plumbing - complete vent pipes, toilet pans and seats, hand wash basins, taps and paraplegic facilities ● New desks, furniture and equipment.
6	Guard House	● Construction of reinforced strip footings, ground slabs, structural masonry walls and prefabricated timber roofing to Engineer's specifications. ● Construction of all new brickwork & selected face brick. ● New smooth and textured plaster and paint internally and externally ● New powder coated aluminium windows. (Colour confirmed on site by Architect) ● New selected roof sheeting brandering on timber purlins and trusses. ● New barge flashing and ridge capping and fascia boards. ● New suspended ceiling. ● New hardwood timber frames and doors and ironmongery. ● New aluminium rainwater goods with new seamless gutters and uPVC downpipes, elbows, bends and shoes. ● New selected vinyl sheet flooring to floors. ● New selected porcelain floor tiles & wall tiles to toilet. ● Electricity supply and distribution as per Engineer's specifications. ● Construction of stormwater management system and construction of V Drains and walkways as per Engineer's specifications. ● Firefighting equipment, wet works and escape designs by Engineer. ● New desks, furniture and equipment.

7	Dining Room/ Nutrition Centre/ Kitchen	● Construction of reinforced strip footings, ground slabs, structural masonry walls and prefabricated timber roofing to Engineer's specifications. ● Construction of all new brickwork & selected face brick. ● New smooth and textured plaster and paint internally and externally ● New powder coated aluminium windows. (Colour confirmed on-site by Architect) ● New selected roof sheeting brandering on timber purlins and trusses. ● New barge flashing and ridge capping and fascia boards. ● New suspended ceiling. ● New hardwood timber frames and doors and ironmongery. ● New aluminium rainwater goods with new seamless gutters and uPVC downpipes, elbows, bends and shoes. ● New selected vinyl sheet flooring to floors. ● Electricity supply and distribution as per Engineer's specifications. ● Construction of stormwater management system and construction of V Drains and walkways as per Engineer's specifications. ● Firefighting equipment, wet works and escape designs by Engineer. (Security Cage) ● New desks, furniture and equipment.
8	Ablutions (4 on site)	● Construction of reinforced strip footings, ground slabs, structural masonry walls and prefabricated timber roofing to Engineer's specifications. ● Construction of all new brickwork & selected face brick. ● New smooth and textured plaster and paint internally and externally

		● New charcoal colour powder coated aluminium windows. ● New selected roof sheeting brandering on timber purlins and trusses. ● New barge flashing and ridge capping and fascia boards. ● New suspended ceiling. ● New hardwood timber frames and doors and ironmongery. ● New aluminum rainwater goods with new seamless gutters and uPVC downpipes, elbows, bends and shoes. ● New selected vinyl sheet flooring to floors. ● New selected porcelain floor tiles & wall tiles to all male and paraplegic toilets. ● Electricity supply and distribution as per Engineer's specifications. ● Construction of stormwater management system and construction of V Drains and walkways as per Engineer's specifications. ● Construction of sewer pipelines and potable water pipelines to Engineer's specifications. ● Firefighting equipment, wet works and escape designs by Engineer. ● Plumbing - complete vent pipes, toilet pans, urinals and seats, hand wash basins, taps and paraplegic facilities ● Equipment.
9	External Works	● Earthworks (cut/fill) to all buildings - consisting of excavations, backfilling, layer filling, compaction ● Covered walkways, ramps, stormwater channels and aprons – consisting of excavations, back filling and reinforced cast in panels. ● Assembly area ● Covered Parking Area ● Paved areas & Driveways ● Combo court ● Construction of a new soccer field ● Rehabilitate existing court surface ● 2x Astro turf areas as per architect's design

		● 2x grass block pavers as per architect's design ● New Plaque wall at entrance ● Demolish Unsatisfactory building's
10	Water Reticulation	● Water reticulation to all new buildings, including trenches, water pipes, backfilling, compacting and construction of valve boxes – connecting from existing water supply. ● Water storage tanks (50Kl) & booster pumps connected to main line
11	Sewer Reticulation	● Sewer reticulation to all new buildings, including trenches, sewer pipes, backfilling, compacting and construction of manholes – connecting to existing municipal sewer infrastructure.
12	Electrification	• Supply of Electricity • Installation – of conduits earthing, cabling, DB, light fittings, light switches, plug points, dedicated plugs, etc • Testing and Commissioning
13	Wet services and Fire	• Internal reticulation of cold water and sewer • Fire requirements on site for fire walls and detection • External fire reticulation

3 SCOPE OF HEALTH AND SAFETY SPECIFICATION DOCUMENT

These specifications should be read in conjunction with the Act, the Construction Regulations 2014, and all other Regulations and Safety Standards which are in force or come into force during the effective duration of the project. The stipulations in this specification, as well as those contained in all other documentation pertaining to the project, including contract documentation and technical specifications shall not be interpreted, in any way whatsoever, to countermand or nullify any stipulation of the Act, regulations and safety standards which are promulgated under, or incorporated into the Act. The client is obligated to implement measures to ensure the health and safety of all people and properties affected under its custodianship or contractual commitments and is further obligated to monitor that these measures are structured and applied according to the requirements of these Health and Safety Specifications.

The purpose of this specification document is to provide the relevant Principal Contractor with any information other than the standard conditions pertaining to construction sites which might affect the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; and to protect persons other than persons at work against hazards

to health and safety arising out of or in connection with the activities of persons at work during the carrying out of construction work for The Development Bank Of Southern Africa. The Principal Contractor is to be briefed on the significant health and safety aspects of the project and to be provided with information and requirements on inter alia:

- Safety considerations affecting the site of the project and its environment;
- Health and Safety aspects of the associated structures and equipment;
- Submissions on health and safety matters required from the Principal Contractor; and
- The Principal Contractor's health & safety plan.

4 DEFINITIONS

"Purpose of the Act" – To provide for the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith.

"Health & Safety Specification" – means a document that includes information required under the construction regulation and obtained from the clients & designers during the early planning & design stage for a specific project on a specific site for use by the contractors when preparing their tenders or bids to clients.

"Health & Safety Plan" – means a document which is site specific and includes all identified hazards, safe work procedures to mitigate, reduce & control the hazards identified in a project.;

"Agent" – means any person who acts as a representative for a client; **"Construction Health & Safety Agent (SACPCMP)" –** The person or entity appointed by the client through the Agent and who has a full authority and obligation to act on the client's behalf in terms of the construction regulations;

''Construction Work" is defined as any work in connection with –

(a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;
(b) the installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
(c) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or

(d) the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work;

"Contractor" – means an employer, as defined in Section 1 of the Act, who performs construction work and includes Principal Contractors;

"Accident" – means unplanned occurrence that happens due to the unsafe condition and may cause injury to a person, damage to the property, material, plant, equipment and the environment;

"Hazard" – means anything including work activities and practices with the potential to cause harm;

"Risk" – means the likelihood that harm will occur and the subsequent consequences.

"Risk assessment" – means a process to determine any risk associated with any hazard at a construction site in order to identify the steps needed to be taken to mitigate, reduce or control such hazards.

Health and Safety File" – means a file, or other record in permanent form, containing the information required a contemplated in the regulations;

5 RESPONSIBILITIES

5.1 The Development Bank of Southern Africa

a) The Development Bank Of Southern Africa or its appointed Agent on its behalf will appoint each Principal Contractor for this project in writing for assuming the role of Principal Contractor as intended by the Construction Regulations.

b) The Development Bank Of Southern Africa or its appointed Agent on its behalf shall discuss and negotiate with the Principal Contractor the contents of the health and safety plan of both Principal Contractor and Contractor for approval.

c) The Development Bank Of Southern Africa or its appointed Agent on its behalf will take reasonable steps to ensure that the Health and Safety Plan of both the Principal Contractor and Contractor is implemented and maintained. The steps taken will include periodic audits at intervals of at least once every month.

d) The Development Bank Of Southern Africa or its appointed Agent on its behalf, will prevent the Principal Contractor and/or the Contractor from commencing or continuing with construction work should the Principal Contractor and/or the Contractor at any stage in the execution of the works be found to:

- have failed to have complied with any of the administrative measures required by the Construction Regulations in preparation for the construction project or any physical preparations necessary in terms of the Act;
- have failed to implement or maintain their health and safety plan;
- have executed construction work which is not in accordance with their health and safety plan; or
- act in any way which may pose a threat to the health and safety of any person(s) present on the site of the works or in its vicinity, irrespective of him/them being employed or legitimately on the site of the works or in its vicinity.

5.2 Principal Contractor

a) The Principal Contractor shall accept the appointment under the terms and Conditions of Contract. The Principal Contractor shall sign and agree to those terms and conditions and shall, before commencing work, notify the Department of Labour of the intended construction work.

In terms of regulation 3(2) of Construction Regulations 2014, an application for a permit to do construction work must be submitted to the Department of Labour.

b) The Principal Contractor shall ensure that he is fully conversant with the requirements of this Specification and all relevant health and safety legislation.

c) The Principal Contractor will in no manner or means be absolved from the responsibility to comply with all applicable sections of the Act, the Construction Regulations or any Regulations proclaimed under the Act or which may perceivable be applicable to this contract.

d) The Principal Contractor shall provide and demonstrate to The Development Bank Of Southern Africa or its appointed Agent a suitable and sufficiently documented Health and Safety Plan based on this Specification, the Act and the Construction Regulations 2014, which shall be applied from the date of commencement of and for the duration of execution of the works. This plan shall, as appendices, include the health and safety plans of all sub-contractors for which he has to take responsibility in terms of this contract.

e) The Principal Contractor shall provide proof of his registration and good standing with the Compensation Fund or with a licensed compensation insurer prior to commencement with the works.

f) The potential Principal Contractor shall, in submitting his tender, demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and Construction Regulations. (See Annexure A: BILL OF QUANTITIES FOR HEALTH AND SAFETY)

g) The Principal Contractor shall consistently demonstrate his competence and the adequacy of his resources to perform the duties imposed on the Principal Contractor in terms of this Specification, the Act and the Construction Regulations.

h) The Principal Contractor shall ensure that a copy of his health and safety plan is available on site and is presented upon request to The Development Bank Of Southern Africa, an Inspector, employee or sub-contractor.

i) The Principal Contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of this Specification, the Act and the Construction Regulations 2014, is opened and kept on site and made available to The Development Bank Of Southern Africa or Inspector upon request. Upon completion of the works, the Principal Contractor shall hand over a consolidated health and safety file to The Development Bank Of Southern Africa.

j) The Principal Contractor shall, throughout execution of the contract, ensure that all conditions imposed on his Sub-contractors in terms of the Act and the Construction Regulations are complied with as if they were the Principal Contractor.

k) The Principal Contractor shall from time to time evaluate the relevance of the Health and Safety Plan and revise the same as required, following which revised plan shall be submitted to The Development Bank Of Southern Africa for approval.

5.3 Contractor

The Contractor must demonstrate to the Principal Contractor that he has the necessary competencies and resources to perform the construction work safely.

6 GENERAL OCCUPATIONAL HEALTH AND SAFETY PROVISIONS

6.1 Health & Safety Plan

A Health and Safety Plan must be developed, implemented, maintained and kept up to date during the construction project.

The Principal Contractor should prepare a Health and Safety Plan that includes

- Project information;
- The Development Bank Of Southern Africa requirements for health and safety management on the project; as specified in this Health and Safety Specification

The Health and Safety Plan should include the following information:

- Details of the Client, that is the person commissioning the construction work, for example their name, representative and contact detail, details of the Principal Contractor;
- Details of the construction project, the address of the workplace, anticipated start and end date and a brief description of the type of construction work that the Health and Safety Plan will cover;

- Details on how subcontractors will be managed and monitored, including how the Principal Contractor intends to implement and ensure compliance with the Health and Safety Plan such as checking on the performance of subcontractors and how non-compliance will be handled; and
- Details on how the risks associated with traffic volumes, construction vehicles and mobile plant and all high-risk construction work that will take place on the construction project will be managed.

The Health and Safety Plan should also include information on:

- the provision and maintenance of a hazardous chemicals register, safety data sheets and hazardous chemicals storage;
- the safe use and storage of plant;
- workplace security and public safety; and
- ensuring workers have appropriate competences and training to undertake the construction work.

The Health and Safety Plan must contain:

- A general description of the type of work activities involved in the project and not just a description of the infrastructures to be constructed;
- The project program or schedule details, including start and finish dates, showing principal activities;
- Details of Client, Design Team, Principal Contractor, Subcontractors, and major suppliers; and
- Extent and location of relevant existing records, surveys, site investigation, etc

6.2 Health and Safety File

The Principal Contractor must, in terms of Construction Regulation 7(7), keep a Health & Safety File on site at all times that must include all documentation required in terms of the Act and Regulations and must also include a list of all Contractors on site that are accountable to the Principal Contractor and the agreements between the parties and details of work being done.

The Health and Safety File will remain the property of The Development Bank Of Southern Africa on its behalf throughout the period of the project and shall be consolidated and handed over to The Development Bank Of Southern Africa on its behalf at the time of completion of the project.

6.3 Application of Construction Work Permit

In terms of Construction Regulation 3 of the Construction Regulations, 2014, the Client is required to apply for a Construction Work Permit at least 30 days prior to the commencement of construction work where the intended construction work:

- will exceed 365 days and involve more than 3 600 person-days of construction work; or
- has a contract value that falls within the threshold of a CIDB Grade 7, 8, or 9 project.

Upon approval of the application, the Provincial Director of the Department of Employment and Labour will issue a Construction Work Permit in writing and allocate a site-specific permit number for the construction site within 30 days of receipt of the application.

It is the intention of DBSA to submit the Construction Work Permit application immediately upon the appointment of the Principal Contractor and receipt of the approved Health and Safety Plan, thereby minimising potential delays to the commencement of construction activities.

The site-specific Construction Work Permit number shall be prominently displayed at the main entrance to the construction site. A copy of the permit shall also be maintained within the Principal Contractor's Health and Safety File and be readily available for inspection by the Department of Employment and Labour or any other authorised person.

Should any material changes occur to the information contained in the original permit application, including but not limited to changes in contractors, construction duration, project scope, or the anticipated workforce numbers, an amended permit application (Annexure 1) shall be submitted to the Department of Employment and Labour for review and approval.

6.4 Structure and Responsibilities

6.4.1 Overall supervision and responsibility for occupational health and safety

- The Principal Contractor [appointed in terms of Construction Regulation 5(1)(k)] is responsible to implement and maintain the Health and Safety Plan approved by the Client.
- The Chief Executive Officer (in terms of Section 16(1) of the Act) of the Principal Contractor is to ensure that the Employer (as defined in the Act) complies with the Act.
- The Principal Contractor's Chief Executive Officer may appoint any person reporting to him/her as Designated Person in terms of Section 16(2) of the Act. Such Designated

Person is responsible to assist the Chief Executive Officer to ensure that the Employer complies with the requirements of the Act.

- The Construction Manager, Assistant Construction Manager, Construction Supervisor and Assistant Construction Supervisor(S) appointed in terms of Construction Regulation 8 are responsible for supervising the construction work and in specific to ensure that all work undertaken comply with the requirements of the Act, its Regulations and these Health and Safety Specifications.

6.4.2 Operational responsibilities for Occupational Health and Safety

The Principal Contractor shall appoint designated competent employees and/or other competent persons as outlined in the following list to assist with the operational responsibilities for occupational health and safety. This list is only the minimum requirement and is therefore in no way exhaustive.

Assistant Construction Manager	Construction Regulation 8(2)
Assistant Construction Supervisor	Construction Regulation 8(8)
Construction Health and Safety Officer	Construction Regulation 8(5)
Construction Manager	Construction Regulation 8(1)
Construction Supervisor	Construction Regulation 8(7)
Construction Vehicle, Mobile Plant and Machinery Supervisor	Construction Regulation 23
Drivers of Construction Vehicles and Operators of Plant	Construction Regulation 23
Electrical Installation and Appliances Inspector	Construction Regulation 24
Emergency, Security and Fire Coordinator	Construction Regulation 29
Excavation Supervisor	Construction Regulation 13
First-aiders	General Safety Regulation 3
Firefighting equipment inspector	Construction Regulation 29
Hazardous Chemical Substances Supervisor	Hazardous Chemicals Substances Regulations 10

Incident Investigator	General Administrative Regulation 9
Ladder Inspector	General Safety Regulation 13(a)
Lifting Machines and Equipment Inspector	Construction Regulation 22
Occupational Health and Safety Committee	OHSACT Section 19
Occupational Health and Safety Representatives	OHSACT Section 17
Person Responsible for Machinery	General Machinery Regulation 2
Risk Assessor	Construction Regulation 9(1)

These appointments must be in writing and the responsibilities clearly stated together with the period for which each appointment is made. This information must be communicated to and agreed with the appointees.

Copies of appointments must be submitted to the client together with concise CV's of the appointees as part of the Principal Contractor's Health and Safety Plan, and if appointed, copies of the appointments included in the Health and Safety File. All appointments must be approved by the client and any changes of appointees or appointments must be communicated to the client and agreed upon before being implemented.

The Principal Contractor must, furthermore, provide the client with a list of all contractors that he/she has appointed or intends to appoint and keep this list updated on a weekly basis.

6.4.3 Construction Health and Safety Officer

This project requires the appointment of a full-time Construction Health and Safety Officer, appointed in terms of Construction Regulation 8(5). This appointee should be duly registered and in good standing with a statutory body approved by the Chief Inspector as is required by Construction Regulation 8(6).

The South African Council for Project and Construction Management Professions (SACPCMP) is currently the statutory body responsible for the professional registration of construction health and safety officers and a copy of the appointee's SACPCMP's registration certificate should be

submitted as part of the Principal Contractor's Health and Safety Plan and be readily available in the Health and Safety File to be kept and maintained on site.

6.4.4 Designation of Occupational Health and Safety Representatives

Where the Principal Contractor employs more than 20 persons [including the employees of other contractors (sub-contractors) and its supervisors] he has to appoint one occupational health and safety representative for every 50 employees or part thereof. General Administrative Regulation 6 requires that the election, appointment and subsequent designation of the occupational healthand safety representatives be executed in consultation with employee representatives or employees. (Section 17 of the Act as well as General Administrative Regulation 6 and 7 refer).

Occupational health and safety representatives have to be designated in writing and the designation must include the area of responsibility of the person and term of the designation.

6.4.5 Duties and functions of the Occupational Health and Safety Representatives

The Principal Contractor must ensure that the designated occupational health and safety representatives conduct a weekly inspection of their respective areas of responsibility, using a checklist, and report thereon to the Principal Contractor. Occupational health and safety representatives must be included in accident and/or incident investigations.
Occupational health and safety representatives must attend all occupational health and safety committee meetings.

6.4.6 Appointment of Occupational Health and Safety Committee

The Principal Contractor must establish an occupational health and safety committee consisting of all the designated occupational health and safety representatives together with a number of management representatives that are not allowed to exceed the number of occupational health and safety representatives on the committee and a representative of the client shall act as the chairperson without voting rights. The members of the occupational health and safety committee must be appointed in writing and copies of the appointments included in the occupational health and safety file.

The occupational health and safety committee must meet as a minimum on a monthly basis and consider, at least, the following agenda items:

- Opening and welcome.
- Members present, apologies and absent.
- Minutes of previous meeting.
- Matters arising from the previous meeting.

- Occupational health and safety representatives' reports.
- Incident and/or accident reports and investigations.
- Incident, accident and/or injury statistics.
- Other matters.
- Endorsement of registers and other statutory documents by a duly authorised representative of the principal contractor.
- Close and next meeting.

6.5 Compensation of Occupational Injuries and Diseases Act 130 of 1993

The Principal Contractor shall submit a letter of good standing with its Compensation Insurer, to the client or his appointed representative, as proof of registration. Contractors shall submit proof of registration to the Principal Contractor before they commence work on site

6.6 Occupational Health and Safety Policy

The Principal Contractor and all other Contractors shall submit to The Development Bank Of Southern Africa and to the Architect, a copy of their organisation's Health and Safety Policy signed by their Chief Executive Officer. Each policy must include a description of the organisation and state the Health and safety objectives and how they will be achieved and implemented by the organisation. Copies of these policies shall be attached to the Health and Safety Plan

6.7 Health and Safety Organogram

The Principal Contractor and all Contractors shall submit an organogram, outlining the Health and Safety site management structure including the relevant appointments/competent persons and shareholders. In cases where appointments have not been made, the organogram shall reflect the intended positions. The organogram shall be updated when there are any changes in the Site management structure. A copy shall be attached to the Health and Safety Plan.

6.8 Hazard Identifications and Risk Assessment

The Contractor shall cause a hazard identification to be performed by a competent person before commencement of construction work, and the assessed risks shall form part of the construction phase health and safety plan submitted for approval by the client or its appointed Agent

The risk assessment must include;

- A list of hazards identified as well as potentially hazardous tasks;
- A documented site-specific risk assessment based on the list of tasks and associated hazards;
- Method statements and a set of safe working procedures to eliminate, reduce and/or control the risks assessed;

- A monitoring and review procedure of the risks assessment as the risks change
- Ergonomic related risks are to be analyzed, evaluated, and addressed as part of the process.

The Principal Contractor shall ensure that all employees and or Contractors are competent to perform the work and informed, instructed and trained by a competent person regarding any hazards, risks and related safe work procedures before any work commences and thereafter at regular intervals as the risks change and as new risks develop. Proof of this shall be kept on the Health and Safety File.

The Principal Contractor shall be responsible for ensuring that all persons who could be negatively affected by its operations are informed and trained according to the hazards and risks and are conversant with the safe work procedures, control measures and other related rules (tool box talk strategy to be implemented). Appropriate signage regarding the dangers attached to the work and hazards identified must be posted at strategic places for everyone to see and be included in the method statement to be provided in the Health and Safety Plan.

6.9 Health and Safety Training/Induction

6.9.1 Induction

The Principal Contractor shall ensure that all site personnel undergo a risk-specific health & safety induction training session before starting work. A record of attendance shall be kept in the Health and Safety File. All visitors to the site shall also receive risk-specific health & safety induction training and a record of such shall be kept. All employees to be informed, instructed and trained by a competent person regarding the hazards and work procedures as prescribed.

6.9.2 Awareness

The Principal Contractor shall ensure that, on site, periodic toolbox talk take place at least once per week. These talks should deal with risks relevant to the construction work at hand. A record of attendance shall be kept in the Health and Safety File. All Contractors have to comply with this minimum requirement. The contractor shall inform all residence and or members of the public, who may be affected by the activities and who will most likely be exposed to the hazards identified of all precautionary measures to be taken.

6.9.3 Competency

All competent persons shall have the knowledge, experience, training, and qualifications specific to the work they have been appointed to supervise, control, carry out. This will have to be assessed on regular basis e.g. periodic audits by the client, progress meetings, etc. The Principal

Contractor is responsible to ensure that competent Contractors are appointed to carry out construction work.

6.10 Medical Certificates of Fitness

The Principal Contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3 of the Construction Regulations 2014.

6.11 Public and Site Visitor Health & Safety

Both The Development Bank Of Southern Africa and the Principal Contractor have a duty in terms of the OHS Act to do all that is reasonably practicable to prevent members of the public and site visitors from being adversely affected by the construction activities.

The Principal Contractor shall ensure that every person working on or visiting the site, as well as the public in general, shall be made aware of the dangers likely to arise from site activities, including the precautions to be taken to avoid or minimise those dangers. A record of these inductions/briefings shall be kept in the Project Health and Safety File in accordance with the Construction Regulations. Appropriate Health and Safety notices and signs shall be posted up, but this shall not be the only measure taken. The construction site shall be suitably and sufficiently fenced off/ barricaded and or provided with controlled access points to prevent the entry of unauthorized persons.

6.12 General Record Keeping

The Principal Contractor and all Contractors shall keep and maintain Health and Safety records to demonstrate compliance with this Specification, with the OHS Act 85/1993, Construction Regulations 2014 and any other legislation applicable on site. The Principal Contractor shall ensure that all records of incidents/accidents, training, inspections, audits, etc, are kept in a Health and Safety File held in the site office. The Principal Contractor must ensure that every Contractor opens its own Health and

Safety File, maintains the file and makes it available on request. The Principal Contractor shall maintain an up to date register of each Contractor engaged in construction work on site giving the Contractors' name and the Responsible Persons' contact details and the number of employees on site. As these details may be subject to frequent change, the register must be updated at least weekly. The register is to be available for inspection

6.13 Health & Safety Audits, Monitoring and Reporting

The Development Bank Of Southern Africa will conduct at least, a once monthly Health & Safety audit of the work operations including a full audit of physical site activities as well as an audit of the

administration of health & safety. The Principal Contractor is obligated to conduct similar audits on all contractors appointed by it. Detailed reports of the audit findings and results shall be reported on at all levels of project management meetings/forums. Copies of the Client audit reports shall be kept in the Project Health & Safety File while the Principal Contractor audit reports shall be kept in their File, a copy being forwarded to the client. Contractors shall audit their sub-contractors and keep records of these audits in their Health and Safety Files, available on request. These audits must be conducted by a competent person.

6.14 Accident / Incident Reporting and Investigation

Injuries are to be categorized into first aid; medical; disabling; and fatal. The Principal Contractor must stipulate in its construction phase Health and Safety Plan how it will handle each of these categories. When reporting injuries to the client, these categories shall be used. All injuries shall be investigated by the Principal Contractor, with a report being forwarded to the client forthwith. All Contractors have to report on the 4 categories of injuries to the Principal Contractor at least monthly. The Principal Contractor must report all injuries to the client in the form of a detailed injury report at least monthly. The Client's Agent must be informed forthwith of any recordable incident or accident.

6.15 Hazards and Potential Situations

The Principal Contractor shall immediately notify other Contractors as well as The Development Bank Of Southern Africa Agent of any hazardous or potentially hazardous situations that may arise during performance of construction activities.

6.16 Contractors and Sub-contractors

The Principal Contractor shall ensure that all Contractors under its control comply with this Specification, the OHS Act of 1993, Construction Regulations 2014, and all other relevant legislation that may relate to the activities directly or indirectly. The Contractor, when appointing other Contractors as 'Sub-contractors', shall mutatis mutandis ensure compliance and a section 37(2) agreement must be put in place.

7 OPERATIONAL CONTROL

7.1 Emergency Procedures

The Principal Contractor shall prepare a detailed emergency procedure prior to commencement of work on site and it shall be included in, and form part of, the Health and Safety Plan. The procedure shall be updated whenever changes occur, and it shall detail the emergency

response plans. The emergency procedures shall not be limited to, but shall include, the following key elements:

- List of key competent personnel on site;
- Details of the nearest emergency services, including their physical addresses and phone numbers;
- Actions or steps to be taken in the event of each specific type of emergency;
- Information on hazardous materials/situations that may be encountered on site.

Emergency procedures shall include, but shall not be limited to, fire, spills, accidents to employees, bomb threats, and major incidents/accidents.

A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc) must be maintained and be readily available to site personnel at all times that there are persons on site i.e. it must not be in an area which may be inaccessible outside of normal working hours.

The Principal Contractor shall advise The Development Bank Of Southern Africa and the Engineer in writing forthwith, and thereafter at the project and Health and Safety meetings, of any emergencies that occurred, together with a record of the action taken. Copies of all reports on emergencies shall be kept in the Project Health and Safety File.

7.2 First Aid Boxes and First Aid Equipment

The Principal Contractor and all other Contractors shall appoint First Aider(s) in writing. All Contractors with more than 10 employees shall have a trained, certified First Aider on site at all times. The appointed First Aider(s) are to be sent for accredited first aid training. Copies of the valid First Aid certificates for each First Aider are to be kept in the Project Health and Safety File. The Principal Contractor shall provide an on-site First Aid Station with First Aid facilities, including first aid boxes adequately stocked at all times. All Contractors with more than 5 employees shall supply their own first aid box(es).

7.3 Security

The Principal Contractor must establish site access rules and implement and maintain these throughout the construction period. Access control must, among others, include the rules that nonemployees will not be allowed on site unaccompanied.

The Principal Contractor must develop a set of project applicable security rules and procedures and maintain these throughout the construction period.

7.4 Accommodation of traffic

The Principal Contractor shall ensure that appropriate and a sufficient number of road signs be posted as per Chapter 13, Volume 2 of the South African Road Traffic Signs Manual (SARTSM) and these signs also be actively maintained to protect employees against traffic and to warn road users of the presence of construction activities and related risks next to and in the road surface. These signs should be repeated as actual construction work and risk are approached.

The maintenance of the road signs including after hour's management shall also be actively managed.

Flag persons shall be provided, where applicable with suitable road marking and flags to ensure the effectiveness of this risk mitigation measures.

7.5 Stacking of materials

The Principal Contractor and other relevant contractors shall ensure that there is an appointed Stacking and Storage Supervisor and all materials, all equipment is stacked and stored safely in a demarcated area.

7.6 Speed Restrictions, Signage and Protection

The Principal Contractor shall ensure that all persons in its employ, all Contractors, and all those that are visiting the site are aware and comply with the site speed restriction(s).

Separate vehicle and pedestrian access routes shall be provided, maintained, controlled, and enforced. Signage shall be provided and should comply as per Occupational Health and Safety Act and SANS standards

7.7 Hazardous Chemical Substances (HCS)

The Principal Contractor and other relevant Contractors shall provide the necessary training and information regarding the use, transport, and storage of HCS. The Principal Contractor shall ensure that the use, transport, and storage of HCS are carried out as prescribed by the HCS Regulations. The Contractor shall ensure that all hazardous chemicals on site have Material

Safety Data Sheets (MSDS) and the users are made aware of the hazards and precautions that need to be taken when using the chemicals. The First Aiders must be made aware of the MSDS and how to treat HCS incidents appropriately.

7.8 Construction Vehicle and Mobile Plant Operators

The following requirements will apply to construction vehicles and mobile plant operators:

- Only certified and/or competent employees may be allowed to operate any construction vehicle and mobile plant.
- Every lifting machine operator must be trained specifically for the type of lifting machine that he or she is operating.
- Only employees duly authorised to do so may operate any construction vehicle and mobile plant.
- Only employees physically and psychologically fit, i.e. in possession of a medical certificate of fitness, may be allowed to operate any construction vehicle and mobile plant.

7.9 Construction Vehicles and Mobile Plant

Construction vehicles and mobile plant should be formally and duly inspected by a competent person appointed by the Principal Contractor prior to being allowed on a project site and suppliers of hired vehicles, plant and equipment must be required to comply with this specification as well as the Act and Regulations.

Construction vehicles and mobile plant must be:

- Of acceptable design and construction;
- Maintained in good working order;
- Used in accordance with their design and intention for which they were designed;
- Operated and/or driven by trained, competent and authorised operators/drivers. No unauthorised persons to be allowed to drive construction vehicles and mobile plant;
- Provided with safe and suitable means of access;
- Fitted with adequate signalling devices to make movement safe including reversing;
- Excavations and other openings must be provided with sufficient barriers to prevent construction vehicles and mobile plant from falling into same;
- Provided with roll-over protection;
- Inspected daily before start-up by the driver, operator and/or user and the findings recorded in a register/log book and any defects addressed as matter of urgency;

- Fitted with two head and two tail lights that is in good working condition whilst operating under poor visibility conditions; and
- Used for transporting persons must have seats firmly secured and sufficient for the number of persons being transported.

No loose tools, material etc is allowed in the driver and/or operators compartment/cabin nor in the compartment in which any other persons are transported.

No person may ride on construction vehicles and mobile plant except for in a safe place designed and provided for this purpose.

Construction vehicles and mobile plant left unattended after hours adjacent to roads and areas where there is traffic movement must be fitted with lights, reflectors or adequate barricades to prevent moving traffic from a sudden emergency, or to come into contact with the parked construction vehicles and mobile plant.

In addition, construction vehicles and mobile plant left unattended after hours must be parked with all buckets, booms etc. full lowered, the emergency brakes engaged and, where necessary, the wheels chocked, the transmission in neutral and the motor switched off and the ignition key removed and stored safely.

All construction vehicles and mobile plant daily inspection records must be kept in the Health and Safety File.

7.10 Electrical Installations

Any electrical work undertaken as part of the project, including the installation of temporary electricity for construction use shall be in accordance with Construction Regulation 24 and the Electrical Installation Regulations.

The Principal Contractor must ensure that:

- Existing services are to be located and clearly marked before construction commences and during the progress thereof;
- Where the abovementioned is not possible, employees with jackhammers etc. will be protected against electric shock by the use of suitable protective equipment e.g. rubber mats, insulated handles etc;

- Electrical installations and -machinery are sufficiently robust to withstand normal working conditions on site;
- Temporary electrical installations must be inspected at least once per week by a competent person and a record of the inspections kept on the occupational health and safety file;
- Electrical machinery used on a construction site must be inspected daily before start-up by the competent driver/operator or any other competent person and a record of the inspections kept on the occupational health and safety file; and
- A competent person appointed in writing must control all temporary electrical installations.

7.11 Electrical and mechanical lockout

An electrical and mechanical lockout procedure must be developed by the Principal Contractor and submitted to the client for approval before construction commences. All contractors on site must be informed of and adhere to this lockout procedure.

7.12 Use and Storage of Flammables

The principal contractor must ensure that:

- No person is required or permitted to work in a place where there is the danger of fire or an explosion due to flammable vapours being present unless adequate precautions is taken;
- Flammables stored on a construction site are stored in a well-ventilated, reasonably fire-resistant container, cage or room that is kept locked with consistent access control measures in place and sufficient firefighting equipment installed and fire prevention methods practiced for example proper housekeeping;
- Only one day's quantity of flammable is to be kept in the workplace;
- Containers (including empty containers) to be kept closed to prevent fumes/vapours from escaping and accumulating in low lying areas; and
- Welding and other flammable gases to be stored segregated as to the type of gas and empty and full cylinders.

7.13 Fire Prevention and Protection

The Principal Contractor must ensure that:

- The risk of fire is avoided;
- Sufficient and suitable storage of flammables is provided;

- All employees are instructed in the use of the firefighting equipment and know how to attempt to extinguish a fire;
- A sufficient number of employees are appointed and trained to act as an emergency team to deal with fires and other emergencies;
- Employees are informed regarding emergency evacuation procedures and escape routes;
- Emergency escape routes are kept clear at all times and clearly marked;
- Evacuation assembly points are demarcated and made known to employees;
- Evacuation is regularly practiced to ensure that all persons are evacuated timeously and;
- Roll call is held after evacuation to account for all employees and to ensure that no-one including visitors and disabled persons have been left behind; and
- A clearly audible, to all persons on site, siren or alarm is fitted and regularly tested.

7.14 Housekeeping

The Principal Contractor must ensure that:

- Housekeeping is continuously implemented and maintained;
- Materials and equipment is properly stored;
- Scrap, waste and debris is removed off site regularly;
- Materials placed for use are placed safely and not allowed to accumulate or cause obstruction to the free-flow of pedestrians and vehicular traffic;
- Where practicable, construction sites are fenced off to prevent entry of unauthorised persons;
- An unimpeded work space is maintained for every employee;
- Every workplace is kept clean, orderly and free of tools and the likes that are not required for the work being done;
- As far as is practicable, every floor, walkway, stair, passage and gangway is kept in good state of repair, skid-free and free of obstruction, waste and materials; and
- The walls and roof of every indoor workplace be sound and leak-free.

7.15 Stacking and Storage

The Principal Contractor must ensure that:

- A competent person is appointed in writing to supervise all stacking and storage on a construction site;
- Adequate storage areas are provided and demarcated;
- The storage areas are kept neat and under control;
- The base of any stack is level and capable of sustaining the weight exerted on it by the stack;

- The items in the lower layers can support the weight exerted by the top layers;
- Cartons and other containers that may become unstable due to wet conditions are kept dry;
- Pallets and containers are in good condition and no material is allowed to spill out;
- The height of any stack does not exceed 3 times the base unless stepped back at least half the depth of a single container at least every fifth tier or the approval of an inspector of the Department of Labour has been obtained to build the stacks higher with the aid of a machine. (The operator of the machine must be protected against items falling from overhead or off the stack and no items may overhang);
- The articles that make up a single tier are consistently of the same size, shape and mass;
- Structures for supporting stacks are structurally sound and able to support the mass of the stack;
- No articles are removed from the bottom of the stack first but from the top tier first;
- Anybody climbing onto a stack can and does do it safely and that the stack is sufficiently stable to support him or her;
- Stacks that are in danger of collapsing are broken down and restacked;
- Stability of stacks are not threatened by vehicles or other moving plant and machinery;
- Stacks are built in a header and stretcher fashion and that corners are securely bonded; and
- Persons climbing onto stacks do not approach unguarded moving machinery or electrical installations.

7.16 Employee Welfare Facilities

7.16.1 Toilets

The provision of toilets for each sex is required in terms of the National Building Regulations and Construction Regulation 30.

Chemical toilets are allowed instead of the water borne sewerage type. Toilets have to be provided at a ratio of at least 1 toilet per 30 employees.

7.16.2 Showers

At least cold-water showers of some sort for each sex have to be provided at a ratio of at least 1 shower per 15 employees.

7.16.3 Change rooms

Some form of screened off changing facility must be provided separately for each sex.

7.16.4 Eating facility

Some form of eating facility sheltered from the sun, wind and rain must be provided.

7.17 Personal and other protective equipment

The Principal Contractor is required to proactively identify the hazards in the workplace and deal with them on an ongoing basis. He/she must either remove them or, where impracticable take steps to protect employees and make it possible for them to work safely and without risk to health under the hazardous conditions.

Personal protective equipment should, however, be the last resort and there should always first be an attempt to apply re-engineering and other solutions to mitigating hazardous situations before the issuing of personal protective equipment is considered.

Where it is not possible to create an absolutely safe and healthy workplace the Principal Contractor is required to inform employees regarding this and issue, free of charge, suitable equipment to protect them from any hazards being present and that allows them to work safely and without risk to health in the hazardous environment.

It is a further requirement that the Principal Contractor maintain the said equipment, that he/she instructs and trains the employees in the use of the equipment and ensures that the prescribed equipment is used by the employee/s in a consistent and correct manner.

Employees do not have the right to refuse to use and/or wear the equipment prescribed by the employer and, if it is impossible for an employee to use or wear prescribed protective equipment through health or any other valid reason, the employee cannot be allowed to continue working under the hazardous condition(s) for which the equipment was prescribed but an alternative solution has to be found that may include relocating the employee.

The Principal Contractor may not charge any fee for protective equipment prescribed by him or her but may charge for equipment under the following conditions:

- Where the employee requests additional issue in excess of what is prescribed;
- Where the employee has blatantly abused or neglected the equipment leading to early failure; and where the employee has lost the equipment.

7.18 Portable Electrical Tools and Equipment

Portable electrical tools and equipment includes every unit that takes electrical power from a 15 ampere plug point and is moved around for use in the workplace i.e. drills, saws, grindstones, portable lights, etc. In addition, electrical appliances such as fridges, hotplates, heaters, etc must be inspected regularly but at least on a weekly basis and maintained to the same standards as portable electrical tools and appliances.

The use, inspection and maintenance of portable electrical tools and equipment must be governed by the following:

- Regular inspections by a competent person appointed in writing;
- Inspection results must be recorded in a register;
- Only competent authorised persons are allowed to use portable electrical tools and equipment; and
- The correct protective equipment is worn/used whilst operating portable electrical tools and equipment.

This equipment:

- Must be maintained in good condition at all times to prevent an electrical shock to the user;
- The main source should incorporate an earth leakage protection device or receive power through a double wound transformer or be double insulated and clearly marked as such; and
- All equipment must be fitted with a switch to allow for safe and easy starting and stopping.

7.19 Portable lights

The following requirements apply to portable lights:

- Must be fitted with a robust non-hygroscopic non-conducting handle;
- Live metal parts which may become live must be protected against contact;
- The lamp must be protected by a strong guard;
- The cable lead-in must withstand rough handling;
- A register be kept for each piece of equipment with findings of regular inspections undertaken to evaluate the condition of these lights;
- Inspections must be undertaken that concentrate on at least the plug, cord, switch, guard and any obvious faults; and
- When used in wet/damp/metal container conditions, it must be protected.

7.20 Public/Scholars Health and Safety

The Principal Contractor is responsible for ensuring that non-employees affected by the construction work are made aware of the dangers likely to arise from said construction work as well as the precautionary measures to be observed to avoid or minimise those dangers. This includes among others:

- Non- employees entering the site for whatever reason;
- The school children
- The surrounding community; and
- Passers-by the site.

Appropriate signage must be posted to this effect and all employees on site must be instructed to ensure that non-employees are protected at all times.

All non-employees entering the site must receive site applicable induction into the hazards and risks and the control measures for these.

7.21 Excavations

All excavation work has to comply with the following:

- Excavation work must be carried out under the supervision of a competent person with at least two years practical experience in excavation work who has been appointed in writing.
- Before excavation work begins the stability of the ground must be evaluated.
- Whilst excavation work is being performed, the Principal Contractor must take suitable and sufficient steps to prevent any person from being buried or trapped by a fall or dislodgement of material.
- No person may be required or permitted to work in an excavation that has not been adequately shored or braced.
- Where the excavation is in stable material or where the sides of the excavation are sloped back to at least the maximum angle of repose measured relative to the horizontal plane, shoring or bracing may be left out but only after written permission has been obtained from the appointed competent person.
- Shoring and bracing must be designed and constructed to safely support the sides of the excavation and prevent it from collapsing.
- Where uncertainty exists regarding the stability of the soil the opinion of a competent professional engineer or professional technologist must be obtained, before excavation

proceeds, whose opinion will be decisive. The opinion must be in writing and signed by the engineer or technologist as well as the appointed excavation supervisor.

- No load or material may be placed near the edge of an excavation if it is likely to cause a collapse of the excavation, unless suitable shoring has been installed to be able to carry the additional load. Best practice requires a one-meter clearance so as to reduce the pressure on the side walls as well as risk of material falling onto persons inside the excavation.
- Every excavation must be provided with means of access that must be within 6 metres of any employee within the excavation at any time. Should ladders be utilised for this purpose they should be duly secured.
- The location and nature of any existing services such as water, electricity, gas, telecommunication etc must be established before any excavation is commenced with and any service that may be affected by the excavation must be protected and made safe for employees working in or near in the excavation.
- Every excavation, including the shoring and bracing or any other method to prevent a possible collapse, must be inspected by the appointed competent person as follows:
    - Daily before work commences
    - After every blasting operation
    - After an unexpected collapse of the excavation or part thereof
    - After substantial damage to any support
    - After rain
- The results of any inspections must be recorded in a register kept on site in the health and safety file.
- Every excavation accessible to the public or that is adjacent to a public road or thoroughfare or that threatens the safety of persons, must be adequately barricaded or fenced off, on all sides, to at least one meter high and as close to the excavation perimeter as practicable. All such excavations must also be provided with warning lights or visible boundary indicators after dark or when visibility is poor.

7.22 Working in Confined Spaces

7.22.1 Ventilation

- The confined space must be opened and allowed to ventilate for at least 15 minutes before entering the confined space. All confined spaces must be barricaded and manned at all times.
- A gas monitor must be lowered to the bottom of the confined space with a rope to test the presence of any toxic/flammable gas. If any gas is detected, the space must be force ventilated by means of a blower for at least 15 minutes where after the air must be tested

again. Under no circumstances may any space be entered while there is a toxic/flammable gas present.

- After the undertaking of the necessary work, the person in charge of the activities must confirm that all the employees are accounted for.

7.22.2 Entering a confined space

- When entering a confined space, the person entering the space must wear a safety harness and fully operational gas detector. A lifeline must be attached to the safety harness and a person on the surface must be in continuous contact with the person in the confined space. At least one person on the surface must be trained in basic first-aid (level 1) with proof of such training as well as a fully equipped first aid box available on site.
- No person shall remain within a confined space for a period of more than one hour at a time. A minimum of 5-minute rest periods on the surface must be taken after this period before re-entering.
- Should the alarm sound on the gas monitor, all employees must exit the confined space and the immediate area must also be evacuated immediately. The area must be properly ventilated and re-tested before re-entering the confined space.
  Professional support should be called for if necessary.
- Employees must be provided with flameproof lighting when entering a confined space with the possibility of flammable gases. No naked lights, smoking or unprotected electrical apparatus which may cause sparks, shall be permitted in any confined space or in its vicinity.

7.22.3 General

All employees working in confined spaces must be issued with fully functioning gas monitoring equipment and safety harnesses. All these employees must be trained (including refresher training on a regular and continuous basis) in the use thereof.

7.22.4 Safety equipment

All teams must be issued with fully functional gas monitoring equipment and safety harnesses where applicable. All employees must be trained (including refresher training on a regular and continuous basis) in the use thereof.

7.22.5 General records

The following records shall be implemented and maintained by the principal contractor:

- Confined space entry permits

- Confined space entry registers
- Safety harness and gas monitoring equipment registers
- Risk assessments
- Incident registers

7.22.6 Training

All employees that have to enter a confined space must be formally trained and confirmed competent before being required to enter such areas (new employees to complete this training and be declared competent before allowed to work in a confined space).

Refresher courses must be attended by employees at least once every 2 years or immediately if new methodologies or equipment are adopted or acquired.

Continuous onsite training and support by supervisory staff should be undertaken and enforced where required.

7.23 Vessels under Pressure (VUP) and Gas Bottles

The Principal Contractor and all relevant Contractors shall comply with the Pressure Equipment Regulations, including:

- Providing competency and awareness training to the operators;
- Providing PPE or clothing
- Inspect equipment regularly and keep records of inspections
- Providing appropriate firefighting equipment (Fire Extinguishers) on hand

7.24 Fire Extinguishers and Fire Fighting Equipment

The Principal Contractor and relevant Contractors must ensure all appropriate measures are taken to avoid the risk of fire shall provide adequate, regularly serviced firefighting equipment located at strategic points on site, specific to the classes of fire likely to occur. The appropriate notices and signs must be posted up as required. The fire equipment contemplated in previous paragraph is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof and a sufficient number of workers are trained in the use of fire-extinguishing equipment;

7.25 Hired Plant and Machinery

The Principal Contractor shall ensure that any hired plant and machinery used on site is safe for use. The necessary requirements as stipulated by the Occupational Health and Safety Act 85/1993 and Construction Regulations 2014 shall apply. The Principal Contractor shall ensure that operators

hired with machinery are competent and that certificates are kept on site in the health & safety file. All relevant Contractors must ensure the same.

7.26 Lifting Machines and Tackle

The Principal Contractor and all Contractors shall ensure that lifting machinery and tackle is inspected before use and thereafter in accordance with the Driven Machinery Regulations and the Construction Regulations. A competent lifting machinery and tackle inspector need to be appointed in writing and must inspect the equipment daily or before use, taking into account that:

- All lifting machinery and tackle has a safe working load clearly indicated;
- Regular inspection and servicing is carried out;
- Records are kept of inspections and of service certificates;
- There is a proper supervision in terms of guiding the loads that includes a trained banksman to direct lifting operations and check lifting tackle;
- The operators are competent as well as physically and psychologically fit to work and in possession of a medical certificate of fitness to be available on site.

7.27 General Machinery

The Principal Contractor and relevant Contractors shall ensure compliance with the Driven Machinery Regulations, which include inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE or clothing, and training those who use machinery.

7.28 High Voltage Electrical Equipment, Underground, Overhead power lines

Care shall be taken when working close to, over or under high voltage reticulation power lines or cables. Underground services to be identified beforehand and the layout of such to be include in the Contractors Health and Safety Plan. A safe work procedure be drawn up and included into Contractors Health and Safety Plan.

7.29 Transport of Workers

The Principal Contractor and other Contractors shall not:

- Transport persons together with goods or tools unless there is an appropriate area of section to store them and all loose tool and plant are tied down and secured;
- Transport persons in a non-enclosed vehicle, e.g. truck; there must be a proper canopy (properly covering the back and top) with suitable sitting area. Workers shall not be permitted to stand or sit at the edge of the transporting vehicle.

- Transport workers in bakkies unless they are closed/ covered and have the correct number of seats for the passengers.

7.30 Working from Fall Risk Positions

Comply with Construction Regulation, Section 10

The Principal Contractor shall ensure that a Fall Protection Plan, developed by a competent person who is designated as the Fall Protection Plan Developer and registered Institute of Working at Heights or similar, is available on site and understood by all employees who will be working from fall risk positions. All employees working from fall risk positions shall protect themselves from falls by wearing a full body harness and the lanyard shall be attached as far as possible above the head of the worker to a lifeline or other approved and tested anchor point.

In addition to obvious elevated work activities, work activities which include:

- Working on the edge of an excavation where there is a risk of falling into the excavation.
- Work on the edge of a vertical drop where there is a risk of falling.
- Work on top of trucks.

shall be considered work from a fall risk positions and Section 10 of the Construction Regulations must be adhered to at all times. The hierarchy of controls must be implemented when such activities are carried out. As a minimum the employee must wear PPE, which shall include a full body harness attached to a restraint.

The Principal Contractor shall further ensure that method statements, appropriate risk assessments, safe work procedures and training are to be available prior to work commencing. All workers exposed to fall risk must undergo formal SAQA accredited “working from height/fall risk position” training.

The focus for working from a fall risk position shall include fall restraint systems where possible except during assembling or dismantling top components or where it is not deemed safe. The relevant SANS codes are to be applied as they apply to the works and the project, such as:

- SANS 10085
- SANS 50355
- SANS 50361

Should part of the works be contracted out, a competent Contractor is to be appointed and submit documentation according to the project requirements. The Principal Contractor is to note if such

work is to be contracted to specialists in the H&S Plan. The Plan is to be developed by and work managed by a competent person for the duration of the project.

The following aspects must be included:

- Notices to be posted
- Restrictions or stoppage when weather conditions are deemed hazardous
- Permit system for working from a fall risk position
- Prevention of falling tools or equipment

All workers are to be in possession of valid certificates of fitness that extend for the duration of the works. Note the requirements in the section relating to medical surveillance and the relevant SANS codes as applied to the works and the project. Registers and all relevant documentation are to be placed in the H&S file.

The Fall Protection Planner shall have the following qualifications as a minimum:

- Fall Protection Planner (Accredited SAQA Unit Standard 229994)

7.31 Demolition Operations (existing buildings and associated structures)

This work may be complete before the main contracts are awarded, however it is likely that certain structures will not be demolished as part of the enabling works contract and will become the responsibility of the main residential works contract.

Any Contractor carrying out demolition work must ensure that prior to any such work being carried out, and in order also to ascertain the method of demolition to be used, a structural engineering survey of the structure to be demolished must be carried out by a competent person and that a method statement on the procedure to be followed in demolishing the structure is developed.

<u>The following measures must also be adhered to</u>:

- The Contractor must appoint a competent person in writing to supervise and control all demolition work on site;
- The Contractor must ensure that any partly demolished structure does not pose a safety risk to workers;
- Should the Contractor be in doubt about the safety of a partly standing structure, the structure must be demarcated at a reasonable distance and sign posted, warning persons of the risk until such structure is made safe;
- The Contractor must ensure that no persons work, move or stand under any partly demolished overhanging material, which has not been adequately shored, braced or supported;
- Any support work must be designed to withstand the load being imposed on it, the design

must be held on site;

- Where the stability of an adjoining structure, building or road may be negatively impacted, the Contractor must take all necessary steps to ensure the stability thereof;
- The Contractor must ascertain the location and nature of electricity, water, gas or other similar services, which may be affected by the work being performed. A safe method of removal or work around these services must be drawn up;
- Safe and convenient access must be provided to all work areas;
- While demolition is taking place, all persons must be kept well away from the operation;
- The demolition safety plan must include what applicable personal protective equipment and clothing is required. The minimum being leather gloves; steel toecap boots; eye protection where the risk of eye injury exists i.e. cutting, grinding, hot work, impact work; hearing protection for operators and other workers exposed to noise over 85dB(A); and fall prevention and/or arrest equipment when the risk of falling exists.

Asbestos work:

The PC must ensure that Asbestos demolition and removal complies with the Asbestos Abatement Regulations of 2022. Note must be taken of the following:

- The works type 1 asbestos work and asbestos removed will be less than 10 square metres
- No employer, self-employed person or asbestos client may carry out any type 1 asbestos work unless the Chief Director: Provincial Operations has been notified in writing of the location, venue and contact details of where the asbestos work will be done, at least seven days prior to commencement of such work.
- Asbestos must be removed using a suitable, sufficient Wet Method, to ensure effective suppression of dust preventing it from becoming airborne. No grinding or intentional breaking of asbestos-containing material is permitted.
- The approved and signed plan must be submitted to DEL prior to asbestos removal being conducted.
- During the asbestos removal process, the approved plan must be fully implemented and adhered to on site.
- Asbestos removal may only start after notification has been done to the AIA and the CHSA/CHSR of the intended asbestos removal date at least 72 hours before stripping starts.
- The CHSO must complete the Asbestos Removal Checklist, Annexure F, item 12.6.2 sign it, have it signed by the CR8(1) or CR 8 (7) appointee and forward it to the CHSA and CHSR within 24 hours should the CHSA/CHSR not be present at the time of asbestos removal starting.

- Normal construction work may only proceed after asbestos removal in the previously designated asbestos zone upon written permission being obtained from the AIA.
- Stripped asbestos must be placed in an enclosed skip or container, no storage on the ground or other areas permitted.
- Disposal certificates must be obtained with 14 days of disposal and kept on the SSHSF.

7.32 Scaffolding

Comply with Construction Regulations, Section 16, General Safety Regulations, Section 6 and SANS 10085:2024– The Design, erection, use and inspection of access scaffolding.

The Principal Contractor shall appoint a competent person in writing as scaffolding Supervisor. Scaffolding Inspectors and Scaffolding Erectors must be trained and found competent to carry out scaffolding work. It is important to note that only competent scaffold erectors are allowed to build the scaffolding. The Scaffold Inspector is not allowed to build the scaffold with the scaffold erector team. The Principal Contractor must further ensure that all scaffolding working platforms are spaced at 3-meter intervals.

Scaffolding shall be erected according to SANS 10085:2024 and shall be tagged “safe for use” after inspection indicated that the scaffold is safe to use. The inspection of the scaffold shall be in

writing and proof thereof shall be available for any user of the scaffold as well as for audit purposes.

Scaffold left erected while The Principal Contractor is not in attendance, must be tagged with a “Not Safe for Use” tag and all reasonably practicable measures must be taken to prevent unauthorized access to the scaffold.

Scaffold must be inspected by the competent scaffold inspector on completion of the scaffold build, weekly thereafter or following severe weather conditions.

Hazards such as overhead power lines must be identified before the scaffold is build and must be reflected in the risk assessment.

When using mobile scaffold, employees and materials must be removed from scaffold before moving the mobile scaffold. Hazards such as overhead power lines must be identified before moving mobile scaffold and must reflect in the risk assessment.

7.33 Ladders and Ladder Work

The Principal Contractor must ensure that all ladders are: inspected daily with monthly records kept; in good safe working order; the correct height for the task; extend at least 1m above the landing; fastened and secured; and at a safe angle. Stepladders must be safe for use, must be the **correct height for the task and the top two rungs may not be used**. **This project will also require workers to work in bulk excavations where heights will be in excess of 10m.** Records of inspections must be kept in a register on site. Contractors using their own ladders must ensure the same. Take note of the ladder regulation promulgated under the General Safety Regulations.

7.34 Formwork and Support Work (Temporary Works)

The Principal Contractor must ensure that the provisions of the Construction Regulations are adhered to. These provisions must include but not be limited to ensuring that all design drawings are available on site, that all formwork and support work equipment used is examined for suitability before use (by the supplier) with proof of these inspections forwarded to the hirer/user, that all formwork and support work (including propping and back-propping) **is inspected by a competent person appointed in writing, immediately before, during and after placement of concrete or any other imposed load and thereafter on a daily basis until the formwork and support work has been removed. Records of all inspections must be kept in a register on site held by the Principal Contractor.** The inspection records must be suitably sequenced and filed for easy reference by the H&S Agent and other interested party.

The necessary edge protection guard rails must be fitted before any trade begins work on a formwork deck or related structure. Such guard rail system must be of a recognised/acceptable design and must be suitably strong to carry the lateral force of a person. **Double hand rails will be required as part of the guard rail system. Toe boards will be required at edges of floors and decks where there is a risk of falling objects and materials/equipment/tools.**

7.35 Occupational Health and Hygiene (exposure to physical and chemical stress factors)

Exposure of workers to occupational health hazards and risks is very common in any work environment, especially in construction. Occupational exposure is a major problem and all Contractors must ensure that

proper health and hygiene measures are put in place to prevent exposure to these hazards. Prevent inhalation, ingestion, and adsorption through the skin of hazardous chemical substances.

- Noise induced hearing loss is a highly underrated occupational condition. Occupational noise emitted by construction machinery and power tools must be controlled as far as possible by implementing engineering solutions such as noise dampening, regular maintenance, servicing and inspection, screening off the noise, and reducing the number of persons exposed. Personal protective equipment such as earmuffs and earplugs must also be used in conjunction with engineering controls so as to reduce noise exposure to below the acceptable levels. **Each and every contractor is required to identify sources of noise which could impact on its personnel, they must then assess the levels of noise, followed by implementing the necessary control measures to reduce the noise to acceptable levels (below 85dB). This must be clearly set out in the Contractor's hearing conservation programme contemplated in the NIHL Regulations.**

- Ergonomics is the study of how workers relate to their workstations. We advise the **Principal Contractors** and Contractors to take this into consideration when conducting risk assessments, thereby improving the worker-task relationship, which will in turn improve productivity and reduce chronic conditions such as back strains, joint problems and mental fatigue, amongst others.

- Dust control (silica dust) – The Principal Contractor must ensure that dust control measures are implemented and enforced **in order to minimise the levels of exposure to below the legal limits. Nuisance dust must also be controlled by means of damping down stock piles and operations such as piling, earthworks, etc.**

- Asbestos fibres – The P/Contractor responsible for the removal of existing asbestos materials must ensure that a registered asbestos contractor is appointed and that the necessary health & safety measures are taken to prevent any exposure to asbestos fibres. An Approved Asbestos Inspection Authority (AAiA) will need to be appointed to co-ordinate this process and ensure that the required air monitoring (environmental and personal) is undertaken in accordance with the Asbestos Regulations.

Annexure A: Acknowledgement of Health aand Safety Documentation

CONTRACTOR NAME:	

I, the undersigned, hereby acknowledge that I have obtained copies of the following listed documentation and confirm that I fully understand the contents thereof and the consequences of non-compliance. The Principal Contractor furthermore reiterates its commitment to compliance of the requirements contained within the following provided documentation:

- OHS Bill of Quantities (Combined in Project Boq)
- Acknowledgement of Baseline Risk Assessment
- Acknowledgement of Helath and Safety Specifications

Signed at …… on this ……... Day of …… 20……...

CONTRACTS MANAGER			
NAME	DESIGNATION	DATE	SIGNATURE
CONTRACTS SUPERVISOR			
NAME	DESIGNATION	DATE	SIGNATURE
WITNESS 1			
NAME	DESIGNATION	DATE	SIGNATURE
WITNESS 2			
NAME	DESIGNATION	DATE	SIGNATURE