

MQHAWE HIGH SCHOOL

BASELINE RISK ASSESSMENT

(The baseline risk assessment may not contain all anticipated activities on site)

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1. BACKGROUND

CIVPRO Engineering JV (CIVPRO) was appointed by the Development Bank of Southern Africa (DBSA) in response to their RFP 116/2018: Provision of Professional Services for Conditional Assessment, Detailed Planning & Design, Procurement Assistance & Tender Documentation, Construction Monitoring and Close Out for the Various school across the KwaZulu-Natal Province for a period of 3 years as and when required without any commitment to a quantum of work ordered.

In response, CIVPRO mobilized their team to conduct a site visit of each of these schools on the week of 20 May 2019. In this week 14 schools in KZN were visited to carry out inspections related to the refurbishment of these schools. This report details the occupational, health and safety risks identifies that by that process.

CIVPRO is committed to achieving the highest standards of health and safety for all stakeholders and others who may be affected by our activities e.g., students, staff, parents, customers, contractors, and clients by:

- ensuring that all hazards and risks are identified and properly controlled so that employees and others can be protected from danger and ensuring that injury and ill health are prevented;
- providing adequate resources to support the full implementation of the policy;
- ensuring that all persons are competent to carry out the duties asked of them, providing information, instruction, supervision and training as necessary;
- consulting all employees, safety representative and subcontractors in the development of the OHS policy and encouraging them to participate in and contribute to improvements in the working environment;
- as a minimum standard, monitoring, reviewing and complying with Health and Safety legislation, regulations and other requirements that are relevant to our operations;
- providing and maintaining safe plant and equipment and a safe working environment;
- taking prompt and effective action to address any problems identified through monitoring the implementation of safe working practices and procedures;
- communicating openly with all persons working on behalf of the company in relation to health and safety matters; and
- reviewing and revising the policy and procedures at regular intervals and at least annually.

2. PROJECT DESCRIPTION AND SCOPE

The scope of works for the asbestos replacement programme for the Mqhawe High School consists of the following:

- Repair structural defects on existing facilities to be retained;
- Replace broken and missing window frames;
- Replace broken and missing window panes;
- Replace broken and missing timber doors including all ironmongery;

- Demolish one (2) retaining walls including the foundations;
- Demolish four (4) building blocks (Blocks H, K, N & P as per the SDP) including removal of foundations;
- Plaster to walls and fixing of wall cracks;
- Remove damaged / rotting purlins and replace with new purlins;
- Remove damaged / rotting rafters or trusses and replace with new rafters or trusses;
- Remove existing roof sheeting and replace with new roof sheeting, barge flashing and ridge capping and fascia boards;
- Remove damaged / collapsing rhino board ceilings;
- Install new brandering and new rhino board ceiling including cornices;
- Identify defective plaster, saw cut, demolish plaster, replaster and make good with polymer modified plaster;
- Prepare, sand, prime and paint all previously painted surfaces and newly plastered surfaces including window frames, doors, door frames and ceilings;
- Replace damaged/missing rainwater goods and replace with new aluminium seamless gutters and uPVC downpipes, elbows, bends and shoes;
- Repair/ install perimeter fence and reposition an internal fence to make way for a new access road;
- Repair / replace electrical reticulation and fittings;
- Install new electric connection, reticulation, fittings and connect to the main supply;
- Rip and reconstruct floors, screed and installation of vinyl tiles;
- Repairs and construct walkway, concrete aprons, v-drains and stormwater drainage;
- Construction new stormwater management infrastructure and water and sewer reticulation;
- Repairs / replace plumbing (sewer and water) drains and sanitary ware;
- Repair and replace chalkboards and pinning boards;
- Repair or install burglar doors and gates;
- Construct 7 new building blocks (Block M, S, T, U, V, W & X) to KZN DoE Norms and Standards;
- Construct a new paved assembly area (709m²);
- Construct a new surfaced driveway parking (44 + 1 disabled bays);
- Construct retaining walls;
- Construct covered walkways and uncovered walkways with stairs and ramps;
- Construct a new burn pit or bin area; and
- Construct a new surfaced access road.

3. RISK ASSESSMENT METHODOLOGY

To ensure that all work carried out is completed in a safe manner a risk assessment will need to be carried out by the contractor according to the Occupational Health and Safety Act (Act 85 of 1993): Construction Regulations, 2014. Prior to this CIVPRO has carried out a risk assessment to identify the major risks prior to selection or evaluation of the Contractor to ensure that all stakeholders are aware of the risks that prevail.

4. RISK MATRIX

Table 3 outlines the risk matrix that will be employed to evaluate risks. Each activity will be assigned a score from each of the columns including Injury, severity, frequency of occurrence, potential damage/loss and environmental.

Table 1. Risk matrix for the identification of risks

RISK MATRIX							
A	Injury Severity	B	Frequency of Occurrence	C	Potential Damage/Loss	D	Environmental
0	No injury.	0	No occurrence.	0	No damage.	0	No effect.
2	Minor lacerations.	2	Occurs seldom.	2	Minor damage.	2	Minor effect.
4	More severe injury.	4	Occurs occasionally.	4	Medium damage (repair on site).	4	Serious effect (short term).
8	Serious injuries.	8	Occurs often.	8	More serious damage.	8	Very serious effect (long term).
10	Loss of life.	10	Could / Has happened.	10	Severe damage.	10	Catastrophic effect.

4.1. Risk Classification

Once the scores for each of the activities are assigned, they are summed to provide a single rating per activity. These final scores are then used to classify each activity according to its risk using table 2 below.

Table 2. Risk classification

RISK CLASSIFICATION	
LOW	0 - 5
MEDIUM	6 – 16
HIGH	17 - 32
CRITICAL	33 – 40

4.2. Risk evaluation

Utilizing the above methodology a risk evaluation was undertaken for all the activities for all the perceived activities to be undertaken at the schools. It is conceivable that other activities may arise as the contractor/s may choose to adopt different approaches to construction. These activities will be evaluated by both CIVPRO and the Contractor prior to the start of any work.

The tables below represent the possible risks to be expected on site, however, this is not a complete list and the tenderer is expected to apply his/her mind to the proposed works to include other factors that may pose a risk.

MATERIAL DELIVERY AND HANDLING

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Inherent Risk Rating					Controls	Residual Risk Rating					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
1	Driving in and out of the yard	<ul style="list-style-type: none"> Collision with other vehicles or pedestrians 	<ul style="list-style-type: none"> Property damage Injuries Fatalities 	10	8	8	4	30	<ul style="list-style-type: none"> Maximum speed of 10 km/h Speed limit sign to be displayed at the entrance of the site Operators to be trained to give way to large construction / articulated vehicles 	4	4	4	2	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Driver Operations Manager Safety Officer
2	Handling of material	<ul style="list-style-type: none"> Not using personal protective equipment Unavailability or lack of following safe working procedure Employees lifting extremely heavy material 	<ul style="list-style-type: none"> Back injuries Dropping load onto fingers, legs, or feet Damage to materials 	4	8	2	2	16	<ul style="list-style-type: none"> Personal protective equipment to be used (safety shoes, gloves, overalls, and hardhat) Safe material handling procedures considering ergonomics to be developed and employees to be trained on it engaging sufficient workers to load and unload the materials or equipment in an orderly manner should be in place Communication to be highly in place when two or more employees are lifting one object. Equipment to be used to lift heavy objects 	4	4	4	2	14	<ul style="list-style-type: none"> Construction Manager Construction Supervisor

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Inherent Risk Rating					Controls	Residual Risk Rating					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
3	Stacking and laydown of material	<ul style="list-style-type: none"> Obstacles on ground may cause tripping and the load may fall on employee Unstable ground Unsafe stacking of material Stacking in areas outside the site 	<ul style="list-style-type: none"> Collapsing of stacks Injury to body and possible fatality 	10	4	8	8	30	<ul style="list-style-type: none"> Ensure that the lay down area is free of obstacles and adequate to stack materials being off-loaded in an orderly manner Employees to be inducted in the importance of good housekeeping Stacking, storage, and laydown area to be demarcated Stacks heights should not exceed three times the size of the base Stacks to be maintain neat and stable All unstable stacks to be dismantled and be properly stacked 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor
4	Handling of material from stacks	<ul style="list-style-type: none"> Materials may dislodge and fall on employees 	<ul style="list-style-type: none"> Injury to all parts of body 	8	4	4	4	18	<ul style="list-style-type: none"> Employees are not allowed to climb on materials that are stacked and should always handle materials from the top of a stack first Handling of material should always start from the top of the stack. 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor

CONSTRUCTION VEHICLE AND MOBILE PLANT

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
5	Operation of construction vehicle and mobile plant on site	<ul style="list-style-type: none"> Plant/ vehicle operated by personnel without competency and medical fitness certificates Speeding Plant / vehicle mechanical faults Vehicles overturning Oil leaks Plant/ vehicle hitting personnel Personnel falling from vehicles Noise 	<ul style="list-style-type: none"> Injury to employee/ personnel Fatalities Construction vehicle hitting employee/ public Noise induced hearing loss Environmental damage Property damage 	10	8	8	4	30	<ul style="list-style-type: none"> Only trained, competent and medically fit personnel should operate plant and construction vehicle Daily safety checks should be conducted on the plant, non-conformances to be immediately rectified Drip trays should be provided for plant and be placed under when stationery In case of oil leaks, they should be cleaned and be disposed of in an approved site Vehicles must be driven at 10 km/h or less inside the site camp. Outside the camp construction vehicles should obey road rules. Construction vehicle should always be traveling at a speed that takes into consideration site conditions and safety. Extra care must be taken when working on slopes Planned maintenance program must be applied All construction vehicles must be fitted with reverse alarms and amber lights Employees working near the plant must wear reflector vests Construction plant not authorised to carry passengers should not carry construction employees 	4	4	8	4	20	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Plant Operator Driver

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
									<ul style="list-style-type: none"> Plant should not work in the same position as labour Construction vehicle/ Plant operators must wear full PPE- safety boots, overalls and those operating noisy machine must wear ear plucks as per recommendations of the safety officer 						

DEMOLISHING ASBESTOS

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
6	Preparations for the Asbestos demolishing work	<ul style="list-style-type: none"> Lack of compliance with Asbestos Regulations, 2001. 	<ul style="list-style-type: none"> Employees and public exposure to asbestos Asbestosis, increased risk of lung cancer and heart disease 	8	4	8	10	32	<ul style="list-style-type: none"> Asbestos demolishing to be conducted by a Registered Asbestos Contractor Notification of Asbestos work to be submitted to Department of Labour 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager Safety Officer Contractor
7	Removal of asbestos roof sheets, asbestos gutters, asbestos downpipes, and asbestos cladding walls	<ul style="list-style-type: none"> Unsafe methods of demolishing asbestos; Release of asbestos fibres to environment Falling through fragile material Falling from heights 	<ul style="list-style-type: none"> Inhalation of asbestos fibres by employees, school personnel and community which may result in irreversible and fatal diseases including Asbestosis, increased risk of 	8	4	8	10	32	<ul style="list-style-type: none"> Fall protection plan to be developed and implemented Area under demolishing to be isolated by barriers from other activities and be provided Signs to be posted conspicuously, prohibiting people from and warning them against entering the workplace Wet removal, i.e. the suppression of dust with water containing a wetting agent. 	4	4	4	8	20	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager Safety Officer Contractor

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
			lung cancer and heart disease Body injuries						<ul style="list-style-type: none"> • The asbestos containing material must be wetted throughout its entire depth and maintained in a wet condition during removal • Safe working procedure for demolishing asbestos and working at height to be provided • Asbestos contractor to be allowed time and space to conduct his works safely • The Principal Contractor's employees to be instructed not be a part of asbestos demolishing • Demolishing contractor to also ensure the following: <ul style="list-style-type: none"> ○ His employees must have certificates of medical fitness from an occupational health doctor which must include lung function tests and lung X rays. ○ Only personnel fit to demolish asbestos must form part of asbestos demolishing team • Employees must be issued with the following PPE: <ul style="list-style-type: none"> ○ Overalls ○ Safety Boots ○ Helmets ○ Gloves ○ Respirators – Filters to be changed daily ○ Full body covering suits ○ Non-slip disposable feet covering 						

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
									<ul style="list-style-type: none"> All PPE excluding overalls and safety boots must remain in a dedicated area on site to prevent exposure to the public PPE may be disposable, washable for re-use –which shall be done by a laundering contractor that understands the requirements for handling All tools that were involved in demolishing asbestos to be stored safely in a dedicated store room PPE must be changed as often as possible at the discretion of the safety officer to ensure safety and health Employees to be trained on the asbestos risk assessment and safe working procedures before they start works <p>Employees involved in removing asbestos must remain within the demarcated areas that are controlled</p>						
8	Ensuring hygiene practices during asbestos demolishing	<ul style="list-style-type: none"> Employees and public exposure to asbestos fibres Employees demolishing asbestos coming contaminating areas outside asbestos demolishing control Employees encountering personnel conducting activities that 	<ul style="list-style-type: none"> Inhalation of asbestos fibres by employees and community, which may result in fatal diseases including Asbestosis, increased risk of lung cancer and heart disease 	8	4	8	10	32	<ul style="list-style-type: none"> Asbestos demolishing area to be demarcated and signage to be placed at the entrance indicating only authorized person to enter The employer shall set up decontamination facilities outside the workplace for the exclusive use of employees exposed to asbestos. Employees must be transported in an enclosed vehicle that complies with requirements and that shall be decontaminated accordingly 	4	4	4	8	20	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager Safety Officer Contractor

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
		excludes asbestos control							<ul style="list-style-type: none"> • These facilities shall consist of a "clean" change- room, toilet/shower facilities and a "dirty" decontamination change-room with vacuum- cleaners for the preliminary de-dusting of protective clothing • Employees must remove personal clothes in the "clean" change-room and put on clean protective clothing, gum-boots and respirators before entering the work- place • Employees must vacuum-clean to re-dust before the protective clothing and gumboots are removed in the "dirty" decontamination change room when leaving the workplace. • While still wearing their respirators, the employees should proceed to the showers and only remove their respirators while showering. • All showering must be done using soap and water • All contaminated clothing and footwear shall be left in the decontamination change-room and should be immediately stored in suitable containers prior to disposal or laundering. • Contaminated respirators that are removed in the showers must be removed after being washed down and stored for disposal or made good for re-use. 						

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
									<ul style="list-style-type: none"> The collection of protective clothing, footwear and respirators shall be strictly controlled Asbestos demolishing personnel must not eat onsite until decontaminated 						
9	Demolishing old structures	<ul style="list-style-type: none"> Building/ structures falling on employees Flying of heavy objects e.g., Bricks, concrete, and metal strips Electricity Dust generation 	<ul style="list-style-type: none"> Injury to employee Short term or long-term hearing loss Injury to employees Electrical shocks which can also be fatal to employees Dust inhalation which can lead to chest infections 	8	4	8	10	32	<ul style="list-style-type: none"> Erect warning signs at the areas where demolition is to occur Area where demolition is taking place to be demarcated Engineers specification to be strictly adhered to Only trained employees to be involved in demolition Employees to wear full PPE Only personnel involved on trained on the task hazards to be allowed in the area All electrical connection to the structure under demolition to be identified and disabled before demolition occurs 	4	4	4	8	20	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager Safety Officer Contractor
10	Housekeeping and waste temporal storage	<ul style="list-style-type: none"> Exposure to asbestos Theft Release of asbestos fibres Employees or public exposure to asbestos fibres 	<ul style="list-style-type: none"> Asbestos fibres inhalation 	8	4	8	10	32	<ul style="list-style-type: none"> Good housekeeping to be implemented maintained in areas under demolishing and storage Asbestos to be stored in an area where it will be fully covered to prevent airborne of fibres they could have been disturbed Skips that can be covered can be obtained and be label Asbestos waste to be stored in a secured area and be label All used body covering to be treated as asbestos waste 	4	4	8	8	24	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager Safety Officer Contractor

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
									Liquids or sludge containing asbestos shall be collected in collecting-tanks from where it may be pumped into sealable drums or closed-type tanker for transit to the waste disposal site						
11	Final disposal of asbestos waste	<ul style="list-style-type: none"> Release of asbestos fibres Public and employee exposure 	<ul style="list-style-type: none"> Public and employee exposure which results fatal lung diseases 	8	4	8	10	32	<ul style="list-style-type: none"> Ensure that asbestos is being transported by a truck that is totally enclosed Asbestos to be placed in covered skips Ensure that employees loading asbestos are fully wearing PPE and following safe working procedures Ensure that all pieces of asbestos are disposed with none left behind Ensure that all asbestos waste and disposable PPE are being taken with asbestos for safe disposal Ensure that tape, barriers and other debris are carefully removed and disposed of as asbestos waste Ensure that asbestos is disposed of in an approved site Disposal certificates must be obtained and be kept in the file All vehicles, re-usable receptacles and covers, which have been in contact with asbestos waste, shall be cleaned by a dust-free method 	4	4	8	8	24	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager Safety Officer Contractor

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
12	Decontamination of work places	<ul style="list-style-type: none"> Release of asbestos fibres Public and employee exposure 	<ul style="list-style-type: none"> Public and employee exposure which results in fatal lung diseases 	8	4	8	10	32	<ul style="list-style-type: none"> The employer must clean all surfaces in the workplace, preferably by first using vacuum cleaning equipment with a filtration efficiency of 99% for particles of one micrometer in size and then wet mops 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager Safety Officer Contractor

USE OF POWERTOOLS

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
13	Checking the machine	<ul style="list-style-type: none"> Machine not in safe condition to be operated Oil leaks 	<ul style="list-style-type: none"> Injuries Fatalities 	8	8	4	4	24	<ul style="list-style-type: none"> Machines to be well maintained and kept in safe working condition No fuel / oil leaks on the machine. When the equipment has leaks, it should not be used and be fixed to prevent leaking Leaks must be cleaned from the environment and in clear labelled chemical waste bin 	4	4	4	4	16	<ul style="list-style-type: none"> Operations Manager Operator
14	Starting the machine	<ul style="list-style-type: none"> Moving parts. Not holding the machine firmly when starting it. 	<ul style="list-style-type: none"> Injuries Fatalities 	10	4	8	4	26	<ul style="list-style-type: none"> Correct PPE to be worn, safety boots, vibration inducing gloves, ear muff, dust masks Only trained employees to use the equipment 	4	4	4	4	16	<ul style="list-style-type: none"> Operations Manager Operator

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
15	Operating the machine	<ul style="list-style-type: none"> Vibration Noise Dust 	<ul style="list-style-type: none"> Blanching of fingers, loss of sensation and loss of grip strength Noise induced hearing loss Eye injuries due to flying objects Bodily Injuries 	4	8	4	4	20	<ul style="list-style-type: none"> Employees to wear full PPE during machine operation: safety boots, vibration inducing gloves, ear muff, dust masks Training on PPE use 	4	4	4	4	16	<ul style="list-style-type: none"> Operations Manager Operator
16	Returning the machine to the store on completion of work.	<ul style="list-style-type: none"> Returning damaged faulty machine. 	<ul style="list-style-type: none"> Injuries Environmental contamination 	4	4	4	4	16	<ul style="list-style-type: none"> Machines to be well maintained and kept in safe working condition No fuel / oil leaks on the machine. When the equipment has leaks, it should not be used and be fixed to prevent leaking Leaks must be cleaned from the environment and waste be temporary placed in a hazardous substance bin 	2	2	4	2	10	<ul style="list-style-type: none"> Operations Manager Operator

ELECTRICAL TOOLS USE

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
17	Electrical tools selection	<ul style="list-style-type: none"> Unsafe tools Injuries to hands, legs, and body. Electrical faults Damage to property 	<ul style="list-style-type: none"> Injuries to hands, legs, and body. Electrical faults Damage to property 	8	4	8	4	24	<ul style="list-style-type: none"> Set standards of tools to be bought by buying department: only SABS approved tools to be used on site. 	4	4	4	4	16	<ul style="list-style-type: none"> Operations Manager Operator
18	tools Electrical use	<ul style="list-style-type: none"> Broken or unsafe cords Electrical faults Electrocution Noise 	<ul style="list-style-type: none"> Bodily injuries Electrocution Fire ignition 	8	4	8	4	24	<ul style="list-style-type: none"> Portable electrical tools to be inspected by a competent person before use Only trained and experienced employees to operate equipment Safety guards must be on machine at all time Fire extinguisher to be always available Ensure all extension cords are of a good standard Personal protective equipment – ear plucks and goggles 	4	4	4	4	16	<ul style="list-style-type: none"> Operations Manager Operator
19	Placing of equipment during use	<ul style="list-style-type: none"> Cables lying in water, vehicles driving over cables, tripping hazard 	<ul style="list-style-type: none"> Equipment damage Property damage Injuries 	8	4	8	4	24	<ul style="list-style-type: none"> Place equipment in safe positions where they will not cause safety risk 	4	4	4	4	16	<ul style="list-style-type: none"> Operations Manager Operator
20	Maintenance program for all portable electrical tools	<ul style="list-style-type: none"> Broken switches, damaged cable and plugs and guards removed 	<ul style="list-style-type: none"> Injuries to hands, back, shoulders and legs Damage to equipment 	8	4	8	4	24	<ul style="list-style-type: none"> Maintenance program for tools to be established Replace faulty/ non-complying tools 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Supervisor Operations Manager Operator

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
21	Storage of portable electrical tools	<ul style="list-style-type: none"> Leaving tools lying on site, tripping hazard, untrained persons using tools 	<ul style="list-style-type: none"> Theft Injuries Property damage 	8	4	4	4	20	<ul style="list-style-type: none"> Ensure all portable electrical tools are returned to the stores Store all portable tools in a safe dry place 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Supervisor Operations Manager Operator
22	Working in the vicinity of other employees	<ul style="list-style-type: none"> Danger of exposure to hazards Noise Dust Flying objects 	<ul style="list-style-type: none"> Body injuries Noise induced hearing loss Chest infections and allergic reactions Eye injuries 	8	4	4	4	20	<ul style="list-style-type: none"> Employees to work too close to others Employees to take reasonable care of others at work PPE to be used by employees exposed to hazards (ear protection and dust masks) 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Supervisor Operations Manager Operator All Employees

HAND TOOLS

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
23	Checking of collected tools	<ul style="list-style-type: none"> Unsafe tools that may cause injuries 	<ul style="list-style-type: none"> Body injuries 	8	4	4	4	20	<ul style="list-style-type: none"> Trained competent persons using the tools must be able to identify when something is not right. 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Supervisor Operations Manager Operator
24	Using of hand tools	<ul style="list-style-type: none"> Tools in poor condition Tools in poor condition Sub-standard work and possible damage to plant and equipment. 	<ul style="list-style-type: none"> Hand, foot, and back injury. Sub-standard work and possible damage to plant and equipment. 	8	4	8	4	24	<ul style="list-style-type: none"> Tools to be well maintained and checked by a competent person Sub-standard tools cause sub-standard work. Use the correct tools in good condition 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Supervisor Operations Manager Operator

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
									<ul style="list-style-type: none"> Provide PPE: hard hats, safety shoes, safety glasses, leather gloves, dust mask, overall. Employees to be trained on the correct use of issued PPE. 						

SKILLSAW

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
25	Preparation before works	<ul style="list-style-type: none"> Unsafe machine Work area with tripping and falling hazards 	<ul style="list-style-type: none"> Body injuries 	8	4	8	4	24	<ul style="list-style-type: none"> Clean up area Check electrics, mechanics and ensure guards are in place 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Supervisor Operations Manager Operator
26	Starting and using the machine	<ul style="list-style-type: none"> Rotating blade Material to be cut containing metal Flying foreign objects 	<ul style="list-style-type: none"> Body injuries Eye injuries Dust inhalation 	8	4	8	4	24	<ul style="list-style-type: none"> Machine to be only operated by a trained person Personal protective equipment: gloves, goggles, ear plucks, dust masks and safety boots Check material to be cut is free of nails or any metals 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Supervisor Operations Manager Operator
27	Complete task and switch off machine	<ul style="list-style-type: none"> Unstable work item or continuing blade rotation 	<ul style="list-style-type: none"> Unstable work item or continuing blade rotation 	8	4	8	4	24	<ul style="list-style-type: none"> Place tools away only after blade has topped rotating Guard in place 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Supervisor Operations Manager Operator

DRILLING, GRINDING AND WELDING

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
28	Operating small hand held Drill	<ul style="list-style-type: none"> Noise Flying objects Mechanical faults 	<ul style="list-style-type: none"> Noise induced hearing loss Eye injuries due to flying objects Electrocution Bodily Injuries 	8	4	8	4	24	<ul style="list-style-type: none"> Driller to be inspected for Safety before use Driller to be operated by a trained personnel Operator to wear goggles, rubber gloves and earplugs 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Supervisor Operations Manager Operator
29	Operating a big drilling machine	<ul style="list-style-type: none"> Hand arm vibration Noise Flying objects Mechanical faults 	<ul style="list-style-type: none"> Blanching of fingers, loss of sensation and loss of grip strength Noise induced hearing loss Eye injuries due to flying objects Bodily Injuries 	8	4	8	4	24	<ul style="list-style-type: none"> Drill to be inspected for Safety before use Drill to be operated by trained personnel Operator to wear vibration reducing gloves, google and earplugs 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Supervisor Operations Manager Operator
30	Operating a grinder	<ul style="list-style-type: none"> Flying sparks Mechanical falls Noise 	<ul style="list-style-type: none"> Eye injuries Electrocution Noise induced hearing loss Hand and bodily injuries 	8	4	8	4	24	<ul style="list-style-type: none"> Grinder to be inspected for Safety before use Grinder to be operated by a trained person Operator to wear face shields, rubber gloves and earplugs 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Supervisor Operations Manager Operator
31	Welding	<ul style="list-style-type: none"> Flying sparks Electrical faults Noise 	<ul style="list-style-type: none"> Eye injuries Electrocution Noise induced hearing loss Hand and bodily injuries 	8	4	8	4	24	<ul style="list-style-type: none"> Welding equipment to be inspected for Safety before use Operator to be trained personnel Operator to wear face shields, rubber gloves and earplugs 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Supervisor Operations Manager Operator

HANDLING OF HAZARDOUS CHEMICAL SUBSTANCES

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
32	Use and storage of hazardous chemical substances (HCS)	<ul style="list-style-type: none"> • Skin and eye contact • Inhalation of HCS • Ingestion of HCS • Exposure to toxic levels exceeded • Fire / explosions 	<ul style="list-style-type: none"> • Burns • Dermatitis • Eye irritation • Respiratory track problems • Upset stomach • Environmental damage • Property damage 	8	4	8	4	24	<ul style="list-style-type: none"> • Consideration must be given to substituting or using less hazardous chemicals • MSDS to be available for chemicals and be strictly followed • Containers must be properly labelled • Safe storage as per MSDS and dispensing of chemicals should be practiced • Appropriate PPE as per MSDS should be provided and used • Good hygiene standards should be in place and maintained by management • Spillages should be cleaned immediately and be disposed of in an approved site 	4	4	4	4	16	<ul style="list-style-type: none"> • Construction Manager • Construction Supervisor • Operations Manager • Safety Officer • All employees
33	Storage of small quantities of diesel, petrol, and flammables	<ul style="list-style-type: none"> • Fire • Explosion • Skin and eye contact • Environmental pollution • Slip/ falls from spillages 	<ul style="list-style-type: none"> • Injuries Fatalities • Property damage • Environmental damage • Dermatitis • Eye irritation 	8	4	8	4	24	<ul style="list-style-type: none"> • Storage to be stored as per supplier's recommendations • Chemicals should only be handles by trained personnel • Material safety data sheet (MSDS) for chemicals to be provided • PPE required when handling the flammable should be warn as per MSDS specifications • Spills to be cleaned up immediately and prevented from entering streams, or drains and they should be placed in a hazardous chemical • No smoking / no naked flame sign should be displayed next to the storage area 	4	4	4	4	16	<ul style="list-style-type: none"> • Construction Manager • Construction Supervisor • Operations Manager • Safety Officer • All employees

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
									<ul style="list-style-type: none"> Storage must be in a well-ventilated room Fire extinguisher should be placed or easily accessible from the area 						

ELECTRICAL WORKS

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
34	Electrical works	<ul style="list-style-type: none"> Uncertified electrician Exposure to live electricity Electrical incidents 	<ul style="list-style-type: none"> Injuries to employees and public Property damage 	8	4	8	4	24	<ul style="list-style-type: none"> Method statement for the electrical works to be provided Certified electricians to conduct the works Power to be isolated from the working areas Insulated tools to be used working with electricity 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Electrical Contractor Operations Manager Safety Officer

EXCAVATIONS

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
35	Excavation by plant /manual	<ul style="list-style-type: none"> Hitting buried services which include power lines and waterpipes Dust production 	<ul style="list-style-type: none"> Damage to services Injuries- getting electrocuted Dust inhalation - Nose and throat irritation 	8	4	8	4	24	<ul style="list-style-type: none"> Underground services to be located before excavations are carried out Alternative routes to be taken to avoid uprooting of buried services Employees to use insulated hand tools when working in the 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager Safety Officer

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
			<ul style="list-style-type: none"> Chest infections 						<ul style="list-style-type: none"> possibility of presence of buried power lines Employees to use appropriate PPE: dust masks Wet methods to be applied to mitigate dust production 						
36	Using a pick and shovel	<ul style="list-style-type: none"> Unsafe use of a pick or shovel Employees working too close to each other Dust generation 	<ul style="list-style-type: none"> Back, hand, leg, head, and shoulders Injuries Employees striking other workers with hand tools 	8	4	8	4	24	<ul style="list-style-type: none"> Train employees on safe working with hand tools Tools to be inspected before use Employees to take reasonable care of other and not work too close to one another Induct employees on safe working procedures Employees to wear PPE – dust masks 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Driver Operations Manager Safety Officer
37	Discharging excavated material	<ul style="list-style-type: none"> Material placed too close to the excavation edges Material may add pressure on the edge of the excavation which may lead to collapse 	<ul style="list-style-type: none"> Injuries Loss of time 	10	4	8	4	26	<ul style="list-style-type: none"> Material must be placed not closer than 1m from the edge of the excavation Supervisor must instruct operator where to place discharged soil and gravel 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager
38	Operating plant and construction vehicle near open excavations	<ul style="list-style-type: none"> Plant falling into excavation Excavation damage 	<ul style="list-style-type: none"> Plant/ construction vehicle damage Excavation damage Injuries Fatalities 	10	4	8	4	26	<ul style="list-style-type: none"> Plant / construction vehicle to always keep 1 meter away from the open excavations 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
39	Work on excavations	<ul style="list-style-type: none"> Unstable excavation walls Loose material causes unsafe conditions 	<ul style="list-style-type: none"> Injuries to employees and damage to excavation 	10	4	8	4	26	Excavations to be inspected daily for safety before works to check for overhanging rocks that might fail, bad soil conditions that might collapse must be. This must be rectified for safety using methods such as removal of loosely hanging stones and shoring of unstable excavations	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager
40	Placing of excavated material	<ul style="list-style-type: none"> Materials can fall onto employees when working inside the excavation Material may cause pressure on the edges and cause collapse 	<ul style="list-style-type: none"> Injuries 	8	4	4	8	24	<ul style="list-style-type: none"> Excavated material must be stored 1 meter away from the excavation edge Employees to be instructed not to place loose soil on edge of excavation 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager
41	Left open excavations	<ul style="list-style-type: none"> Filling with water Excavations could collapse Employees could trip and fall in Vehicles and machinery could damage excavations Public may accidentally fall into open excavations 	<ul style="list-style-type: none"> Damage to excavations. Injuries to employees. Damage to plant and machinery Injuries to the public or fatalities to animals and children 	8	4	4	8	24	<ul style="list-style-type: none"> Backfill as soon as possible within the day of opening Open excavations that are left unattended must be barricaded with strong physical barricade Excavations filled with water to be dewatered mechanically in the mornings Excavations with the risk of collapsing to be braced Excavations deeper than 1.5 meters to be battered 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager
42	Backfilling by hand or plant	<ul style="list-style-type: none"> Worker may be buried in soil Plant may fall into the excavation Dust 	<ul style="list-style-type: none"> Employees being injured by collapsing material Body injury Injury to hands 	8	4	4	8	24	<ul style="list-style-type: none"> Employees to use appropriate PPE: dust masks, safety boots, gloves No employee is allowed in an excavation while it is being back filled by machinery 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
			<ul style="list-style-type: none"> Employees striking other with tools Employees being struck by plant Nose and throat irritation and chest infections 						<ul style="list-style-type: none"> Watchman to be present above excavation to watch for location of workers Plant to keep 1 meter away from the edge excavation 						

CONCRETE WORKS

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
43	Placing concrete from bucket hoisted by crane	<ul style="list-style-type: none"> Concrete bucket hitting a worker Splashing of concrete 	<ul style="list-style-type: none"> Injury to hands and body Body contacts with cement Environment contamination 	8	4	4	8	24	<ul style="list-style-type: none"> Only the Banksman / spotter to direct crane at loading and discharge Workers to be advised to stand clear of the path of the bucket Splashed concrete to be cleaned immediately and be placed in hazardous chemical substances bin 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager
44	Handling the concrete basket	<ul style="list-style-type: none"> Opening and closing the bucket Spillage of concrete Swinging basket Unstable standing surfaces 	<ul style="list-style-type: none"> Injury to hands and body Bodily contact with cement Environment contamination Falling and injuries 	8	4	4	8	24	<ul style="list-style-type: none"> Ensure bucket is properly closed after every placing Use safety gloves and overalls Cement on the must be allowed to run off to drains, sewer or water lines SDS's for cement to be available and used Spilled concrete to be cleaned immediately and be placed in hazardous chemical substances 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
									bin Employees standing on heights above 1.5 meters without edge protection to wear safety harnesses Employees to wear full PPE; full body covering overalls, safety boots, helmets, and rubber gloves						
45	Vibrating concrete	<ul style="list-style-type: none"> Concrete splash from vibrating 	<ul style="list-style-type: none"> Eye injuries Hand injuries Cement contaminating environment 	8	4	4	8	24	<ul style="list-style-type: none"> Safety goggles Safety gloves Prevent spillages to the environment and localize areas to be in contact with cement 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager
46	Mixing concrete by hand	<ul style="list-style-type: none"> Exposure to cement through inhalation of cement dust Eye contact with cement powder Hands contact with dry or wet cement Mixing cement directly on the ground 	<ul style="list-style-type: none"> Nose, throat, and lung irritation Silicosis Increased risks of Tuberculosis Burns in the skin, dermatitis Eye irritation Environment contamination 	8	4	4	8	24	<ul style="list-style-type: none"> Employees to avoid eye contact with dry powder cement. Employees to wear rubber gloves when working with cement Employees to wear dust masks when working with powdered cement Cement to be only mixed on a concrete of over an impermeable material to prevent environmental damage 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager
47	Casting concrete for the walls	<ul style="list-style-type: none"> Workers falling due to: not using safe scaffolding Concrete encountering the skin Exposure to cement through inhalation of cement dust Eye contact with cement powder 	<ul style="list-style-type: none"> Injury to body Disabling and even fatal injuries 	8	4	4	8	24	<ul style="list-style-type: none"> Strict adherence to the project's fall projection plan Use complying scaffolding Wear long rubber boots Employees to avoid eye contact with dry powder cement. Employees to wear rubber gloves when working with cement Employees to wear dust masks when working with powdered cement 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
		<ul style="list-style-type: none"> Hands contact with dry or wet cement Mixing cement directly on the ground 							Cement to be only mixed on a concrete of over an impermeable material to prevent environmental damage						

COMPACTING

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
48	Using the compaction hand- held equipment /Wacker	<ul style="list-style-type: none"> Unsafe equipment Oil leaks Vibration 	<ul style="list-style-type: none"> Hands, arms vibration disorder Noise induced hearing loss Nose throat and lung irritation, allergic reactions Body and feet injuries Environmental contamination 	4	8	4	8	24	<ul style="list-style-type: none"> Employees to work in pair to take breaks and relieve another from body vibration Employees operating hand held compactor to wear full PPE vibration reducing gloves, ear muff and safety boots Machines to be well maintained and kept in safe working condition No fuel / oil leaks on the machine. When the equipment has leaks, it should not be used and be fixed to prevent leaking Leaks must be cleaned from the environment, waste to be temporary placed in hazardous chemical subcases bin that must be emptied of in an approved landfill site 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager Operator

BRICKWORK

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
49	Preparing site for brickwork	<ul style="list-style-type: none"> Insufficient space and access problems. Working at height over open spaces 	<ul style="list-style-type: none"> Difficult to work and possible injury 	8	4	8	4	24	<ul style="list-style-type: none"> Carry out full site inspection and evaluate requirements before starting work Fall protection plan to be in place 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager
50	Transport and stacking of materials on site.	<ul style="list-style-type: none"> Insufficient space/ stacking /access problems. 	<ul style="list-style-type: none"> Poor housekeeping and causing congestion and difficult to work. 	8	4	4	4	20	<p>Only sufficient material / equipment brought on site as is required. Remove any superfluous material and ensure housekeeping standard is always maintained.</p>	4	4	4	4	16	<ul style="list-style-type: none"> Construction Supervisor Operations Manager
51	Working at height	<ul style="list-style-type: none"> Falls from heights Dropping of material /equipment. Overloading of platforms and or trestles. 	<ul style="list-style-type: none"> Body injuries Fatalities 	10	4	4	4	22	<ul style="list-style-type: none"> Fall protection plan for the project to be developed and used Safe scaffolding that complies with SANS 10085 standards to be used to access heights Ensure that supervision keeps check of materials i.e. bricks, tiles mortar etc. being loaded onto platforms. 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager
52	Housekeeping	<ul style="list-style-type: none"> Causing tripping / slipping hazards 	<ul style="list-style-type: none"> Injuries Damage 	8	4	4	4	20	<ul style="list-style-type: none"> Keeping the area clean and tidy is part of the job, not something extra Scrap and rubble to be placed in a temporal rubble collection area that should be demarcated 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
53	Task completion	<ul style="list-style-type: none"> Area not cleaned up correctly 	<ul style="list-style-type: none"> Hazards causing trips and falls 	8	4	4	4	20	<ul style="list-style-type: none"> Removal all equipment, refuse, rubble, and materials 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager

TACKLING AND LIFTING

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
54	Tackling and lifting using plant on site	<ul style="list-style-type: none"> Dropping of load due to mechanical failure of load-bearing component (equipment or accessory). Dropping of load due to unbalanced load or incorrect use of lifting accessories (chains, slings, eye bolts, etc.) Electrical cables Crushing injuries to the toes 	<ul style="list-style-type: none"> Injuries Fatalities Property damage 	8	8	8	2	26	<ul style="list-style-type: none"> Only use lifting equipment and accessories if the safe working load is clearly marked on it. When moving large loads a banksman to be provided in order to prevent collisions with persons or plant Maintenance program and inspections of the plant, chains and slings to be up-to-date Certified operator to operate the lifting plant Correct weight of loads to be applied Lifting and tackling not to be done under electrical cables Rubber or similar handling gloves for handling chains and slings to be used Steel toe-cap boots to prevent crushing injuries to the toes, overalls, and reflector vests 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager

ELEVATED POSITIONS & ROOF WORK

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
55	Accessing heights	<ul style="list-style-type: none"> Open edges Using of unsafe height access equipment 	<ul style="list-style-type: none"> Falling - Injuries to employees Fatalities Property damage 	10	8	4	4	26	<ul style="list-style-type: none"> Fall protection plan should be used for works done on elevated positions which starts from 1.5 meters Scaffolding that complies with SANS 10085 standards should be used to access heights higher than 1.5 meters Ladders should be used to access heights less than 1.5 meters Safe ladders should be used to access excavations deeper than 1.5 meters Safety harness should be work when working at heights that are without edge protection Barricade and cover all openings to avoid unnecessary incidents 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager
56	Lowering material	<ul style="list-style-type: none"> Falling objects 	<ul style="list-style-type: none"> Falling objects 	8	8	4	4	24	<ul style="list-style-type: none"> No gear, debris or other material must be dropped from heights All material and equipment must be lowered or chuted to lower levels 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager
57	Conducting roof work	<ul style="list-style-type: none"> Falling Dropping material 	<ul style="list-style-type: none"> Injuries Fatalities 	10	8	4	4	26	<ul style="list-style-type: none"> Method statement/ safe working procedure for roof work to be provided Ensure that anchor points can hold 70the weigh exerted on them. Ensure all safety belt catches are hooked onto anchor points 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
									<ul style="list-style-type: none"> If there is no place to hook a safety belt – a lifeline must be supplied Ensure the length of the safety harness is safe and prevents employees from hitting the ground Employees to work safely and avoid dropping material Employees working below overhead work to wear helmets 						
58	Maintenance of areas below elevated positions	<ul style="list-style-type: none"> Keep all debris, rocks, scraps, and rubble away from the work area 	<ul style="list-style-type: none"> Tripping and falling Injuries 	8	4	8	4	24	<ul style="list-style-type: none"> Ensure good standard of housekeeping. Always clean your work area throughout the day 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager
59	Unsafe means of accessing heights	<ul style="list-style-type: none"> Drum may buckle or break 	<ul style="list-style-type: none"> Injuries Fatalities 	10	8	4	4	26	<ul style="list-style-type: none"> Do not stand on empty drums or chairs to access heights Ensure enough scaffolding and ladders are provided on site 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager

SCAFFOLDING

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
60	Erecting of the scaffolding and use	<ul style="list-style-type: none"> Scaffold collapse Employees may fall off scaffold 	<ul style="list-style-type: none"> Injuries Fatalities Property damage 	10	8	4	4	26	<ul style="list-style-type: none"> Scaffold must only be erected, altered, or dismantled under the supervision of a competent scaffolding erector appointed in writing Scaffolding should be erected as per SANS10085 standards If there is more than one scaffolding on site, it should be numbered for correlating with the checklists Scaffolding to be erected on solid and stable ground and to have base plates Scaffold standards must be secure and braced. All scaffold components must be in good condition, free of corrosion and not damaged Scaffolding must have sufficient scaffold boards, and it should be fully fitted with guard rails. Access must only be through a ladder Mobile scaffolding must be locked after being moved Safe and convenient access for all employees to their place of work must remain a priority -scaffolding must be erected in such a way so as not to obstruct any through-way or access ladder Heavy equipment / materials must not be placed on scaffold 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager Contractor

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
									platforms unless the scaffold has been designed to hold the weight						
61	Dismantling scaffolding	<ul style="list-style-type: none"> Scaffold collapse Employees falling 	<ul style="list-style-type: none"> Injuries Fatalities Property damage 	8	8	4	4	24	<ul style="list-style-type: none"> Safety working procedures for dismantling scaffolding to be provided, implemented and scaffolding team trained on them Supervision to be in place during the task 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager Contractor

LADDERS

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
62	Positioning of extension ladder	<ul style="list-style-type: none"> Improper angle positioning of extension ladders Improper opening of step ladders Falls of the ladder Ladder could slip and fold close 	<ul style="list-style-type: none"> Falls off the ladder Ladder could slip and fold close Falling of ladders 	8	8	4	4	24	<ul style="list-style-type: none"> A ladder must be positioned at an angle of between 60° and 70° When adjusting the length of an extension ladder, make sure the locking device is secured before use Ladders must have non-slip devices fitted on the feet which must be in good condition All stepladders must be fully extended and spreaders must be locked into position 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
63	Use of portable ladders	<ul style="list-style-type: none"> Instability of damaged ladder Ladder not long enough for intended task Ladder may tip over 	<ul style="list-style-type: none"> Falling and injuries Over stretching to reach which may result in awkward positions, back and arms pain and falls 	8	8	4	4	24	<ul style="list-style-type: none"> Only ladders in good condition to be used Ladders must be checked for safety before use Employee must be trained on the correct use of a ladder Ensure ladder is long enough for the work to be performed Employees to ever stand on the top three rungs of the ladder Ensure ladder is long enough for the job Only one person at any one time on the ladder 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager

TEMPORARY WORKS

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
64	Erecting formwork and dismantling formwork	<ul style="list-style-type: none"> Collapse Falls Falling objects Loading Unauthorized access 	<ul style="list-style-type: none"> Injuries Fatalities Property damage 	8	8	8	4	28	<ul style="list-style-type: none"> Designing the formwork and falsework to suit the site requirements including loads and environment Formwork to be constructed as per design Fall protection to be implemented. Entry to formwork and falsework area should be restricted to those carrying out the work while the formwork and falsework is being erected, altered, repaired and dismantled Temporary works should be inspected and be certified by 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager Contractor

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
									competent person before concrete placement Temporary works should be inspected daily and be certified for curing before removal of temporary works						
65	Steel fixing	<ul style="list-style-type: none"> Manual handing Use of incorrect tools Unsafe stacking of materials 	<ul style="list-style-type: none"> Injury 	8	8	8	4	28	<ul style="list-style-type: none"> The supervisor is to ensure that the right tools for the task are readily available Tools pre-use inspections to be conducted PPE requirements to be established and adhered to. All stacking and storage activities to be conducted under the supervision of the appointed stacking and storage supervisor Steel fixing RA and MS to be compiled and adhered to. 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager Contractor

PAINTING

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
66	Accessing heights	<ul style="list-style-type: none"> Fall from heights 	<ul style="list-style-type: none"> Injuries Fatalities 	10	4	4	4	22	<ul style="list-style-type: none"> Fall protection plan should be used Heights should be accessed using equipment as per specification of the fall protection plan for heights being accessed 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager

No	Task / General Activities	Hazards Identifications	Risk Related Hazards	Risk Evaluation					Controls	Risk Evaluation					Responsible Person/s
				A	B	C	D	R		A	B	C	D	R	
67	Painting	<ul style="list-style-type: none"> Inhaling / absorbing poisonous chemicals Fire 	<ul style="list-style-type: none"> Respiratory problems Damage to property and environment 	4	8	4	8	24	<ul style="list-style-type: none"> Train employees to adhere to fall protection plan requirements Employees to use full PPE as per Material Safety data sheet i.e. gloves, masks, full body covering overalls Ensure sufficient ventilation No smoking or open flames permitted in the vicinity where painting work is done Paint to be not allowed to spill over the environment. In such cases, spill should be cleaned and disposed of in an approved site 	4	4	4	4	16	<ul style="list-style-type: none"> Construction Manager Construction Supervisor Operations Manager

ANNEXURE A – CONTRACTORS DECLARATION

CONTRACTORS HEALTH AND SAFETY DECLARATION

Project Name: _____

Client: **Development Bank of Southern Africa**

Introduction

In terms of Construction Regulation 7(1) (a) of the Construction Regulations of February 2014, a Contractor may only be appointed to perform construction work if the Client is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act, Act 85 of 1993 and the Construction Regulations of February 2014. In line with this requirement the Contractor is required to read this document carefully, sign it and submit it with his/her Tender.

Declaration

1. I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act, Act 85 of 1993, the Construction Regulations of February 2014 and the Construction OHSE Specification attached in the tender document.
2. I hereby declare that my company and its employees has the necessary competency and resources to safely carry out the construction work under this contract in compliance with the Occupational Health and Safety Act, Act 85 of 1993, the Construction Regulations of February 2014 and the Construction OHSE Specification.
3. I hereby confirm that adequate provisions have been made in my tender to cover the cost of all Safety, Health and Environmental duties and responsibilities imposed on me by the Occupational Health and Safety Act, Act 85 of 1993, the Construction Regulations of February 2014 and the Construction OHSE specification.
4. I confirm that I may not commence with any part of construction work under the contract until my Construction Safety, Health and Environmental Plan has been approved in writing by the Client.
5. I hereby confirm that copies of the following documentation will be kept on site for viewing and inspection purposes for the duration of the construction work:

- a) Construction OHSE specification;
- b) Approved Construction Health and Safety Plan and File;
- c) Occupational Health and Safety Act, Act 85 of 1993 Late;
and
- d) Construction Regulations of February 2014.

6. I agree that my failure to complete and execute this declaration to the satisfaction of the Client will mean that I am unable to comply with the requirements of the Occupational Health and Safety Act, Act 85 of 1993 and Construction Regulations 2014, and accept that my tender will be rejected.

Duly Signed at Durban on the 09 day of October 2023

Full Name of Signatory

Name of Enterprise

Capacity of Signatory
Bidder

Signature of authorised representative of

Moosa Mahomed



CHSA / 113 / 2021

Signature of CHSA