REFERENCE NO	**WIMS: 044044**
Revision	**04**
Date	**16 January 2025**
Client	**Department of Public Works**

public works

Department:
Public Works
PROVINCE OF KWAZULU-NATAL

Occupational Health and Safety Specification (OHSE SPEC)

Project Name: Construction of a new 28 bed mental health inpatient and outpatient unit

WIMS no. : 044044

Region : Southern Region

District : uMgungundlovu

Client OHS Representative : I Samsunder

Prepared by I Samsunder
KDS Health & Safety Consultants
Tel: 031-4648091
Email: vinesh@kdssafety.co.za

TABLE OF CONTENTS

1. Introduction ……. Page 3

2. Definitions……Page 4-5

3. Scope of application…….. Page 6

4. Scope of Works…… Page 7

5. Contractual Issues……Page 7

6. Administrative Requirement…….. Page 7

6.1. Application for Construction Work permit

7. Appointment of Safety Officers……Page 8

8. Communication Plan of the Project …….. Page 8

9. Project Team…….. Page 9

10. Summary of Designers Hazards and Risks …….. Page 10

Annexures

i. *Annexure A – Structure of the detailed OHSE Plan……*Page 13-14

ii. *Annexure B – Client Specific Legal Requirements……* Page 15-26

iii. *Annexure C – OHS Declaration for Tenders……*Page 27

iv. *Annexure D – OHSE Bill of Quantities……*Page 28 -29

v. *Annexure E – Hoarding Plan for Park Homes Finance and Clinic. Page 30*

vi. *Annexure F – Baseline Risk Assessment……* Page 3

1. Introduction

The *KwaZulu Natal Department of Public Works* is deemed as the "**Client"** in terms of the definitions of Construction Regulations of 2014 as published in *Government Gazette No. 37305*.The Construction Regulations of 2014 under *CR (5) (1)* stipulates that the client must prepare a suitable, sufficiently documented and coherent site specific Occupational Health and Safety Specification for the intended construction work based on the baseline risk assessment.

The purpose of this Occupational Health, Safety and Environmental Specification document (*which hereinafter will be referred to as OHSE Spec*) is to provide designers and the successful tenderer with essential OHS information to ensure effective safety management during the design and construction phase of the project.

This OHSE Spec forms an integral part of the contract between the Client and the Principal Contractor, so as to ensure compliance with the Occupational Health and Safety Act, Act 85 of 1993 and its applicable regulations and must serve as the basis for the Principal Contractor to develop his/her Project Safety, Health and Environmental Management Plan. As with any other plan for it to be implemented and managed effectively it requires the allocation of sufficient funds to achieve the objectives set out in the plan. In line with this requirement Construction Regulation 5(1) (g) requires the Client to ensure that the Principal Contractor has made adequate provisions for the cost of Health and Safety Measures in their tenders.

It must be noted that this OHSE Spec as much as it is detailed it is not exhaustive and the onus is on the Principal Contractors to ensure that they comply with Section 8 of the OHS Act, Act 85 of 1993 which states that "*Every Employer shall provide and maintain, as far as is reasonably practicable, a working environment that is safe and without risk to the health of his employees*." this means that Principal Contractors as they are employers in their own right must at all times ensure continuous assessments are done for continued provision and maintenance of a healthy and safe working environment.

2. Definitions

For the purpose of the OHSE Spec, the abbreviations or definitions given hereunder shall apply and the reference to on gender will also apply to the other gender.

"CR" refers to the Construction Regulations 2014

"Agent (*Pr.CHSA***)"** means a competent person who acts as a representative for a client in terms of regulation (5)5.

"Client" means Department of Public Works

"Competent person" means a person who-

(a) Has in respect of the work or task to be performed the required knowledge, training, and experience and, where applicable, qualifications, specific for that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualifications Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and

(b) Is familiar with the OHS Act, Act 85 of 1993 and with the applicable regulations made under the Act;

"Construction Manager (*Site Agent***)"** means a competent person responsible for the management of the physical construction processes and the coordination, administration, and management of resources on a construction site;

"Construction Site" means a workplace where construction work is being performed;

"Construction Supervisor" means a competent person responsible for supervising construction activities on a construction site;

"Construction Vehicle" means a vehicle used as a means of conveyance for transporting persons or material, or persons and material, on and off the construction site for the purposes of performing construction work;

"Construction work" means any work in connection with –

(a) The construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or
(b) the construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer, or water reticulation system; or the moving of earth, clearing of land, the making of excavation, piling, or any similar civil engineering structure or type of work;

"Contractor" means an employer who performs construction work;

"COVID 19" means Coronavirus disease 2019

"Coronavirus disease" is an infectious disease caused by a newly discovered coronavirus.

"COVID 19 compliance officer" designated person that oversee the implementation of the COVID-19 site management plan.

"Demolition Work" means a method to dismantle, wreck, break, pull down or knock down of a structure or part thereof by way of manual labour, machinery, or the use of explosives;

"Fall Protection Plan" means a documented plan, which includes and provides for-

(a) All risks relating to working from a fall risk position, considering the nature of work undertaken;
(b) The procedures and methods to be applied in order to eliminate the risk of falling; and
(c) A rescue plan and procedures;

"Health and Safety File" means a file, or other record containing the information in writing required by these Regulations;

"Health and Safety Plan" means a site, activity, or project specific documented plan in accordance with the client's health and safety specification;

"Health and Safety Specification" means a site, activity or project specific document prepared by the client pertaining to all health and safety requirements related to construction work;

"Medical Certificate of Fitness" means a certificate contemplated in regulation 7(8) of Construction Regulations 2014;

"Principal Contractor" means an employer appointed by the client to perform construction work;

“Safety Officer” – a person deemed competent by SACPCMP under the relevant category of registration.

"Professional Engineer or Professional Certificated Engineer" means a person holding registration as either a Professional Engineer or Professional Certificated Engineer in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000).

3. Scope of Application

This OHSE Specification document stipulates the minimum Occupational Health, Safety, and Environmental requirements that the tenderer need to address in his/her OHSE Plan. This Specification also addresses legal compliance, hazard identification, risk assessment, risk control, and the promotion of a Health and Safety culture amongst those working on the project.

This Specification also makes provision for the protection of persons other than employees. This OHSE Spec is exclusively applicable to the following project pending any change of scope which may necessitate changes to the OHSE Specification.

Construction of a New 28 Bed Mental Health In-patient and Out-patient Unit at Port Shepstone Hospital

This OHSE Specification further seeks to achieve the following;

a) To provide Principal Contractors with the Structure of the Detailed OHSE Plans they will have to prepare and submit for this project. ***See Annexure A***

b) Provide the overarching framework within which the Principal Contractor is required to demonstrate compliance with certain requirements for occupational health and safety established by the Occupational Health and Safety Act, Act 85 of 1993, all applicable regulations and Client Specific Requirements. ***See Annexure B***

c) To bring to the attention of the Bidding Principal Contractors that they need to make an undertaking that the costs for executing the project includes the costs of complying with the OHS Act, Act 85 of 1993, all applicable regulations including Client Specific requirements. Such undertaking is made by appending signatures on the OHS Declaration for Tenders. ***See Annexure C***

d) To bring to the attention of the Bidding Principal Contractors that they need to price accordingly for the provision of OHSE management for the execution of this project. The OHS BOQ template provides the OHS items that is to be taken into consideration when tendering for this project. ***See Annexure D***

e) To bring to the attention of the Bidding Principal Contractors that a Hoarding Plan for Park Homes Finance and Clinic is attached and is to be implemented before any construction works commence. **See Annexure E**

f) Ensure that the Principal Agent as the Professional Service Provider appointed by the Department to manage the project on its behalf in terms of the Conditions of Contract applicable to this project ensures that the contents of this document and the attached Baseline Risk Assessment are taken into consideration during design by all professionals appointed and that the OHSE Specification is incorporated into the tender documents. ***See Annexure F***

4. Scope of Works

The project involves the construction of a New Psychiatric Ward comprising a 28-bed stand-alone unit, including;

- 17 Male and 11 Female beds
- 2 Seclusion rooms (1 Male, 1 Female)
- 2 Isolation rooms (1 Male, 1 Female)
- Male and Female Ablutions
- Treatment Areas and Consulting Rooms
- Construction of concrete retaining walls

The Outpatients Area is to include; Consulting and Waiting Areas, and Administration (with supporting) Facilities
It would also include a basement parking to accommodate 73 vehicles

The New Psychiatric Ward is to be located at the site west corner and selected structures are to be demolished to accommodate the New Psychiatric Ward

The site is bounded by Bazley Street at the northeast, George Street at the northwest, Colley Street at the southeast, and a Department of Education service road at the southwest.

5. Contractual Issues

Acceptance by the Principal Contractor of the contract with KZN DOPW shall constitute acknowledgement that the Principal Contractor has familiarised him/herself with the contents of the OHSE Spec and that he/she will comply with all its obligations in respect thereof.

Due to the fact that this document is based on legislative requirements, the Client requires that all Contractors comply with the requirements of this document and all other relevant legislative requirements not covered by this document.

The Client or its duly appointed Construction H&S Agent reserves the right to stop any Principal Contractor or Sub-Contractors from working whenever Safety, Health or Environmental requirements are being violated as required by regulation 5(1)(q). Any resultant costs of such work stoppages will be for the relevant Contractor's account.

The requirements as specified by the Client in this document must not be deemed to be exhaustive and the Client reserves the right to make changes as and when the Client deems fit to address issue of OHSE Compliance.

The Client will not entertain any claim of any nature whatsoever which arises as a result of costs incurred or delays being experienced due to the Contractor not complying with the requirements of this document and/or any other applicable legislative requirements imposed on the Contractor.

6. Administrative Requirements

6.1. Application for construction work permit

A client who intends to have construction work carried out, must at least 30 days before that work is to be carried out apply to the provincial director in writing for a construction work permit to perform construction work if the intended construction work will-

(a) exceed 180 days:
(b) will involve more than 1800 person days of construction work: or
(c) The works contract is of a value equal to or exceeding thirteen million rand or Construction Industry Development Board (CIBD) grading level 6

The application for the construction work permit will be done by the client's appointed CHS representative.

Site establishment will commence once the construction work permit has been issued by the Department of Employment and Labour and a copy of the permit has been issued to the principal contractor.

The construction work permit number is to be displayed on the project construction notice board at the entrance of the construction site

7. Appointment of a Full Time Safety officer

The Principal Contractors will have to appoint a full-time competent Construction H&S Officer who is registered with the S.A.C.P.C.M.P. The appointed person shall be tasked with the duties and functions as prescribed in the standard scope of services for construction health & safety officer registered in terms of the South African Council for the Projects and Construction Management Professions Act No 48 of 2000.
The CHS officer must also ensure the administration of safety related documents is conducted and submit the SHE report to the client on a monthly basis.

8. Communication Plan for the Project

OH&S Liaison between the Employer, the Principal Contractor, other Contractors, the Designer and other concerned parties shall be through the H&S Committee as per the procedures determined by the H&S Committee.

In addition to the above, communication may be directly to the Client or his appointed Agent, verbally or in writing, as and when the need arises.

Consultation with the workforce on OH&S matters will be through their appointed construction safety officer/Construction manager/supervisors. A community liaison officer will be appointed, through whom all communication for the local labour will be done.

The Principal Contractor will be responsible for the dissemination of all relevant OH&S information to the other Contractors e.g., design changes agreed with the

Client and/or its Agent on its behalf and the Designer, instructions by the Client and/or his/her agent, exchange of information between Contractors, the reporting of hazardous/dangerous conditions/situations.

9. The Project Team

Initial & Surname	Organization	Discipline	Telephone	Email
Mr S Zulu	D.O.P.W	Project Leader		mhlonipheni.zulu@kznworks.gov.za
Mr Somers Govender	Artek 4 Architects	Architecture Project Manager	083 792 7677	somers@artek4.co.za
Mrs Stephanie Taylor	TVA Quantity Surveyors	Quantity Surveyor	039-315 1962	steph@tvaqs.co.za
Mr Michael Cooper	Drennan Maud (PTY)LTD	Structural Engineers	039 - 3122588	michael@drennanmaud.com
Mr Mahesh Khoosal	Mahesh Khoosal and Associates	Mechanical Engineers	031 536 8306	mkhoosal@mkaengineers.co.za
Mr Tilly Nel	TJ Nel & Associates	Electrical Engineers	0832659623	tjnelsa@venturenet.co.za
Ms. Gelly Majola	D.O.P. W	OHS	071 100 7366	Gelly.Majola@kznworks.gov.za
Mr I Samsunder	KDS	CSH Agent	031 4648091	vinesh@kdssafety.co.za

9.1. Overall Supervision and Responsibilities for OHS Management

- The Chief Executive Officer of the Principal Contractor in terms of Section 16 (1) of the Act to ensure that the Employer (as defined in the Act) complies with the Act
- All OH&S Act (85 /1993), Section 16 (2) appointee/s as detailed in his/her/their respective appointment forms to regularly, in writing, report to their principals on matters of health and safety per routine and ad hoc inspections and on any deviations as soon as observed, regardless of whether the observation was made during any routine or ad hoc inspection and to ensure that the reports are made available to the principal Contractor to become part of site records.
- The Construction Manager/s, Supervisor/s and Safety Officer appointed in terms of Construction Regulation 8 to regularly, in writing, report to their employer on matters of health and safety per routine and ad hoc inspections and on any deviations as soon as observed, regardless of whether the observation was made during any routine or ad hoc inspection and to ensure that the reports are made available to the principal Contractor
- On a monthly basis, the principal contractor's health, and safety management system (SHE Plan) and workplace activities will be audited by the appointed Agent to assess compliance with the project health and safety requirements. Any deviation from these requirements (i.e. non-conformance) that places the health or safety of any person in immediate danger will result in the specific activity being stopped until the non-conformance is corrected.
- For each non-conformance identified during any audit, the contractor will identify and implement appropriate corrective actions.

- For each corrective action, a responsible person must be designated and an appropriate timeframe (target date) for completion of the corrective action must be specified. Progress on implementing corrective actions (i.e. closing non-conformances) must be monitored and reported on. The implementation of corrective actions will be verified during the monthly audits.
- Failure on the part of the Client or Agent to comply with this requirement will not relieve the Principal Contractor from any one or more of his/her duties under the Act and Regulations
- Should it be determined that the contractor's level of compliance is unsatisfactory, all work being performed by the contractor on the project site may be stopped (at the contractor's expense) until an investigation into the reasons for the poor performance has been carried out, a corrective action plan has been developed, and corrective actions have been implemented.
- In addition to the audit carried out by the clients Agent, the contractor will carry out an internal audit on a monthly basis to assess compliance with the project health and safety requirements (including the requirements of this specification and the contractor's Health and Safety Management Plan). Furthermore, the contractor will ensure that each appointed sub-contractor is audited and measured to the same standard. Copies of these audit reports must be submitted to the appointed Agent on a monthly basis.

10. Summary of Designers Hazards and Risks (Stage 1/2)

Discipline	Description	Risk	Mitigation
Architect	Scope change by client	Delays from knock-on effect	DOH PL to provide all client requirements at the beginning of the project
	Delay of submission of drawings to client	Co-ordination of consultant disciplines	DOPW PM to co-ordinate all drawings from design team
	Delay of approval of project stages by client	Complying with specific requirements.	DOH PL to facilitate the process of approval
	This Risk is exacerbated by there being more than one Client entities	Delays in obtaining consensus between client Entities.	With personnel and policy changes in any of the various entities
	Need to appoint Specialist Consultant for compliance with Asbestos Abatement Regulations.	Delays during construction if not properly documented.	DOPW to make appointments timeously.
	Disruption of Existing Oxygen Supply Tanks	Unpredictable.	Contractor to ensure all services are maintained and managed with hospital
Civil Engineer	Working in the vicinity of deep excavations	Injury if persons fall into excavations	Barriers and ladders to be provided
	Wet soil conditions/ uneven surfacing	Injury due to slipping or falling	Ensure no construction activity is allowed during raining conditions
	Working in confined spaces - Construction of Attenuation tank	Lung damage due to air quality	Contractor to ensure correct PPE is worn at all times

	Bearing weights in excess of 40kg	Injury to persons	Suitable mechanical lifting equipment to be provided
	Pressure Testing bulk pipework	Injury to burst pipes and fittings	Contractor to ensure correct PPE is worn at all times
	Compaction results for all layer works	Incorrect compaction will result in deformations and cracking of ground bearing surfacing	Contractor to ensure compaction test are carried out as per specifications
Structural Engineer	Poor design	Unquantified Structural defects	PM to monitor coordination drawings
	Poor quality of materials	Unquantified structural / civils defects	Main Contractor to provide samples of all construction materials for approval
	Extended work hours arising from large concrete pours and similar potential	Requirement to work after hours	Contractor to notify PM in advance when after-hour work is foreseen. Measures to be in place where extended work is required on short notice.
	Deep excavations adjacent existing structures	Undermining of existing structure, potential damage to structure	Lateral support Contractor to take out special insurance. Structural and Geotechnical Engineers to supervise the works and if necessary, underpin portions of existing structures.
	Unforeseen ground conditions	Potential claims from lateral support and piling Contractor	Detailed ground investigations already carried out. Any unforeseen conditions having a material impact to be reported immediately to Drennan Maud
	Working at heights during structural assembly	Probability of falling	PPE in accordance with the H&S Act
	Working in proximity to exposed steel	Impalement / injury	Adequate training and where necessary, plastic caps to exposed steel
	Piling subcontractor injuries on duty working heavy piling rig	Pinch-points on rig, heavy steel with crushing capability	PPE in accordance with the Act. Suitably experienced piling contractor essential.
Mechanical Engineering	Approval of project stages	Delay of by client	DOH PL to facilitate the process of approval
	Space around plants	Inadequate space for repairs and maintenance	Architect and Mechanical Engineer to coordinate to ensure compliance
	sub-contractors	Incompetent sub-contractors appointed by main contractor	Consultants to include evaluation criteria for sub-contractors in tender document and Procurement Section to comply with Conditions of Tender during adjudication
	Time allowed in programme for testing and commissioning of mechanical installations	Inadequate time allowed in programme for testing and commissioning of mechanical installations	Principal agent to stipulate the minimum duration to be allowed for testing and commissioning in the main contract
	Sub contractors	Not appointed timeously by main contractor	Principal agent to write in main contract that main contractor to appoint Mechanical sub contractors within a stipulated

			time.
Electrical Engineer	Poor Design of the Electrical and Associated Installations.	Interpretation of the Design to be monitored	Contractors to submit timeously any deviations to the original designs and as per specifications provided
	Delay of approval of project stages by client	Contractors to keep pace with the progress of the construction works at hand	The PM to ensure each contractors performance is keeping pace with the Building programme
	Quality of Materials and workmanship	No substandard Installations to be permissible.	The PM is at all times during construction to ensure no substandard Quality related Installations are being carried out.
	Specialist facility being used for purposes other than were not designed for	The areas and spaces allowed for the Electrical and Associated Installations to be respected	Early identification of specialist areas to be monitored on an on-going bases
	Power Supply Failures	Risk of Fatal Electrical Shock if not taken care of.	Immediate appropriate attention to Power Failures by all Contractors
	Incorrect Voltage, Current and/or Fault Current Switchgear Installed.	Explosive interruptions if incorrect Sized Switchgear is Installed	The PM to monitor the Installations during the Construction Phase of the project to ensure compliant Installations.
	Incorrect cable/conductors and/or Bus bars Installed	The result could lead to Fire Conditions.	The PM is to ensure contractors install the correct sized Cables/Conductors etc.
	Insuffient Illumination Levels for relevant Tasks employed.	Workmen will be exposed to a dangerous environment	Totally Unacceptable: All Contractors to be made aware of undertaking specific Tasks under unfavourable conditions.
	Incorrect Tools and/or equipment used for specific Tasks	Noted that specific tools are required for certain Tasks	Any inappropriate improvises may lead to substandard Installations
	Unsuitable Materials Installed.	Only Materials Designed for specific Installations to used	The Main and all SubContractors to use Materials designed for said Installations.
	Installations devoid of Warrantees/Guarantees	The User department directly exposed.	Contractors are held responsible to ensure all Warrantees/Guarantees are in place
	All Installations to comply with SANS and/or relevant International Standards and fully compliant with Health and Safety Requirements	No compromise to SANS and INTERNATIONAL STANDARDS DOCUMENTATION to Health and Safety.	All Health and Safety Regulations to be applied during the Construction Phase of the Project

Annexure A

Structure of the Detailed OHSE Plan

A detailed OHSE Plan is to be submitted by the successful tenderer as per section 3 (a) on this document. The following are the minimum standard legal documentation that must form part of the OHSE Plan based on the risks attached in executing this project **–**

Construction of a new psychiatric ward at Port Shepstone Hospital

1. Letter of Good Standing with Compensation Commissioner or Compensation insurer
2. The Contractor's Health, Safety & Environmental Policy, signed by the chief executive officer, which outlines the Contractor's OHSE compliance objectives and how they will be achieved.
3. Principal Contractor to supply two (02) RAMS (Risk Assessment Method Statement) for two priority risks as per the risk profile which can be found under the Annexure's to this document which needs to be submitted as part of the evaluation of competencies process.
4. Relevant checklists and registers
5. Statutory test and inspections have been carried out on machinery, tools and equipment used on the Project
6. Site specific OHSE Organogram onsite.
7. Preliminary Induction Program
8. OHS Audit format for scheduled audits on all appointed contractors and self-audits
9. Asbestos Removal Plan
10. Fall Protection Plan
11. Demolition Plan. To be approved by the structural/architect before any works can be executed.
12. Bulk earthworks. To be approved by the Structural Engineer before any works can be executed
13. Environmental Management Plan which is to be developed to comply with the requirements of the National Environmental Management Act (NEMA) and the Local Municipal Bylaws. The environmental management plan is to provide a detailed waste management plan as all demolished structures and the storm water management.
14. Site Establishment Plan
15. Public Safety Management Plan
16. Emergency Preparedness Plan
17. Personal Hygiene Management Plan
18. Infectious Disease Management Plan.
19. Traffic Management Plan
20. Duties and responsibilities of key appointed staff for the project

Proof of competency, which should include detailed CV, proof of qualifications, registration with relevant statutory bodies, relevant experience, and references from previous clients for the following legal appointees.

20.1. Construction Manager –
20.2. Construction Work Supervisor –
20.3. Construction H&S Officer – Registration with SACPCMP
20.4. Risk Assessor – SAQA accredited competency certificate
20.5. Accident Investigator – SAQA accredited competency certificate
20.6. Fall Protection Planner – SAQA accredited unit standard: 229994/229995/229998
20.7. Demolition work inspector –
20.8. Electrician – Wireman's licence
20.9. Temporary works supervisor -
20.10. Excavation supervisor

Legal appointments to be appointed	
Prior Site Handover	**After Site Handover on commencement with Construction work**
• 16.2 • Construction Manager • Assistant Construction Manager • Construction Work Supervisor • Construction H&S Officer • Risk Assessor • Fall protection Planner • Demolition Works Supervisor	• Excavation work supervisor • Scaffold Erectors • Scaffold Inspectors • Scaffold Supervisors • First Aiders • Emergency co-ordinator • Fire Marshalls • AIA (Asbestos Removal) • Portable Electrical tool inspector • Hand tools inspector • Assistant Construction Work Supervisor • Housekeeping inspector • Stacking and storage inspector • Construction Vehicle and mobile plant inspector • Construction Vehicle and Mobile plant operators • Traffic Controller (Flagman) • Lifting machinery operators • Lifting equipment inspector • Banksman • Temporary electrical installation inspector • Temporary works designer • Temporary works inspector • Flammable liquids Storage Inspector • Hazardous substance storage inspector • Ladder inspector • Health and safety representatives • Accident investigator

Annexure B

Client Specific Requirements

Items	Client Specific Requirements
Site establishment	• The requirements of the project require the application for a Construction Work Permit. The application will be done via the appointed SHE Agent. Once the work permit has been approved by DEL, the contractor can commence with site establishment. • The location of the site office should be in an area that will not require visitors /patients/ hospital staff to pass through or enter area where construction work is active and will not require the re-location of the office as the project progresses. • The site office location is to be fully fenced off with access control • Contractor is to submit a Site Establishment Plan for review and approval prior to establishing site. • The proposed construction site is to be completely hoarded off from the general public, patients and hospital staff. The hoarding is to be solid and a min height of 2.5m high • A hoarding design plan is provided (*Annexure F*) for the safe guarding of the existing park homes, Finance and Clinic which is located next to the proposed driveway. • Principal contractor is to ensure designated parking is provided during site establishment.
Medical Certificates	• In compliance with the requirements of the Construction Regulations 2014 section 7(8) the Contractor must ensure that all of his employee's onsite 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.
Appointment of a Full-time safety officer	• The Principal Contractors will have to appoint a competent Construction H&S Officer, for this project, who is registered with SACPCMP and will have to be onsite for the duration of this project. • Appointed CHSO should have at least 7 years post S.A.C.P.C.M.P registration and should have worked within a hospital environment.
Relocation of identified mobile buildings and services	• The mobile building units will be relocated prior to any construction works. This will involve the use of lifting machinery. • The contractor will be responsible for the relocation of the Afrox oxygen tank. • The park homes(Finance and Clinic 1) will not be relocated. These building will be hoarded off as per hoarding design plan.
Demolition work	• All demolition works is to be comply with the requirements of Construction Regulations 14. • The Principal Contractor/Contractor must appoint a competent person in writing to supervise and control all demolition work on site. • Identified building will be demolished. Prior to any demolition isolation and lock out is to be conducted for all services to these buildings. The Principal Contractor/Contractor must ensure that prior to any demolition work being carried out, and in order also to ascertain the method of

	demolition to be used, a detailed structural engineering survey of the structure/section to be demolished is carried out by a competent person and that a method statement on the procedure to be followed in demolishing the structure is developed and provided to the appointed Engineer / Architect for review and approval as this building is classified as a heritage building. • During the demolition, the competent person shall check the structural integrity of any buildings in close proximity. • All salvageable items roof timbers and roof sheeting can be used for the solid hoarding of the construction site.
Extreme weather conditions	• If the weather condition poses a threat to the health & safety of employees, be it extreme heat, cold, lighting or any adverse weather condition appropriate safety measures have to be taken. • Adequate measures to be implemented to mitigate rain damage to any exposed buildings or services.
Change to scope of work	• Should there be changes to the original scope of work, the Principal Agent must inform appointed Construction Health and Safety Agent to effect changes to the OHSE Specification.
Contractors OHSE Plan Submission	• The successful Tenderer must submit a copy of the detailed OHSE Plan for approval and keep the original for onsite use during construction. Should there be a change in the original scope of works, the principal contractor is to amend his/her OHSE Plan • The OHSE Plan is to be aligned as per project requirements.
Bylaws	• The Principal Contractor must incorporate any aspects of the Local Municipal bylaws which affect the Safety and Environmental wellbeing of the employees, the public and the environment into his/her OHSE Plan and ensure compliance to such bylaws.
Risk assessment for construction work	• To comply with CR (9) and to also address environmental issues • To also include exposure to hazardous chemical substances, gases *See the attached baseline risk assessment to be considered by both the designer and the principal contractor.* • Issue a Baseline and Continuous Risk Assessment • Risk assessments and method statements are to be submitted to the SHE Agent at least 2 weeks in advanced for review and approval before any works commence on site. • Ensure all risk assessments are communicated to staff prior to commencement of the task.
Personal Hygiene and Infectious Disease Management Plan	• Occupational exposure to hazardous biological agents is a present risk on this project and the contractors must ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards. • Contractors must prevent inhalation, ingestion and absorption of any harmful chemical or biological agents which includes Covid 19. • Appropriate PPE to be used when working within the existing sewer lines. • Water to be utilized for drinking purposes may only be drawn from taps designated for drinking water purposes.

	• Hazardous materials such as asbestos may not be included in general rubble and need to be disposed of as per applicable legislative requirements
Fall protection	• Submit s site specific fall protection plan prior to any heights works conducted on site. • To comply with CR (10) And the applicable unit standards namely: 229994, 229995 and 229998 • Edge protection and protection of floor openings need to be of such a manner as to properly protect employees from falling off elevated positions or falling into floor openings • All staff working at heights to have valid medicals and competency training.
Structures	• To comply with CR (11) • Underpinning is to be done and principal contractor is to ensure required inspections are conducted by the appointed competent person. • The required method statement and risk assessment is to be submitted and approved before any works commence on site. • Anchored contiguous piled wall will be constructed to provide lateral support to identified building and retain excavation. Inspection of existing structures is to be monitored.
Excavations	• To comply with CR (13) and the following; • If the risk exists of a person in an excavation being enclosed in an event of a collapse the following will apply; shoring sufficient to prevent enclosure, any excavated material must be placed at least 1metre from the edge and at the maximum angle of repose to the horizontal. • No excavation may affect the stability of any adjoining structure or road unless steps have been taken as identified by an Engineer or a Technologist. • Adequate provisions must be made to ensure that water is drained from excavations where water may enter such excavations as a result of seepage or rain • All excavations done by the Principal or Sub-Contractors must be barricaded by means of solid barricading and barricading tape may only be used to make such barricading more visible • All deep open excavations to be sign posted. • Site specific risk assessment and method statement are to be provided for review and approval for excavations executed on site.
Foundation piles	• The proposed construction works involves foundation piling and the anchored contiguous piled wall. • This will involve the establishment of plant on site and adequate measures to be implemented to mitigate dust during construction works.
Scaffolding	• To comply with CR (16) and SANS 10085 and the following; • Scaffolding Inspectors, Scaffolding Supervisors and Scaffolding Erectors must be different individuals and be deemed competent with records of competency in file • Scaffold Harness must be used on Scaffolding, normal Harnesses may not be used on scaffolding • Sufficient Scaffolding material e.g., tags, trapdoors etc. need to be on site as determined by the activities on site

	• Scaffold bases may not be supported by materials such as bricks and chipboard. Suitable material needs to be used as per SANS 10085. • • All scaffolding to be erected, is to have a design plan and the following documents are to be provided before use: Scaffold request form Scaffold Inspection form Scaffold handover certificate
Construction vehicles and mobile plant	• To comply with CR (23) and the National Road Traffic Act 1996. and the following; • Have the appropriate code of licence and training to operate the class of construction vehicle and mobile plant • Provision of a serviced portable fire extinguisher in vehicles at all times. • All construction vehicles must be fitted with audible reverse alarms.
Electrical installations and machinery on construction sites	• To comply with **CR (24)** • All temporary electrical connections to be done by a registered electrician and a valid CoC is to be provided and in file. • All electrical supply to the proposed buildings is to be isolated and locked out by the appointed Electrician by the Principal contractor. • Contractor will be provided with an electrical point of supply which will be metered for the cost of the contractor. • Contractor is to make provision for power supply during load shedding. The existing point of supply will not be connected to the hospital essential supply.
Use and temporary storage of flammable liquids on construction sites	• To comply with **CR (25)** and the following: • All flammable liquids to be stored in a flammable liquid cupboard/cage which is to be located away from any existing hospital buildings. • A spill kit is to be available to clean any spillages. • All fuels to be stored in designated storage containers and should be in a bund area. • Contractor is to comply with the Local Fire Department requirements for bulk fuel storage on site.
Housekeeping and general safeguarding on construction sites	• To comply with CR (27) and the following; • Contractor to designate areas for placing refuse and rubble prior to being removed from site • Dust suppression is to be maintained on site during construction activities • Contractor must implement a daily task site clean-up for all activities these should cover work areas, stairways, walkways and entire construction site to free of any construction debris obstruction. • Refuse to be separated for recycling purposes • All domestic refuse is to be placed into refuse bins with lids and to be disposed of site at frequent intervals to mitigate the attraction of rodents and insects
Stacking and storage on construction sites	• To comply with CR (28) and the following; • All stacking and storage is to be done within the construction work site • Stacking and storage on the public road will not be permitted as these areas are used for hospital visitors parking. • All unused building material is to be removed off site.

	• The demolished building waste is to be removed off site.
Fire precautions on construction sites	• To comply with CR (29) and the following; • No smoking may be permitted on site except in designated smoking areas • All stacking and storage of hazardous chemicals and flammable chemicals must be stored based on their class of compatibility. • Adequate firefighting equipment is to be provided on site
Construction employees' facilities	• To comply with CR (30) and the following; • Sufficient toilets to be provided for both male and female staff • All portable toilets are to be serviced twice a week with records in file. • Gender signs to be placed at appropriate locations • All welfare facilities to be kept in a hygienic condition at all times. • Employees to be trained in good hygiene practices • Adequate hand wash and sanitising areas to be provided on site • Contractors staff are not permitted to use any of the hospital ablution facilities or have their breaks within the operational hospital premises.
Public Safety & Signage	• The Principal Contractor engaged in construction work must ensure that each person working on or visiting a site, and the general public and hospital staff adjacent to the construction site, shall be made aware of the dangers likely to arise from onsite activities and the precautions to be observed to avoid or minimise those dangers. • Appropriate signage shall be posted at conspicuous points within and around the perimeter of the construction site. The steps to comply with this requirement must be outlined in the OHSE Plan. • The public or visitors may only be permitted on site if they go through an appropriate health and safety induction detailing hazards and risks, they may be exposed to and what measures are in place to control these hazards and risks • The entire project site must be secured against unauthorized access and provided with appropriate warning signage. Where roadways or walkways must be encroached or closed due to work, adequate barriers shall be installed to safely redirect the flow of vehicles and pedestrians and protect them from construction activities. • Whenever it is necessary to maintain public and hospital staff use of work areas (such as sidewalks, ramps, entrances to buildings, corridors, or stairways), the public shall be protected with appropriate guardrails, barricades, temporary fences, overhead protection, or temporary partitions and hoarding. The public and hospital staff must also be adequately protected from any work created hazards, such as noise and dust exposure. Appropriate warnings, signs, warning lights and instructional safety signs shall be conspicuously posted and placed where necessary. • The public and hospital staff must also be protected from falling debris and objects from the project site. • Overhead protection shall be provided that will fully protect the public and hospital staff and be capable of withstanding the maximum forces that could be applied from potential falling objects. • Special attention shall also be given to developing adequate means to protect against wind-blown debris and construction-related materials. • A traffic management plan is to be submitted together with the contractors SHE Management prior to any site establishment done on site

	• Control measures as indicated in the traffic management plan is to be implemented on site to manage traffic flow of construction vehicles, plant and delivery vehicles. • The public road leading to the construction site is to be displayed with the applicable construction signage's indicating the movement of construction plant and vehicles.
On Site Health and Safety Training & Induction	• The Principal Contractor shall ensure that all site personnel and visitors undergo a risk-specific health & safety induction training session before starting work or being permitted to enter the site. A record of attendance shall be kept in the health & safety file. • The Principal Contractor shall ensure that, on site periodic toolbox talks 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 & safety file. The above should also cover all sub-contractors that are onsite. • All Contractors have to comply with this minimum requirement. • Environmental issues to be included in toolbox talks where required.
General Record Keeping	• The Principal Contractor and all Sub-Contractors must keep and maintain Health and Safety records to demonstrate compliance with this Specification, The OHS Act 85/1993; and with the Construction Regulations of 2014. The Principal Contractor shall ensure that all records of incidents/accidents, training, inspections; audits, etc. are kept in a health & safety file held in the site office, which must be present on site at all times. • The Principal Contractor must ensure that every Sub-Contractor opens its own health & safety file, maintains the file, and makes it available on request.
Health & Safety Audits, Monitoring and reporting	• The Client or its duly appointed Agent shall conduct monthly health & safety audits. • The Principal Contractor is obligated to conduct similar audits on all Sub-Contractors appointed by them at least once a month. • Detailed audit reports must be presented and discussed at all levels of project management meetings and a copy of such audit will be provided to the Client or it's duly appointed Agent within 7 working days of such audit. • Copies of the Client's audit reports shall be kept in the Principal Contractors Health & Safety File.
Emergency Procedures	• The Principal Contractor shall submit a detailed Emergency Plan for approval to the Clients Agent prior to commencement on site. The plan shall detail the response procedure including the following key elements: 1. List of key competent personnel. 2. Contact details of emergency services. 3. Actions or steps to be taken in the event of the specific types of emergencies that may be encountered on site or within the vicinity of the project. 4. Information on hazardous material/situations. • The contractor's emergency procedures shall not negatively impact the operations of the hospital.

First Aid Boxes and First Aid Equipment	• To comply with GSR (3) and the following; • The appointed First Aider(s) to be in possession of a valid first aid training certificate Level 2. • Valid certificates are to be kept in the Site Safety File. • All Sub-Contractors with more than 5 employees shall supply their own first aid box, except if otherwise agreed upon between Principal and Sub- Contractor in writing. • The contents of the first aid box are to have the minimum contents as per the Regulation 3.
Accident / Incident Reporting and Investigation	• To comply with GAR (8) and the following; • Injuries are to be categorised into Near miss, first aid, LTI, fatal etc. • Fatal accidents to be reported in addition to applicable legislative requirements to the Client or its duly appointed Agent with immediate effect. • The Principal Contractor must stipulate in its construction phase OHSE Plan how it will handle each of these categories. • When reporting injuries to the Client, these categories shall be used. • The Principal Contractor shall investigate all injuries, with a report being forwarded to the Client/clients agent immediately. • All Sub- Contractors have to report on the abovementioned categories of injuries to the Principal Contractor at least monthly. • All categories of incidents/accidents must be in the Statistics Section of the Monthly Audit Reports, submitted to the Client or it's duly appointed Agent.
Asbestos Removal	• Identified buildings for demolition may contain asbestos containing material. An AIA is to be appointed via the Principal Contractor to assess the big 6 roof sheeting installed on Building 7 does contain ACM. • Asbestos containing material, water tank exists on site for removal by a registered contractor. • The Principal contractor is to ensure that he complies with the requirements of Asbestos Abatement Regulations, 2020
Hazards and Potential Situations	• The Principal Contractor shall immediately notify other Sub-Contractors as well as the Client and the client's representative of any hazardous or potential situations that may arise during performance of construction activities. • Should a hazardous situation require work stoppages, the work must be stopped, and corrective steps taken such as the issue of Written Safe Work Procedures and the issue of Personal Protective Equipment.
Personal Protective Equipment (PPE) and Clothing	• The Principal Contractor must ensure that all workers are issued with the required PPE as required by the risks associated with the activities they perform. • The minimum PPE to be worn on site will be Safety Shoes/Boots, Hard Hats, Overalls, and reflective vests. • No Visitors may enter the site without Safety Shoes/Boots, and Hard hats. • The Principal Contractor and all Sub Contractors shall make provision and keep adequate quantities of SABS approved PPE on site at all times.

	• All contractors and sub-contractors permanent staff to have their company name /logo on their PPE top and employed local labour to comply with the PPE requirements as per the EPWP. • All employees issued with PPE to be trained in correct use, records of training and issue to be kept in the Site SHE File. • Procedure to be in place to deal with: 1. Lost or stolen PPE. 2. Worn out or damaged PPE replacement. 3. Employees not utilising PPE as required • The above procedure applies to Principal Contractors and their appointed Sub- Contractors, as they are all employers in their own right.
Permits	• The Principal Contractor shall prepare and issue the required written permits relating to but not limited to the following: 1) Hot Work 2) Roof Work; and 3) Electrical work (both temporary and permanent) 4) Confined Space Entry 5) Isolation Lockout • The Principal Contractor must ensure that where permits are required that they be properly implemented and adhered to. • Any works conducted after hours or on Sundays must be authorised as per the Local Municipal Bylaws.
Speed Restrictions and Protections	• Unless otherwise stipulated, the maximum speed limit on sites must be limited to 5 km/h. 1) Vehicle movement routes on site must be clearly indicated where applicable. 2) Signage to ensure the safe movement of vehicles on site, as well as to ensure the health and safety of all employees and visitors on site, must be displayed in strategic locations. 3) The max speed limit for all delivery vehicles /construction plant when traveling on the public road is to be restricted to 20km/h 4) The public roads leading to the construction site is to be displayed with the applicable construction signage's indicating the movement of construction vehicles
Hazardous Chemical Substances (HCS)	• To comply with Hazardous Chemical Substances Regulations as published in Government Notice No. R. 1179 dated 25 August 1995. • In addition to the abovementioned, Material Safety Data Sheets must be kept on site for all materials, which may contain hazardous chemical substances • All staff responsible for use of any HCS must be inducted of the MSDS. The MSDS is to be referred to when conducting risk assessments, DSTI's and the waste management plan for disposal requirements. Appointed first aiders to reference required MSDS during any incidents involving HCS. • If contractor intends to use any high risk HCS, this is to be approved by the Designer and the required mitigation measures to be included in the site specific risk assessment.
Fire Extinguishers and Fire Fighting Equipment	• The Principal Contractor and Sub-Contractors must allow for and provide adequate provision of regularly serviced temporary firefighting equipment located at strategic points on site, specific for the classes of fire likely to occur.

	• The appropriate notices and signs must be allowed for and be erected as required • Contractors may not utilize fire protection equipment belonging to the Client without prior consent • Adequate number of staff to be trained in use of fire equipment.
Ladders and Ladder Work	• To comply with GSR (13A) and the following; 1) The Principal Contractor must allow for and ensure that all ladders are inspected at least monthly, are in a good safe working order, are the correct height for the task, extend at least 1m above the landing, are fastened and secured and are placed at a safe angle. 2) Records of inspections must be kept in a register on site.
Use of lifting equipment on site	• All lifting done on site is to comply with Driven Machinery Regulations 18(11) and Driven Machinery Regulations 2015 • The Contractor shall appoint a lifting machinery and tackle inspector who will inspect the equipment daily or before use, taking into account that: ✓ All lifting machinery and tackle have a safe working load clearly indicated; ✓ Records of inspections and load testing certificates are kept on site. • There is proper supervision in terms of guiding the loads which includes a trained banksman to direct and check lifting tackle if it is safe for use. • Lifting machinery and tackle to be used on site shall be marked with the Maximum Mass Load (MML), which is the safe limit in which the equipment may be used. • Inspections of lifting machines and lifting tackle shall be undertaken once per month and recorded in the register provided. • Daily pre-start checks shall also be conducted on all lifting machinery and Tackle. • Records shall be kept of all lifting machinery and tackle inspections and load tests. • Load tests shall be conducted a minimum of once per annum, and a certificate of compliance shall be kept on record. • A valid logbook shall be maintained for all lifting machinery, which will comply with a minimum six-monthly service and maintenance. • Lifting machinery shall be operated at all times with the assistance of a trained banks man who shall inspect all tackle before each lift. • All lifting equipment operators shall be trained once every two years and a copy of such training shall be attached to the appointment, which is to be made on site. • The Operators shall have a medical certificate of fitness to work in such an environment, issued by an occupational health practitioner in the form of Annexure 3.
Cranes	A contractor must, in addition to compliance with the Driven Machinery Regulations, 1988 ensure that where tower cranes are used— • They are designed and erected under the supervision of a competent person • A relevant risk assessment and method statement are developed and applied; • The effects of wind forces on the crane are taken into consideration and that a wind speed device is fitted that provides the operator with an

	audible warning when the wind speed exceeds the design engineer's specification; • The bases for the tower cranes and tracks for rail-mounted tower cranes are firm, level and secured; • the tower crane operators are competent to carry out the work safely; and • The tower crane operators have a medical certificate of fitness to work in such an environment, issued by an occupational health practitioner in the form of Annexure 3.
Portable Electrical Tools and Hand Tools	• The Principal Contractor shall ensure that all electrical tools, electrical distribution boards, extension leads, and plugs are kept in a safe working order. • The Principal Contractor shall ensure that all portable electrical Equipment, is clearly numbered, inspected by a Competent appointed person and records of such inspections to be kept on record in an appropriate register on the site SHE file • The Principal Contractor shall allow for and ensure the following in relation to hand Tools: 1) That a "Competent Person" undertakes routine inspections and records are kept on site. 2) That only authorized trained persons use the tools. 3) That safe working procedures apply. 4) That PPE is provided and used.
Adequate Lighting	All Contractors must allow for and ensure that adequate lighting is provided to allow for work to be carried out safely where natural lighting is inadequate. Any works done after hours; adequate lighting is to be provided.
Transportation of Workers	• In addition to CR 23 and the National Road Traffic Act 1996 the following will apply: The Principal Contractor and Sub-Contractors shall not: 1) Transport persons together with goods or tools unless there is an appropriate area or section of the vehicle in which to store such goods. 2) Transport persons on the back of trucks except if a proper canopy (properly covering the sides and top) has been provided with suitable seating areas. 3) Permit workers to stand or sit on the edge of the transporting vehicle. 4) Transport workers in LDVs unless they are closed/covered and have the correct number of seats for the passengers 5) Allow driver to transport more than four people on the back of a LDV and more than two passengers on the back of a ½ Ton LDV. • The driver of any LDV may not permit more than two passengers to occupy the cab of any LDV. • Drivers of such vehicles must have a valid driver's license for the code of vehicle being driven by them. • No servicing of vehicles will be permitted on a Construction Site. No Vehicles or machinery leaking oil will be permitted on site due to the risk posed to the environment. • Any oil or diesel spilled on site must be cleaned up as per accepted environmental practice

	In the event that Earth Moving Machinery is present on site the following must be adhered to: • Drivers of vehicles must be instructed to avoid parking behind earth moving machinery in order to ensure that their vehicles are visible to the operators of earth moving machinery. • Right of way must be afforded to earth moving machinery at all times. • Vehicles must only be permitted to park, where possible, in designated areas
Environmental Management	• The Principal Contractor and Sub-Contractors must comply with the requirements of NEMA Act (Act 107 of 1998) • The Principal Contractor must develop a waste management plan, implement, and maintained it onsite • Cement mixing to be done at a predetermined location on site which must include a solid, slab, and bunded edges to prevent runoff • A concrete wash out area to be established to clean all contaminated equipment • Contractor is to ensure adequate storm water control measures are implemented and maintained during the construction works. • Contaminated run off water from the site must be treated such as to ensure that it does not pose a risk to the environment • Dust suppression is to be managed on site • Any material which may have a harmful effect when disposed of by normal means must be disposed of in an appropriate manner to eliminate its harmful effect on the environment after disposal. • The Principal Contractor must allow for and ensure that adequate procedures are implemented and maintained to ensure that waste generated is placed in suitable receptacles and removed from the site promptly. • Plans to deal with spillages must be in place and maintained. • No waste materials (liquid or solid) may be disposed of in any sewer or storm water drains. • No burning of waste material may take place on site as such material being burned may result in pollution of the air or give off toxic vapours which could be harmful to the health of employees, patients and hospital staff or any other person present on site and adjacent to the construction site.
Alcohol and other Drugs	• To comply with GSR (2A) and the following; • No alcohol and other drugs will be allowed on site. • No person may be under the influence of alcohol or any other drugs while on the construction site or intends to enter the construction site. • Any person on the construction site who is on prescription drugs must inform his/her Employer accordingly and the Employer shall in turn report this to the Principal Contractor immediately. • Any person on the construction site who is suffering from any illness/condition that may have a negative effect on his/her safety performance must report this to his/her Employer, who in turn must report this to the Principal Contractor forthwith.

	• Any person on the construction site who is suspected of being under the influence of alcohol or other drugs must be removed from site immediately and be instructed to report back the next day for a preliminary inquiry. A full disciplinary procedure must be followed by the Contractor concerned and a copy of the disciplinary action must be forwarded to the Principal Contractor for his records.
Provision of water and electricity for building purposes	• The Principal contractor is responsible for the cost of water and electricity for building purposes and his site office. A metered point of supply will be provided by the hospital for the principal contractor. • Public water supply is not to be used by the principal contractor.
Compliance training for construction staff	• The Principal contractor shall ensure that all staff working at heights is trained for work at heights and against the fall protection plan. • The Principal Contractor shall implement a training matrix based on the required training needs for the project • Training is to be done via accredited training service providers

Annexure C

CONTRACTOR'S SAFETY, HEALTH AND ENVIRONMENTAL DECLARATION FOR TENDERS

INTRODUCTION

In terms of *Construction Regulation 5(1) (h)* 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 through 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 Safety, Health and Environmental 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 Safety, Health and Environmental 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 Safety, Health and Environmental 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) Client's Construction Safety, Health and Environmental Specification
    b) Approved Construction Safety, Health and Environmental Plan
    c) Occupational Health and Safety Act, Act 85 of 1993, 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 …….. on the ……day of ……..20…….

_____	_____
Full name of Signatory	Name of Enterprise
_____	_____
Capacity of Signatory	Signature of authorised representative of Bidder

Annexure D

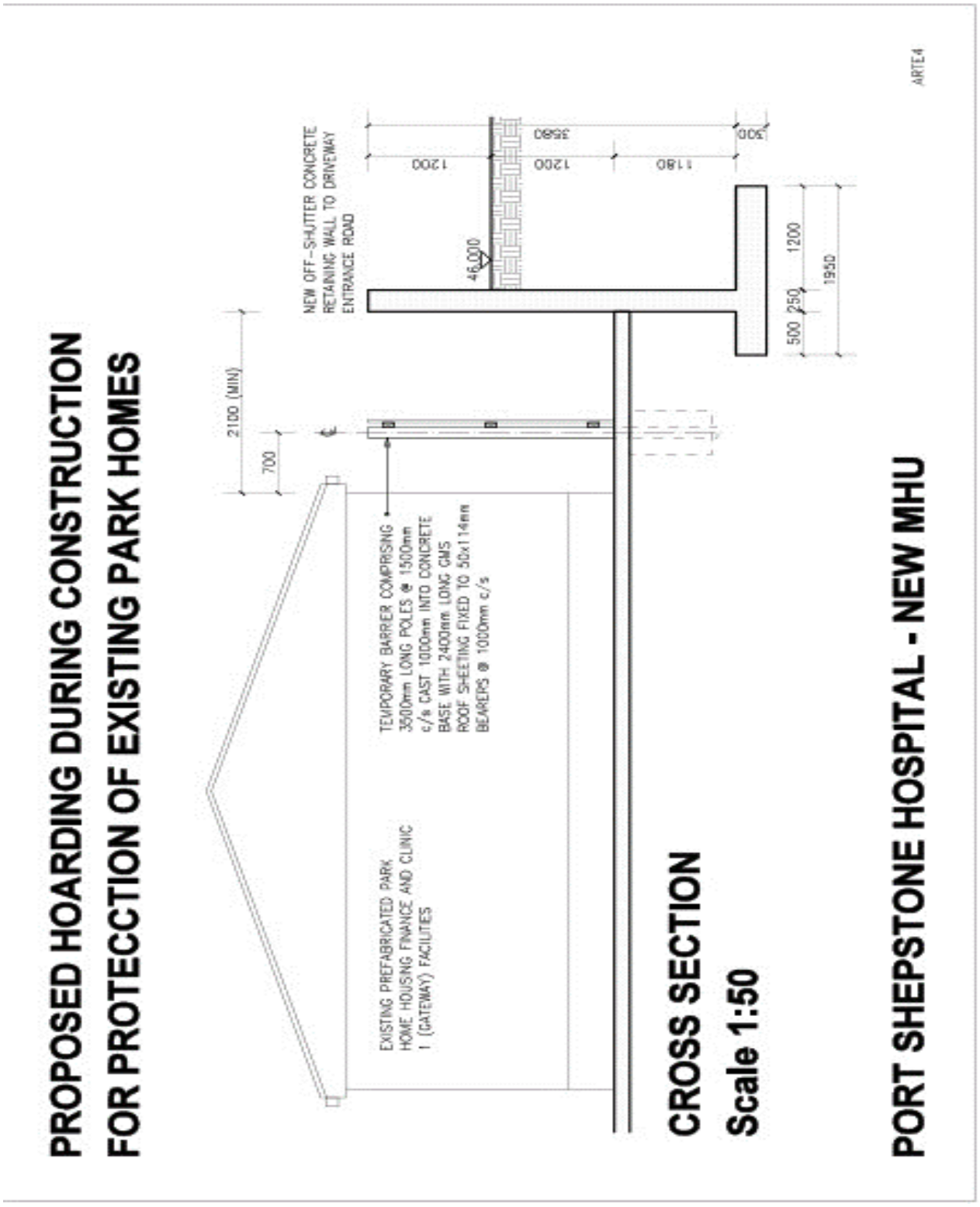
OHSE Bill of Quantities Template

	Description	Unit	Qty	Rate	Total
1	Allow for the necessary Workman's Compensation Fund or FEM contributions for the duration of the project with and including renewals	item			
2	Allow for the preparation and approval of project-specific H&S Plan & File [CR 7(1)(a)]	item			
3	Allow for the implementation and maintenance of project-specific H&S Plan & File. [CR 7]	Months			
4	Allow for the appointment of a Full-Time Competent Construction Health & Safety Officer registered with SACPCMP to assist in the control of all health and safety related aspects on site as per [CR 8(5)]	Months			
5	Provide for appointment of responsible and competent person/s to manage and supervise the works and administer and enforce health and safety on site as per [CR 8(1), & (7)	Months			
6	Allow for provision of telecommunication, facilities for the appointed Construction Health & Safety Officer	Months			
	EMERGENCY PREPAREDNESS				
7	Allow for provision of Basic Emergency Preparedness and Response equipment & at least Level 2 First Aider/s	Months			
8	Allow for the provision of fire extinguishers with servicing and maintenance				
9	Provision of air horns	Yearly			
10	Erect solid hoarding 2.5m high around the construction site.	Item			
	Provide, supply and maintenance for <u>each</u> worker the following SANS approved personal protective equipment & clothing as per the site-specific risk assessments:				
11	Hard Hats (High Density polyethylene, & 6-point lining)	No.			
12	Overall/work suit (100% Cotton)	No.			
13	Rain suits	No.			
14	Safety boots/shoes (Steel-Toe)	No.			
15	Safety Gumboots (Steel-Toe)	No.			

16	Safety gloves	No.			
17	Ear Plugs/Muffs	No.			
18	Dust Mask (at least FF2 type)	No.			
19	Respiratory Protective Equipment	No.			
20	Safety goggles/ Eye Protective Equipment	No.			
21	High visibility reflective vests	No.			
22	Personal Fall arrest and rescue equipment with and including lifelines and associated equipment	No.			
23	Temporary warning signs and symbols	No.			
24	SANS approved safety netting (orange color with minimum of 1,2 meters high)	Meters			
25	Provision for the supply and maintenance of Road Traffic Signs as in terms of the South African Road Traffic Signs Manual complete	Item			
26	Allow for Pre-employment medical examinations: yearly	Yearly			
27	Allow for exit medical examinations	No	1		
	HEALTH AND SAFETY EDUCATION				
28	Allow for HIV/AIDS awareness and Implementation programmes, including STI and TB	Months			
29	Allow for all compulsory health and safety awareness programme (e.g., Inductions, toolbox Talks, Safety Promotions, Risk Assessment, First Aid, Fire Fighting, Work at heights, H&S related training)	Item			
	ENVIRONMENTAL				
30	Provide for adequate handling and storage of materials so as to minimize contamination of ground, air, or water.	Item	1		
31	Provide for the adequate and safe collection and disposal of waste material from site by an approved method.	Item			
32	Provide Ablution Facilities separate for males and females and Eating Area for workers.	Item			
33	Provide for rehabilitation on completion of site areas	Item			
34	Provide for adequate dust control measure,	Item			
35	Provide for adequate storm water management	Item			

Annexure E

Hoarding Plan for Park Homes Finance and Clinic



Annexure F

BASELINE RISK ASSESSMENT

Please note that this is a Baseline Risk Assessment and not a detailed Risk Assessment of anticipated activities

Project:	*Department of Health: Construction of a new Psychiatric Ward for Port Shepstone Hospital* *WIMS NO: 044044*						
REF N0	**058170**	**RISK ASSESSOR**	**Inderjith Samsunder**	**REVISION**	01	**DATE**	**17 July 2021**

LIKELIHOOD		**CONSEQUENCE**		**RISK VALUE= LIKELIHOOD X CONSEQUENCE**	**RISK RANKING**
Rare	**1**	**Insignificant**	**1**	**0-5**	**1**
Unlikely	**2**	**Minor**	**2**	**6-10**	**2**
Possible	**3**	**Moderate**	**3**	**11-16**	**3**
Likely	**4**	**Major**	**4**	**17-20**	**4**
Almost certain	**5**	**Severe**	**5**	**21-25**	**5**

MAIN ACTIVITY		Site Establishment								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
1.1	**Travel to site**	Potholes	• Loss of vehicle control- Collision			• Collision • Pedestrians	**4x4=16:3**	• All drivers to be deemed competent • Drivers to adhere to road conditions • All equipment to be secured during transport	**3x2=6**	**2**
					• Oil/diesel spillages			• Drivers to adhere to road conditions • All equipment to be secured during transport		
		Restricted road access into the construction site	• Accidents • Overturning of vehicles			• Collision with private vehicles	**3x4=12:3**	• Construction vehicle and plant access is to be created to allow for movement in and out of the construction site. • A traffic management plan to be provided to control traffic flow into the site • All drivers to have valid medicals • All vehicles to be road worthy	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	• RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
1.2	**Site establish & solid hoarding off the construction site**	Site level with mechanical plant	• Failure of plant resulting in accidents /injuries				**4x4=16:3**	• All drivers to have valid medicals • All vehicles to be road worthy	**3x2=6**	**2**
		Manual excavation	• Pinch points from manual handling • Injuries				**4x3=12:3**	• All contractor staff and local labour to be inducted on the project and site specific risk assessments • All staff to use the required PPE when on site	**3x2=6**	**2**
		Damage to underground services	• Electrocution				**4x4=16:3**	• All underground services to be identified • All works to be supervised • Contractor to conduct DSTI's and communicated at the beginning of the shift on a daily basis. DSTI close out to be conducted and attendance registered signed by all staff.	**2x3=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
1.3	**Loading/Off-loading materials and equipment manually**	Unsafe manual lifting of equipment	• Injuries				**3x3=9:2**	• All staff to be inducted on the risk assessment • All staff to have correct PPE • Staff to be trained on correct lifting techniques • Laydown areas to be established	**3x1=3**	**1**
1.4	**Lifting and placement of site office /ablution facility on site (mechanical)**	Unsafe /incorrect rigging of containers at heights	• Failure of lifting equipment – injuries				**4x5=20:4**	• All operators to be deemed competent • Staff to be trained for heights • Ladder to be inspected • All riggers to be deemed competent • All lifting equipment to be load tested and records in file	**3X3=9**	**2**
		Failure to establish lifting equipment on solid surface	• Mechanical aids overturning - injuries		HCS spills, ground contamination		**3x4=12:3**	• Mechanical Aids must be operated by competent persons Ensure Offloading area is clear, level, and solid ground • Correct outrigger pads to be used	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
1.5	**Connection of municipal power supply from hospital access point**	Incompetent electrical contractor appointed	• Electrocution	• Electrical burns			**4x4=16:3**	• Only authorised person to do electrical connection • A CoC is to be provided by electrician once electrical connection is done and tested • Monthly inspections to be done for all temporary electrical connections	**2x3=6**	**2**
	Provision of generator for site	Unsafe establishment of generator on site	• Electrical fires- injuries				**3x3=9:2**	• All generators to be placed on drip trays • Generator to be established on a solid level surface and is to be bunded • Electrical connection to generator to be done by a registered electrician	**3x1=3**	**1**
		Storage of bulk fuel /fuel on site	• Fires- injuries • Property damages	• Exposure to fumes			**3x4=12:3**	• Bulk fuel to be stored within a bunded area • Bulk storage to be done in accordance of local Fire Dept. requirements • All small quantities to be stored in designated fuel containers • Staff to be trained in fire fighting	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
1.6	**Connection of portable water supply**	Use of incompetent staff	• Incorrect use of hand tools - injuries				**3x3=9:2**	• Staff to inducted on risk assessment • Identified risks to be communicated • All appointed staff to be deemed competent	**3x1=3**	**1**
1.7	**Establish of staff facilities: eat area/change area/ provision of portable toilets**	Site establishment plan not submitted for review and approval				• Incorrect establishment of facilities	**4x3=12: 3**	• Proposed location of staff facilities area to be away from work site activities	**3x2=6**	**2**
		Construction of staff facilities	• Manual handling - injuries • Fall from heights				**4x3=12: 3**	• All staff to work under supervision • All power tools to be inspected prior to use • Staff to have required PPE	**3x2=6**	**2**
		Use of portable toilets on site		• Unhygienic conditions • Insufficient ablution facilities for each sex	• Uncontrolled release of contaminated water		**4x3=12: 3**	• Staff facilities area to be suitable for staff use • Separate male and female change facilities to be provided • The portable toilets to be located away from the operational hospital • All portable toilets to be service twice a week	**3x2=6**	**2**

MAIN ACTIVITY		Demolition of identified buildings								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
2.1	**Isolation of electrical supply and removal of steel roof sheeting & purlins for hoarding**	Electrical Isolation lock out not done correctly	• Electrocution /electrical burns				**4X4=16:3**	• All isolation of power supply to be done by authorised electrician • A registered electrical contractor to be appointed • Records of lockout to be in file	**3x2=6**	**2**
		Removal of roof sheeting and purlins	• Injuries • Unsafe use of hand tools - injuries				**4x3=12:3**	• Correct use of PPE • All work sites to have solid hoarding • An approved demolition plan to be in place • Scaffold to be erected by competent person • Works to be supervised	**3x2=6**	**2**
		Work at heights	• Fall from heights - injuries				**4x4=16:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All staff to have the required PPE. • Staff to have medicals including work at heights	**3x3=9**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
2.2	**Manual demolition windows/ doors/ doorframes/ plumbing fixtures/**	Working at heights	• Fall from heights - injuries				**4x4=16:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All staff to have the required PPE. • Scaffold to be erected as per SANS 10085 • Staff to have medicals including work at heights • All ladders to be inspected	**3x3=9**	**2**
		Manual handling of demolished items	• Pinch points from hand tools • Trips and falls -injuries				**4x3=12: 3**	• DSTI to be done • In house training to be done on correct procedures of dismantling structures • Staff to use correct PPE as per risk based activity • All hand tools to be inspected before use • All staff to have the required PPE.		

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
2.3	**Removal of asbestos containing material roof sheets and water tanks**	Handling of asbestos containing material	• Untrained staff removing asbestos - injuries			• Asbestos dust exposure- health risks	**4x4=16: 3**	• An AIA to be appointed to prepare an inventory • A registered Asbestos removal contractor is to be appointed • A file is to be submitted for review and approval before any works commence on site • All works to be supervised. • All staff tom be trained on asbestos handling	**3x2=6**	**2**
		Work at heights	• Fall from heights- injuries				**4x3=12:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All staff to have the required PPE. • Scaffold to be erected as per SANS 10085 • Staff to have medicals including work at heights • All ladders to be inspected	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
2.4	**Mechanical demolishing of identified buildings**	Use of mechanical construction plant	• Collapse of structures onto staff- injuries/ fatalities				**5x4=20: 4**	• Appropriate machinery to be used for demolishing • Required signage's to be displayed indicating demolition in progress on site. • Demolishing plan to be provided • Risk assessments to be done for scope of works • Nil staff to be present during mechanical demolition	**3x2=6**	**2**
		Man Machine / Interface	• Injuries to employees • Fatality • Damage to plant / equipment / services				**4x3=12: 3**	• Man / LDV interface – adhere to 10m rule • Utilize / appoint flagman for parameter control • All staff to use required PPE for visibility	**3x3=9**	**2**
		Accumulation of demolished waste		• Exposure to dust			**3x3=9: 2**	• Demolished waste to be loaded into tippers for disposal off site due to restricted workspace. • Dust suppression to be maintained whilst demolished waste is on site	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
2.5	**Isolation and lockout of identified storm water drains and sewer lines**	Entry into restricted confined spaces	• Exposure to methane gases-unconsciousness				**5x4=20: 4**	• Any person entry in confined space is to be trained and deemed medically fit • Permits to be provided for entry • Gas testing to be conducted for all sewer manhole entry. • DSTI to be done • Sewer lines within construction site to be blanked off or diverted to allow for flow from operational building. • Strom water lines to be to be blanked off to prevent possible obstruction to operational lines.	**3x2=6**	**2**
				• Exposure to raw sewage			**4x3=12: 3**	• DSTI to be done • Sewer lines within construction site to be blanked off or diverted to allow for flow from • All staff to have valid medicals in file	**3x2=6**	**2**

MAIN ACTIVITY		Relocation of mobile buildings								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
3.1	**Relocation of mobile buildings**	Use of lifting machinery	• Failure of lifting machinery – overturning • Injuries				**3x4=12:3**	• All lifting machinery to be inspected before use. • Required load test to be in file • A lifting study to be conducted for lifting and relocation • All staff to be inducted on risk assessment. • Medical records to be provided for all staff • All staff to have the required PPE • Flagman to be present to guide operator	**2x3=6**	**2**
		Incompetent operator	• Establishment on unstable ground- machine overturning - injuries				**3x4=12:3**	• Operator to have necessary skills and qualifications and to be verified • Prior to establishment, ground to be inspected for stability. • Outrigger pads to be used	**2x3=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Incompetent rigger	Failure of lifting load - injuries				**4x4=16:3**	• Operator to have necessary skills and qualifications and to be verified • Guide ropes to be attached to all lifts to control movement Rigger to ensure correct SWL of lifting tackle to be used	**2x3=6**	**2**
		Failure of lifting tackle	• Failure of lift-damage to equipment • Injuries				**3x4=12: 3**	• All lifting tackle to be inspected with load tests in file • Correct lifting tackle to be used • Damaged lifting tackle is not to be used.	**2x3=6**	**2**

MAIN ACTIVITY		Construction of Anchored Contiguous Piled Wall								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
4.1	**Site survey**	Survey and installation of survey pegs	• Trips and falls - injuries • Injuries from use of hand tools				**3x3=9: 2**	• Works to be supervised • Lime to be used for ground markings and not cement • Required PPE to be used • All survey pegs to be made visible • If steel is to be used rebar caps are to be fitted onto them • Staff to use sun brim hats based on risk factors	**2x2= 4**	**1**
4.2	**Establish for piling**	Man Machine / Interface	• Injuries to employees • Fatality • Damage to plant / equipment / services				**4x3=12: 3**	• Man / machine interface – adhere to 10m rule • Utilize / appoint flagman for parameter control • All staff to use required PPE for visibility	**3x3=9**	**2**
		Restricted workspace	• Trips and falls - injuries				**3x3=9: 2**	• Establishment area to be prepared before machinery brought to site • Spill kit to be available on site	**3x1=3**	**1**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
4.3	**Drilling of grout injected CFA piles**	Operation of drilling machinery				• Dust exposure • Noise exposure	**4x3=12: 3**	• All staff to have required PPE • Dust suppression to be maintained on site • All works to be supervised by competent staff	**3x2=6**	**2**
		Incompetent operator	• Establishment on unstable ground- machine overturning – injuries				**3x4=12:3**	• Operator to have necessary skills and qualifications and to be verified • Outrigger pads to be used • Piling machine to be inspected before use • Records to be in file	**2x3=6**	**2**
		Attaching of additional drill piles	Fall from heights- injuries				**4x3=12:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All staff to have the required PPE. • Staff to have medicals including work at heights • All equipment to be inspected before use.	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Failure of lifting tackle	• Failure of lift- damage to equipment • Injuries				**3x4=12: 3**	• All lifting tackle to be inspected with load tests in file • Correct lifting tackle to be used • Damaged lifting tackle is not to be used.	**2x3=6**	**2**
		Man Machine / Interface	• Injuries to employees • Fatality • Damage to plant / equipment				**4x3=12: 3**	• Man / machine interface – adhere to 10m rule • Utilize / appoint flagman for parameter control • All staff to use required PPE for visibility	**3x3=9**	**2**
4.4	**Concreting of piles**	Manual handling of pile cages	• Pinch points from manual handling • Injuries				**4x3=12:3**	• All contractor staff and local labour to be inducted on the project and site specific risk assessments • All staff to use the required PPE when on site	**3x2=6**	**2**
		Grouting of piles			• Spillage of grout – ground contamination		**4x2=8: 2**	• All spills to be managed on site. Waste area to be established • All accumulated waste to be removed off site for disposal • All machinery to be inspected	**3x1=3**	**1**

MAIN ACTIVITY		Bulk Earthworks								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
5.1	**Mechanical excavations**	Man Machine / Interface	• Injuries to employees • Fatality • Damage to plant / equipment				**4x3=12: 3**	• Man / machine interface – adhere to 10m rule • Utilize / appoint flagman for parameter control • All staff to use required PPE for visibility	**3x3=9**	**2**
		Incompetent plant operators	• Machine overturning – injuries				**3x4=12:3**	• Operator to have necessary skills and qualifications and to be verified • Operator to have valid medicals in file\ • Records of all plant to be available on site	**2x3=6**	**2**
		Defective Plant	• The use of a defective plant may result in accidents that could result in injuries				**3x4=12: 3**	• All plant utilized on site has a recent service inspection register in place and signed off by the relevant technical manager	**2x3=6**	**2**
		Incorrect excavation	• Collapse of side walls – injuries/ fatalities				**3x4=12: 3**	• All excavations to be supervised • Side walls to be battered	**2x3=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Excavations next to existing building	• Collapse of existing buildings – damages / injuries				**3x5=15:3**	• Excavations to be done once CFA piles are completed • Photographic evidence to be recorded before and after excavations. • Excavations to be supervised by Excavation supervisor	**3x3=9**	**2**
5.2	**Hauling of spoil to spoil site**	Movement of construction plant	• Collision with machinery/ other vehicles/ injuries				**3x4=12:3**	• Flagman to direct trucks into site for loading • All truck operators to have valid medicals and PDP.	**3x2=6**	**2**
					• Hydrocarbon spills –ground contamination • Dust exposure		**3x3=9:2**	• All trucks are to be inspected • When vehicles are parked off, drip trays to be used	**3x2=6**	**2**
						• Spoil falling off trucks	**4x3=12: 3**	• Tippers are not to be overloaded during haul to mitigate spoil falling along route. • All spoil to be netted of during transport	**3x2=6**	**2**

MAIN ACTIVITY		Construction of Foundation Piles, Pile Caps and Beams (CFA)								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
6.1	**Manual excavations for pile caps and ground beams**	Manual excavation	• Pinch points from manual handling • Incorrect use of hand tools - Injuries				**4x3=12:3**	• All contractor staff and local labour to be inducted on the project and site specific risk assessments • All staff to use the required PPE when on site • Staff to be spaced out during manual excavation	**3x2=6**	**2**
			• Exposure of pile rebar – injuries				**3x4=12:3**	• All exposed rebar to be fitted with rebar caps	**3x2=6**	**2**
6.2	**Steel fixing for pile caps and ground beams**	Manual handling of rebar	• Manual handling injuries • Pinch points • Slips and trips				**4x3=12: 3**	• All staff to have required PPE • DSTI to be done • All works to be supervised • All steel to be stacked within a designated area • Correct lifting techniques to be practised on site	**2X2 =4**	**1**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
6.3	**Concreting of pile caps and ground beams**	Man Machine / Interface	• Injuries to employees • Fatality • Damage to plant / equipment				**4x3=12: 3**	• Man / machine interface – adhere to 10m rule • Utilize / appoint flagman for parameter control • All staff to use required PPE for visibility	**3x3=9**	**2**
		Incompetent concrete delivery operators	• Machine overturning – injuries				**3x4=12:3**	• Operator to have necessary skills and qualifications and to be verified • Operator to have valid medicals in file\ • Records of all plant to be available on site • All delivery trucks to be guided to site by flagman	**2x3=6**	**2**
		Delivery of concrete to site			• Concrete spills- ground contamination		**4x3=12: 3**	• Delivery trucks are not to be overloaded to meet demand • Drip sheets to be used to contain all spills on site • Concrete wash out facility to be established on site to prevent operators washing trucks on the road	**3x2=6**	**2**

MAIN ACTIVITY		Construction of Columns, Beams and Roof slab for Ground Floor & First Floor								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
7.1	**Steel fixing for columns and beams and floor slab**	Steel fixing	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 3**	• Required PPE to be used • DSTI to be done • All works to be supervised • All steel to be stacked within a designated area for easy handling • All exposed upright rebar is to be fitted with rebar caps • Staff to practice correct lifting techniques	**2X2 =4**	**1**
		Erection of access scaffolding for steel fixing at heights	• Unsafe erection of access scaffolding – collapse /injuries • Incompetent Erectors and inspectors- Scaffold failure				**4x3=12:3**	• Scaffold to be erected as per SANS 10085 • Staff to have medicals including work at heights • Required PPE to be used • DSTI to be done • All works to be supervised • Inspection registers to be maintained in file	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Working at heights	• Fall from heights- injuries				**4x3=12:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All staff to have the required PPE. • Staff to have medicals including work at heights • Lay down area to be established	**3x2=6**	**2**
7.2	**Erection of temporary works for columns, beams and floor slab**	Mechanical lifting for installing of temporary works	• Failure of lift- damage to equipment • Injuries				**3x4=12: 3**	• All lifting tackle to be inspected with load tests in file • Correct lifting tackle to be used • Damaged lifting tackle is not to be used.	**2x3=6**	**2**
		Man Machine / Interface	• Injuries to employees • Fatality • Damage to plant / equipment				**4x3=12: 3**	• Man / machine interface – adhere to 10m rule • Utilize / appoint flagman for parameter control All staff to use required PPE for visibility	**3x3=9**	**2**
		Incompetent rigger	Failure of lifting load - injuries				**4x4=16:3**	• Operator to have necessary skills and qualifications and to be verified	**2x3=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
								• Guide ropes to be attached to all lifts to control movement Rigger to ensure correct SWL of lifting tackle to be used		
		Manual handling of rebar	• Manual handling injuries • Pinch points • Slips and trips				**4x3=12: 3**	• All staff to have required PPE • DSTI to be done • All works to be supervised • All steel to be stacked within a designated area • Correct lifting techniques to be practised on site	**2X2 =4**	**1**
		Working at heights	Fall from heights- injuries				**4x3=12:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All staff to have the required PPE. Staff to have medicals including work at heights • Fall prevention to be installed	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
7.3	**Electrical 1st fix**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done • All works to be supervised • All steel to be stacked within a designated area • Correct lifting techniques to be practised on site	**2X2 =4**	**1**
		Extreme weather conditions		• Heat exhaustion /stroke			**3x4=12**	• Staff to maintain hydration during extreme weather • Work hours to be adapted as per weather patterns • All staff to have valid medicals	**3x2=6**	**2**
7.4	**Concreting of columns, beams and floor slab**	Man Machine / Interface	• Injuries to employees • Fatality • Damage to plant / equipment				**4x3=12: 3**	• Man / machine interface – adhere to 10m rule • Utilize / appoint flagman for parameter control All staff to use required PPE for visibility • Operator of concrete chute to be deemed competent	**3x3=9**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Mechanical lifting of concrete with use of concrete bucket	• Failure of lift- damage to equipment Injuries				**3x4=12: 3**	• All lifting tackle to be inspected with load tests in file • Damaged lifting tackle is not to be used.	**2x3=6**	**2**
					• Concrete spills		**4x2=8:2**	• Drop sheet to be used • Concrete bucket to be filled to required level • All concrete spills to be cleaned immediately • Waste concrete and cleaning to be disposed in wash out facility	**3x1=3**	**1**
		Exposure to concrete		• Concrete burns			**4x3=12:3**	• All staff to have correct PPE as per risk factors • Staff to be trained in correct use of PPE • Any contact with skin to be washed off immediately	**2x3=6**	**2**
		Extreme weather conditions		• Heat exhaustion /stroke			**3x4=12**	• Staff to maintain hydration during extreme weather • Work hours to be adapted as per weather patterns • All staff to have valid medicals in file	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Failure of erected temporary works	• Collapse of installed temporary works – injuries/ damage to equipment / property				**3x5=15:3**	• All temporary works to be erected as per design plan • DSTI to be done • All works to be supervised • Nil concrete pour until approved by the appointed Structural Engineer • Competent staff to be appointed for all temporary works • Records of inspection for before during and after concrete pour to be in file. • Nil staff to be under any temporary works during concrete pour	**2x3=6**	**2**
					• Concrete Contamination to environment		**3x3=9:2**	• A waste management plan to be implemented for project. • All inspections are to be in file	**2x2=4**	**1**

MAIN ACTIVITY		Building works								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
8.1	**Brick work for super structure for ground floor and first floor**	Manual handling of bricks	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done • All works to be supervised • All bricks to be stacked within a designated area • Correct lifting techniques to be practised on site	**2X2 =4**	**1**
		Extreme weather conditions		Heat exhaustion /stroke			**3x4=12**	• Staff to maintain hydration during extreme weather • Work hours to be adapted as per weather patterns • All staff to have valid medicals	**3x2=6**	**2**
		Erection of access scaffolding for brickworks	• Unsafe erection of access scaffolding – collapse /injuries				**4x3=12:3**	• Staff to have medicals including work at heights • DSTI to be done • Inspection registers to be maintained in file • All scaffold to be erected as per SANS 10085	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Working at heights	• Fall from heights- injuries				**4x3=12:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All staff to have the required PPE. Staff to have medicals including work at heights • Fall prevention to be installed	**3x2=6**	**2**
		Accumulation of building waste			• Infestation of rodents		**4x3=12:3**	• A waste management plan to be implemented • Daily housekeeping to be managed • Waste skips to be available on site	**3x2=6**	**2**
8.2	**Installing of steel roof trusses/ purlins and sheeting on building**	Establishment of mobile crane	• Establishment on unstable ground- machine overturning – injuries				**3x4=12:3**	• Operator to have necessary skills and qualifications and to be verified • Outrigger pads to be used • Mobile crane to be inspected before use • Records to be in file • A lifting study to be provided	**2x3=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Man Machine / Interface	• Injuries to employees • Fatality • Damage to plant / equipment				**4x3=12: 3**	• Man / machine interface – adhere to 10m rule • Utilize / appoint flagman for parameter control All staff to use required PPE for visibility • All works to be supervised	**3x3=9**	**2**
		Failure of lifting tackle	• Failure of lift-damage to equipment / Injuries				**3x4=12: 3**	• All lifting tackle to be inspected with load tests in file • Correct lifting tackle to be used • Appointed rigger to be competent with records in file • Guide ropes to be attached to control movement • Nil lifting to be done during windy conditions	**2x3=6**	**2**
		Rigging of items to be lifted	• Manual handling injuries • Failure of lift-damages / injuries				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done • All works to be supervised • Correct lifting techniques to be practised on site	**2X2 =4**	**1**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Installing of rood sheets	• Manual handling injuries • Pinch points • Slips and trips				**4x3=12: 3**	• All staff to have required PPE • DSTI to be done • All works to be supervised • Correct lifting techniques to be practised on site • A single roof sheet to be lifted at a time. • Nil lifting to be done during windy conditions	**3X2 =6**	**2**
						• Unused roof sheets blown of roof- injuries/ public damages	**3x5=15: 3**	• All unsecured sheets to be brought down and secured • Offcut sheets to be removed off roof		
		Working at heights	Fall from heights- injuries /fatalities				**3x5=15:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All staff to have the required PPE. Staff to have medicals including work at heights • Fall prevention to be installed	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
8.3	**Install of fascia/ barge boards/ gutters on new building**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done • All works to be supervised • All roof material to be stacked within a designated area Correct lifting techniques to be practised on site	**2X2 =4**	**1**
		Rigging of items to be lifted	• Manual handling injuries • Failure of lift-damages/ injuries				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done • All works to be supervised • A single item to be lifted at a time.	**2X2 =4**	**1**
		Working at heights	Fall from heights- injuries /fatalities				**3x5=15:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All staff to have the required PPE. Staff to have medicals including work at heights • Fall prevention to be installed	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
8.4	**Electrical 2nd fix**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done • All works to be supervised • All electrical material to be stacked within a designated area	**2X2 =4**	**1**
		Use of small power tools	• Injuries /cuts • Electrocution				**4x3=12:3**	• All power tools to be inspected before use • DSTI to be conducted • Staff to be deemed competent in use of power driven tools • Correct PPE to be used as per risk factors	**3x2=6**	**2**
				• Dust exposure • Excessive dust may cause respiratory illness			**4x3=12:3**	• Employee to make use of SABS approved hearing protection, supervisor to ensure that the correct P.P.E is used. • Task to be supervised by a competent supervisor • All staff to have valid medicals	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Working at heights	Fall from heights- injuries				**4x3=12:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All ladders to be inspected before use • Correct types ladders to be used	**3x2=6**	**2**
8.5	**Plastering Of new walls**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done • All works to be supervised • Housekeeping to be managed on site	**2X2 =4**	**1**
		Mixing mortar for plaster		• Dust exposure • Excessive dust may cause respiratory illness			**4x3=12:3**	• Employee to make use of SABS approved hearing protection, supervisor to ensure that the correct P.P.E is used. • Task to be supervised by a competent supervisor • All staff to have valid medicals	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
					• Contamination to environment		**3x3=9:2**	• A waste management plan to be implemented for project. • All mixing to be done on platforms or ply boards • All waste is to be disposed as per waste management plan. • Nil contaminated water to enter storm water	**2x2=4**	**1**
8.6	**Installation of medical gas pipes**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done • All works to be supervised • Laydown area to be established	**2X2 =4**	**1**
		Use of power tools	• Injuries /cuts Electrocution				**4x3=12:3**	• All power tools to be inspected before use • DSTI to be conducted • Staff to be deemed competent in use of power driven tools • Correct PPE to be used as per risk factors • All extension cables to be of correct size.	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Working at heights	• Fall from heights- injuries				**4x3=12:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All ladders to be inspected before use • Correct types ladders to be used	**3x2=6**	**2**
		Hot works	• Fires- injuries /burns				**3x3=9:2**	• Risk assessment to be communicated to all staff. • All staff to have the required PPE • Hot works permit to be implemented • Fire extinguishers to be present on site • Fire watches to be present	**2x2=4**	**1**
8.7	**Installing of ceilings/ cornices on new and existing buildings**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done • All works to be supervised • Laydown area to be established • Correct lifting techniques to be implemented	**2X2 =4**	**1**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Erection of access scaffolding for ceiling installation	• Unsafe erection of access scaffolding – collapse /injuries • Incompetent Erectors and inspectors- Scaffold failure				**4x3=12:3**	• Scaffold to be erected as per SANS 10085 • Staff to have medicals including work at heights • Required PPE to be used • DSTI to be done • All works to be supervised • Inspection registers to be maintained in file	**3x2=6**	**2**
		Working at heights	• Fall from heights- injuries				**4x3=12:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All ladders to be inspected before use • Correct types ladders to be used	**3x2=6**	**2**
		Use of small power tools	• Injuries /cuts • Electrocution				**4x3=12:3**	• All power tools to be inspected before use • DSTI to be conducted • Staff to be deemed competent in use of power driven tools • Correct PPE to be used as per risk factors	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
8.8	**Painting works on building**	Preparing walls to be painted		• Dust exposure • Excessive dust may cause respiratory illness			**4x3=12:3**	• Supervisor to ensure that the correct P.P.E is used. • Task to be supervised by a competent supervisor • All staff to have valid medicals • Staff to be communicated on MSDS for paints	**3x2=6**	**2**
		Working at heights	Fall from heights- injuries				**4x3=12:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All ladders to be inspected before use • Correct types ladders to be used	**3x2=6**	**2**
		Painting works		• Exposure to paint fumes –respiratory illness			**4x3=12:3**	• Required PPE to be used • DSTI to be done • Area to be well ventilated • Risk assessment and SWP to be in file • All spills to be cleaned	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Painting works			• Soil and water contamination		**3x3=9: 2**	• Work area to be naturally ventilated during painting • Drip sheets to be used to protect flooring • Staff to have required PPE • Washing of all paint items to be done in a controlled manner for safe disposal • All contaminated waste to be safely disposed as per waste management	**3x2=6**	**2**

MAIN ACTIVITY		Building works for new building								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
9.1	**Fitting of wash basins/ pan cisterns**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done • All works to be supervised • Laydown area to be established • Correct lifting techniques to be implemented	**2X2 =4**	**1**
		Use of small power tools	• Injuries /cuts Electrocution				**4x3=12:3**	• All power tools to be inspected before use • DSTI to be conducted • Staff to be deemed competent in use of power driven tools • Correct PPE to be used as per risk factors	**3x2=6**	**2**
				• Dust exposure • Excessive dust may cause respiratory illness			**4x3=12:3**	• Supervisor to ensure that the correct P.P.E is used. • Task to be supervised by a competent supervisor • All staff to have valid medicals	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
9.2	**Fitting of water pipes**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done • All works to be supervised • Laydown area to be established • Correct lifting techniques to be implemented	**2X2 =4**	**1**
		Use of small power tools	• Injuries /cuts Electrocution				**4x3=12:3**	• All power tools to be inspected before use • DSTI to be conducted • Staff to be deemed competent in use of power driven tools • Correct PPE to be used as per risk factors	**3x2=6**	**2**
		Hot works	• Fires- injuries /burns				**3x3=9:2**	• Risk assessment to be communicated to all staff. • All staff to have the required PPE • Hot works permit to be implemented • Fire extinguishers to be present on site Fire watches to be present	**2x2=4**	**1**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
9.3	**Installing of sewer /storm water pipes**	Manual excavation	• Pinch points from manual handling • Injuries				**4x3=12:3**	• All contractor staff to be inducted on the site specific risk assessments • All staff to use the required PPE on site • All works to be supervised	**3x2=6**	**2**
		Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done Laydown area to be established • Correct lifting techniques to be implemented	**2X2 =4**	**1**
		Damage to underground services	• Electrocution				**3x4=12:3**	• All underground services to be identified • All works to be supervised • Contractor to conduct DSTI's and communicated at the beginning of the shift on a daily basis. • DSTI close out to be conducted and attendance registered signed by all staff.	**2x3=6**	**2**

MAIN ACTIVITY		Carpentry Works and Ironmongery works								
REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
10.1	**Fitting of Single Doors & Double Doors into frames**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done Laydown area to be established • Correct lifting techniques to be implemented	**2X2 =4**	**1**
		Use of small power tools	• Injuries /cuts Electrocution				**4x3=12:3**	• All power tools to be inspected before use • DSTI to be conducted • Staff to be deemed competent in use of power driven tools • Correct PPE to be used as per risk factors	**3x2=6**	**2**
				• Dust exposure • Excessive dust may cause respiratory illness			**4x3=12:3**	• Supervisor to ensure that the correct P.P.E is used. • Task to be supervised by a competent supervisor All staff to have valid medicals	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
10.2	**Fitting of cupboards, desk and shelving etc.**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done Laydown area to be established • Correct lifting techniques to be implemented	**2X2 =4**	**1**
		Use of small power tools	• Injuries /cuts Electrocution				**4x3=12:3**	• All power tools to be inspected before use • DSTI to be conducted • Staff to be deemed competent in use of power driven tools • Correct PPE to be used as per risk factors	**3x2=6**	**2**
10.3	**Fitting of Ironmongery**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done Laydown area to be established • Correct lifting techniques to be implemented	**2X2 =4**	**1**

MAIN ACTIVITY		Floor Works								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
11.1	**Screed of floors**	Preparing floors to be screed		• Dust exposure • Excessive dust may cause respiratory illness			**4x3=12:3**	• Supervisor to ensure that the correct P.P.E is used. • Task to be supervised by a competent supervisor • All staff to have valid medicals • Staff to be communicated on MSDS for paints	**3x2=6**	**2**
		Mixing mortar for plaster		• Dust exposure • Excessive dust cause respiratory illness			**4x3=12:3**	• Staff to use correct PPE • Task to be supervised by a competent supervisor • All staff to have valid medicals	**3x2=6**	**2**
11.2	**Install vinyl floor tiles**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done Laydown area to be established • Correct lifting techniques to be implemented	**2X2 =4**	**1**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Installing of vinyl flooring		• Exposure to glue fumes – respiratory illness			**4x3=12:3**	• Required PPE to be used • DSTI to be done • Area to be well ventilated • Risk assessment and SWP to be in file • All spills to be cleaned	**3x2=6**	**2**
			• Flammable vapours – fires /burns				**3x3=9:2**	• Risk assessment to be communicated to all staff. • All staff to have the required PPE • Hot works permit to be implemented • Fire extinguishers to be present on site	**2x2=4**	**1**
11.3	**Installing floor/wall tiles**	• Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done Laydown area to be established • Correct lifting techniques to be implemented • All waste to be managed as per waste management plan.	**2X2 =4**	**1**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Mixing of tile fix		• Excessive dust cause respiratory illness			**4x3=12:3**	• Staff to use correct PPE • Task to be supervised by a competent supervisor All staff to have valid medicals	**3x2=6**	**2**
		Use of small power tools	• Injuries /cuts Electrocution				**4x3=12:3**	• All power tools to be inspected before use • DSTI to be conducted • Staff to be deemed competent in use of power driven tools • Correct PPE to be used as per risk factors	**3x2=6**	**2**
		Working at heights	Fall from heights- injuries				**4x3=12:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All ladders to be inspected before use • Correct types ladders to be used	**3x2=6**	**2**

MAIN ACTIVITY		Electrical Installation								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
12.1	**Electrical installation 2nd fix for distribution boards/ plug points and lighting**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done Laydown area to be established • Correct lifting techniques to be implemented • All waste to be managed as per waste management plan.	**2X2 =4**	**1**
		Use of small power tools	• Injuries /cuts Electrocution				**4x3=12:3**	• All power tools to be inspected before use • DSTI to be conducted • Staff to be deemed competent in use of power driven tools • Correct PPE to be used as per risk factors	**3x2=6**	**2**
		Use of hand tools	• Hand injuries				**3x3=9:2**	• All hand tools are to be inspected. • Correct hand tools to be used for the correct task. • Staff to use correct PPE.	**2X2 =4**	**1**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Working at heights	Fall from heights- injuries				**4x3=12:3**	• All staff to be trained for heights • An approved fall protection plan to be implemented for site • All ladders to be inspected before use • Correct types ladders to be used	**3x2=6**	**2**
11.2	**Installation of HVAC**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**4x3=12: 3**	• All staff to have required PPE • DSTI to be done Laydown area to be established • Correct lifting techniques to be implemented	**3X2 =6**	**2**
		Use of small power tools	• Injuries /cuts Electrocution				**4x3=12:3**	• All power tools to be inspected before use • All works to be done by registered electricians • DSTI to be conducted • Staff to be deemed competent in use of power driven tools Correct PPE to be used as per risk factors	**3x2=6**	**2**

MAIN ACTIVITY		Installation of elevated water tank								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
12.1	**Excavation for tank base**	• Manual excavation	• Pinch points from manual handling • Injuries				**4x3=12:3**	• All contractor staff to be inducted on the site specific risk assessments • All staff to use the required PPE on site • All works to be supervised	**3x2=6**	**2**
			Collapse of excavation side wall – injuries/ fatalities				**3x4=12:3**	• All works to be supervised • All excavated material to be 1m away from edge • All staff to use correct PPE	**3x2=6**	**2**
12.2	**Steel fixing for foot foundations**	Manual handling of rebar	• Manual handling injuries • Pinch points • Slips and trips				**4x3=12: 3**	• All staff to have required PPE • DSTI to be done • All works to be supervised • All steel to be stacked within a designated area • Correct lifting techniques to be practised on site	**2X2 =4**	**1**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
12.3	**Concrete of strip foundations**	Man Machine / Interface	• Injuries to employees • Fatality • Damage to plant / equipment				**4x3=12: 3**	• Man / machine interface – adhere to 10m rule • Utilize / appoint flagman for parameter control All staff to use required PPE for visibility	**3x3=9**	**2**
		Incompetent concrete delivery operators	• Machine overturning – injuries				**3x4=12:3**	• Operator to have necessary skills and qualifications and to be verified • Operator to have valid medicals in file\ • Records of all plant to be available on site All delivery trucks to be guided to site by flagman	**2x3=6**	**2**
		Delivery of concrete to site			• Concrete spills- ground contamination		**4x3=12: 3**	• Delivery trucks are not to be overloaded to meet demand • Drip sheets to be used to contain all spills on site • Concrete wash out facility to be established on site to prevent operators washing trucks on the road	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
12.4	**Assembly of steel structure supports for tank base**	Manual handling of rebar	• Manual handling injuries • Pinch points • Slips and trips				**4x3=12: 3**	• All staff to have required PPE • DSTI to be done • All tank sections to be stacked within a designated area • Correct lifting techniques to be practised on site	**2X2 =4**	**1**
12.5	**Assembly of water tank using scaffolding /ladders**	• Rigging of items to be lifted	• Manual handling injuries • Failure of lift-damages/ injuries				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done • All works to be supervised A single item to be lifted at a time.	**2X2 =4**	**1**
		Working at heights	Fall from heights- injuries /fatalities				**3x5=15:3**	• An approved fall protection plan to be implemented for site • All staff to have the required PPE. • Staff to have medicals including work at heights • Fall prevention to be installed	**3x2=6**	**2**

MAIN ACTIVITY		Construction of car park and walkways								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
13.1	**Site levelling using excavator/ bob cat**	• Man Machine / Interface	• Injuries to employees • Fatality • Damage to plant / equipment				**4x3=12: 3**	• Man / machine interface – adhere to 10m rule • Utilize / appoint flagman for parameter control All staff to use required PPE for visibility	**3x3=9**	**2**
		Backfill and compaction		Excessive dust cause respiratory illness			**4x3=12:3**	• Staff to use correct PPE • Task to be supervised by a competent supervisor All staff to have valid medicals	**3x2=6**	**2**
13.2	**Laying of pavers for car park**	Manual handling of pavers	• Manual handling injuries • Pinch points • Slips and trips				**4x3=12: 3**	• All staff to have required PPE • DSTI to be done • All pavers to be stacked within a designated area • Correct lifting techniques to be practised on site	**2X2 =4**	**1**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
				Heat exhaustion /stroke			**3x4=12**	• Staff to maintain hydration hot weather • Work hours to be adapted as per weather patterns • All staff to have valid medicals	**3x2=6**	**2**
13.3	**Compaction of laid pavers**	Man Machine / Interface	• Injuries to employees • Fatality • Damage to plant / equipment				**4x3=12: 3**	• Man / machine interface – adhere to 10m rule • Utilize / appoint flagman for parameter control All staff to use required PPE for visibility	**3x3=9**	**2**
				Excessive dust cause respiratory illness			**3x3=9:3**	• Staff to use correct PPE • Task to be supervised by a competent supervisor All staff to have valid medicals	**2x2=4**	**1**
13.4	**Concreting of walkways**	Manual excavation	• Pinch points from manual handling • Injuries				**4x3=12:3**	• All contractor staff to be inducted on the site specific risk assessments • All staff to use the required PPE on site • All works to be supervised	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
	Concreting of walkways	Delivery of concrete to site			• Concrete spills- ground contamination		**4x3=12: 3**	• Delivery trucks are not to be overloaded to meet demand • Drip sheets to be used to contain all spills on site • Concrete wash out facility to be established on site to prevent operators washing trucks on the road	**3x2=6**	**2**
				Excessive dust cause respiratory illness			**3x3=9:3**	• Staff to use correct PPE • Task to be supervised by a competent supervisor All staff to have valid medicals	**2x2=4**	**1**
				Heat exhaustion /stroke			**3x4=12**	• Staff to maintain hydration hot weather • Work hours to be adapted as per weather patterns All staff to have valid medicals	**3x2=6**	**2**

MAIN ACTIVITY		Glazing of windows, Metal and Hot Works								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
14.1	**Glazing of windows**	Manual handling of glass panes	• Manual handling injuries /cuts • Pinch points • Slips and trips				**4x3=12: 3**	• All staff to have required PPE as per task risks. • DSTI to be done • Correct lifting techniques to be practised on site	**2X2 =4**	**1**
		Working at heights	Fall from heights- injuries /fatalities				**3x5=15:3**	• Glazers to ensure a step ladder is used. • All ladders to be inspected before use • All staff to have the required PPE. • Staff to have medicals including work at heights	**3x2=6**	**2**
14.2	**Installation of handrails**	Manual handling of glass panes	• Manual handling injuries /cuts • Pinch points • Slips and trips				**4x3=12: 3**	• All staff to have required PPE as per task risks. • DSTI to be done • Correct lifting techniques to be practised on site	**2X2 =4**	**1**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Use of small power tools	• Injuries /cuts Electrocution				**4x3=12:3**	• All power tools to be inspected before use • All works to be done by registered electricians • DSTI to be conducted • Staff to be deemed competent in use of power driven tools Correct PPE to be used as per risk factors	**3x2=6**	**2**
		Welding works	• Fires / injuries				**3x4=12: 3**	• All staff to have required PPE as per task risks. • DSTI to be done • Hot works permit to be implemented. • Fire extinguishers to be present on site	**3x2=6**	**2**
14.3	**Installing of steel roller shutters (Lock garages), steel strong-room doors,**	Manual handling	• Manual handling injuries /cuts • Pinch points • Slips and trips				**4x3=12: 3**	• All staff to have required PPE as per task risks. • DSTI to be done • Correct lifting techniques to be practised on site • Trolleys to be used to move steel doors	**2X2 =4**	**1**

MAIN ACTIVITY		Installation of elevator inside the building								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
15.1	**Excavation for lift base**	• Manual excavation	• Pinch points from manual handling • Injuries				**4x3=12:3**	• All contractor staff to be inducted on the site specific risk assessments • All staff to use the required PPE on site • All works to be supervised	**3x2=6**	**2**
			Collapse of excavation side wall – injuries/ fatalities				**3x4=12:3**	• All works to be supervised • All excavated material to be 1m away from edge • All staff to use correct PPE	**3x2=6**	**2**
15.2	**Steel fixing for foot foundations**	Manual handling of rebar	• Manual handling injuries • Pinch points • Slips and trips				**4x3=12: 3**	• All staff to have required PPE • DSTI to be done • All works to be supervised • All steel to be stacked within a designated area • Correct lifting techniques to be practised on site	**2X2 =4**	**1**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
15.3	**Construction of concrete plinth at lift pit**	Man Machine / Interface	• Injuries to employees • Fatality • Damage to plant / equipment				**4x3=12: 3**	• Man / machine interface – adhere to 10m rule • Utilize / appoint flagman for parameter control All staff to use required PPE for visibility	**3x2=6**	**2**
		Incompetent concrete delivery operators	• Machine overturning – injuries				**3x4=12:3**	• Operator to have necessary skills and qualifications and to be verified • Operator to have valid medicals in file\ • Records of all plant to be available on site All delivery trucks to be guided to site by flagman	**2x3=6**	**2**
		Delivery of concrete to site			• Concrete spills- ground contamination		**4x3=12: 3**	• Delivery trucks are not to be overloaded to meet demand • Drip sheets to be used to contain all spills on site • Concrete wash out facility to be established on site to prevent operators washing trucks on the road	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
15.4	**Fixing rail brackets and rails for lift**	Use of small power tools	• Injuries /cuts Electrocution				**4x3=12:3**	• All power tools to be inspected before use • DSTI to be conducted • Staff to be deemed competent in use of power driven tools Correct PPE to be used as per risk factors	**3x2=6**	**2**
		Erection of access scaffolding for ceiling installation	• Unsafe erection of access scaffolding – collapse /injuries Incompetent Erectors and inspectors- Scaffold failure				**4x3=12:3**	• Scaffold to be erected as per SANS 10085 • Staff to have medicals including work at heights • Required PPE to be used • DSTI to be done • All works to be supervised • Inspection registers to be maintained in file	**3x2=6**	**2**
		Working at heights	Fall from heights- injuries /fatalities				**3x5=15:3**	• Installers to ensure that all scaffolding is safe • All ladders to be inspected before use • All staff to have the required PPE. • Staff to have medicals including work at heights	**3x2=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
15.5	**Electrical Wiring, installation of traction machine and Control panel in machine room for lift**	Manual handling	• Manual handling injuries • Pinch points • Slips and trips				**3x3=9: 2**	• All staff to have required PPE • DSTI to be done Laydown area to be established • Correct lifting techniques to be implemented	**2X2 =4**	**1**
		Use of small power tools	• Injuries /cuts • Electrocution				**4x3=12:3**	• All power tools to be inspected before use • All electrical installation to be done by registered electrical staff • DSTI to be conducted • Staff to be deemed competent in use of power driven tools Correct PPE to be used as per risk factors	**3x2=6**	**2**
		Use of hand tools	• Hand injuries				**3x3=9:2**	• All hand tools are to be inspected. • Correct hand tools to be used for the correct task. • Staff to use correct PPE.	**2X2 =4**	**1**

MAIN ACTIVITY		Civil Works – Underpinning and attenuation tank								
REF NO	**SUB ACTIVITY**	**HAZARDS**	**SAFETY RISKS**	**HEALTH RISK**	**ENVIRO MENTAL RISK**	**PUBLIC RISK**	**PURE RISK**	**RECOMMENDED RISK CONTROL MEASURE**	**RESIDUAL RISK**	**Risk Priority No**
16.1	**Excavation for underpinning of identified sections of foundation by machinery and manually**	• Manual excavation	• Pinch points from manual handling • Injuries				**4x3=12:3**	• All contractor staff to be inducted on the site specific risk assessments • All staff to use the required PPE on site • All works to be supervised	**3x2=6**	**2**
			Collapse of excavation side wall – injuries/ fatalities				**3x4=12:3**	• All works to be supervised • All excavated material to be 1m away from edge • Shoring is to be implemented • All staff to use correct PPE	**3x2=6**	**2**
16.2	**Steel fixing for underpinning**	Manual handling of rebar	• Manual handling injuries • Pinch points • Slips and trips				**4x3=12: 3**	• All staff to have required PPE • DSTI to be done • All works to be supervised • Correct lifting techniques to be practised on site	**2X2 =4**	**1**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
16.3	**Concreting of underpinning**	• Delivery of concrete to site			• Concrete spills- ground contamination		**4x3=12: 3**	• Delivery trucks are not to be overloaded to meet demand • Drip sheets to be used to contain all spills on site • Concrete wash out facility to be established on site to prevent operators washing trucks on the road	**3x2=6**	**2**
16.4	**Mechanical excavation for storm water attenuation tank**	• Man Machine / Interface	• Injuries to employees • Fatality • Damage to plant / equipment				**4x3=12: 3**	• Man / machine interface – adhere to 10m rule • Utilize / appoint flagman for parameter control All staff to use required PPE for visibility	**3x3=9**	**2**
16.5	**Steel fixing for attenuation tank base**	• Manual handling of rebar	• Manual handling injuries • Pinch points • Slips and trips				**4x3=12: 3**	• All staff to have required PPE • DSTI to be done • All works to be supervised • All steel to be stacked within a designated area • Correct lifting techniques to be practised on site	**2X2 =4**	**1**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
		Delivery of concrete to site			• Concrete spills- ground contamination		**4x3=12: 3**	• Delivery trucks are not to be overloaded to meet demand • Drip sheets to be used to contain all spills on site • Concrete wash out facility to be established on site to prevent operators washing trucks on the road • All delivery trucks to be guided to site by flagman. • All waste concrete to be managed as the waste management plan	**3x2=6**	**2**
		Incompetent concrete delivery operators	• Machine overturning – injuries				**3x4=12:3**	• Operator to have necessary skills and qualifications and to be verified • Operator to have valid medicals in file • Medical records to be in file for all staff delivery to site.	**2x3=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
16.6	**Erection of temporary works for attenuation tank**	Mechanical lifting for installing of temporary works	• Failure of lift- damage to equipment • Injuries				**3x4=12: 3**	• All lifting tackle to be inspected with load tests in file • Correct lifting tackle to be used	**2x3=6**	**2**
		Man Machine / Interface	• Injuries to employees • Fatality • Damage to plant / equipment				**4x3=12: 3**	• Man / machine interface – adhere to 10m rule • Utilize / appoint flagman for parameter control All staff to use required PPE for visibility	**3x3=9**	**2**
		Incompetent rigger	Failure of lifting load - injuries				**4x4=16:3**	• Rigger to have necessary skills and qualifications and to be verified • Records to be in file	**2x3=6**	**2**
		Failure of erected temporary works	• Collapse of installed temporary works – injuries/ damage to equipment / property				**3x5=15:3**	• All temporary works to be erected as per design plan • DSTI to be done • Nil concrete pour until approved by the appointed Structural Engineer • Competent staff to be appointed for all temporary works	**2x3=6**	**2**

REF NO	SUB ACTIVITY	HAZARDS	SAFETY RISKS	HEALTH RISK	ENVIRO MENTAL RISK	PUBLIC RISK	PURE RISK	RECOMMENDED RISK CONTROL MEASURE	RESIDUAL RISK	Risk Priority No
16.8	**Concrete of floor slab and side walls for attenuation tank**	• Delivery of concrete to site			• Concrete spills- ground contamination		**4x3=12: 3**	• Delivery trucks are not to be overloaded to meet demand • Drip sheets to be used to contain all spills on site • Concrete wash out facility to be established on site to prevent operators washing trucks on the road • All delivery trucks to be guided to site by flagman. • All waste concrete to be managed as the waste management plan	**3x2=6**	**2**
16.8	**Installing of attenuation tank covers**	Mechanical lifting for installing of tank cover	• Failure of lift- damage to equipment Injuries				**3x4=12: 3**	• All lifting tackle to be inspected with load tests in file • Correct lifting tackle to be used	**2x3=6**	**2**
		Incompetent rigger	Failure of lifting load - injuries				**4x4=16:3**	• Rigger to have necessary skills and qualifications and to be verified Records to be in file	**2x3=6**	**2**

Prepared by: Inderjith Samsunder

Signature: _____

Date: 28 June 2024