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**SERVICE CENTRES SA****ANNEXURE 2 – ALIGNED WITH MSCSA CONTRACTOR PROCEDURE****HEALTH AND SAFETY SPECIFICATION AS CONTEMPLATED IN THE
CONSTRUCTION REGULATION, PROMULGATED IN FEBRUARY 2014****PROJECT NAME**

LIGHTING REPLACEMENT AND SENSOR INSTALLATION

CLIENT

MACSTEEL HEAD OFFICE

PRINCIPAL CONTRACTOR:

THENJIWE SUPPLIES

SPECIFICATIONS DRAFTED BY

CLIENT

NAME AND SURNAME

NONHLANHLA MBELE

DESIGNATION

SHEQ OFFICER

SPECIFICATIONS SIGNED BY**CLIENT****PRINCIPAL CONTRACTOR****Name**

DANIEL

Name

Martin

Surname

CARVALHO

Surname

du Plessis

Designation

MAINTENANCE

Designation

Electrician

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1. FOREWORD

- 1.1 This Health and Safety specification has been compiled under the guidelines of the Occupational Health & Safety Act no.85 of 1993 as amended and in particular in terms of the Construction Regulations (February 2014).
- 1.2 It must be clear that this document is a management tool and should be used and transformed by the principal contractor into a **project-specific** construction Health and Safety plan for work in order to comply with the aforementioned Act and regulations.
- 1.3 Should there be any contradiction between the document and the Act; the Act must take preference except where explicitly stated or where requirements are more stringent than the Act. Where this document is silent on a specific Health & Safety requirement, the Act and regulations must be used as the minimum requirement.
- 1.4 The Construction Regulations (February 2014) places the onus on the Client, to prepare a Health and Safety specification document for the Principal Contractor, as well as providing the Principal Contractor with a baseline risk assessment outlining the hazards and risks associated with the specific area where construction will commence. The specification highlights the **minimum** requirements which form the framework of the health and safety plan needs to be developed and submitted by the Principal Contractor to the Client for approval **before commencement** of the construction work/project.
- 1.5 The approved, site specific health and safety plan, in turn, needs to be successfully implemented by the Principle Contractor and any appointed sub-contractor to ensure that identified health and safety risks are managed effectively, and that full adherence to the minimum prescribed corporate and legal requirements (as pertained herein) are ensured at all times and are verified during regular audits by the Principle Contractor and the Client.
- 1.6 The following abbreviations are required to understand the terminology and the use of this document.
 - 1.6.1 CR – Construction Regulation (February 2014).
 - 1.6.2 OHSa – Occupational health and safety act 85 of 1993.
 - 1.6.3 ER – Environmental Regulations for workplaces (16 October 1987).
 - 1.6.4 GMR – General Machinery Regulation (5 August 1988).
 - 1.6.5 GSR – General Safety regulation (30 May 1986)
 - 1.6.6 GAR – General Administrative Regulation (25 June 2003).
 - 1.6.7 FR – Facilities Regulation (5 October 1990).

2. DEFINITIONS

1. "chief executive officer", in relation to a body corporate or an enterprise conducted by the State, means the person who is responsible for the overall management and control of the business of such body corporate or enterprise;

2. "Danger" means anything which may cause injury or damage to persons or property;
3. "Employee" means, subject to the provisions of subsection (2), any person who is employed by or works for an employer and who receives or is entitled to receive any remuneration or who works under the direction or supervision of an employer or any other person;
4. "Hazard" means a source of or exposure to danger.
5. "Health and safety committee" means a committee established under section 19 ;
6. "Health and safety equipment" means any article or part thereof which is manufactured, provided or installed in the interest of the health and safety of any person;
7. "Health and safety representative" means a person designated in terms of section 17
8. "Healthy" means free from illness or injury attributable to occupational causes;
9. "Incident" means an incident as contemplated in section 24 (1); including other less serious/minor incidents and therefore used as a generic term as well;
10. "Plant" includes structures, buildings, fixtures, fittings, implements, equipment, tools and appliances, and also anything which is used for any purpose in connection with such plant;
11. "Risk" means the probability that injury or damage will occur;
12. "Safe" means free from any hazard;
13. "Substance" includes any solid, liquid, vapour, gas or aerosol, or combination thereof;
14. "This Act" includes All Regulations;
15. "Bulk mix plant" Machinery , appliances or other similar devices that are assembled in such a manner so as to be able to mix materials in bulk for the purpose of using the mixed product for construction work;
16. "Client" means any person for whom construction work is performed;
17. "Competent person" means any person who has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific to that work or task; Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (act No. 67 of 2000);
18. "Construction work" means any work in connection with-
 - (a) The erection, alteration, renovation, repair, demolition or dismantling of or Addition to a building or any similar structure;
 - (b) The erection, dismantling, demolition or maintenance of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system; or the moving of earth, cleaning of land, the making of excavation, pilling, or any similar civil engineering structure or type of work.

19. "construction vehicle" means a vehicle used for means of conveyance for transporting persons or material or both such persons and material, as the case may be, both on and off the construction site for the purposes of performing construction work;
20. "Contractor" means an employer who performs construction work;
21. "Design" in relation to any structure includes drawings, calculations, design details and specifications;
22. "Designer" means any of the following persons-
- (a) A person who prepares a design;
 - (b) A person who checks and approves a design;
 - (c) A person who arranges for any person at work under his control (including an employee of His, where he is the employer) to prepare a design, as well as;
 - (c) an architect or engineer contributing to, or having overall responsibility for the design;
 - (d) building services engineer designing details for fixed plant;
 - (e) surveyor specifying articles or drawing up specifications;
 - (f) contractor carrying out design work as part of a design and build project;
 - (g) temporary works engineer designing formwork and false work; and
 - (h) Interior designer, shop-fitter and landscape architect.
23. "Ergonomics" means the application of scientific information concerning humans to the design of objects, systems and the environment for human use in order to optimize human well-being and overall system performance;
23. "Excavation work" means the making of any man-made cavity, trench, pit or depression formed by cutting, digging or scooping;
24. "Explosive actuated fastening device" means a tool that is activated by an explosive charge and that is used for driving bolts, nails and similar objects for the purpose of providing fixing;
25. "Fall prevention equipment" means equipment used to prevent persons from falling from an fall risk position, including personal equipment, body harness, body belts, lanyards, lifelines or physical equipment, guardrails, screens, barricades, anchorages or similar equipment;
26. "Fall arrest equipment" means equipment used to arrest the person in a fall from an elevated position, including personal equipment, body harness, lanyards, deceleration devices, lifelines or similar equipment, but excludes body belts;
27. "Fall protection plan" means a documented plan, of all risks relating to working from an fall risk position, considering the nature of work undertaken, and setting out the procedures and methods to be applied in order to eliminate the risk as well as a rescue plan;
28. "Hazard identification" means the identification and documenting of existing or expected hazards to the health and safety of persons, which are normally associated with the type of construction work being executed or to be executed;
29. "Health and safety file" means a file or other record in permanent form, containing the information required as contemplated in these regulations;

30. "Health and safety plan" means a site activity, or project specific documented plan in accordance with the client's health and safety specification;
31. "Fall Risk" means ant potential exposure to falling either form, off or into;
32. "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;
33. "Medical certificate of fitness" means a certificate valid for one year issued by an occupational health practitioner, issued in terms of South Africa;
34. "Method statement" means a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment;
35. "Mobile plant" means machinery, appliances or other similar devices that is able to move independently, for the purpose of performing construction work on the construction site;
36. "National Building Regulations" means the National Building Regulations made under the National Building Regulations and Building Standards Act, 1977 (Act No.103 of 1977), and published under Government Notice No. R 2378 of 30 July 1990, as amended government notices No R 432 of 8 March 1991, R.919 of 30 July 1999 and R. 547 of 30 May 208;
37. "Person day" means one day for carrying out construction work by a person on a construction site for one normal working shift;
38. "Principal contractor" means an employer, Act who performs construction work and is appointed by the client to be in overall control and management of a part of or the whole of a construction site;
39. "Professional engineer or professional certificated engineer" means any person holding registration as either a Professional Engineer or Professional Certificated Engineer under the Engineering Profession Act, 2000 (Act No. 46 of 2000);
40. "Professional technologist" means any person holding registration as a Professional Technologist under the Engineering Profession Act, 2000;
41. "Provincial director" means the provincial director as defined in regulation 1 of the General Administrative Regulations under the Act;
42. "Risk assessment" means a program to determine any risk associated with any hazard at a construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard;
43. "SABS 085" means the South African Bureau of Standards' Code of Practice entitled "The Design, Erection, Use and Inspection of Access Scaffolding";
44. "SABS 0400" means the South African Bureau of Standards, Code of Practice for the application of the National Building Regulations;

45. "Scaffold" means any temporary elevated platform and supporting structure used for providing access to and supporting workmen or materials or both;
46. "Shoring" means a structure such as a hydraulic, mechanical or timber/steel shoring system that supports the sides of an excavation and which is intended to prevent the cave-in or the collapse of the sides of an excavation, and "shoring system" has a corresponding meaning;
47. "Structure" means-
- (a) Any building, steel or reinforced concrete structure (not being a building), railway line or Siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed Vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, batching Plants, pylon, surface and underground tanks, earth retaining structure or any structure Designed to preserve or alter any natural feature, and any other similar structure;
 - (b) Any formwork, false work, scaffold or other structure designed or used to provide support or means of access during construction work; or
 - (c) Any fixed plant in respect of work which includes the installation, commissioning, Decommissioning or dismantling and where any such work involves a risk of a person falling Two meters or more;
48. "The Act" means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993);
49. "Tunnelling" means the construction of any tunnel beneath the natural surface of the earth for a purpose other than the searching for or winning of a mineral;
50. "HIRA" Hazard Identification and Risk Assess;
51. "Major non-compliance"

Any at risk or non-caring behaviour which threatens the employee/s or visitors' health or safety to such an extent, whereby those actions may or can lead to serious injury or damage to property.

3. PURPOSE

By assisting in achieving compliance with the Occupational Health and Safety Act 85/1993 and the promulgated Construction Regulations (February 2014), in order to reduce incidents and injuries.

These specifications shall act as the basis for the drafting of the Health and Safety plan for the Principal Contractor, and all subsequent Health and Safety plans by contractors. The specification sets out the requirements to be followed by the Principal Contractor and other Contractors so that the Health and Safety of all employees and other persons potentially at risk may receive the same priority as other facets of the project e.g. cost, programme, environment and quality.

4. IMPLEMENTATION OF THE HEALTH AND SAFETY SPECIFICATION

This specification forms an integral part of the contract, and the Principal Contractor is required to use it when drawing up its project-specific Health and Safety plan. The Principal Contractor shall forward a copy of this specification to all Contractors at their bidding stage so that they can in turn prepare Health and Safety plans relating to operations and include the cost of safety thereof.

The principal contractor shall further ensure that these specifications form part of every safety plan developed for; **Macsteel Head Office- Lighting and Sensor Project**. The principal contractor for this project will be required to develop a health and safety plan including a file that is site and task specific.

In addition, all health and safety files will be kept on site at all times.

5. HEALTH AND SAFETY SPECIFICATION

5.1 APPLICATION

This specification is a compliance document drawn up in terms of the South African legislation and is therefore binding. It must be read in conjunction with relevant legislation/regulations, gazette guidelines, SABS/SANS codes Facilities and building Regulations.

5.2 SECTION 37.2 MANDATARY AGREEMENTS.

The Client (Macsteel) and the Principal Contractor, will enter into a written agreement in terms of section 37 (2) of the act and CR 5 (1) (K). This agreement ensures that all parties exercise their respective duties, within the specifications set out in this document as employers in their own right. The Principal Contractor shall ensure that a copy of such agreement readily available for inspection within their health and safety file.

In the event where the Principal Contractor appoints any sub-contractor to perform construction work on his or her behalf, such agreement shall be entered into between the Principal Contractor and such sub-contractor provided that a copy of such agreement is submitted within the sub-contractor's health and safety file.

5.3 COMPENSATION INSURER

The Principal Contractor shall ensure that he/she is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and diseases Act, 1993 (Act No.130 of 1993). A copy of the registration of good standing letter must be attached to the Principal Contractor safety plan and handed to the client as per agreed and set date. This copy must also be readily available for inspection by the client, employees or inspector in the health and safety file.

In the event where the Principal Contractor appoints any sub-contractor to perform construction work on his behalf, the same will apply to such sub-contractor.

5.4 BASELINE RISK ASSESSMENT

A baseline risk assessment has to be prepared for the Principal Contractor for the area where construction will commence in terms of the CR 5 (1) (a), and the risk assessment in its entirety shall read as **annexure 1** attached to this document.

The Principal Contractor shall use this baseline risk assessment and integrate it with his/her risk assessments as well as their safety plan for the project, in order to ensure that all hazards have been identified and risk evaluated, as well as ensure that his/her activities don't pose any risk or have any impact on these processes or the public.

High risk hazards which the Principal Contractor have to be aware of and address within his/her risk assessment as well as identify control measures with the objective to prevent any injuries, damage or loss for the construction area are as follow, but not limited to;

- Working at heights
- Operational activities below work area (heights)
- Uninformed employees working at heights.
- Incompetent employees allowed access the roof.
- Change management (scope of work and employees).
- Site operational processes.
- Multiple operational Risks Present (Multiple contractors on site).
- Incorrect use and of the fall arrest equipment.
- Damaged fall arrest equipment.
- Damaged part of the roof.
- Lifting items to the roof.
- Inclement weather conditions.

5.4.2 ACTIONS TO BE TAKEN BASED ON THE IDENTIFIED RISKS.

- Fall protection and rescue plan
 - Competency certificate for planner
 - Risk identified for all activities but more specifically for roof work i.e. Sufficient and suitable platforms used, the identification of insufficient roof sheets access control for roof work, rain etc.
 - Competencies for all roof work personnel (Detailed CV's)
 - Programme plan for the roof work (To determine how the roof work is planned for)
 - Fall arrest and prevention equipment to be used and competency required
 - Detailed method statement of access to and from teeth roofs
 - Detailed plan on the measure and monitoring of wind speed and when work will be stopped and how to determine when to resume work.
 - Detailed plan for personnel and operations taking place underneath elevated work area
 - Securing of sheet that requires replacement on top of the roof
- Medical certificates of witness for elevated works signed by OHMP
- The Contractors shall further ensure that a comprehensive access procedure is developed and implemented specific to the overall site, including roof access. The objective will be to prevent unauthorized personnel accessing the site or the roof.

- The procedure shall further include change management to the scope of work or employees, and clearly establish measure to ensure compliance with legal aspects including client requirements.
- The contractor will clearly establish areas where access to any site operations is prohibited. This will form part of the contractor's risk portfolio and will be communicated with all involved personnel.
- The contractor shall ensure that a site specific health and safety induction is conducted prior work commences and that each employee under his control undergoes health and safety induction by the client.
- Notice to be placed in the area and barricading to be utilized.
- Contractors will ensure that a detailed emergency preparedness and response plan is developed that addressed the operational risk and potential risks.
- Contractor employees need to be made aware of vehicles moving around on the premises which may affect the contractors work.
- The principal contractor is to ensure that all employees are to be trained on the basic knowledge of working at heights.
- The contractor must ensure that the procedure is in place that will outline how the installation of Anchor point and life line will take place.
- The contractor shall develop and procedure that will entails on how items access the roof.
- The Contractor to appoint a competed person to inspect the fall arrest equipment before use.
- The contractor must ensure the fall protection and rescue plan will outline actions to be taken when working on damaged roofs (These roofs have a higher risk of an individual falling through the roof).
- Principal contractor to develop a safe work procedure for lifting equipment to the roof.
- Principal contractor to ensure all employees are trained on basic knowledge for working at heights.
- Principal contractor to ensure employees are conversant with the risks associated with the working environment (e.g. damaged roof)
- All Contractors are to ensure a systematic communication with other contractors working in the area.

5.5 METHOD STATEMENT

The method statement must address the project in a phased approach and provide detailed scope work addressing all activities and equipment, estimated starting date and closing date for each phase as well as estimated amount of people allocation (including any sub-contractor appointments) for the project on a phased approached.

This method statement shall form part of the Principal Contractor's health and safety plan, whether integrated or attached to the health and safety plan.

The same principle shall apply for any sub-contractor appointed by the Principal Contractor to conduct construction work on his/her behalf.

5.6 HAZARDS AND RISKS ADDRESSED FROM THE METHOD STATEMENT

From the above method statement, the Principal Contractor is required to identify all activities and the safe controls towards eliminating or mitigating the hazards or risks which maybe encountered during project implementation within the health and safety plan.

The health and safety plan must also address legal compliance, hazard identification and risk assessment, risk control and promoting a Health and Safety culture amongst those working on the project. The specification also makes provision for the protection of those persons other than employees, thus including the protection of visitors and other members of the public must be addressed within the health and safety plan.

The above will also apply to any sub-contractor appointed by the Principal Contractor to perform construction work on his/her behalf.

6. **ADMINISTRATIVE REQUIREMENTS**

6.1 NOTIFICATION OF CONSTRUCTION WORK

The Principal Contractor shall notify the provincial director in writing in the form of annexure 2, 7 days before construction work commences of its intended construction work which includes;

- Working at heights or where there is a risk of falling.

The Principal Contractor shall ensure that he/she is in possession of this notification and a copy must be readily available in the health and safety file for inspection and when the Principal Contractor presents the file to the Client for approval.

6.2 ASSIGNMENT OF RESPONSIBLE PERSONS SUPERVISING HEALTH AND SAFETY

The Principal Contractor shall submit supervisory appointments as well as any relevant Appointments in writing (as stipulated by the OHSA and Construction Regulations), prior to commencement of work. Proof of competency (CV's) must be included. Additional appointments may be considered, based on the outcome of the risk assessment results.

6.3 APPOINTED COMPETENT PERSONS

The Principal Contractor competent persons for the various risk management portfolios shall fulfil the criteria as stipulated under the definition of Competent in accordance with the Construction Regulations (February 2014) and such competency must be available within the health and safety file for approval by the Client. This may include but not be limited to;

Appointment	Legal Ref.	Required Competency
Fall protection and Rescue Planner	CR 10	SAQA unit standard and 229994 & 229995
Risk Assessor	CR 9	Recognised HIRA Training
Incident Investigator	GAR 9	Recognised Investigation Training
Health and Safety Officer	CR 8	Registered with SACPCMP
Construction Manager	CR 8	Detailed CV of experience
Assistant Construction Manager	CR 8	Detailed CV of experience
Construction Supervisor	CR 8	Detailed CV of experience
Assistant Construction Supervisor	CR 8	Detailed CV of experience
Excavation Supervisor	CR 13	Detailed CV of experience
Scaffold Supervisor	CR 16	Scaffold erection & dismantling training
Scaffold Erector & Dismantler	CR 16	Scaffold erection & dismantling training
Scaffold Inspector	CR 16	Scaffold erection & dismantling training
Rope Access Supervisor	CR 18	Recognised rope access training
First Aider	GSR 3	Recognised first aid training
Fire Fighter	CR 29	Recognised firefighting raining
Health and Safety Representative	OHS 17	Recognised SHE Rep Training
Stacking and storage supervisor	CR 28	Detailed CV of experience
Lifeline and anchor points installation	CR 10	SAQA unit standard 229995

6.4 OCCUPATIONAL HEALTH AND SAFETY POLICY

The Principal Contractor and all other contractors shall submit a Health and Safety policy signed by their Chief Executive Officer. The Policy must outline objectives and how they will be achieved and implemented by the Contractor.

Other Policies to be developed and implemented for this project is;

- Substance abuse policy and
- Disciplinary code of practice

6.5 HEALTH AND SAFETY ORGANOGRAM

The Principal Contractor and all Contractors shall submit an organogram, outlining the Health and Safety site Management Structure including the relevant appointments / competent persons. The organogram shall be updated when there are any changes in the site management structure.

6.6 HAZARD IDENTIFICATION AND RISK ASSESSMENT (HIRA)

The Principal Contractor must ensure that hazard identification and risk assessment are performed by a competent person before commencement of any activity. This may include, but not be limited to underground water mains, electrical, excavation, working at a fall risk position, stacking and storage, equipment and tools etc. The assessed risk shall form part of the construction health and safety file submitted for approval by the Client.

THE RISK ASSESSMENT MUST INCLUDE BUT NOT LIMITED TO:

- (a) A procedure describing the HIRA methodology used.
- (b) Detailed risk registers listing all risk assessments.
- (c) A baseline risk assessment specific to the scope of work undertaken.
- (d) Issue based risk assessments listing all activities.
- (e) Continues review, monitoring and updating of the risk identified through the risk assessments.
- (f) A set of working instructions based on the risks identified through the risk assessment process.

The Principal Contractor shall ensure that all Contractors/Employees are informed, instructed and adequately trained by a competent person regarding any hazards, risks and related working instructions and method statements before any work commences, and thereafter at regular intervals as the risks change and as new risks develops, of which supporting documentation should be kept in the safety file.

The Principal Contractor shall be responsible for ensuring that all persons who could be negatively affected by its operations are informed and trained according to the hazards and risks and are conversant with the working instructions, control measures and other related rules (toolbox talk/communication strategy to be implemented, and all persons should be informed that all hazards they have identified need to be escalated via their company's reporting structure without delay).

The Principal Contractor shall furthermore ensure that any appointed sub-contractor to perform construction work on his/her behalf follow the above processes for implementation.

6.7 HEALTH AND SAFETY REPRESENTATIVE(S)

Legally, for any workplace where more than 20 employees work, the minimum prescribed number of Health and Safety Representatives in a ratio of 1:50 employees must be nominated, elected, designated in writing and trained to carry out his/ her functions in his/ her area of responsibility.

In addition, for the purpose of this project, it is required that the Principal Contractor and all other contractors, in areas where **Fifteen (15)** or more employees are engaged in an activity, at least one Health and Safety Representative is designated in writing in the same manner, and thereafter follow the ratio approach as stipulated above.

The Principal Contractor /contractors must consult in good faith, with registered trade unions where applicable, prior to elections and conclude an agreement on procedures outlined in the General Administrative Regulations 6 (1) (a-e).

The Principal Contractor /contractors must ensure that all Health and Safety Representatives carry out their functions in their area of responsibility, in accordance with Section 18 of the Occupational Health and Safety Act, 1993. Health and Safety Representatives shall be required to conduct weekly inspections within their area of responsibility; records must be kept in the safety file for CLIENT'S auditing purposes and inspections by the inspector.

All deviations recorded must immediately be reported to the appointed Construction Supervisor, where applicable, within the designated person's area. Appropriate action must immediately be taken to eliminate the identified health and safety hazard and such deviations

and actions shall be discussed within the monthly SHE (Safety, health and environmental) committee meetings.

6.8 HEALTH AND SAFETY COMMITTEES

The Principal Contractor shall ensure that Health and Safety meetings are held monthly and meetings must be organized and chaired by the Principal Contractor Responsible Person. All Contractors' Responsible Persons and Health and Safety Representatives shall attend the monthly Health and Safety meetings. Contractors shall also have their own internal Health and Safety committees in accordance with the OHS Act 85/1993 and minutes of their meetings shall be forwarded to the Principal Contractor on a monthly basis.

The number of persons nominated to serve on the Health and Safety Committee may not exceed the number of Health and Safety Representatives on that Committee.

All members required to be in attendance shall be notified of such meeting by means of a formal agenda that must be made available to the CLIENT upon request.

The Principal Contractor / contractors shall ensure an attendance register and minutes are kept for auditing purposes by the CLIENT. A copy of all minutes must be forwarded to the CLIENT on a monthly basis.

It must be noted that in the event where no health and safety committee is required, management and relevant personnel of such contractor shall conducted monthly safety meetings as prescribed above.

7 HEALTH AND SAFETY TRAINING

7.1 INDUCTION

The Principle Contractor and subsequent contractors must provide site specific, risk based health and safety induction training before commencement of work on site. A record of attendance shall be kept in the Health and Safety file.

The Principal Contractor shall ensure that every employee and all subsequent contractors employees are in possession of induction cards in the form of **annexure 8 aligned with MSCSA Contractor Management Procedure attached to this document**. All personnel including visitors shall carry such induction with him/her at all times.

New employees shall not be permitted to work until he/she has undergone full health and safety induction by the Client and Principal Contractor and until such induction card is provided by the Principal Contractor.

7.2 AWARENESS

The Principal Contractor shall ensure that, on site, periodic toolbox talks take place at least once per week and before hazardous work is carried out.

These talks shall deal with the risks relevant to the construction work at hand. A record of attendance shall be kept in the Health and Safety file.

Furthermore, the Principal Contractor and all relevant contractors shall ensure that effective implementation of Daily planned job task observations, as well as DSTI's (Daily safety task instructions or otherwise known as mini risk assessments) are established.

All contractors have to comply with this minimum requirement and records must be made available to the Client on request.

7.3 GENERAL RECORDS KEEPING

The Principal Contractor and all 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 (February 2014) and applicable regulations.

The Principal Contractor shall ensure that all records of incidents / accidents, emergency procedures training, inspections, audits, etc. are kept in the Health and Safety file, kept at the site office provided by the Client.

The Principal Contractor must ensure that every contractor keeps its own Health and Safety file, maintains the file and make it available on request. All Health and Safety records (health and safety files) generated during the course of construction shall be handed over to the CLIENT upon completion of the project, which should include design drawings of formwork, false work and other permanent and temporal structures.

7.4 HEALTH AND SAFETY AUDITS, MONITORING AND REPORTING

The Client shall conduct monthly Health and Safety audits of the work operations including a full audit of physical site activities as well as an audit of the administration of Health and Safety.

The outcome of all audits shall be discussed within every SHE meeting and minutes thereof forwarded through to the Client on a monthly basis by the Principal Contractor.

The Principal Contractor is obligated to conduct similar audits on all Contractors appointed by it and assure thorough communication thereof between the relevant parties. The Client must receive copies of all audit reports as well as communication thereof between the parties.

7.5 EMERGENCY PROCEDURES

The Principal Contractor shall submit a detailed Emergency Procedure for approval by the Client prior to commencement of work. The procedure shall detail the response plan including the following key elements, which needs to be reviewed on a monthly basis:

- List of key competent personnel,
- Details of emergency services envisaged to be used to be available on file and on display.
- Actions or steps to be taken in the event of the specific types of emergencies,
- Information on hazardous material / situations.
- Information on evacuation routes, periodic drills and assembly points to be displayed and otherwise documented and implemented.
- Emergency procedure(s) shall include, but shall not be limited to fire, spills, accidents to employees, use of hazardous substances, bomb threats, major incidents / accidents, etc.

- Emergency response plan shall include the notification process to the Client, and include but not limited to;
 - o Contact details for notification by the Principal Contractor to the Client
 - o Contact details for notification by the Client to the Principal Contractor
 - o The nature and risk of emergency
 - o Process of evacuation
 - o A list of all service providers such as; fire department, Ambulance, police, Medical and hospital etc.
- The Principal Contractor shall advise the Client and in writing forthwith, of any emergencies, together with a record of actions taken.

7.6 FIRST AIDERS AND FIRST AID BOXES

The Principal Contractor and all contractors must ensure that all working areas are adequately provided with first aid attendants, appointed in writing, whether there are ten (10) employees or more engaged in the contract. The First Aid attendants must be trained in accordance with the requirements set out in the Act with a recognized and accredited service provider as defined above. Valid certificates are to be kept on site.

The Principal Contractor / contractor must ensure that first aid boxes are adequately filled as per the annexure listing of General Safety Regulation 3 of the Occupational health and safety Act 85 of 1993, and checked monthly of which record must be kept. This is the *minimum* requirement and additional needs be considered in terms of prevailing risk/activities and the first-aid equipment to be available at all times and accessible to all. The Client shall inspect the contents of the first aid box and dressing record from time to time.

The allocation of the first aid boxes shall be clearly marked with signage at the entrance of where the first aid boxes are allocated. Furthermore, all first aid boxes shall be clearly marked and visible regarding the person responsible for first aid and all relevant details to be included.

7.7 ACCIDENT / INCIDENT REPORTING, INVESTIGATION AND STATISTICS

Injuries are to be categorized into near miss, first aid, medical, disabling/ lost time and fatal. The Principal Contractor must stipulate in the Health and Safety plan how it will handle each of these categories. The appointed investigators of the Principal Contractor or contractors must investigate and report on all incidents to the Principal Contractor and the Principal Contractor to the Client as soon as they occur. However, the Principal Contractor and all contractors must ensure that incidents are fully investigated within seven days of the incident in the form of Annexure 1 (General Administrative Regulations) and immediately forward a copy on the completed investigation report to the Client, with the original report kept in the Health and Safety file, where it may be accessed by an Inspector of Department of Labour, Health and Safety Representatives or other interested parties. All incidents shall be captured on a incident register and made readily available for inspection.

All serious incidents reportable in terms of the provision of Section 24 of the OHS Act 85 of 1993 must be reported to the local Department of Labour and to the Client in the prescribed manner ***without delay and before disturbing the scene of the accident***. Injured persons may however be removed by qualified emergency personnel. Photographs need to be taken and sketches made to gather as much information possible during such an emergency and the Principal Contractor must make this available to the Client, who must also be ***notified***

immediately of such an event, and the Client reserves the right to participate in all investigations of incidents.

The Principal Contractor and contractors must keep updated statistics reflecting on their Lost time injury frequency rate *(LTIFR).

$$\text{*LTIFR (Lost time Injury Frequency Rate)} = \frac{\text{LTI's} \times 200\,000}{\text{Man-hours}}$$

The Principal Contractor shall ensure that a copy of their incident investigation form, WCL2 employers report and annexure 1 notification to the department of labour is submitted within their SHE file.

7.8 PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING

The Principal Contractor must comply with the requirements of the Occupational health and safety Act 85 of 1993, General Safety Regulation 2, to provide PPE and must identify the specific PPE needs per activity and then issue the PPE accordingly. PPE must be provided to visitors as well by the Principal Contractor and adequate quantities of SABS approved PPE on site at all times. The Principal Contractor must ensure adequate training in the use of PPE is provided to all employees, and proof of training shall be kept in the Health and Safety file for auditing purposes.

The Principal Contractor shall clearly outline procedures to be taken when PPE or clothing is:

- Lost or stolen,
- Worn out or damaged and
- Issuing thereof.

Replacements must be made immediately and in line with requirements of the Act. The above procedure applies to Contractors and their Sub-Contractors, as they are all Employers in their own right.

7.9 OCCUPATIONAL HEALTH AND SAFETY SIGNAGE

The Principal Contractor must provide adequate on-site health and safety signage, as per risk identified, including **but not limited** to the following signs:

- Name of company and project
- No unauthorized entry
- Beware of excavation
- Hard hat area
- Noise area
- Safety shoes
- Mobile equipment
- No smoking and designated smoking area
- Emergency assembly point

Signage shall be posted up at all entrances to the site as well as on site in strategic locations e.g. Access routes, stairways, entrances to structures and buildings, scaffolding, excavation and other potential risk areas / operations.

The Principal Contractor and contractors shall also maintain the signage to ensure its effectiveness at all times and under all conditions. Signage, which cannot be repaired or got lost / stolen, must be replaced immediately.

7.10 PERMITS

The Principal Contractor shall ensure that access to site works is restricted to construction personnel who have been inducted by the Principal Contractor.

- All contractors on site to carry proof of induction.
- All attempts must be made to restrict spectator access.
- Special permits for highly dangerous work will apply and must be identified during the Hazard Identification and Risk assessment process by the appointed competent person for risk assessments.
- Hot work and isolation permits shall apply prior to commencing with the activity.

Permits may further include, but is not restricted to the following:

- Working at heights

In the event where visitors have to enter the construction site, the Principal contractor shall ensure all such visitors comply with the required PPE and is represented by a person on behalf of the Principal Contractor or the Client at all times.

7.11 CONTRACTORS AND SUB-CONTRACTORS

The Principal Contractor shall ensure that all Contractors appointed by it comply with this Specification, the OHS Act 85/1993, Construction Regulations (February 2014), and all other relevant legislation that may relate to their activities directly or indirectly. The Contractor, when appointing other Contractors as 'Sub-contractors', shall mutatis mutandis ensure compliance as if it was the Principal Contractor.

- The Principal Contractor may only appoint a contractor after approving the contractor's health & safety plan. The Principal Contractor must audit each of its contractors on a weekly and on a monthly basis, with audit reports filed in the health & safety file on site and electronic copies forwarded to the Client. The audit must include an administrative assessment (Monthly) as well as a physical inspection (weekly) of the contractor's health & safety system.
- The Principal Contractor must stop any Contractor from carrying out construction work that is not in accordance with the Principal Contractor or Contractor's health & safety plan or if there is an immediate threat to the health and safety of persons.
- The Principal Contractor shall take all reasonable steps necessary to ensure cooperation between all contractors to enable each of those contractors to comply with the provisions of these regulations and proof of such engagement to be kept in the health and safety file for auditing purpose;
- The Principal Contractor shall take all reasonable steps to ensure that each contractor's health and safety plan is implemented and maintained on the construction site: Provided

that the steps taken shall include periodic audits at intervals mutually agreed upon between the Principal Contractor and Contractors, but at least once every month for administrative and weekly for physical inspections.

- The Principal Contractor must ensure that where changes are brought about to the design and construction, that sufficient health and safety information and appropriate resources are made available to Contractors so as to allow them to execute the work safely;
- The Principal Contractor must ensure that every contractor is registered and in good standing with a recognized compensation fund or with a licensed compensation insurer prior to work commencing on site;
- The Principal Contractor must ensure that potential Contractors submitting tenders have made provision for the cost of health and safety measures during the construction process; The Principal Contractor shall discuss and negotiate with the Contractor the contents of the health and safety plan and shall finally approve that plan for implementation;
- The Principal Contractor shall hand over a consolidated health and safety file to the client upon completion of the construction work and shall include a record of all drawings, designs, materials used and other similar information concerning the completed structure;
- The Principal Contractor shall not appoint a Contractor to perform construction work unless the Principal Contractor is satisfied that the Contractor he or she intends to appoint has the necessary competencies and resources to perform the construction work safely. The sub-contractor assessment / audit report to be kept in the health and safety file for auditing purposes by the client.
- The Principal Contractor must co-operate with the Client at all times and incorporate in the health and safety plan any additional requirements/ precautionary measures that may become necessary in the interest of health and safety of employees, visitors, members of the public or other affected parties. The anticipation of new or potential risks may therefore necessitate the immediate review of the health and safety plan on realization of such need by the Principal Contractor, subsequent contractor or by the Client.

7.12 PENALTIES

Penalties may be imposed on the Principle Contractor for non-compliance to the provisions of the Client's Health and Safety specification and/ the Principal Contractor and Contractor's Health & Safety plans.

The penalty procedure shall consist of a written warning with a compliance time frame of 1 day for non-compliances as per the aforementioned. Failure to comply within the time frame provided shall result in a stoppage until such non-compliance is rectified.

In the case where such contractor continues with non-compliance as per the aforementioned, such contractor shall be removed from site.

In the event where major non-compliance/s are identified (Regardless if such non-compliance was the wrong doing of the Principal Contractor or contractors for which the Principal Contractor is directly responsible), a penalty of **(R14 940)** will be issued to the Principal Contractor. Without derogating from the above, major non-compliance/s will immediately result

in the removal from site, of such individual/s unsafe act or at risk behaviour, or otherwise agreed by the project management.

8. PHYSICAL REQUIREMENTS

8.1 EXCAVATION, SHORING, DEWATERING OR DRAINAGE

The Principal Contractor shall make provision in the tender for adjacent barricading, shoring within, and dewatering or drainage of any excavation that requires it, unless otherwise stipulated elsewhere in the contracts. The contractor shall ensure that:

- a) A competent person is appointed in writing to supervise the excavation work;
- b) The stability of the ground has been assessed before excavation work begins;
- c) All excavations are adequately protected by a barrier or fence regardless of the depth;
- d) The excavation is adequately shored where necessary as contemplated in the Construction Regulations 13 (2) (b) and (c) and ensure that no person will face the risk of being buried as contemplated in 13 (2) (a).
- e) The safe work procedure is enforced and maintained by the appointed competent person at all times; and that a comprehensive rescue plan is developed and implemented.
- f) The excavation is inspected as required under Construction Regulations 13 (h) and (l), and records kept thereof.

The Principal Contractor shall ensure those other requirements set out in the Construction Regulation 2014 sub-regulation 13 are met pertaining to excavation.

Excavation, piling or any form of ground removal or drilling shall not commence without the site development plan.

The Principal Contractor shall ensure that this plan is readily available in the health and safety file for inspection and the construction project manager and site engineer are in possession of the latest copy.

8.2 STACKING OF MATERIALS

The Principal Contractor and other relevant contractors must ensure that all stacking will be supervised by a competent person that is appointed in writing to supervise over the activities, and that clearly defined and allocated storage areas are provided for and identified.

All materials being stored within this area must be stacked in accordance with sound stacking principles of sort by sort, maintained access, level surfaces, and a height to base ratio of no more than three times higher than the base.

Double handling of material should be avoided and for this purpose, pallets and other stacking options should be used. Housekeeping must also be maintained at all times as this will be inspected and evaluated by the CLIENT during monthly audits.

The Principal Contractor and all relevant Contractors shall inspect and keep records of inspections of the construction plant used on site.

Only authorized / competent persons are to use machinery under proper supervision, and the Principle Contractor must provide proof of **medical and psychological fitness including training of all operators** engaged in the construction activity. Appropriate PPE and clothing must be provided and maintained in good condition at all times, as legally required.

The Principal Contractor shall further ensure that any lifting equipment or machinery is clearly identified within a register and that all AIA (Approved Inspection Authority) inspections as well as load testing are valid and readily available within the health and safety file.

Lifting tackle to be inspected by the AIA every 3 months and lifting equipment such as cranes every six months. However, load tests certificates for lifting machines and lifting equipment will be done once every year.

9.2 BULK MIXING PLANTS

In the event where appliances or other similar devices that are assembled in such a manner so as to be able to mix materials in bulk for the purpose of using the mixed product for construction work, the Principal Contractor shall ensure that the operation of such plant is supervised by a competent person who has been appointed in writing and is;

- Aware of all the dangers involved in such operation.
- The Principal Contractor shall ensure that all risk and hazards associated with the mixing plant are addressed in the risk assessments as well as safe operating procedures.
- The Principal Contractor shall ensure that all employees involved with this process are made conversant with the precautionary measures to be taken in the interest of health and safety.
- The person supervising and operating a bulk mixing plant shall be competent to do so and such competency is placed in the safety file and readily available for inspection.
- The Principal contractor shall ensure that the bulk mixing plant is equipped with a device that start and stop the bulk mixing plant and must meet the requirements of the Construction Regulation (February 2014) 20 (4) (a) (b).
- The machinery selected must be stable for the mixing task and all dangerous moving parts of a mixer are placed beyond the reach of persons by means of doors, covers or other similar means.

The Principal Contractor shall ensure that all records of repairs and maintenance to a bulk mixing plant is kept in the health and safety file readily available for inspection by the client, inspector or employees.

10. PRESSURE EQUIPMENT

The Principal Contractor and all relevant Contractors shall comply with the Pressure Equipment Regulations and SANS 347, including:

- Ensuring all pressure vessels and steam generators owned and hired, comply with the 36-month pressure vessel inspection requirement, and a certificate of testing from an approved inspection authority is available on site for inspection by the CLIENT.
- Ensure that all piping is inspected and tested by the manufacturer after manufacture, installation, modification or repair and before commissioning.
- Ensuring that all personnel who shall use this equipment are competent and trained.
- Ensuring the users of this equipment is issued with the required PPE.
- Ensuring the area is adequately identified as a noise area and warnings are posted.
- Ensuring daily pre-start inspections are carried out on all the equipment including piping and pipe line of which findings must be recorded.
- Ensuring the correct fire prevention and fighting equipment is available at all times.
- Noise levels where possible shall be kept within reasonable operating norms.
- Ensure proper use and storage of gas during construction, which may include trolleys upon which bottles are moved and chains to prevent bottles falling over.
- Ensure that flash back arrestors are affixed where applicable.
- The inspection of these activities must be included in the Principal Contractors monthly safety inspections, registers and audits.


10.1 FIRE EXTINGUISHERS AND EQUIPMENT

The Principal Contractor and relevant Contractors shall provide adequate, regularly serviced firefighting equipment located at strategic points on site, specific to the classes of fire likely to occur. The appropriate notices and signs must be posted up as required.

The Principal Contractor / Contractor shall ensure that all fire equipment to be used on site comply with the following:

- Extinguishers shall be placed in positions to ensure fast and easy access is maintained at all times.
- Placement of all extinguishers shall be depicted with the required pictograms.
- Extinguishers specific to the classes of fire likely to occur to be installed.
- Extinguishers shall be inspected monthly and serviced once annually.

The Principal Contractor and all relevant Contractors shall comply with the Pressure Equipment Regulations and SANS 347, including:

- Ensuring all pressure vessels and steam generators owned and hired, comply with the 36-month pressure vessel inspection requirement, and a certificate of testing from an approved inspection authority is available on site for inspection by the CLIENT.
 - Ensure that all piping is inspected and tested by the manufacturer after manufacture, installation, modification or repair and before commissioning.
 - Ensuring that all personnel who shall use this equipment are competent and trained.
 - Ensuring the users of this equipment is issued with the required PPE.
 - Ensuring the area is adequately identified as a noise area and warnings are posted.
 - Ensuring daily pre-start inspections are carried out on all the equipment including piping and pipe line of which findings must be recorded.
 - Ensuring the correct fire prevention and fighting equipment is available at all times.
 - Noise levels where possible shall be kept within reasonable operating norms.
 - Ensure proper
- 

- Extinguishers specific to the classes of fire may be installed.
- Extinguishers shall be inspected monthly and serviced once annually.

- The Principal Contractor / Contractor shall ensure all employees are adequately trained in the safe use of the extinguishers and proof of training is kept on site for inspection by the CLIENT.
- The Principal Contractor / Contractor shall ensure a person is appointed to inspect the extinguishers on a monthly basis and the results of which are to be entered into a register designed for that purpose.

The Principal Contractor shall further ensure that where fire equipment is required that a trained and competent person is appointed in writing to inspect such equipment on a weekly basis.

10.2 HIRED PLANT AND MACHINERY

The Principal Contractor shall ensure that any hired plant and machinery used on site is safe for use. The necessary requirements as stipulated by the OHS Act 85/1993 and Construction Regulations (February 2014) shall apply. The Principal Contractor / Contractor shall ensure the following criteria are adhered to when considering hired plant and machinery:

- Hired plant and machinery must be checked for safety compliance prior to being accepted for use on site, should a deviation be identified; the CLIENT reserves the right to order the removal of such equipment from site. (records to be kept on safety file)
- Should an operator be provided to operate the hired equipment, the Principal Contractor / Contractor shall ensure that the operator's competency is verified and that the operator undergoes an induction training session by the Client and Principal Contractor whereby an induction card has to be issued.
- The Principal Contractor and contractors must ensure the operators of hired plant and machinery attend weekly toolbox talks in conjunction with the Principal Contractor site personnel, and that such hired plant and machinery are incorporated within the hazard identification and risk assessment.
- The Principal Contractor / contractor must ensure that all operators are equipped with the required PPE before commencing work on site and all hazards and risk as well as working instruction are communicated with such operator.
- The Principal Contractor shall ensure that such operator is in possession of a valid medical certificate of fitness issued by and OMP or OHP.
- In the event where an operator is contracted from such hired plant or machinery, the Principal Contractor shall ensure that they follow the requirements set out in clause 7.11 and is treated as a sub-contractor.

11. **WORKING AT A FALL RISK POSITION**

Should the project include any work that poses a fall risk position, the Principal Contractor and contractors shall develop a fall protection and rescue plan, and such person responsible for

the plan shall be competent to do so; Proof of competency shall be made available for approval by the Client before work commences.

- The plan shall meet the requirements set out in the Construction Regulation (February 2014) sub-regulation (10), and shall furthermore be site and task specific.
- The Principal Contractor and contractors shall ensure that the evaluation of the employees' medical certificate fitness is done by an OMP or OHP such certificates are kept in the safety file readily available for inspection in the form of annexure 3.
- Employees' not declared fit for elevated position shall not be allowed to do so, and the client reserves the right to stop any such work and ask the employee to leave the site.
- In the event where any non-conformance is found regarding working at heights, a penalty of (10 %) of the project value (R149 400(14 904)) will be imposed on the Principal Contractor, and such employee/s found not complying shall be removed from the site immediately.
- The Principal Contractor and contractors shall ensure that all employees working where there is a fall risk undergoes working at heights training, and such certificates shall be kept in the safety file readily available for inspection.
- Furthermore, The Principal Contractor and contractors shall ensure that a rescue team is identified and trained to perform rescue efficiently from heights and the fall protection and rescue plan is develop in accordance with the fall protection and rescue plan specifications. **See attached annexure 6 aligned with MSCSA Contractor Procedure, to this specification.**
- The fall protection and rescue plan shall include hazard identifications and risk assessments as well as working instruction derived from hazard identification and risk assessment conducted by a competent person to develop hazard identification and risk assessments.
- The Principal Contractor and contractors shall furthermore ensure that a person is appointed in writing to inspect safety harnesses prior to use.
- The fall protection plan shall further identify all the areas where is fall risk may occur and clearly outline the fall factor within the plan.
- The Principal Contractor shall also provide detailed specifications regarding the type of anchor points and lifelines to be installed, as well as provide the competency of the person responsible to install such fall arrest equipment.
- The fall protection plan shall clearly identify the required rescue equipment to be used in the event of a fall, and develop a process flow approach regarding the manner in executing a rescue safely without endangering any person's life.
- The fall protection plan shall in detail outline the roll players as well as their roles and responsibilities.
- Special care will be taken where roof work is performed, the fall projection plan shall discuss in detail, a comprehensive plan on executing the roof work safely, as well

consider all measures relating to fall prevention system before Referring to fall arrest systems.

- The fall protection plan shall also, clearly pin point the method of installing the identified fall prevention and fall arrests systems before work such can be performed safely.
- The fall protection plan must be approved by the client before work may commence.

12. SCAFFOLD

Scaffolding must comply with the requirements of SABS 10085. Strict control measures must be in place to prevent unauthorized alterations to scaffolding such as removing ties and scaffold boards, and daily pre-start inspections to be conducted by the Principal Contractor and contractors, as well as after inclement weather conditions.

All scaffolds shall be erected under the control of a person trained and appointed in writing to conduct such scaffold erection, inspection and all scaffold erectors, team leader / site supervisors and inspectors are competent to carry out their work. When deviations are found on any scaffolding, the use thereof must be stopped by the Principal Contractor until such time as compliance can be achieved.

In the event where the use of scaffolding is necessary, a comprehensive scaffolding plan shall be developed which include all applicable drawings of such scaffolding.

Scaffolding shall be clearly mark "safety to use" before any personnel is allowed to embark it.

Any major non-compliance found with regards to the erection, dismantling, use or failure to inspect, a penalty shall be imposed on the Principal Contractor of (R14 940).

13. LADDERS AND LADDER WORK

The Principal Contractor shall ensure that all ladders be clearly numbered, and inspected on a register. The inspections done on ladders shall be done by a competent person, identified and appointed as the ladder inspector.

Under no circumstances shall any Contractor manufacture self-made ladders for use during the construction project, and only aluminium ladders shall be used. Ladders shall be secured at the top and chocked at the base to prevent slipping when leaning on a structure.

Where chocking of the base is not possible, then the user shall ensure that the ladder is held in position by another employee when ascending/ descending or whilst work on the ladder.

Ladders shall be inspected before use by the person appointed as the ladder inspector and a records of such inspection shall be kept on file.

Proper storage shall be provided for all ladders when not in use. Ladders must be the correct height for the task, extended at least 1m above the landing, fastened and secured, and at a safe angle.

No ladders shall be used higher than 4 meters.

14. PORTABLE ELECTRICAL TOOLS, EXPLOSIVE POWER TOOLS, HAND TOOLS

The Principal Contractor / contractor must ensure the following procedure is adhered to regarding Portable Electrical Tools, Explosive Powered and Hand tools:

- Power tools to be well guarded, not over loaded and be double insulated or earthed and used on an earth leakage system. All equipment shall be identified and allocated a serial number which shall be recorded on a register.
- No work under wet conditions allowed with electrical power tools.
- Only competent persons shall be permitted to conduct routine and monthly inspections on the equipment whereby such inspections are kept in the health and safety file.
- Persons competent to inspect the equipment must be appointed in writing.
- Persons must be trained to operate such equipment and must be appointed and shall be the only authorized person to operate the equipment.
- The Principal Contractor / contractor must ensure operation of the equipment is in accordance with an approved Risk Assessment and Working Instructions.
- All users must undergo regular awareness training to ensure compliance with the hazard identification and risk assessments as well as working instructions.
- The Principal Contractor / contractor must ensure the required PPE and clothing is provided and maintained.
- No privately owned or home- made hand tools to be used on site.
- All hand tools to be kept in a clean and sound condition.
- The right tools for the task to be used.

In the event where the Principal Contractor / Contractors make use of explosive actuated fastening devices, the Principal Contractor shall ensure that;

- The user of such a device is provided with and uses suitable protective equipment.
- The operator shall be trained in the use and maintenance of such a device, and such training records kept in the health and safety file readily available for inspection.
- The device shall be fitted with a protective guard around the muzzle end, which effectively confines any flying fragments or particles.
- The competent person shall be the only person authorized to operate such a device and conduct pre-use inspections as well as monthly inspection thereon, and kept in the health and safety file for inspection by the client, inspector or employees.

- When the device and its cartridges are not in use, the Principal Contractor shall ensure that both items are locked up in a safe and secure place without being loaded, which is inaccessible to unauthorized persons.

15. ELECTRICAL

15.1 ELECTRICAL MACHINERY

If high voltage electrical lines or any other similar device/cables are present on the site perimeter, the Principal Contractor must be aware of the location and have to demarcate their position. These demarcations must be maintained throughout the duration of the construction work. The minimum safety clearances as per Electrical Machinery Regulation 19 must be adhered to. All installation and modification work must comply with SANS 10142 & the regulations of the OHS Act 85/1993.

The Principal Contractor / contractor must ensure lighting circuits and power circuits are fitted with suitable earth leakage systems and installed by an approved authority.

The Principal Contractor / contractor must ensure that;

- Earth leakage system will be tested weekly.
- Malfunctions shall be repaired immediately or replaced.
- Lighting shall be so positioned as not to interfere with construction activities.
- Lighting shall be provided to ensure adequate visibility under all conditions.
- Lighting and electrical installations shall be weatherproof.
- The Principal Contractor / Contractor must ensure operation of the equipment is in accordance with an approved Risk Assessment and Working Instructions.
- All users must undergo regular awareness training to ensure compliance.
- The Principal Contractor / Contractor must ensure the required PPE and clothing is provided and maintained.
- The Principal Contractor / Contractor shall ensure that all portable electrical equipment is maintained in a good working order (records to be kept in safety file).

15.2 ELECTRICAL INSTALLATIONS

- The Principal contractor / Contractor must ensure that all installation and modification work must be conducted in accordance with the Electrical Installation Regulations GNR. 242 of 6 March 2009.
- No person may do electrical installation work as an electrical contractor unless that person has been registered as an electrical contractor.
- The electrical contractor shall provide Client with a copy of his registration certificate.

- The registered person shall exercise general control over all electrical installation work being carried out, and no person may allow such work without such control.
- Any person who undertakes to do electrical installation work shall ensure that a valid Electrical certificate of compliance is issued for that work.

16. PUBLIC AND SITE VISITOR HEALTH AND SAFETY

The Principal Contractor shall ensure that every person working on or visiting the site, as well as the public in general, shall be made aware of the dangers likely to arise from site activities, including the precautions to be taken to avoid or minimize those dangers.

- Appropriate Health and Safety notices and signs shall be posted up, but shall not be the only measure taken.
- The Principal Contractor has a duty in terms of Section 9 of the Occupational Health and Safety Act 85 of 1993 to do all that is reasonably practicable to prevent members of the public and site visitors from being affected by the construction activities.
- The Principal Contractor shall ensure that all site visitors undergo Health and Safety Induction training on the hazards and risks they may be exposed to and what measures are in place or should be taken to control these hazards and risks and supply them with the necessary personal protective equipment.
- A record of these inductions must be kept on site in accordance with the Construction Regulations. The Principal Contractor shall ensure that no unauthorized employees enter the construction area and that this process document and implemented.

17. TRANSPORT OF WORKERS

The Principal Contractor and other Contractors shall not:

- Transport persons together with goods or tools unless there is an appropriate area or section to store them,
- Transport person in a non-enclosed vehicle e.g. Truck, bakkie – there must be a proper canopy (Properly covering the back and top) with suitable sitting area. Workers shall not be permitted to stand or sit at the edge of the transport vehicle.
- Transport workers in bakkies unless they are closed / covered and have the correct number of seats for the passengers.
- Permit personnel to travel on any plant or equipment on the site works.
- Exceed the prescribed speed limit as indicated throughout the site.
- The Principal Contractor and other Contractors shall ensure:
 - o Road safety principles are adhered to on and off site.

- Vehicles entering the site are clearly identified e.g. having company details on vehicles and is road worthy.

18. OCCUPATIONAL HEALTH

18.1 HYGIENE

Exposure of workers to occupational health hazards and risks is very common in any work environment, especially in construction. Occupational exposure is a major problem and the Principal Contractor and Contractors must ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards such as;

- Inhalation
- Ingestion
- Absorption
- Noise (Noise induce hearing loss conservation programme)

18.2 WELFARE FACILITIES

The Principal Contractor must supply sufficient toilets (1 toilet per 30 workers), showers (1 for every 15 workers), changing facilities, hand washing facilities, soap, toilet paper and hand drying material. This shall be clearly outlined within the health and safety plan.

Waste bins must be strategically placed and emptied regularly. Waste management requirements to be obtained from the Environmental Controller. Safe and clean storage areas must be provided for workers to store personal belongings and personal protective equipment.

Workers should not be exposed to hazardous materials / substances while eating and must be provided with sheltered eating areas. Adequate portable water must be provided if not on tap.

18.3 ALCOHOL AND DRUGS

The PRINCIPAL CONTRACTOR must not permit any person who is under the influence of intoxicating liquor or drugs, to enter or remain on site. The Principal Contractor must ensure that no person on site partakes or offer another person the same or is in possession of such intoxicating liquor or drugs.

Any person suspected of being under the influence of alcohol or other drugs must be refused entry and the prescribed disciplinary procedure must be followed by the Principal Contractor and the Client must be informed.

Records of such proceedings (policy and procedure) must be implemented before work commences and proof thereof available with the health and safety file.

19. ENVIRONMENTAL MANAGEMENT

The Principal Contractor shall have an Environmental Management Plan (EMP) for the site. It must include all requirements reflected in the Environmental aspects and Impact Assessment.

Employees must be trained in the application of the environmental waste management plan as well as the aspect and impact assessments. Proof of such training shall be kept in the safety file readily for inspections by the client, inspector and employees.

All waste from servicing must be disposed of in accordance with the environmental legislation. The project manager or safety officer reserves the right to request the contractor to produce a certificate of disposal for all waste or contaminated soil generated from these activities.

Spills of diesel, oil, cement and other hazardous chemicals should be prevented at all times.

All equipment that has the potential for spillages or leakages shall be equipped with drip trays.

In the event of a spill, the source of the spill must be identified and addressed. The spill must be cleaned immediately and any contaminated soil must be removed and disposed of through a recognised waste disposal method with the approval of the client's representative.

Where major spills/contaminations are likely to occur, a spill kit must be made available and personnel trained in its use. Proof of such training shall be kept in the health and safety file.

No open or unattended fires are allowed within the construction site. The burning of waste is prohibited and firefighting equipment must be supplied at combustible waste areas.

In the event of a spillage of hazardous chemical substances and where clean-up is required the Principal Contractor shall notify the department of environmental affairs of such an incident, both telephonically and in writing. Proof of this must be submitted to the client.

20. EMPLOYEE DOCUMENTATION

The Principal Contractor / Contractors shall ensure, that all his/her employees names, surnames and ID numbers are placed on a register and a copy of each employee's ID document to be filed in the health and safety file made readily available for inspection.

In the case where the Principal Contractors / Contractors employ foreign nationals, such employees shall be in possession of a valid workers permit, and such documentation shall be filed in the health and safety file readily for inspection.

In the event where new employees are employed by Principal contractor/contractors, such register shall be updated immediately.

21. MEDICAL CERTIFICATE OF FITNESS

The Principal Contractor / Contractors shall ensure that all employees working under their employment, have valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational medical or health practitioner in the form of annexure 3.

These medical certificates of fitness shall be filed in the health and safety file readily for inspection. Employees are to be withdrawn from the project should they be declared unfit.

22. COPY OF THE ACT

The Principal Contractor shall ensure that a copy of the Occupational health and safety act 85 of 1993 as well as the Construction Regulation 2014 is readily available on site at all times.

23. SITE ESTABLISHMENT

The Principal Contractor shall develop a full site establishment plan within the health and safety plan, which shall be reviewed by the Client for approval before work commences.

24. MANAGEMENT COMMITMENT

Management of the Principal Contractor will demonstrate their commitment in order to achieve high standards of performance through effective management systems. The demonstration of commitment will be in the form of developed SHE policies as well as the identification of people with health and safety hazards management responsibilities.

Management will effectively plan in order to recognize their business needs to fulfil obligations and objectives in relation to the safety of their people which include;

- Regular formal planning sessions to review the SHEQ management system and safety plan
- Ongoing assessment of safety and hazard management
- Skills and competencies
- Induction processes
- Develop, implement and maintain a disciplinary code

25 CLIENT SPECIAL REQUIREMENTS

The principal contractor shall ensure that the client is issued with a monthly health and safety performance report in the following format.

Contractor's Monthly Health and Safety Performance Report		
To be sent to Site Manager by 2 nd working day of each month		
Site Fax:	Date:	Month:
Contractor:		
Contact Person:		
Number of hours worked:		Average number of people on site:
Health and Safety Committee/meetings		Inspections
Attended site Health and Safety Committee <input type="checkbox"/> Yes <input type="checkbox"/> No Minutes received <input type="checkbox"/> Yes <input type="checkbox"/> No		Held as per schedule <input type="checkbox"/> Yes <input type="checkbox"/> No

Accident Type	How Many	Reported Yes/No & Date	To Whom	Investigation Done	By Whom
Lost time (> 1 shift)*					
Medical/Hospital					
First Aid Treatment					
Other					

Number of Risk Assessments Conducted	Number of SWP's Developed	No. of Permits Issued	No. of Training Sessions Held	No. of Audits Carried Out

MONTHLY CONTRACTOR REPORT	
SECTION 1 – COMPLETED BY CONTRACTOR	
To be sent to Site Manager by 2 nd working day of each month	
Contract Name:	Month:
Contract Number:	Prepared by:
Contractor:	Date:
Are subcontractors engaged in this work? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Subcontractor Names (legal identity):	

PERFORMANCE INDICATORS	This month	Total	Monthly Average (over last 12 months)

Number of lost time injuries			
Working days lost due to injury			
Number of first aid treatments			
Number of hazard inspections conducted			

STATUS OF INJURED PERSONNEL AND PROPERTY DAMAGE					
Name/Item	Injury/Damage	Date of Incident	Days Lost for Injured Person		Forecast Return-To-Work for Injured Person
			Total for month	Total for year	

STATUS OF INJURED PERSONNEL AND PROPERTY DAMAGE					
Comments/Outcomes:					
Next audit or inspection is planned for (date):					

GOVERNMENT DEPARTMENT ACTIVITIES/INSPECTIONS			

SHEQ CORRECTIVE ACTIONS			
List all Corrective Actions for this Month	Status:		Comments
	Work is:		
	Ongoing	Complete	

COMMENTS ON POSITIVE SHEQ PERFORMANCE			
Contractor representative (e.g. workplace inspection held, SHEQ training)			
UNRESOLVED HEALTH AND SAFETY ISSUES			
Detail			

We the undersigned accept and agree to the terms and conditions set out herein and in the health and safety plan in terms of the Occupational health and safety act 85 of 1993 and the regulations.

Signed at _____ on thisday of.....2018

.....

Name: Cyril Alberts
THE CLIENT MSCSA

Name:
WITNESS

Signed at _____ on thisday of.....2018

.....

Name: Innocent Dube
THE PRINCIPAL CONTRACTOR
ACIVERS CONSTRUCTION

Name:
WITNESS

Categories for Assessment			Hazard Identification		Assessment & Analysis of Risk										Evaluation of Risk					Risk Treatment	
Area Name	Occupations	Tasks & Equipment	Hazards	SHEQ	Hazardous Event	Who's at Risk	Inc History	Exp	S	L	PR	Engineering	Administrative	PPE	Effective	S	L	RR	Action		
1		Site Access	Driving on site	S	Bumping into people	Employees, Bystanders and Visitors	Low	Med	5	4	20	Install a sensor on the car	Induction training, Communication on entry procedure, communication on designated walkways		Good	3	1	1	Maintain		
			Employee / Contractor personnel who are unfamiliar with the site	S	Walking through high risk areas Causing distraction	Employees, Bystanders and Visitors	Med	High	4	4	16		Signage, Supervision, Induction (Training)	Reflective vests	Satisfied	3	4	12	ALARP		
			Uneven terrain	S	Slip, trip and fall	Employees, Bystanders and Visitors	Med	High	4	4	16		Risk Assessment, Supervision, Inspection of work area	Safety Boots	Good	3	4	12	ALARP		
			Visitors/ Customers access to the site	S	Walking through high risk areas Causing distraction	Employees, Bystanders and Visitors	Med	Med	4	4	16	Clock-in system in high risk areas to restrict access, Put barrier around high-risk areas	Signage, Supervision, Induction (Training)	Safety Boots, Reflective vests	Good	2	4	8	ALARP		
2		Working at heights	PPE not worn	S	Body harm	Employee, Assistant	Med	High	4	3	12		Risk Assessments, PPE PR, Various Work Instructions, Employee competency training, Induction, Pre-work Inspections, Supervision & Audits, PPE Training		Good	3	3	9	ALARP		
			Psychological challenges (Not medically fit)	SH	Body harm Falling	Employees, Bystanders and Visitors	Low	High	3	0	0		Periodic medicals, PJO's, WSWP		Good	3	2	6	Maintain		
			Adverse weather conditions	SE	Unable to work due to extreme heat/cold	Employee, Assistant	Low	Med	3	4	12		Risk Assessment, Inspections, Supervision, Planned task observation and DSE's	Safety Boots, Overalls	Satisfied	3	3	9	ALARP		
			Incompetent persons/No training	S	Falling Body harm	Employee	Med	Med	4	3	12		Training, Induction, SWMS, PJO's, Supervision		Good	3	3	9	ALARP		
			Fatigued	SQ	Substandard quality	Employee, Assistant, Bystanders and Visitors	Med	Med	4	4	16		Risk Assessment, Employee Assessment, Supervision and Awareness training		Satisfied	3	4	12	ALARP		
			No medical done	SH	Not fit for the job	Employee	Low	Low	4	3	12		Periodic medicals, Training, Induction, Supervision		Good	3	2	6	Maintain		
			Incompetent employees	SQ	Substandard quality of work Falling Body harm Damage to equipment and material Fatality	Employee, Assistant	Low	Low	4	3	12		Risk Assessments, Work Instructions, Staff training & Competency Assessment, Induction & Awareness Training		Good	4	3	12	ALARP		
			Complacency / Lack of concentration	SQ	Substandard quality of work Falling Body harm Damage to equipment and material Fatality	Employee, Assistant, Bystanders and Visitors	High	High	4	4	16		Risk Assessments, PPE PR, Various Work Instructions, Staff competency training, Induction, Pre-work Inspections, Supervision & Audits, PPE Training		Satisfied	4	3	12	ALARP		
			Not aware of emergency procedures	S	Body harm, due to unawareness to evac pro	Employee	Med	Med	4	4	16		Risk assessment, Signage, Training, Induction	Safety Boots, Reflective vests	Good	5	2	10	ALARP		
			Incompetent assistant	SH	Falling Body harm	Employee, Assistant	Med	Med	4	3	12		Risk Assessment, Employee Assessment, Supervision and Awareness Training, SWMS, PJO's		Satisfied	3	2	6	Maintain		
			Intoxication	H	Violence or medical treatment	Employee and assistant	Low	Med	3	4	12	Breathalyzer	Risk Assessments, Alcohol & Drugs Policy, Employee training & Competency Assessment, Induction & Awareness Training		Satisfied	3	3	9	ALARP		
			Poor communication	S	Injuries	Employee and assistant	Med	Med	4	4	16		Risk assessment, Induction, Training, Supervision		Good	3	3	9	ALARP		
3		Ladders	Unsecured ladder	S	Falling Body harm Damage to equipment Damage to material	Employee, Assistant, Bystanders and Visitors	Med	Med	3	4	12	Rubber chucks at the bottom of the legs of the ladder	Risk Assessment, Maintenance & equipment inspections, Pre-use inspections and Supervision		Good	3	2	6	Maintain		
			Ladder not inspected by a competent person	S	Ladder fracture Body harm Damage to equipment	Employee, Assistant, Bystanders and Visitors	Low	Med	4	2	8		Risk Assessment, Maintenance & equipment inspections, Pre-use inspections and Supervision		Satisfied	3	2	6	Maintain		
			No assistant to hold the ladder	S	Falling Body harm	Employee, Assistant	Low	Low	4	3	12	Rubber chucks at the bottom of the legs of the ladder	Risk Assessment, Maintenance & equipment inspection, Pre-use inspections and Supervision		Good	4	2	8	ALARP		
			Type and height of ladder	S	Substandard quality work Failure to complete work Body harm Falling	Employee	Med	Med	4	4	16	Correct ladder for the task at hand	Risk Assessment, Inspection of work area, Supervision, Assistant Training		Satisfied	3	2	6	Maintain		
4		Hand Tools	Tools not inspected	SQ	Work not done Substandard quality work Work may take longer to complete	Employee	Med	Low	3	3	9		Risk Assessment, Maintenance & equipment inspections, Pre-use inspections and Supervision		Satisfied	4	3	12	ALARP		
			Type of tool used / Incorrect tool used	SQ	Substandard quality work Damage to equipment	Employee	Med	Low	3	3	9		Risk Assessment, Maintenance & equipment inspections, Pre-use inspections and Supervision, Signage, Induction, Training, PJO's		Satisfied	3	2	6	Maintain		
			Heavy tools	S	Damage to equipment and material Falling tools Body harm to persons-by/assistant	Employee, Assistant, Passers-by, Bystanders	Med	Low	4	3	12		Risk Assessment, Maintenance & equipment inspections, Pre-use inspections and Supervision, Training, Induction, PJO's, SWMS	Utility belt	Good	3	2	6	Maintain		
5		Possible diseases	Unknown Chronic illnesses	H	Harm to employee health Substandard quality work Falling Body harm	Employee, Assistant, Bystanders and Visitors	Low	Low	5	3	15		Risk Assessment, Supervision, Employee Competency, Annual Medical, Clinic Visits		Satisfied	4	1	4	Maintain		
			Undiagnosed Acute illnesses	H	Harm to employee health Substandard quality work Falling Body harm	Employee, Assistant, Bystanders and Visitors	Med	Low	4	4	16		Risk Assessment, Supervision, Employee Competency, Annual Medical, Clinic Visits, Periodic medicals, Training, Induction, Supervision		Satisfied	3	2	6	Maintain		
			Undiagnosed occupational illnesses	H	Harm to employee health Substandard quality work Falling Body harm	Employee, Assistant, Bystanders and Visitors	Low	Low	4	3	12		Risk Assessment, Supervision, Employee Competency, Annual Medical, Clinic Visits		Good	4	2	8	ALARP		
6		Housekeeping	Cables	S	Slip, trip and fall Live wires	Employee, Assistant	Med	Med	3	4	12		Risk Assessments, Work Instructions, Inspections of Tools & Equipment, Employee training & Competency Assessment, Induction & Awareness Training, Checklist and Registers, Signage, Training (toolbox talk)		Good	3	3	9	ALARP		
			Long grass / Trees	SH	Insect/dinimal bites	Employee, Assistant	Med	Med	4	4	16	Cut grass	Risk Assessments, Work Instructions, Inspections of Tools & Equipment, Employee training & Competency Assessment, Induction & Awareness Training, Checklist and Registers	Overall, Safety boots, gloves	Good	4	3	12	ALARP		
			Stacking of material	S	Slip, trip and fall	Employee, Assistant, Bystanders and Visitors	Med	Med	4	4	16	Provide designated stacking zones, Height allocation per zone	Training (toolbox talk), Supervision	Reflective vest, Safety boots	Good	4	3	12	ALARP		