Tender Document

This document is the pre-contract Health and Safety Specification which must be used by the Principal Contractor and Sub-Contractors appointed by the principal Contractor to compile Health and Safety Plans for this project and forms part of the tender documentation.

The Principal Contractor and Sub Contractor's particular attention is drawn to Section 1.2 of this specification whereby

"Upon award of the contract, the contractor is to assume and adopt the functions and duties of the Principal Contractor as set out in the Construction Regulations 2003 No. R.1010 promulgated 18th July 2003."

The Health and Safety Specifications outlined herein must be taken into account and due allowance made within the pricing of appropriate items contained within the specification. Where the tenderer is of the opinion that a requirement is missing or is not adequately specified, then this shall be drawn to the South African National Parks’ attention during the tender period. In the absence of any direction to the contrary, the tenderer shall as part of the tender submission, set out the details of such discrepancy together with the costs associated therewith, separately identified and included within the tender figure.

Principal Contractor

The successful tenderer will upon signing the contract to which this tender documents refers be required to fulfil the functions and duties of the Principal Contractor as set out in the Construction Regulations 2003 No. R.1010 promulgated 18 July 2003.

Start of Construction Phase

The construction phase shall not commence until the Principal Contractor's Health and Safety Plan has been considered and approved by South African National Parks’ Corporate OHS office. The South African National Parks' shall discuss and negotiate with the Principal Contractor the contents of the Health and safety Plan submitted by the Principal Contractor before finally approving it for implementation.

The construction phase shall not commence until written permission is received South African National Parks’ Corporate OHS office. In this respect, the South African National Parks’ Corporate OHS office may rely on the advice of the Design Team as to the adequacy and comprehensiveness of the Plan offered by the Principal Contractor.

In preparing the detailed Health and Safety Plan based on the relevant sections of this Health and Safety Specifications supplied by South African National Parks’ Corporate OHS office, contractors must allow for the adoption
safe working procedures and co-ordinate and rationalise activities to avoid controllable hazards arising due to clashes of activities.

A1.1.4 **Sub-Contractors, Suppliers and Designers**

The Principal Contractor shall ensure that all direct appointments in connection with this project include provisions for the compliance of his sub-contractors, suppliers and designers etc – with the relevant provision of the occupational Health and Safety Act (Act 85 of 1993) and its Regulations – in particular, the Construction Regulations 2003 No. R1010 promulgated 18 July 2003.

A1.1.5 **Liaison**

The Principal Contractor shall together with all his appointees, liaison with the South African National Parks’ Corporate OHS office as required under the Regulations and agreed procedures for the transfer of relevant information in respect of designs and in connection with the preparation of the Health and Safety File.

A1.1.6 **Advice**

The tenderer shall, as part of the tender submission, indicate where advice will or may be required of the South African National Parks’ Corporate OHS office in respect of the competence of the tenderer’s designers and the adequacy of resources allocated or to be allocated by them.

A1.1.7 **Undertaking by Principal Contractor and Sub-Contractor appointed by Principal Contractor**

The Principal Contractor as well as Sub-Contractors appointed by him/her shall undertake in writing to ensure that the provisions of the Occupational Health and Safety Act (Act 85 of 1993) and its Regulations, in particular, the Construction Regulations 2003 No. R.1010 and any amendments or re-enactments thereto are complied with. The Attached Occupational Health and Safety provisions undertaking form for the Principal Contractor in Appendix 1 shall be completed and signed by the most senior representative of the company/firm awarded the tender.

A1.2.0 **INFORMATION REQUIREMENTS**

*The contractor must provide the following information:*  

- The principal Contractor/Sub-Contractor shall have an OHS Policy in accordance with Occupational Health and Safety Act, (Act 85 of 1993) and include a copy of the Policy in the Health and Safety Plan to be submitted by the Principal Contractor/Sub-Contractor.  
- The Principal Contractor/Sub-Contractor shall promptly display a copy of the company’s OHS policy on the OHS notice board for the duration of the contract and include information provided to persons at the contract OHS induction.
The principal Contractor shall develop a contract specific OHS Management Committee Statement based on the company's OHS Policy.

The Principal Contractor's Managing Director shall sign the Commitment Statement and the copy of the Statement shall be prominently displayed on the OHS Notice Board for the duration of the contract. A copy of the Statement shall be shall be included in the information provided to persons at the contract OHS induction and other copies shall be supplied to each Sub-Contractor.

A1.2.1 Management

Details of the personnel and management systems to be put in place to prepare, manage, implement, conduct and monitor the Health and Safety Plan for the project.

Broadly speaking your –

- Organisation's internal structures that establish the company's Safety, Health and Environmental (SHE) management roles, responsibilities, accountabilities and reporting relationships.
- Safety, Health and Environment (SHE) Plans, Policies, procedures, Directives and Standards that provide instructions as to how activities and functions are to be carried out.
- Safety, Health and Environment (SHE) Controls, Inspections, Reviews etc built into construction operations to ensure that performance is consistent Safety, Health and Environment (SHE)objectives and requirements.
- Safety, Health and Environment (SHE) Communication mechanisms for collecting, handling and reporting information.

In other words, Management Systems that specify WHO is going to do WHAT, WHERE, WHEN, WHY and HOW.

- Details of qualifications and experience held by the person nominated above – including recent health and safety education and training undertaken.
- Procedures for determining the competence of contractors engaged on the project – whether employed by the contractor directly or by others to fulfil their duties the Construction Regulations 2003 (No. R.1010 promulgated 18 July 2003).

A1.2.2 Hazard Identification, Risk Assessment and Control

- The Principal Contractor/Sub-Contractor shall detail and implement procedures that will identify hazards, assess risks and determine suitable control measures as they arise throughout the term of the contract. These procedures shall both comply with and be implemented and managed in accordance with the specification.
- The Principal Contractor/Sub-Contractor shall detail and implement procedures that ensure control measures are evaluated for effectiveness and modified as necessary. The evaluation procedure shall detail the responsibilities, timelines and records that will be kept as part of the process.
Safe and effective practices

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Where Risk is controlled through administrative control measures, the Principal Contractor/Sub-Contractor shall ensure that the administrative measures are:

a) Clearly documented and the personnel responsible for implementation and management are explicitly defined;
b) Understood by all relevant personnel through training and assessment;
c) Implemented and documented and promptly reviewed for effectiveness following initial implementation;
d) Amended and authorised as required;
e) Adequately supervised, managed and audited to ensure continuing compliance;
f) Available at all times wherever the measures are being implemented.

Any piece of plant or equipment not complying with the specification shall cease operation until the Principal Contractor/Sub-Contractor can demonstrate to the satisfaction of the South African National Parks’ Corporate OHS office that the piece of non-conforming plant or equipment conforms to these requirements.

A1.2.3 The Health and Safety Plan

The Principal Contractor/Sub-Contractor shall develop a Health and Safety Plan to reflect variations in design or changes in site conditions and liaise with the South African National Parks’ Corporate OHS office.

The Principal Contractor shall develop a Health and Safety Plan so that it:

a) Incorporates the contractor’s approach to managing the construction work to ensure the health and safety of all persons carrying out the construction work and all persons who may be affected by their work.
b) Includes the risk assessments prepared by all Contractors under the duties set out in the Construction Regulations 2003 and any other relevant legislation (i.e. the OHS Act and Regulations etc.);
c) Includes the arrangements for ensuring that – where appropriate or specifically requested, all Contractors/Sub-Contractors prepare suitable and sufficient method statement for their construction works which incorporate adequate measures for ensuring the health and safety of all persons who may be affected by these works.
d) Incorporate the common arrangements for site safety, statutory notices and registers etc.
e) Includes the site rules to be adopted for controlling the risks to health and safety during the construction phases.
f) Includes reasonable arrangements monitoring compliance with health and safety legislation and site rules.
g) Includes reasonable measures to ensure co-operation between all Contractors and Sub-Contractors in respect of health and safety provisions and prohibitions.
h) Includes the steps to be taken to ensure that only authorised persons are allowed into any premises or parts of the site/premises where construction work is being carried out.
i) Includes arrangements for emergency procedures.

j) Includes arrangements for ensuring that – so far as is reasonably practicable, every Contractor and Sub-Contractor is provided with comprehensive information about the risks to health and safety of that Contractor/Sub-Contractor or of any employees or other persons under their control, arising out of the construction works, including the emergency procedures.

k) Includes details of the arrangements for ensuring – so far as is reasonably practicable, that the employees or other persons under the control of any Contractor/Sub-Contractor and any visitors to the site receive adequate information about the risks to their health and safety arising out of the construction works and where necessary, adequate training to carry out their work in a safe and healthy manner.

l) Includes arrangements for providing all persons at work on the site and visitors to the site with the opportunity and means of discussing and offering advice on health and safety issues relating to the construction works.

m) Includes arrangements for the reporting of any accidents, inquires or dangerous occurrences, including conforming to the statutory requirements.

n) Can be modified as the work proceeds to take account of any information received from Contractors/Sub-Contractors, any experience gained during the course of the project or any changes necessary as a result of unforeseen circumstances or alterations to the design.

A1.2.4 Programme

A time estimate required by the Contractor to implement the Health and Safety Plan sufficiently for works to commence on site.

A1.2.5 Cost

A detailed breakdown of costs allowed in the contractor’s tender for preparing, managing, implementing and monitoring the Health and Safety Plan and for complying with the requirements imposed on the principal Contractor under the Construction Regulations of 2003 (No.R.1010 promulgated 18 July 2003).

A1.3.0 GENERAL SITE SAFETY

A1.3.1 Safety Training & Education

The Principal Contractor shall detail the OHS competencies and training received by its contract management personnel.

The Principal Contractor’s Health and Safety Plan shall have a detailed register of the skills and competencies for all personnel for the activities that the personnel will undertake under the contract e.g. Mobile plant operators, Crane operators etc.

The Principal Contractor shall demonstrate and maintain documentary evidence of competencies on site for the duration of the contract.
A1.3.2 Induction Training

The Principal Contractor/Sub-Contractor shall develop and detail a Site Induction Training Programme as part of the Occupational Health and Safety Plan to be submitted to the South African National Parks’ Corporate OHS office prior to commencement of construction that includes as a minimum:

a) Training related to hazards likely to be encountered on site and control measures that have been developed in response to these hazards;

b) Roles and responsibilities;

c) The requirements of the Health and Safety Plan submitted and approved;

d) Address the identified issues in the FIRE safety, Emergency preparedness, Evacuation and Rescue Plan to ensure that all site personnel are aware of procedures in the event of an incident or emergency occurring.

The Principal Contractor/Sub-Contractor shall evaluate all persons undertaking the site induction training through a written test to ensure that inductees have an understanding of the OHS requirements in terms of the Occupational Health and Safety Act for the contract at hand. The written tests shall be signed and dated by the person undertaking the induction training to attest to their understanding and be retained by the Principal Contractor/Sub-Contractor as a record that the training has been done and completed.

A1.3.3 Induction Training for Specified Work

The Principal Contractor/Sub-Contractor shall conduct Site Specific occupational health and safety Induction Training for all personnel, the South African National Parks’ Corporate OHS office or Client/Client’s Agent and all visitors not escorted on Site by inducted persons.

The Principal Contractor/Sub-Contractor shall evaluate all persons undertaking the site induction training through a written test to ensure that inductees have an understanding of the OHS requirements for the contract. The written test shall be signed and dated by the person undertaking the induction training to attest to their understanding and be retained by the Principal Contractor/Sub-Contractor as a record that the training has been completed.

A1.3.4 Recording and Reporting of Injuries

Make arrangements for all contractors to report accidents, ill health and dangerous occurrences notifiable to the Department of Labour under Section 24 of OHS Act (Occupational Health and Safety Act, Act 85 of 1993) Reporting to the Department of Labour (DoL) Inspector regarding certain incidents.

All lost time incidents associated with the contract works or reportable as defined by Section 24 of the OHS Act shall be immediately reported to the South African National Parks’ Corporate OHS office or the Divisional OHS Manager.
The Principal Contractor/Sub-Contractor shall provide a detailed report of all accidents/incidents including events that could have become lost time incidents were it not for fortuitous circumstances to the South African National Parks’ Corporate OHS office within 5 days of the incident occurring. The Principal Contractor/Sub-Contractor shall provide copies of all reports and information associated with the incidents to the South African National Parks’ Corporate OHS office or the Divisional OHS Manager. Copies of reports must be placed on the Health and Safety File.

**Where the Principal Contractor/Sub-Contractor has been:**

- Served with a prohibition, contravention or improvement notice under the OHS Act or
- Required to comply with any order issued by an Inspector from the Department of Labour;

The Principal Contractor/Sub-Contractor shall immediately supply a copy of that notice, order or notification to the South African National Parks’ Corporate OHS office or the local Divisional OHS Manager.

The Principal Contractor/Sub-Contractor has been served with a summons or is convicted of any offence in relation to occupational health and safety, the Principal Contractor/Sub-Contractor shall immediately supply a copy of that summons to the Client/Client’s Agent.

The Principal Contractor/Sub-Contractor shall detail the reporting and investigation procedures for incident investigation. The procedures shall include the investigating Officer responsible and the time limits imposed for reporting and investigating the incident and to implement corrective action in a timely manner so as to prevent a recurrence.

The South African National Parks’ Corporate OHS office or the local Divisional OHS Manager may participate in or undertake an investigation into the incident, injury or illness at its discretion and the Principal Contractor/Sub-Contractor shall cooperate with and provide assistance to the investigation organised and undertaken by the South African National Parks’ Corporate OHS office or the local Divisional OHS Manager.

**A1.3.5 First Aid**

Establish and implement a first-aid programme to provide emergency treatment to victims of accidents, chemical substances or excessive exposure to toxic substances.

**The programme shall include:**

- Proper first aid facilities administered by qualified personnel;
- First aid boxes;
- First aid room (where there are 500 or more workers on site);
- Training and re-training of first aiders;
- First aid treatment procedures;
- Standard procedures;
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- Special procedures – e.g. for poisoning;
- Maintenance of first aid facilities.

All first aid provisions shall comply with the OHS Act (Act 85 of 1993)

A1.3.6 Fire Protection and Prevention

- Appropriate measures taken to prevent the risk of FIRE;
- Sufficient and suitable storage must be provided for flammable liquids, solids and gases;
- Smoking must be prohibited and notices in this regard must be prominently displayed in all containing readily combustible or flammable materials;
- Combustible materials must not accumulate on the construction site;
- Welding, flame cutting and other hot work may only be done after the appropriate precautions have been taken to reduce the risk of fire;
- Suitable and sufficient fire-extinguishing equipment must be placed at strategic locations and such equipment must be maintained in good working order;
- A sufficient number of workers must be trained in the use of fire extinguishing equipment.

A1.3.7 Site Emergency Procedures

The Principal Contractor/Sub-Contractor shall establish an Emergency Evacuation and Rescue Plan.

The Plan shall include the following detail:

- The role and responsibility of every individual in the work area on fire safety emergency evacuation and rescue;
- General work area precautions, fire prevention, detection, protection and warning alarm systems;
- Fire fighting and rescue equipment including types of fire extinguishers;
- Fire safety measures for Site accommodation;
- Escape and communication;
- Fire brigade access facilities and coordination;
- Fire drills and training including the use of fire fighting equipment;
- Material storage (including flammable liquids, gases and waste).

The Principal Contractor/Sub-Contractor shall ensure that all procedures, precautionary measures and safety standards stipulated in the Plan are communicated, implemented and complied with by all workers including other interfacing contractors on Site.

The Principal Contractor/Sub-Contractor shall practice their emergency preparedness within six (6) weeks of the commencement of work and at least four (4) monthly intervals thereafter.
The Principal Contractor/Sub-Contractor shall review and ensure the adequacy of the Plan as the work progress.

The Principal Contractor/Sub-Contractor shall conduct monthly checks on fire fighting equipment and test alarms and detection devices installed on Site and document findings in a register which shall be kept on Site at all times for inspection.

A1.3.8 Housekeeping

Effective and efficient housekeeping must continuously be implemented on the construction Site including:

- Proper storage of materials and equipment;
- Removal of scrap, waste and debris at appropriate intervals;

Loose materials shall not be placed or allowed to accumulate on Site so as to obstruct access and egress from workplaces and passageways.

A1.3.9 Stacking and Storage

- Adequate storage areas must be provided;
- Storage areas must be kept neat and under controlled supervision.

A1.3.10 Illumination

Provide adequate lighting (natural and/or artificial) when work is carried out especially after dark and inside buildings.

A1.3.11 Sanitation and Hygiene

Provision of on-site hygiene facilities:

- At least one (1) sanitary facility for every 30 workers;
- Adequate washing facilities;
- One (1) shower facility for every 15 workers.

Drying sheds, huts, rooms or other accommodation for sheltering during bad weather, storing clothes and taking meals. Facilities should include tables and chairs - suitable means for boiling water and a supply of wholesome drinking water.

The contractor shall provide reasonable and suitable living accommodation for the workers at construction sites which are remote from their homes and where adequate transportation between the site and their homes or other suitable living accommodation is not available.
A1.3.12 **Personal Protective Equipment**

The Principal Contractor/Sub-Contractor shall provide and maintain suitable Personal Protective Equipment (PPE) to all employees employed on Site.

The Principal Contractor/Sub-Contractor shall ensure that such PPE comply with the requirements of the Occupational Health and Safety Act (Act 85 of 1993).

The Principal Contractor/Sub-Contractor shall also ensure that all equipment is properly used by employees during the course of their work.

The Principal Contractor/Sub-Contractor shall record all issues of all equipment to his/her employees is documented in appropriate registers and such registers shall be kept in the Health and Safety File on Site and made available for inspection at all times.

The Principal Contractor/Sub-Contractor shall provide the South African National Parks’ Corporate OHS office and/or the Divisional OHS Manager with a colour code by which employees will be identified with regard to occupations, responsibilities, accountabilities, reporting relationships and access to different locations on site e.g. hard hats or overalls etc.

The PPE shall be, used and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards.

All personal protective equipment shall be of safe design and construction for the work to be performed.

A1.3.13 **Permit to work Requirement**

*Institute a “HOT work” permit system in respect of:*

- Metalwork flame cutting;
- Site welding.

A1.3.14 **Lock-out**

Institute a “Lock-out” procedure in respect of controlling energy so as to prevent unexpected operation or activation of machinery or equipment. This procedure must include a written policy, specific procedures, rules and supervisory follow-up covering the positive locking of switches and valves to ensure that alterations, maintenance, set-up and/or other work can be performed safely.

A1.3.15 **Monthly Health and Safety Audits**

The Principal Contractor shall carry out monthly Health and Safety Audits on the measures contained within his/her Health and Safety Plan submitted to the South African National Parks’ Corporate OHS office and/or the Divisional OHS Manager as well as Health and Safety Plans submitted Sub-Contractors appointed by the Principal Contractor to demonstrate that the required level of health and safety are being achieved and maintained and compile a full report to the South African National Parks’ Corporate OHS office and/or the Divisional OHS Manager on such audit.
The South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager will audit the Principal Contractor as well as his/her Sub-Contractor’s Health and Safety Plans from time to time and will advise the Principal Contractor of any matter with which he/she is not satisfied and the Principal Contractor shall take such steps as are necessary to satisfy the South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager.

The South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager will carry out such audits as he/she considers necessary but not less than monthly.

The Principal Contractor shall make available specialist personnel as the South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager may consider necessary for the performance of such audits.

The Principal Contractor shall develop and maintain an Audit Schedule that details the audits planned to be undertaken by the Principal Contractor of the work under the contract - including sub-contractors for the duration of the contract. The Audit Schedule shall form part of the Health and Safety Plan that needs to be submitted by the Principal Contractor.

Audit reports shall detail the scope of the audit, the audit questions and the audit findings.

The South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager shall be promptly provided with copies of all audit reports together with other documentation to show that all matters raised have been appropriately addressed.

Unless otherwise directed by the South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager, the Principal Contractor/Sub-Contractor shall undertake its initial OHS Audit within 4 weeks of commencement of work.

The Principal Contractor/Sub-Contractor shall undertake subsequent OHS Audits at a frequency not less than once every 3 months.

All Principal Contractor’s OHS Audits shall include an assessment of Sub-Contractor compliance with the approved OHS Plan.

A1.3.16 Management Review

The Principal Contractor shall undertake an independent review of the Health and Safety Plan for the contract in accordance with the requirements of the OHS Act and all the relevant Regulations and in particular the Construction Regulations 2003.

A review shall be undertaken 3 months after commencement of the contract and every 6 months thereafter for the duration of the contract.
Following the completion of the review process, the Principal Contractor shall submit a written report that details the suitability, adequacy and effectiveness of the OHS Plan and to certify that the Site procedures, practices and operations are in accordance with the contract.

A1.3.17 Provision of Information

- Provide Sub-Contractors appointed by him/her with the relevant sections of the Health and Safety specifications pertaining to the construction work which has to be performed.
  - Where changes are brought to the design and construction – provide sufficient information and appropriate resources to the Sub-Contractor to execute the work safely;
  - Discuss and negotiate with Sub-Contractor the contents of the Health and Safety Plan/Plans submitted by them and finally approve such plans for implementation;
  - Ensure that copies of Health and Safety plans compiled by the Principal Contractor and his/her Sub-Contractors are available upon request by employees, DoL Inspector, contractor, South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager;
  - The Principal Contractor/Sub-Contractor shall detail procedures that will ensure that personnel are suitably consulted and communicated with during the planning and application of work activities associated with the contract;
  - The Principal Contractor/Sub-Contractor shall detail the procedures for the identification, assessment and control of hazards associated with the day to day work activities. These procedures shall include requirements for consultation with personnel involved in the work activity;
  - The Principal Contractor/Sub-Contractor shall have procedures for ensuring that OHS information is communicated to and from its personnel. The Principal Contractor/Sub-Contractor shall hold OHS meetings with all personnel or their representatives at the site on a weekly basis.
  - Minutes shall be recorded for all OHS meetings and posted on OHS notice boards within 48 hours of the meeting.
  - The Principal Contractor/Sub-Contractor shall maintain at the Site an OHS notice board located in a prominent position and accessible to all personnel for the distribution of OHS information.
  - The Principal Contractor/Sub-Contractor shall as a minimum, establish and implement procedures for reporting relevant and timely information with regard to OHS performance and incidents;
  - The Principal Contractor/Sub-Contractor shall establish, implement and maintain a controlled copy of all contract OHS documentation on Site;
  - Where the Principal Contractor/Sub-Contractor’s Health and Safety Plan references other documentation including the contract, the Principal Contractor/Sub-Contractor shall ensure that section and clause numbers are clearly denoted in its Health and Safety Plan. All documentation referenced in the Health and Safety Plan shall be available on Site for the duration of the contract;
  - Ensure that Health and Safety Files kept by Sub-Contractors appointed by the Principal Contractor is kept on Site and made
A1.3.18 Stop the Execution of Construction Work

Stop any construction/construction related work conducted by any person which is not in accordance with the Principal Contractor's Health and Safety Plan and/or the Health and Safety Plans of Sub-Contractors which poses a threat to the health and safety of persons.

A1.3.19 Handing Over of Project Health and Safety File

- Hand over a consolidated health and safety file to the South African National Parks' Corporate OHS office and/or the local Divisional OHS Manager upon completion of construction work – including all drawings, designs, materials used and other similar information concerning the completed project;
- In addition to the Health and Safety File – compile and hand over a comprehensive and updated list of all contractors on site accountable to the Principal Contractor as well as the agreements between the parties and the type of work done by them.

A1.3.20 Records and Records Management

- The control of records shall be in accordance with the Principal Contractor's/Sub-Contractor's approved Health and Safety Plan for the contract.
- Records shall be registered, ordered and retained on Site in the Health and Safety File for the duration of the contract.

A1.4.0 CHEMICAL HAZARDS

The following construction materials and substances which may be used in the construction works have been identified as potentially posing special health and safety hazards in the project:

A1.4.1 Substances

- Asphalt
- Bitumen
- RTH Tar prime
- Synthetic Polymer (Polypropylene/polyethylene)
- Stabilising agents
- Anionic stable grade emulsion
- Rubber
- Bitumen Rubber mix
- Hydrophilic aggregates
- Cationic emulsion
Proprietary chemical additive
- Styrene
- Butadiene rubber (SBR latex)
- Cleaning agent
- Paint
- Oxygen
- Acetylene
- Diesel
- Petrol
- Weed killer

A1.4.2 Material

- Cement
- Lime
- Mud rock
- Shale
- Clay
- Synthetic fibre filter fabric
- Geo-textile (synthetic polymer)
- Crushed aggregate
- Weathered dolerite gravel
- Fine slurry
- Crusher dust
- Paving blocks

Adhesive/solvents which can make personnel ill by inhalation of vapours, irritation when in contact with bare skin and eyes can be highly inflammable.

**Cement can cause ill health by:**

a) Skin contact, cement burns and dermatitis;
b) Eye contact, irritation and inflammation;
c) Inhalation of dust – irritation to nose and throat and causes some difficulty with breathing.

- Oil based paints can cause illness by vapour inhalation;
- Silicon sealant with fungicides can cause skin irritation on affected areas
- Timber preservatives/flame retardant which can cause irritation to the skin, eyes, nose and throat and harmful if ingested
- Paving slabs which may contain silica – when wet, can create dust which may affect the lung functioning.

**Chemical cleaners can cause ill health mainly by:**

a) Skin contact, acids and alkalis are highly corrosive and destructive to human body tissues causing burns;
b) Inhaling fumes or mist concentrated solutions of acids and alkalis emit toxic and corrosive fumes.

All materials contained within aerosol containers which are pressurised. Contractors are required to take appropriate
measures to manage the risks arising and to provide details of their proposed measures within their tenders and to incorporate adequate method statements within the Health and Safety Plan.

This is not a definitive list of all potential harmful products. Other materials and substances commonly used during construction may also present health or safety hazards, however, it is deemed that these should be familiar to the average competent Contractor as part of routine risk and Occupational Health, Safety and Hygiene (OHSH) assessments and are therefore not included here.

Adopt all precautionary measures provided by manufactures for storage, use and application of specified materials.

Data sheets for these and any other materials that will be used for the works - are to be obtained by the contractor from the manufacturers.

A1.5.0 SAFETY HAZARDS

A1.5.1 Tools

A1.5.1.1 Hand Tools

- Employers shall not issue or permit the use of unsafe hand tools.
- Wrenches – including adjustable, pipe, end, and socket wrenches shall not be used when jaws are sprung to the point that slippage occurs;
- Impact tools – such as drift pins, wedges and chisels shall be kept free of mushroomed heads;
- The wooden handles of tools shall be kept free of splinters or cracks and shall be kept tight in the tool.

A1.5.1.2 Portable Electrical Tools

*No person shall use a portable electrical tool with an operating voltage which exceeds 50 to earth unless –*

- It is connected to a source of electrical energy incorporating an earth leakage protection device which meets the requirements of section 36 of OHS Act or
- It is connected to a source of high frequency electrical energy derived from a generator which is used solely for supplying energy to such portable electric tool and which arrangement is approved by the chief inspector ; or
- It is clearly marked that it is constructed with double or reinforced insulation.
- Portable electric tools – together with its flexible cord and plug shall be maintained in a serviceable condition.
EXCAVATIONS

- The contractor shall ensure that all excavation work is carried out under the supervision of a competent person who has been appointed in writing.
- The Contractor shall evaluate the stability of the ground before excavation work begins.
- The Contractor shall take suitable and sufficient steps in order to prevent any person from being buried or trapped by a fall or dislodgement of material in an excavation operation.
- The Contractor shall not permit any person to work in an excavation which has not been adequately shored or braced.

Shoring and bracing may not be necessary where –

- The sides of an excavation are sloped to at least the maximum angle of repose measured relative to the horizontal plane; or
- Such an excavation is in a stable material;
- Provided that:
  - Permission is granted in writing by the appointed competent person upon evaluation by him or her of the site conditions; and
  - Where any uncertainty pertaining to the stability of the soil still exists, the decision from a professional engineer or a professional technologist competent in excavation operations shall be decisive and such a decision shall be noted in writing and signed by both the competent person and a professional engineer or technologist as the case may be;
- Take steps to ensure that the shoring or bracing is designed and constructed in such a manner rendering it strong enough to support the sides of the excavation in question;
- Ensure that no load, material, plant or equipment is placed or moved near the edge of any excavation where it is likely to cause its collapse and thereby endangering the safety of any person – unless precautions such as the provision of sufficient and suitable shoring or bracing are taken to prevent the sides from collapsing;
- Cause convenient and safe means of access to be provided to every excavation in which persons are required to work and such access shall not be further than 6m from the point where any worker within the excavation is working;

**Cause every excavation, including all bracing and shoring to be inspected** –

i. Daily, prior to each shift;
ii. After every blasting operation;
iii. After an unexpected fall of ground;
iv. After substantial damage to supports; and
v. After rain
By a competent person in order to pronounce the safety of the excavation to ensure the safety of persons and those results are to be recorded in a register kept on Site and made available to an inspector, Client/Client’s Agent, Contractor or employee upon request;

- Cause every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares or whereby the safety of persons may be endangered to be –
  - Adequately protected by a barrier or fence of at least one (1) meter in height and as close to the excavation as is practicable; and
  - Provided with warning illuminants or any other clearly visible boundary indicators at night or when visibility is poor;
  - Cause warning signs to be positioned next to an excavation within which persons are working or carrying out inspections or tests.

A1.7.0 FORMING & SUPPORT WORK

The Contractor shall ensure that –

- All form work and support work operations are carried out under the supervision of a competent person who has been appointed in writing for that purpose;
- All form work and support work structures are adequately designed, erected, supported, braced and maintained so that they will be capable of supporting all anticipated vertical and lateral loads that may be applied to them and also that no loads are imposed onto structures that the structure is not designed to withstand;
- The designs of form work and support work structures are done with close reference to the structural design drawings and where any uncertainty exists, the structural designer should be consulted;
- All drawings pertaining to the design of form work or support work structures are kept on the site and are available on request by an inspector, contractor, South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager or employees;
- All equipment used in the form work support work structure are carefully examined and checked for suitability by a competent person before being used;
- All form work and support work structures are inspected by a competent person immediately before, during and after the placement of concrete or any other imposed load and thereafter on a daily basis until the form work and support work structure has been
removed and the results have been recorded in a register and made available on Site;

- If after erection, any form work and support work structure is found to be damaged or weakened to such a degree that its integrity is affected, it shall be safely removed or reinforced immediately;

- Adequate precautionary measures are taken in order to
  - Secure any deck panels against displacement;
  - Prevent any person from sleeping on any form work or support work due to the application of form work or support work release agents;

- The health of any person is not affected due to the use of solvents or oils or any other similar substances used in the process;

- Upon casting concrete, the support work or form work structure should be left in place until the concrete has acquired sufficient strength to support safely – not only its own weight but also any imposed loads and should not be removed until authorisation has been granted by a competent person;

- Provision is made for safe access by means of secure ladders or staircases for all work to be carried out above the foundation bearing level;

- All workers required to erect, move or dismantle form work and support work structures are provided with adequate training and instruction to perform these operations safely;

- The foundation conditions are suitable to withstand the weight caused by the form work and support work structures any imposed loads such that the form work and support work structure are stable.

A1.8.0

CONSTRUCTION VEHICLES

The Contractor shall ensure that all construction vehicles and mobile plant:

- Are of an acceptable design and construction;
- Are maintained in a good working order;
- Are used in accordance with the design and the intention for which they were designed – having due regard to safety and health;
- Are operated by workers who –
  - i. Have received appropriate training and have been certified as competent and authorised to operate such vehicle or plant; and
  - ii. Are physically and psychologically fit to operate such construction vehicle or mobile plant by being in possession of a medical certificate of fitness;

- Have safe and suitable means of access;
- Are properly organised and controlled by providing adequate signalling or other control arrangements to guard against the dangers
relating to movement of vehicular and plant traffic in order to ensure their continued safe operation;

- Are prevented from falling into excavations, water or any other place lower than the working surface by installing adequate edge protection – which may include guardrails and crash barriers;
- Where appropriate, are fitted with structures designed to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn;
- Are equipped with electrically operated acoustic signalling device and a reversing alarm;
- Are on a daily basis inspected prior to use - by a competent person who has been appointed in writing and the findings of such inspection is recorded in a register.

The Contractor shall further more ensure that –

- No person rides or be required or permitted to ride on any construction vehicle or mobile plant otherwise than in a safe place provided thereon for that purpose;
- Every construction site is organised in such a way that pedestrians and vehicles can move safely and without risks to health and safety;
- The traffic routes are suitable for the persons using them – sufficient in number, in suitable positions and of sufficient size;
- Every traffic route is – where necessary, indicated by suitable signs;
- All construction vehicles and mobile plant left unattended at night – adjacent to a freeway in normal use or adjacent to construction areas where work is in progress, shall have appropriate lights or reflectors or barricades equipped with appropriate lights or reflectors in order to identify the location of the vehicles or plant;
- Bulldozers, scrappers, loaders and other similar mobile plant where they are being repaired or when not in use should be fully lowered or blocked with controls in a neutral position, motors stopped and brakes set;
- Whenever visibility conditions warrant additional lighting, all mobile plant should engage at least two headlights and at least two taillights while in operation;
- Tools and materials are secured in order to prevent movement when transported in the same compartment with workers;
- Vehicles used to transport workers have seats firmly secured and adequate for the number of workers to be carried; and
- When workers are working on or adjacent public road, reflective indicators are provided and worn by the workers at all times.

**A1.9.0 ELECTRICAL INSTALLATIONS**

- Before construction commences and during the progress thereof, adequate steps must be taken to ascertain the presence guarding against danger to workers from any electrical cable or apparatus;
- All parts of electrical installations and machinery must be of adequate strength to withstand the working conditions on construction sites;
- In working areas where the exact location of underground electric power lines are unknown, workers, using jackhammers, shovels, picks or any other hand tools which may make contact with a power line –
must be provided with insulated protective hand gloves or otherwise that the handle of the tool being used is insulated;

- All temporary electrical installations must be inspected at least once a week and electrical machinery on a daily basis before use on a construction site by competent persons and the records of these inspections be kept in a register residing on Site;
- The control of all temporary electrical installations on the construction site must be designated to a competent person who has been appointed in writing.

A1.10.0  
**USE AND STORAGE OF FLAMMABLE LIQUIDS**

- Where flammable liquids are being used, applied or stored – it must be done in such a manner that would cause no fire or explosion risk and that the workplace is effectively ventilated:

  **Provided that where the workplace cannot effectively be ventilated** –

  i. Every employee involved is provide with a respirator, mask or breathing apparatus of a type appropriate and approved by the chief inspector; and
  ii. Steps are taken to ensure that every such employee – while using or applying flammable liquids, uses the apparatus supplied to him or her;

- No person smokes in any place in which flammable liquid is used or stored and the contractor shall affix a suitable and conspicuous notice at all entrances to any such areas prohibiting such smoking;
- Flammable liquids on a construction site are stored in a well-ventilated – reasonably fire resistant container, cage or room and kept locked with proper access control measures in place;
- Adequate amount of efficient fire-fighting equipment is installed in suitable locations around the flammable liquid store – with known and recognised symbolic safety signs posted;
- Only the quantity of flammable liquid needed for work in one (1) day is to be taken out of the store for use;
- All containers holding flammable liquids are kept tightly closed when not in actual use and after their contents have been used up – to be removed from the construction site and safely disposed of;
- Where flammable liquids are decanted, the metal containers are bonded or earthed;
- No flammable material such as cotton waste, paper, cleaning rags or similar material is stored together with flammable liquids.

A1.11.0  
**DISPOSAL OF MATERIALS**

*See Environmental Management Plan (Tender Document)*

A1.12.0  
**WELDING & CUTTING**

*No contractor shall require or permit welding or flame cutting operations to be undertaken unless* –
The person operating the equipment has been fully instructed in the safe operation and use of such equipment and in the hazards which may arise from its use;

Effective protection is provided and used for the eyes and respiratory system and where necessary for the face, hands, feet, legs, body and clothing of persons performing such operations as well as against heat, incandescent or flying particles or dangerous radiation;

Leads and electrodes are properly and effectively insulated; and

The workplace is effectively partitioned off and where not practicable, all other persons exposed to the hazards are warned and provided with suitable protective equipment;

No contractor shall require or permit electric welding to be undertaken in wet or damp places, inside metal vessels or in contact with large masses metal unless –

The insulation of the electrical leads is in a sound condition and the electrode holders are completely insulated to prevent accidental contact with current – carrying parts;

The welder is completely insulated by means of boots, gloves or rubber mats and at least one other person who has been properly instructed to assist the welder in cases of emergency is and remains in attendance during operations.

No contractor shall require or permit welding, flame cutting, grinding, soldering or similar work to be undertaken in respect of any tube, tank, drum, vessel or similar object or container –

Is completely closed unless a rise in internal pressure cannot render it dangerous; or

Contains any substance which, under the action of heat, may –
  i. Ignite or explode; or
  ii. React to form dangerous or toxic substances;

Where hot work involving welding, cutting, brazing or soldering operations is carried out at places other than workplaces which have been specifically designated and equipped for such work, the employer shall take steps to ensure that proper and adequate care with regards fire prevention precautionary measures are taken.

A1.13.0 BLASTING & USE OF EXPLOSIVES

A1.13.1 Safety Distances

The contractor shall –

Apply the safety distance for the respective categories of explosives as stipulated in annexure 1 of the Explosives Regulations;

Where less than 5 kilograms of explosives is used, apply the chief inspector of occupational health and safety for a determination of a safety distance which the employer shall enforce;

A1.13.2 Supervision of explosives

In order to ensure that the provisions of the Act and its regulations in relation to explosives workplaces are complied with, the contractor shall in writing appoint a competent and certified person in a full-time capacity to be
responsible for explosives management in respect of every workplace where explosives are being used, tested, stored or manufactured.

The contractor shall appoint one or more persons who are suitably qualified and experienced as authorised supervisors to assist the explosives responsible person.

**The contractor shall ensure that –**

- **The explosives responsible person (manager) –**
  
  i. Approves in writing the rules, methods, materials, equipment and tools to be used in the danger areas;
  
  ii. Ensure that all persons under his or her control are informed of the hazards and risks related to their tasks and are thoroughly trained in safe work procedures in particular, with respect to shock, friction risk of fire or static electricity and are familiar with the requirements of the explosives regulations;
  
  iii. Prescribes all protective gear and equipment to be used in the danger area;
  
  iv. Ensures that the processes and equipment specified in schedule licences are safe and appropriate for the manufacturing processes envisaged for the workplace;

- **The supervisor official –**
  
  i. is at all times in a position to exercise control over the operations;
  
  ii. reports without delay to the explosives manager any plant or equipment under his or her control that has or may have posed a risk;
  
  iii. ensures that all rules implemented in the interest of health and safety are at all times complied with;
  
  iv. stops all work involving explosives if he or she becomes aware of any risk posed to the health and safety of persons.

A1.13.3 Safe Handling of Explosives

**The contractor shall ensure that –**

- all explosives or ingredients thereof are at all times free of foreign material;
- all reasonable precautions are taken to prevent the spillage of explosives;
- cleaning procedures in the case of a spillage of explosives are prescribed in writing by the explosives manager. Provided that where no cleaning procedures have been prescribed, any unusual spillage of explosives shall be reported immediately to the supervising official;
- all waste, paper, timber, rags, cotton and similar materials that have been in contact with explosives or an ingredient of an explosive are disposed of in a manner prescribed in writing by the explosives manager; Provided that at the end of the working day, all waste and floor sweepings from danger areas shall be deposited in the designated places;
The contractor shall ensure that –

- all material, equipment, tools or similar articles used in a danger area are decontaminated after such use – and that no person shall make use of any such article that has not been decontaminated after use in a contaminated area;
- the certification of the decontamination process is certified and approved by the explosion manager or a person authorised by the explosives manager;

Unless permission has been granted by the chief inspector of occupational health and safety, no contractor shall use –

- explosives on site other than explosives workplace approved by the chief inspector of occupational health and safety;
- any explosives for which no provision is made Explosives Regulations.

No contractor shall allow unauthorised access to such explosives or bury, dump, hide or abandon any explosives. No contractor shall use any explosive material for blasting purposes unless –

- he or she is in possession of a written permission issued by or under the authority of the chief inspector of occupational health and safety;
- he or she is undergoing training while using such blasting material under immediate and constant supervision of a person who is in possession of permission.

A1.13.4 Dangerous Areas

The contractor shall ensure that entry and exit from danger areas is only permitted –

- at the permanent authorised point of entry or exit – provided that the entry or exit at any other point may be authorised by the explosives manager or a person authorised by him or her if the authorised gatekeeper has been informed thereof;
- for persons and vehicles undergoing training authorised by the explosives manager or person authorised by him or her;
- to visitors under escort by an authorised person who is aware of the hazards attached to the danger area.
The contractor shall keep a register of the entries and exits and that register shall be available on the premises for inspection by an inspector.

No person shall –

- enter the danger area with
  - tobacco
  - matches, cigarette lighter or any other device capable of generating heat or a spark source;
  - intoxicating liquor or narcotics;
  - food, medicines or drinkable fluids – provided that authorisation to enter with such articles may be granted by the explosives manager for purposes of consumption in licenced mess rooms and smoking areas – provided further that special rules for the control of such consumption and smoking is approved by the chief inspector of occupational health and safety shall be made in writing and shall be enforced by the employer, self-employed person or user; and
  - radio transmitter or cellular telephones; or

- the contractor shall ensure that hazard warning signs (prohibitory safety symbolic signs) are clearly displayed at the entrance to any danger area.

A1.14.0 VESSELS UNDER PRESSURE

A1.14.1 Refer to Regulations regulating the use of boilers

A1.14.2 Portable Gas Containers

No user shall use or require or permit a portable gas container to be used and no user shall fill, place in service, handle, modify, repair, inspect or test any portable gas container other than in compliance with standards incorporated into the vessels under pressure regulations.

A1.14.3 Hand Held Fire Extinguishers

No user shall use, require or permit the use of a hand held fire extinguisher unless designed, constructed, filled, recharged, reconditioned, modified, repaired, inspected or tested in accordance with a safety standard incorporated into the Vessels under Pressure regulations.

No person shall fill, recharge, recondition, modify, repair or test any hand held fire extinguisher unless a holder of a permit issued by the South African Bureau of Standards in terms of SABS1475.

A1.14.4 Gas Fuel use, Equipment and Systems

No person shall handle, store or distribute a gas fuel in any manner – including the filling of a container other than in accordance with health and safety standards.

A1.14.5 Inspections and Test
See Regulations governing boiler usage

A1.14.6 Record keeping

Any user of a Vessel under Pressure shall keep on his premises a record which shall be open for inspection by an inspector in which the results of inspections, tests, modifications and repairs shall be recorded, dated and signed by the competent person.

A1.15.0 PHYSICAL HAZARDS

A1.15.1 Ergonomics

- ensure that assigned tasks do not exceed the limits of the performance capacities of the worker.
- Prevent injury or any detrimental effects to the health of the worker;
- Provide the tasks and working conditions will not lead to impairments.

A1.15.2 Noise

No contractor shall require or permit an employee to work in an environment in which he is exposed to an equivalent noise level equal to 85 dB(A) or higher. The contractor shall reduce the equivalent noise level to below 85 dB(A) or, where this is not reasonably practicable, he shall reduce the level to as low as is reasonably practicable and take all reasonable steps to isolate the source of the noise acoustically. Where the equivalent noise level in any workplace cannot be reduced to below 85 dB(A) the contractor shall –

- prohibit any person from entering a noise zone unless such person wears hearing protectors.
  The contractor shall provide free of charge hearing protectors to each employee who works in or to any person who is required or permitted to enter a noise zone – and no contractor shall require or permit any person to work in or enter such noise zone and no person shall work in or enter such noise zone unless he wears such hearing protectors in the correct manner. Provided that where the equivalent noise level to which employees are exposed is such that the attenuation of the hearing protector does not reduce the said noise to below 85 dB(A), the employer concerned shall limit the time during which employees work in that noise zone in such a way that they are not exposed to an equivalent noise level equal to 85 dB(A) or higher.

  The contractor shall properly instruct any person who is required to wear hearing protectors in the use of such protectors and inform him of noise zones where the wearing thereof is compulsory.

  The contractor shall –

- ensure that every employee employed in a noise zone is subjected to audiometric examinations conducted in accordance with section 7 of SABS 083 by an Audiometrist approved by the chief inspector;
- keep records of the results of each audiometric examination and make such records available for inspection by an inspector if he so requires; and
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- keep such records for a minimum period of 30 years after termination of employment: Provided that if the employer ceases activities all such records shall be forwarded to the regional director.

A1.15.3 Vibration

Whole-body vibration occurs when the body is supported on a surface which is vibrating e.g. when sitting on a seat which vibrates, standing on vibrating floor or recumbent on a vibrating surface. Whole-body vibration occurs in all forms of transport and when working near some industrial machinery. Hand-transmitted vibration is the vibration that enters the body through the hands. It is caused by various processes where vibrating tools or work pieces are grasped or pushed by the hands or fingers. Exposure to hand-transmitted vibration can lead to the development of several disorders.

A1.16.0 SITE WIDE ELEMENTS

A1.16.1 Site Access and Egress

- Access to the site will involve crossing the public footpath.
- Store materials and plant away from means of access for the general public and occupants.
- Remove rubbish and demolition materials regularly. Do not allow to accumulate on flat roofs;
- Maintain free access through designated means of escape at all times;
- Agree with the South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager delivery points for materials before commencing works.

A1.16.2 Visitors to the site

- All visitors to report to the Principal Contractor’s reception area for OHS induction training;
- All visitors to sign the visitor’s registration document;
- All visitors to be provided with a Visitor’s Permit to enable them to access the construction site;
- All un-inducted visitors must be accompanied on the construction site by an inducted person;
- No visitor shall be allowed to access the construction site without wearing the necessary PPE.

A1.16.3 Deliveries

Access will involve crossing the public footpaths.

A1.16.4 Emergencies

Ensure that there are adequate escape routes and that they are kept clear at all times.

A1.16.5 Location of Temporary Site Accommodation
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See “Site Lay-out Plan”

A1.16.6 Location of Materials unloading and Storage

Materials are to be unloaded and stored in locations which will not in any way affect access or egress to neither the site nor the works.

A1.16.7 Traffic and Pedestrian Routes

The road, public footpaths and access way are to be kept open at all times. All necessary signage and barriers are to be put in place to protect pedestrians at the site entrance and access egress points.

A1.16.8 Environment

See “Environmental Management Plan”

A1.16.9 Safety

- Ensure that all employees are aware of the Health and Safety policy and put into place arrangements to ensure that all visitors and workers new to site are aware of the site safety provisions;
- Locate underground electricity cables, mark and take precautions to avoid;
- Ensure that cartridge operated tools are operated by trained personnel and in accordance with the manufacturer’s instructions that the gun is cleaned regularly and kept in a secure place when not in use;
- Protect people who may be exposed to health risks arising from hazardous substances.

A1.17.0 CONTINUING LIAISON

The procedures for consideration and evaluation of the health and safety implications of Contractor designed elements of the works must follow the recognised principles of prevention and protection and take account of the issues highlighted in this OHS Specification.

The following information is to be submitted by the Contractor to the South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager in sufficient time to allow adequate consideration by the South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager and where appropriate, the design team and the provision of relevant information to those persons affected by the works - prior to the commencement of the relevant works:

- Suitable and sufficient information to demonstrate that health and safety issues have been adequately considered;
- Risk assessments.
- A list of health and/or safety hazards identified which cannot be designed out;
- A list of any materials or substances which are specified or inherent in the design which is potentially hazardous to health and/or safety.
A1.17.1 **Unforeseen Eventualities**

The following action is to be taken in the event of unforeseen eventualities arising during construction stage of the project which require significant design changes or affect the resources required to carry out the work without risk to health and safety or other health or safety implications.

The South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager and where possible, the Principal Contractor are to be advised as soon as possible.

Full details of the relevant health or safety issues involved are to be reviewed with the South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager and Principal Contractor as soon as possible.

Full details of any revised designs, risk assessments and identified hazards and/or hazardous materials and substances are to be issued to the South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager and Principal Contractor in sufficient time to allow for the revision of the Health and Safety Plan and notification of all persons affected by the health and/or safety implications of the changes prior to the commencement of the affected works.

A1.17.2 **Site Liaison**

Liaise with all other contractors and implement any agreed changes to the Health and Safety Plan arising from such liaison. Set up regular training for all operatives including induction training for all staff upon arrival to site.

A1.17.3 **Health and Safety File**

Provide the Planning supervisor with all and any relevant information which the contractor believes should be incorporated into the Health and safety File.

A1.17.4 **Design Development**

Provide the South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager with all design information prepared by sub-contractors.

Arrange liaison meetings with sub-contractors to discuss and review health and safety issues arising from the sub-contractors designs.

A1.18.0 **CONCLUSIONS**

The hazards listed above were identified posing potential threats to the health and/or safety of persons that will work on the contract. Although every effort were made to ensure that every possible hazard was identified, the employer cannot guarantee this, therefore, it is imperative for the contractor to conduct
a comprehensive hazard identification and detailed risk assessment in order to make certain that all hazards are identified and known.

A1.19.0 ENVIROMENTAL ISSUES

See Site information

A1.19.1 MANAGEMENT

Management of the works

The management of the site shall be in accordance with provisions of the COLTO Standard Specification for Roads and Bridge Works for state authorities (1998 edition) and the OHSAct, Act 85 of 1993 as well as the Environmental Management Act.

A2.00 DETAILED PROJECT SPECIFICATIONS (Continued)

A2.1 OCCUPATIONAL HEALTH AND SAFETY

A2.1.1 INTERPRETATIONS

Occupational Health and Safety Act, Act 85 of 1993 shall apply to this Contract.

The Construction Regulations promulgated on 18 July 2003 and incorporated into the said Act by Government Notice R.1010, published in Government Gazette 25207 apply to any person involved in construction work. These regulations are thereinafter referred to as “the Construction Regulations” and the said Act as “the Act”.

Construction work is defined as –

“Any work in connection with: -

a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;
b) the installation, erection, dismantling of or maintenance of a fixed plant where such work includes the risk of a person falling;
c) the construction, maintenance, demolition or dismantling of a bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or
d) the removing of earth, clearing of land, the making of an excavation, piling or any similar type of work”

As per Construction Regulation 4, the Client is responsible to prepare this Health and Safety Specification for the required construction work.

Provision for the cost of Health and Safety on site is made in the Schedule of Quantities.
A2.1.2 GENERAL

The Contractor shall ensure that all employees and visitors are informed, instructed and trained regarding safety conditions on site.

A2.1.2.1 Proof of induction training to all workers shall be filed in the Health and Safety File on Site. All employees shall sign the relevant induction training forms. The contents of the induction training shall be displayed in the file. Each worker shall write a safety induction test to prove their understanding of the induction training done.

The Contractor shall ensure that all professionals entering the site are informed, instructed and trained regarding safety conditions on site. Proof of Professional site safety induction shall be signed by professionals and filed in the Health and Safety File which is kept on Site.

The Contractor shall ensure that all visitors are informed, instructed and trained regarding safety conditions on site. Visitors have to sign the visitor’s register before entering the site. Hard hats shall be issued to visitors entering site. No visitor shall enter the site without appropriate safety shoes.

A2.1.2.2 Should the Contractor at any stage during execution of the works –

a) fail to implement or maintain his or her health and safety plan
b) execute construction work which is not in accordance with his health and safety plan; or
c) act in any way which may pose a threat to the health and safety of persons, the employer will stop the contractor at its own (Contractor) cost from executing construction work.

A2.1.2.3 The Contractor shall provide proof his or her registration and letter of Good Standing with the Compensation Fund or with a licenced compensation insurer when submitting a tender. Tenders without these documents will be regarded as non-responsive – (Construction Regulation 4).

A2.1.2.4 The Contractor shall, in submitting this tender, demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and the Construction Regulations. The Schedule of Quantities health and safety requirements in the tender document shall be completed in full. Each and every item shall be priced. No summations or groupings of items are allowed.

A2.1.2.5 The Contractor shall consistently demonstrate his competence and adequacy of resources to perform the duties imposed on the Contractor in terms of this Specification, the Act and its Construction Regulations.

A2.1.3 INDEMNITY OF EMPLOYER AND HIS AGENTS

a) The annexures to this Contract Document contain a “Mandatory Form of Authority and Agreement in terms of Section 37(2) of the Occupational Health and Safety Act, Act 85 of 1993” which agreement shall be entered into and duly signed by both the Client/Client’s Agent and the Principal Contractor prior to commencement with work.
A copy of the signed agreement shall be included in the Contractor's Health and Safety File which will be kept on Site at all times.

b) Any acceptance, approval, check, certificate, consent, examination, inspection, instruction, notice, observation, proposal, request, test or similar act by either the Client/Client’s Agent or the Engineer (including absence of disapproval) shall not relieve the Principal Contractor from any responsibility he has under the Contract, the Act and the Construction Regulations, including responsibility for errors, omissions, discrepancies and non-compliances.

c) A Section 37(2) agreement shall be entered into and duly signed by both the Principal Contractor and Sub-Contractor prior to commencement with work by Sub-Contractor.

d) Any acceptance, approval, check, certificate, consent, examination, inspection, instruction, notice, observation, proposal, request, test or similar act by either the Employer (Client/Client’s Agent), any of his agents or the Engineer (including absence of disapproval) shall not relieve the Sub-Contractor from any responsibility he has under the Contract, the Act and the Construction Regulations, including responsibility for errors, omissions, discrepancies and non-compliances.

A2.1.4 SCOPE

A2.1.4.1 The specification as set out in this Portion is known as the Health and Safety Specification for the Construction work to be carried out by the Principal Contractor as per regulations of the Construction Regulations July 2003.

Information herein addressed might affect the health and safety of employees or persons carrying out the construction work as per this tender document.

The Contractor shall ensure that it is fully conversant with the requirements of this Specification.

This Specification is not intended to supersede the Act nor the Construction Regulations. Those sections of the Act and the Construction Regulations which apply to the scope of the work to be performed by the Contractor in terms of this contract continue to be a legal requirement of the Contractor.

The Principal Contractor will be appointed in writing to be in overall control of the construction site.

A2.1.4.2 A Health and Safety Plan must be submitted by the Principal Contractor to the Client or the Client’s Agent containing all the relevant documents as required by this Specification and terms of the provisions of this Specification, the Act and the Construction Regulations (Construction Regulation 4).

A Health and Safety Plan must also be submitted by the Sub-Contractor to the Principal Contractor containing all the relevant documentation as required
by this specification and terms of the provisions of this Specification, the Act and the Construction Regulations – (Construction Regulation 5).

The Health and Safety Plan shall be submitted before commencement of any work on site.

The Health and Safety Plan must be approved by the South African National Parks’ Corporate OHS office. Any alterations required in the Plan shall be done before commencement of work.

Should the scope of work changes during the construction period, alterations to the plan shall be done accordingly.

**The Health and Safety Plan shall contain the following items where applicable:**

1. Description of Contract;
2. Construction site address or building site address;
3. Construction period
4. Name and details of Client – telephone, fax, address;
5. Name and details of consultants – telephone, fax, address
6. Name and details of principal contractor – telephone, fax, address
7. Name and details of sub-contractor - telephone, fax, address
8. Company’s policy toward health and safety
9. Company’s policy towards drug and alcohol abuse
10. Company’s policy towards disciplinary procedures
11. Company’s policy towards environment
12. Workmen compensation – number and expiry date
13. Management and supervision rules
14. Structure, Supervision of construction work and responsibilities
15. Health and Safety Officers and OHS Representatives
16. Health and Safety Committee/s
17. First Aid
18. Medical Tests
19. Incident/Accident reporting procedures
20. Emergency/Evacuation procedures
21. Sub-contractor agreements and requirements and super positioning
22. Material Safety Data Sheets
23. Transport of workers
24. Proposed PPE
25. Scope of works – describe type
26. Sequence and phases of the work to be performed – describe stages involved in project
27. List of all equipment to be used on the specific site – tools, construction vehicles, mobile plant etc
28. Company’s approach towards hygiene facilities on the construction site (toilets, eating areas, drinking water, shower facilities, refuse removal)
29. Company’s approach towards other facilities as required by law (the transport Act, the smoking Act, PPE)
30. Local labour agreements, requirements and policies
31. Fire extinguishers and fire equipment
32. Oxygen, Acetylene and LP gas cylinders
33. Welding, cutting, grinding and heating
34. Signs and symbols to be displayed on the specific site
35. Lock-out procedures
36. Public safety, hoarding and fencing
37. Risk assessment methods
38. Company’s monitoring plan
39. Company’s review plan
40. Identification of risks and hazards
41. Appointment of personnel to be made OHS Reps, supervisors, First Aiders, Fire Fighters and Fire equipment inspectors etc.
42. Registers and checklists to be completed by appointed employees
43. List of training material to be used for educational purposes of construction workers (induction, Fire drills, safety talks etc.)
44. List of safe work procedures to be explained to the workers
45. Company’s policy on –
   - Housekeeping
   - Stacking and storage on site
   - Construction welfare facilities
   - Explosive power tools
   - Ladders
   - Welding, flame cutting and soldering
   - Electrical installation and machinery
   - Boatswain chairs
   - Suspended platforms
   - Material hoists/Builders hoist
   - Batch plants
   - Water environments

46. List of plans and rules to be used
   - Fall protection plan
   - Tunnelling plan
   - Pile driving plan
   - Steel assembling and placing plan
   - Emergency evacuation and response plan
   - Demolition plan
   - Scaffold erection procedures plan
   - Erection of structural steel plan
   - Electrical installations plan
   - Excavation plan
   - Form work and support work plan
   - Material hoist rules
   - Lifting machines and tackle rules
   - Rules on construction vehicle and mobile plant procedures
   - Rules on mobile and tower cranes
   - Rules on fire precautions on the construction site
   - Rules on hazardous chemicals on site – storage and use
   - Rules on storage and use of flammable liquids and substances on site
   - Rules on compressed gas cylinders
   - Rules on hand tools
   - Rules on portable electrical equipment

List of Risk Assessments

- Clearing and grubbing of the area/site
- Site establishment including: -
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- Office(s)
- Secure/ safe storage for materials, plant and equipment
- Ablutions
- Sheltered eating areas
- Maintenance workshops
- Vehicle access to the site
  - Dealing with existing structures
  - Location of existing services
  - Installation and maintenance of temporal construction electrical supply, lighting and equipment
  - Adjacent land uses/surrounding property exposures
  - Boundary and access control/public liability exposures (N.B. the Employer is also responsible for the OHS of non-employees affected by his work activities).
  - Health risk arising from neighbouring as well as own activities and from the environment e.g. threats by dogs, bees, snakes, lightning etc.
  - Exposure to noise
  - Exposure to vibration

✓ Protection against dehydration and heat exhaustion
✓ Protection from wet and cold conditions
✓ Dealing with HIV/AIDS and other diseases
✓ Use of portable electric equipment including
  - Angle grinder
  - Electrical drilling machine
  - Skill saw

✓ Excavations including
  - Ground/soil conditions
  - Trenching
  - Shoring
  - Trench drainage

✓ Welding including
  - Arc welding
  - Gas welding
  - Flame cutting
  - Use of LP gas torches and appliances

✓ Loading and offloading of trucks
✓ Aggregate/sand and other materials delivery
✓ Manual and mechanical handling
✓ Lifting and lowering operations
✓ Driving and operation of construction vehicles and mobile plant including
  - Trenching machine
  - TLB
  - Tipper
  - Grader
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- Water browser
- Tractor
- Excavator
- Material handlers
- Bobcat
- Bomag roller
- Plate compactor
- Front end loader
- Mobile cranes and the ancillary lifting tackle
- Tower cranes
- Parking of vehicles and mobile plant
- Towing of vehicles and mobile plant

✓ Use and storage of flammable liquids and other hazardous substances
✓ Layering and bedding
✓ Installation of pipes in trenches
✓ Pressure testing of pipelines
✓ Backfilling of trenches
✓ Protection against flooding
✓ Gabion work
✓ Use of explosives
✓ Protection from overhead power lines
✓ As discovered by the principal contractor’s hazard identification exercise
✓ As discovered from any inspections and audits conducted by the client or by the principal contractor or any other contractor on site
✓ As discovered from any accident/incident investigation

The Health and Safety Plan provide for by the Principal Contractor may be adjusted by the Client to suit the requirements.

The approved Health and Safety Plan will be implemented on the construction site.

The Health and Safety Plan of the Principal Contractor shall include all relevant health and safety plans of contractors and sub-contractors on site. The Contractor shall, through execution of the Contract, ensure that all sub-contractors have similar Health and Safety Plans in place which must be available on Site.

The execution of the Health and safety plan shall be documented in the form of a Health and Safety File which shall contain items as described elsewhere in this Specification. A large file (lever arch file) shall be used with a clear index and dividers. Numbering and items shall be done clearly with numbers as specified elsewhere.

The File shall be available at all times and kept on site and made available for inspection by an inspector, South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager or Principal Contractor.
A2.1.4.3 Provisions for costs in respect to Health and Safety in the tender shall be tendered for in the Schedule of Quantities. The tendered price is fixed. A provisional sum will be included in the schedule of quantities to make provision for a certified an approved Health and Safety service provider to assist the Contractor in performing the health and safety activities as required.

A2.1.4.4 The following paragraphs summarise the Health and Safety Activities to be performed by Contractors.

(Terms and definitions in the following paragraphs are explained elsewhere in this Specification)

A2.1.4.4.1 The following activities shall be strictly performed by the Principal Contractor and Sub-Contractors upon acceptance of the tender and before commencement of any works on the construction site.

(Terms and definitions in the following paragraphs are explained somewhere in this Specification)

The Contractor will only be allowed to start work once the submitted Health and Safety Plan is approved by the Client or the Client’s Agent.

A prior baseline Risk Assessment shall be done on site before the commencement of any work by a competent and experienced Risk Assessor (Construction Regulation 7).

**The Risk Assessment shall:**

- Address tasks on site and hazards related to the type of work performed.
- Possible consequences of these hazards;
- Refer to legislative requirements concerning these hazards on the construction site;
- Calculate the value of the risk associated with the hazard by an approved method taking into consideration the probability of occurrence, the degree of injury, lost time, production costs, influence on the environment and frequency of occurrence.

**The outcome of the Risk Assessment will determine:**

- Method Statement, safe Work Procedures, Training and PPE to be issued and implemented to reduce the Risk Values.
- Type of Training required,
- Type and number of safe Work Procedures to be introduced to workers in the form of Tool Box Talks.

PPE as determined by the Risk Assessment shall be issued and the employees shall sign the issue register to indicate the type and quantity of equipment received by each employee.

No work shall commence on the construction site prior to induction training of all employees intended to work on site.
Training shall be done by a competent Health and Safety Induction Trainer. Proof of training in the form of a register signed each trained employee shall be kept in the OHS File. The contents of the training as well as the Induction test results shall also be displayed in the OHS File.

Appointments of skilled professionals/service providers and workers related to Health and Safety as required by legislation. The Risk Assessment shall be done prior to the commencement of any work. Letters of appointment shall be kept in the OHS File for inspection by the South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager or an inspector.

The CEO of the Principal Contractor (Company) shall appoint a Project Manager (16(2)).

The Project Manager shall appoint a Construction Supervisor (6(1)) to be permanent on site. The Construction Supervisor shall have a detailed CV attached to his or her appointment letter.

The Construction Supervisor shall perform all other OHS appointments.

All appointed workers shall have some proof of competency attached to their letters of appointment e.g. TLB Operator shall have a valid TLB competency Certificate.

Medical Fitness Certificates shall be obtained for the workers/operators as determined by the Risk Assessment.

During the construction period, the Contractor shall ensure that all employees and visitors are informed, instructed and trained regarding safety conditions on site. All employees shall have proof of Induction while employed on site in the form of signed induction training forms and induction tests. Proof of training shall be kept in the OHS File on site.

Additional training required on this project is described in this Specification.

Notification of Construction work shall be done to the Department of Labour within 7 days from commencement of the Construction work.

A Safety Management Information (SMI) board shall be erected at the site office and maintained during the construction period.

**Items to be displayed on the board shall include:**

- Copy of the OHS Act
- Organogram of Appointments
- Safety Incident Statistics
- Letter of Good Standing with Compensation Commissioner
Follow-up Risk Assessments shall be done during the construction period as and when the scope of work changes indicating newly introduced hazards.

Additional appointments shall follow as determined by the Risk Assessment.

A2.1.4.3 **Should the Contractor at any stage in the execution of works –**

a) fail to implement or maintain his health and safety plan;

b) execute construction work which is not in accordance with his health and safety plan; or

c) act in any way which may pose a threat to the health and safety of persons, the Employer (South African National Parks’ Corporate OHS office or its Representative) will stop the Contractor from executing the construction work at the cost of the Contractor.

A2.1.4.5 The Employer (South African National Parks’ Corporate OHS office and/or the local Divisional OHS Manager/Client) will take reasonable steps to ensure that the Contractor’s Health and Safety Plan is implemented and maintained. The steps taken will include periodic audits at intervals of at least once a month.

A2.1.4.6 Upon completion of the works, the Contractor shall hand over a consolidated Health and safety File to the South African National Parks’ Corporate OHS office or its Representative.

A2.2.0 **HEALTH AND SAFETY FILE**

The following documentation shall be in the Health and Safety File of the Principal Contractor and Sub-Contractors:

A1 Copy of the Occupational Health and Safety Act No 85 of 1993 including the Construction Regulations of July 2003;

A2 Proof of registration with the Compensation Commissioner (Principal Contractor);

A3 Copy of Notification of Construction to the Department of Labour

A4 Agreement in terms of section 37(2) of the Occupational Health and Safety Act, 85 of 1993. To be signed by the Client and the Principal Contractor in the presence of witnesses;

A5 Health and Safety Specifications provided by the Client;
A6 Notices to Principal Contractor, Copy of all drawings – schematics, Detail Drawings, As-Built Drawings and all other relevant works documentation;

A7 Health and Safety Plan describing all activities as mentioned in this Specification;

A8 Company Health and Safety policy – to be signed by the CEO of the Company;

A9 Organogram indicating site specific organisational structure with reference to requirements of the Construction Regulations;

A10 Letters of Appointment;

The following appointments are required for the project. Deviations will only be allowed with the approval of the South African National Parks’ Corporate OHS office or its Representative. Appointment of an employee for more than one responsibility will be allowed and shall be approved by the South African National Parks’ Corporate OHS office or it’s Representative.

Basic Appointments

- appointment of Principal Contractor by Client;
- appointment of Project Manager (Section 16(2) of the Act – by CEO of Company;
- appointment of Contractors (Sub-Contractors) by Principal Contractor (where applicable) (16(2) to appoint Sub-Contractors);
- Appointment of Construction Works Supervisor (Construction Regulation 6(1)) (full time employee on site);
- Appointment of Assistant Construction Works Supervisor (Construction Regulation 6(2)) (full time employee on site if required).

Appointment of Specialists (Refer to a Specialist Company)

- Appointment of Health and Safety Officer
- Appointment of Risk Assessment Officer
- Appointment of a SHE Coordinator
- Appointment of a Health and Safety Induction Trainer

Appointment of full time employees on site

- Appointment of a SHE Representative (Competent employee to control/monitor all SHE activities onsite)
- Appointment of an Incident/Accident Investigator
- Appointment of the SHE Committee Members (employees actively involved in Health, Safety and Environmental (SHE) activities);
- Appointment of an Excavation Inspector;
- Appointment of Construction Vehicle and Mobile Plant Inspector;
- Appointment of Construction Vehicle and Mobile Plant Operators;
- Appointment of Concrete Mixer Operator (where applicable);
- Appointment of a Hand Tool Inspector;
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- Appointment of Portable Electrical Equipment Inspector;
- Appointment of a Ladder Inspector (where applicable);
- Appointment of a Scaffold Inspector (where scaffolding is applicable);
- Appointment of a Hygiene and facility Inspector;
- Appointment of a Fire Equipment Inspector;
- Appointment of Fire Team Members (employees trained in firefighting);
- Appointment of First Aid Equipment Inspector;
- Appointment of First Aid Team Members (employees trained in first aid).

A11 List of contractors (Sub-Contractors)
A12 Evacuation Plan (also to be displayed on the SMI board)
A13 The contents of all training material used and to be used on site (Accredited and non-accredited training, Tool Box Talks and all training records signed by workers);
A14 Risk Assessments – All Risk Assessments done before and during the construction period;
A15 Registers as required;
A16 Safe Work Procedures and Material Safety Data Sheets;
A17 Fall Protection Plan;
A18 Incident Reporting and Investigation forms;
A19 Medical records of workers (Certificates of fitness);
A20 Minutes of Health and Safety meetings

N.B. Emergency telephone numbers to be displayed on the back of the OHS File

A2.3.0 NOTIFICATION OF CONSTRUCTION WORK

The Employer will appoint the Contractor in writing for the execution of the Works. The Contractor shall accept its appointment under the terms and Conditions of Contract. The Contractor shall sign and agree to those terms and conditions and shall, before commencing work, notify the Department of Labour of the intended construction work in terms of Regulation 3 of the Construction Regulations. The Contractor shall submit the notification in writing prior to commencement with work. The annexures to this contract document contain a “Mandatory notification of construction work in terms of Regulation 3 of the Construction Regulation (2003) of the Occupational Health and Safety Act, 85 of 1993” which shall be filled in by the contractor and forwarded to the Department of Labour. A copy of this notification shall be included in the contractors health and safety file.

The Principal Contractor must notify the provincial Director of:
Construction work on a form similar to Annexure A in the Construction Regulations 2003 of the Occupational Health and Safety Act and Regulations.

A copy of the notification form must be kept available on site for inspection by an inspector.

*Notification is also required from the Sub-Contractors on site.*

**A2.4.0 CONTRACTOR’S SHE REPRESENTATIVE**

Before commencing work, the Principal Contractor shall designate a competent Safety, Health and Environmental representative (SHE Rep) who shall be acceptable to the Client or South African National Parks’ Corporate OHS office or it’s Representative to represent and act for the Principal Contractor and Sub-Contractors.

It should be noted that the Principal Contractor is held responsible for the activities of the Sub-Contractors.

*Failure of Health and Safety measures by the Sub-Contractor will revert directly back to the Principal Contractor.*

The Contractor shall inform the Client or Client’s Agent in writing of the name and address of the Contractor’s SHE Rep and of any subsequent changes in the name and address of the SHE Rep together with the scope and limitations of the SHE Rep’s authority to act for the Contractor. The Contractor’s SHE Rep shall make available to the Employer/Client/the South African National Parks’ Corporate OHS office or it’s Representative an all hours telephone number at which the SHE Rep can be contacted at any time in the event of an emergency involving any of the Contractor’s employees, or other persons at the Works.

**A2.5.0 SUPERVISION OF CONSTRUCTION WORK – Regulation 6**

The appointed Project Manager (Section 16(2) of the Act) of the Principal Contractor shall appoint a full time employee (Construction Regulation 6(1)) in writing as the Construction Supervisor. An Assistant Construction Supervisor (Construction Regulation 6(2)) may also be appointed where necessary if required.

The appointed Project Manager (Section 16(2) of the Act) shall appoint all Sub-Contractors. All sub-Contractors shall appoint a full time employee (Construction Regulation 6(1)) in writing as the Construction Supervisor. An Assistant Construction Supervisor may also be appointed when necessary.

**PS 10.9 RISK ASSESSMENT – Regulation 7**

The Principal Contractor as well as all other contractors shall appoint a competent person in writing to carry out a risk assessment before any construction work is started.
The Risk Assessment shall form part of the Health and Safety Plan

The Risk Assessment shall include:

- Identification of all tasks to be performed;
- Risks and hazards associated with each task;
- Rating of possible consequences;
- A documented plan of safe working procedures to mitigate, reduce or control the risks and hazards - (Safe Work Procedures and PPE);
- A monitoring Plan;
- A Review Plan

Copies of the Risk Assessment shall be made available on site for inspection

All employees shall be informed, instructed and trained by an appointed competent person regarding all hazards and work related procedures.

A Risk Assessment communication register shall be displayed with each Risk Assessment done to prove communication of the assessment to the relevant workers.

The form shall be signed by all relevant workers.

PS 10.10  LOCAL SERVICES

Contractor must establish all local services in area of excavations

Plan of local services shall be documented in the Health and Safety File (A6)

Local services include:

Telkom, Gas, Water, Electricity Supplies and other similar services.

PS 10.11  SAFE WORKING LOADS

The Contractor shall ensure that –

a) the safe working loads of hoists, load bearing beams and cranes are prominently displayed at all times;

b) the safe working loads are not exceeded under any circumstances;

c) all lifting gear is marked with a unique identity number and recorded in a register

PS 10.12  MACHINE GUARDING

All power tools and machinery driven by belts, gears, ropes, chains, couplings and similar drives shall be adequately guarded. The Contractor shall prohibit the use of any equipment with a damaged, missing or inadequate guard.
CONSTRUCTION VEHICLES AND MOBILE PLANT – Regulation 21

The Contractor shall ensure that drivers of motor vehicles are in possession of a driver’s licence, valid for the class of vehicle which they are required to drive and shall produce the licence upon request.

The Contractor shall not permit any driver to be in control of a vehicle at the Works while under the influence of alcohol, drugs or other substance.

All vehicles of the Contractor shall display a name board bearing the Contractor’s name. Hired vehicles shall bear an identifying sticker.

A register shall be kept of workers operating construction vehicles and mobile plant.

The register shall contain proof of training of operators to operate construction vehicles and mobile plant, certification of competency and authorisation of operators to operate machinery, vehicles and plant.

Names of operators and their relevant training with date and time stamps – together with name of course instructor shall be kept in the Health and Safety File on site.

Physical and psychological fitness shall be proved by way of a medical certificate of fitness (issued by a registered Occupational Medical Practitioner) of the said operators before allowing operators to operate machinery, vehicles or plant.

The Health and Safety File shall include the written training material offered to operators for the different construction vehicles and mobile plant.

Each and every driver shall be trained on risks associated with their trade and safety procedures to mitigate the risks.

All construction vehicles and mobile plant must be of acceptable design and construction and used according to their design.

All construction vehicles and mobile plant must be maintained in good working order.

Registers of all vehicles and plant shall be kept on site together with names of operators responsible for each.

The register shall report all maintenance activities performed on these vehicles and plant as well as signatures certifying condition of the vehicles as in a good working order.

All requirements on the vehicles and mobile plant with regard to safety and health shall be inspected and certified.

These requirements include:
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a) portable fire extinguishers mounted in specified positions on construction vehicles – 2kg DCP Fire extinguisher;
b) safety belts and harnesses;
c) inspection for leaking fuel or gasses which can cause a fire hazard;
d) safe and suitable means of access;
e) adequate signalling or other control arrangement to guard against the dangers relating to movement of vehicles and plant;

Attention must be paid to –

i. Turn indicators
ii. Stop lights x2 – where poor visibility conditions warrant
iii. Reverse siren or acoustic device
iv. Tail lights
v. Head lights x2 – where poor visibility conditions warrant
vi. Rotating amber flashing with lens height of at least 200mm and an output of at least 100Watts on roof or other visible position
vii. Warning boards mounted at least 1.5m above ground level to be clearly visible
viii. Inspections of appropriate structures fitted to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn
ix. Appropriate seats must be firmly secured and adequate in number on vehicles used to transport employees

During use of Construction vehicles or mobile plant, the following rules shall be adhered to:

1. Construction vehicles or mobile plant must be prevented from falling into excavations, water or any other area lower than the working surface. This protection must consist of adequate edge protection e.g. guard rails and/or crash barriers.

2. No person shall be allowed to or require to ride on any Construction Vehicle or Mobile Plant in a position otherwise than a safe place provided for on the construction vehicle or mobile plant as designed for that purpose.

3. The construction site must be organised in such a way that as far as is reasonably practical, pedestrians and vehicles can move safely and without risk to health and safety.

4. Traffic routes shall of sufficient size, sufficient in number and in suitable positions to be used safely by construction vehicles, mobile plant and pedestrians.

5. Each and every route shall be indicated by suitable signs for reasons of safety and health.
6. No tools and/or materials shall be transported in the same compartment as the operators/drivers/employees unless the said are secured against movement during transportation.

7. All Construction Vehicles and Mobile Plant left unattended at night adjacent to a freeway in normal use or adjacent to construction areas where work is in progress, shall have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors in order to identify the location of the vehicles or plant.

8. Bulldozers, scrapers, loaders and other similar mobile plant are, when being repaired or when not in use, fully lowered or blocked with controls in a neutral position, motors stopped and brakes set.

9. Reflective indicators must be provided to workers in the form of reflective yellow jackets or vests as specified and worn by workers working on/or adjacent to public roads.

PS 10.14 SIGNS AND NOTICES

The use of colour codes, symbolic signs and notices are means of communication whereby information is visually conveyed to people and also provides early warning of dangers.

Safety signs provide for immediate recognition of danger, information, actions allowed or not allowed and procedures that have to be followed.

There are 5 types of safety signs:

1. Black triangle on yellow background => WARNING
2. Red circle on white background => PROHIBITORY
3. White on blue background => MANDATORY
4. White on green background => INFORMATION
5. Red square on white background => FIRE

The following signs shall be provided for on site:

Traffic control signs  - ROAD CLOSED
                      - DETOUR
                      - DIRECTION ARROWS

Warning signs        - DANGER – MEN AT WORK
Prohibitory signs - NO ENTRY
Fire - POSITION OF EQUIPMENT ARROWS
First Aid - INFORMATION SIGNS

All signs shall be new or in good condition and approved by the Engineer.

All temporary signs shall be mounted on portable supports to facilitate moving.

Defective or missing items shall be replaced immediately.

All signs shall be inspected at twice a day.

Prohibited area – TR 208
Men at work - TW 336

EXCAVATIONS – Regulation 11

Excavation:

Definition: A space made by digging.

1. An excavation could be a hole or trench of any size and shape
2. A Risk Assessment must be done prior to making an excavation.
3. The following must be taken into consideration when conducting the Risk Assessment:
   - Depth of the excavation;
   - Length of the excavation;
   - Type of soil;
   - Sloping of sides of excavation to maximum angle of repose;
   - Shoring and bracing required;
   - Existing services;
   - Barricading and demarcation.

Depth of the excavation

1. Should an excavation be more than chest deep (1.5m), it must be adequately shored or braced.
2. Slopes or trenches shall be as flat as possible, 1 x vertical to 2x horizontal must be considered maximum for dry conditions. In wet conditions, either a much lower slope shall be used or if space is a constraint, shoring and de-watering shall be applied.

A competent person shall be appointed to supervise excavation work.
Stability evaluation of ground must be done and a certificate shall be issued.

A plan for prevention of persons being trapped due to collapse shall be provided by Contractor.

The design of shoring shall be documented by Contractor in the Health and Safety File as provided by the competent designer of shoring.

The maximum loading of sides of an excavation must be documented in a suitable format.

If adjacent structures and buildings are present and can be affected, a design and construction of supporting details shall be represented.

Provision shall be made for access routes to the excavation. Routes shall not be more than 6m away from the worker.

Contractor must establish all local services in area of excavations.

Plan of local services shall be documented in the Health and Safety File.

**Local services include:**

*Telkom, Gas, Water, Electricity supplies and other similar services.*

Inspection shall be done on all bracing and shoring on a

- daily basis
- prior to each shift
- after every blasting operation
- after an unexpected fall of ground
- after substantial damage to supports
- after rain

An inspection register shall be completed by the Excavation Inspector during each and every inspection.

**Barricading and Demarcation:**

Excavations shall be fenced at least 1meter high and as close to the excavation as possible – when accessible by public or other employees or adjacent to public roads or thoroughfares.

Protection around excavations must be in the form of a physical barrier to prevent persons from falling into the excavation. Danger tape on its own is not considered as a barrier.
Excavations must be provided with clearly visible boundary indicators and illuminated at night or where/when visibility is poor.

Precautionary measures in terms of confined spaces must be met and employees must be declared fit and not claustrophobic.

Explosives regulations must be adhered to if explosives are required to carry out the excavation. Competent persons with blasting certificates must be in charge.

**PS 10.16  BARRICADING AND DEMARCATION**

The construction site shall be barricaded completely to prevent pedestrians and vehicles from entering the construction area.

Protection around the site must be in the form of a physical barrier and appropriate signage to prevent the public from entering the area.

A physical barrier will be a fence at least 1 meter high. Danger tape is not considered a physical barrier. A danger tape is considered as a signage only.

It is advised to use a 1.2m high Dayglo mesh (barrier netting) to prevent pedestrians on pavements to enter the construction area.

**PS 10.17  LADDERS**

*Ladders used shall be undamaged and are of sound construction*

Ladders must be numbered and placed on a register and inspected on a monthly basis by an appointed Ladder Inspector.

Ladders are to be secured during use. If it is necessary to use a ladder before it can be secured, a second person must hold it steady at all times. Place the ladder’s feet on a level base – wooden blocks or bricks are not to be used!

Ladders are not to be used as scaffolds or work platforms.

When used as access to trenches and work areas, the ladder must extend 1m above the step off point and be placed at an angle where the base of the ladder is ¼ of the ladder height away from the base of the structure – and must be fitted with non-slip devices.

Ladders must not be used nearer than 3m to any exposed electrical power source and never in substations or on electrical installation work.

Ladders are not to be used in a horizontal position.

Maintain a 3-point contact by keeping two hands and one foot or two feet and one hand on the ladder at all times.
Do not carry objects in your hands while on a ladder.

Ladders must be fitted with non-slip devices at the bottom ends and hooks or similar devices at the upper ends.

Ladders with damaged stiles, or damaged or missing rungs should never be used.

Ladders must never be fastened together to increase the reach.

Wooden ladders must never be painted.

**PS 10.18 CONCRETE MIXERS – Regulation 18**

The Contractor shall ensure that all concrete mixers are operated by appointed Concrete Mixer Operators and supervised by a competent person who has been appointed in writing as a Concrete Mixer Inspector.

The Contractor shall ensure that all devices to start and stop the concrete mixers are provided and that these devices are:

1. placed in an easily accessible position; and
2. constructed in such a manner to prevent accidental starting.

All dangerous moving parts of a mixer must be placed beyond the reach of persons by means of protective guarding.

No person shall be permitted to remove or modify any guard or safety component unless authorised to do so by the appointed person (Concrete Mixer Inspector).

The Contractor shall ensure that all persons authorised to operate the concrete mixers are fully:

1. aware of all dangers involved in the operation thereof
2. conversant with the precautionary measures to be taken in the interest of health and safety.

A Safe Work Procedure on each specific concrete mixer shall be done and communicated to the operator and relevant workers.

No person supervising or operating a concrete mixer shall authorise any other person to operate the plant – unless such a person is competent to operate such machinery.

**PS 10.19 SCAFFOLDING – Regulation 14**

All scaffolding must be in compliance to SABS 085.
A competent person shall be appointed in writing to supervise the erection of all scaffolding operations. The scaffolding erected shall have the required accredited qualifications for scaffold erecting.

A competent Scaffold Inspector shall be appointed in writing to inspect the erected scaffolds and shall not be same person as the Erector.

An inspection register on scaffolding shall be kept in the Health and Safety File.

A copy of the SABS 085 as amended shall be available on site and kept in the Health and Safety File.

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**KOUSEKEEPING AND CONSTRUCTION SITES – Regulation 25**

The Contractor shall at all times carry out the Works in a manner to avoid the risk of bodily harm to persons or risk of damage to any property. The Contractor shall take all precautions which are necessary and adequate to eliminate any conditions which contribute to the risk of injury to persons or damage to property. The Contractor shall continuously inspect all work, materials and equipment to discover and determine any such conditions and shall be solely responsible for the discovery, determination and elimination of such conditions.

During the period of the contract, the Contractor shall be responsible for the safe storage of all materials and equipment required for executing of the Contract and for the disposal of all non-usable waste material in an orderly manner.

All materials, whether stored on the construction site or within the Contractor’s designated area, shall be stored neatly and safely to prevent possible injury to any personnel. The material shall be stored to facilitate safe access to and removal of the material from the storage area.

Any flammable materials such as paint, diesel fuel and oil, shall be stored in lockable non-combustible structures which shall be clearly marked to indicate the hazardous nature of the materials stored within. The flammable materials stores shall be located in safe areas away from hazardous surroundings – and adequate and suitable fire fighting equipment shall be provided within easy reach of the materials stores.

All diesel tanks shall be erected on a suitable floor surrounded by a bund wall which will contain 110% of the maximum volume of diesel stored.

Loose material needed for use shall not accumulate so as to obstruct means of access and egress from the workplace. A demarcated area shall be identified for waste disposal.

Scrap and waste shall not be allowed on site and must be removed daily.

The construction sites adjacent to built-up area or public way shall be effectively fenced and controlled with access points.
PS 10.21  STACKING AND STORAGE ON CONSTRUCTION SITES – Regulation 26

A competent person shall be appointed in writing with the duty of supervising all stacking of material on site.

Adequate storage areas shall be provided which includes demarcated areas.

All storage areas shall be kept neat and under control.

Registers and checklists on housekeeping shall be kept on site.

PS 10.22  FALL PROTECTION – Regulation 8

The Contractor shall cause –

a) the designation of a competent person, responsible for the prevention of a fall protection plan;
b) the fall protection plan contemplated in paragraph (a) to be implemented, amended where and when necessary and maintained as required;
c) steps to be taken in order to ensure the continued adherence to the fall protection plan.

The fall protection plan contemplated in sub-regulation (1) shall include

a) a risk assessment of all work carried out from an elevated position which shall include the procedures and methods to be used to address all the risks identified per location;
b) the process for evaluation of the employees’ physical and psychological fitness necessary to work at elevated heights.

➢ Safety Harness:

The wearing of an approved type of safety harness fitted with a shock absorber and correctly secured to any approved anchorage is compulsory for personnel working at heights.

Safety harnesses must be worn where a leaning bar cannot be installed, where handrails are not available, in instances where there is a risk of injury due to falling and generally, whenever work is undertaken at a height of more than “person’s height”.

Where roof work is undertaken, harnesses must be attached to a lifeline or other substantial support.

The single support waist type safety belts should not be used – therefore, a full parachute type harness of an approved type is required.

It is the Contractor’s responsibility to train his employees on the correct use of harnesses.
Safety belts may only be used as a fall restraint and not as a fall protection device.

- **Identify Risks**

Lanyards must be used to attach tools and equipment used in elevated positions.

Scaffolding - where possible must be provided.

On windy/rainy days, special precautions are to be taken especially when working with *loose roof sheets*.

Walking on asbestos roofs is prohibited unless supporting ladders or crawl boards are placed thereupon.

Consult your supervisor in that area if in any doubt.

---

**STRUCTURES – Regulation 9**

1. The Contractor shall ensure that –

   i. all reasonable practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof – which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work:

   and

   ii. no structure or part of a structure is loaded in a manner which would render it unsafe.

2. The designer of a structure shall –

   a) before the contractor is put out to tender, make available to the Client all relevant information about the design of the relevant structure that may affect the pricing of the construction work;

   (i) inform the contractor in writing of any known or anticipated dangers or hazards relating the construction work – and make available all relevant information required for the safe execution of the work upon being designed or when the design is subsequently altered;

   (ii) subject to the provisions of paragraph (a) and (b) ensure that the following information is included in a report and made available to the contractor

   (iii) a geo-science technical report where appropriate

   (iv) the loading of the structure is designed to withstand and

   (v) the methods and sequence of construction process.
b) not including anything persons in the design of the structure necessitating the use of dangerous procedures or materials hazardous to the health and safety of persons which could be avoided by modifying the design or substituting materials;

c) take into account the hazards relating to any subsequent maintenance of the relevant structure and should make provision in the design for that work to be performed to minimise the risk;

d) carry out sufficient inspections at appropriate times of the construction work involving the design of the relevant structure in order to ensure compliance with design and a record of those inspections is to be kept in file on site;

e) stop any contractor from executing any construction work which is not in accordance with the relevant design;

f) conduct a final inspection of the completed structure prior to its commissioning to render it safe for commissioning and issue a completion certificate to the contractor; and

g) ensure that during commissioning, cognisance is taken of ergonomic design principles in order to minimise ergonomic related hazards in all phases of the life cycle of a structure.

3. The contractor shall ensure that all drawings pertaining to the design of the relevant structure are kept on site and are available on request by an inspector, contractor, client or the client’s agent or employee.

4. The owner of the structure shall ensure that inspections of the structure upon completion are carried out periodically by competent persons in order to render the structure safe for continued use – provide that the inspections are carried out at least once every six (6) months for the first two (2) years and thereafter, yearly – records of such inspections shall be kept and made available to an inspector upon request.

5. The owner of the structure shall ensure that the structure upon completion is maintained in such a manner that the structure remains safe for continued use and such maintenance records shall be kept and made available to an inspector upon request.

PS 10.24 FORM WORK AND SUPPORT WORK – Regulation 10

A competent person shall be appointed in writing to supervise all form work and support work – (Form work and Support work Inspector).
The name and address of such a person shall be included in the Health and Safety Plan of the Principal Contractor.

The Contractor must ensure that all formwork and support work structures and adequately designed, erected, supported, braced and maintained so that they will be able to support all anticipated loads.

All drawings pertaining to formwork and support work must be kept on site and available for inspection by an inspector, Contractor, South African National Parks’ Corporate OHS office or it’s Representative or employee.

**All formwork and support work must be inspected and checked for suitability by a competent under the following conditions:**

1. Before use
2. During placement of concrete or any other imposed load
3. After placement of concrete or any other imposed load
4. On a daily basis after placement of concrete until the structure is removed
5. Ensure that concrete gains sufficient strength before the support work is removed

*Record must be kept of these inspections.*

Weakened formwork or support work must be immediately reinforced

Deck panels must be secured against displacement

Persons must be prevented from slipping onto support work

Persons must not be affected by the use of solvents or any other similar substances

Safe access must be provided for all support work.

Employees involved must be adequately trained and instructed to perform the work in a safe manner.

Foundations of formwork must be adequate to sustain the applied load.

---

**PS 10.25**  **FIRST AID**

**PS 10.25.1**  **SMI Board**

The Contractor shall provide a Safety Management Information Board where safety notices, site regulations concerning safe working practices and information on the location of the nearest first aid station, can be conspicuously displayed to all staff. The size of the notice board shall be at least 600mm x 800mm.
PS 10.25.2 **First Aid Equipment**

The Contractor shall provide for its employees, a stretcher for emergencies and an approved first aid box. The first aid box shall be checked weekly by a responsible person who shall be appointed by the Contractor – and a record shall be kept of the contents. Any deficient medical supplies shall be promptly replenished by the Contractor.

PS 10.25.3 **Hazard Notices**

The Contractor shall display hazard notices in all areas where hazardous conditions prevail or may occur.

PS 10.25.4 **Reporting of Incidents and/or Injuries**

All incidents in respect of damage to works, property or machinery or injury to persons shall be reported by the Contractor SHE Representative to the area supervisor and to the Accident/Incident Investigator.

Minor Injuries and near misses shall also be reported and recorded on the appropriate forms.

*In cases of –*

- any person dies
- becomes unconscious
- lose a limb or part thereof
- suffer permanent physical disability
- unable for 14 days to work

A mandatory incident report form (Annexure 1) containing full details of the incident, shall be completed by the appointed Accident/Incident Investigator and submitted to the Site Agent and the Department of Labour within 24 hours of the occurrence of the incident.

Within 7 days' notice, the incident report must be given in the form of WCL2 to the Provincial Director.

*In cases of –*

- Major incident
- Dangerous substance spill
- Uncontrolled release of any substance under pressure
- Machinery fracture resulting in flying, falling objects
- Machinery out of control

A mandatory incident report form (Annexure 1), containing full details of the incident, shall be completed by the appointed Accident/Incident Investigator and submitted to the Site Agent and the Department of labour within 24 hours of the occurrence of the incident.
FIRE PRECAUTIONS ON CONSTRUCTION SITES – Regulation 27

A register shall be kept on all Acetylene and Oxygen cylinders used on site.

Condition of components, sub-components and safety components – e.g. Flame back arrestors, shall be listed in the register and signed by the construction supervisor at regular intervals as required with time and date stamp.

Acetylene, Oxygen and LP Gas cylinders shall be stored in suitable places to minimise the risk of fire;

Suitable storage to be provided for all flammable liquids e.g. petrol, diesel, paints and thinners;

Smoking shall be prohibited in the workplace and notices posted accordingly;

Smoking areas with sand buckets or ash trays will be demarcated when site is established;

Sufficient and suitable fire fighting equipment shall be provided and placed in strategic positions in the workplace (on vehicles and other positions as dimmed necessary);

A Register shall be kept on type and number of equipment for each site in the Health and Safety File;

A competent person shall inspect all fire fighting equipment;

A sufficient and adequate number of employees shall be trained in the use of fire fighting equipment;

A Register shall be kept in the Health and Safety File on site bearing the names of employees and type of fire fighting training received and completed with dates of training and training provider’s name;

Suitable and sufficient signs shall be erected in the workplaces indicating all escape routes;

Escape routes shall be kept clear – a copy of the Evacuation plans shall be kept in the Health and Safety File as part of Induction Training provided;

Combustible materials shall not accumulate on site;

A siren is installed and sounded in the event of FIRE.

CONSTRUCTION WELFARE FACILITIES – Regulation 28

At least one sanitary facility shall be erected for every 30 workers; 1 shower for every 15 workers; a changing facility for each sex and sheltered eating areas shall be provided in each work site.

Mobile toilets with bucket system shall be installed at the site;
Cleaning of buckets shall be arranged with the City Council;

Where applicable, chemical toilets shall be provided.

Eating facilities shall be made available in the form of a shaded net, table and chairs.

For sites in remote areas, transport shall be made available for workers to and from sites.

PS 10.28 **TOXIC MATERIALS**

a) The contractor shall exercise all necessary care in the handling of toxic compounds and shall be able to identify the major chemical components in the event of medical treatment being required.

PS 10.29 **HAZARDOUS CHEMICALS AND MATERIALS**

a) THE Contractor shall provide suitable and adequate protective equipment when working in an area where hazardous chemicals and materials are being used;

b) The Contractor shall ensure that its employees have familiarised themselves with the hazardous material data sheets applicable to the specific site as well as the location of fire fighting equipment, safety showers/baths and other washing facilities prior to commencement of work.

Material Safety Data Sheets shall be provided with all chemical use and filed in the Health and Safety File.

Examples:

- Paint
- Tile glue
- Tar
- Diesel
- Petrol
- Thinners
- Turps
- Drain cleaners
- Weed Poisons

PS 10.30 **COMMISSIONING SAFETY PRECAUTIONS**

The Contractor shall ensure that whatever repairs, adjustments or any other work undertaken on any plant or machinery, power supply is switched off, disconnected or the plant/machinery disengaged until the work or repairs have been completed.
PS 10.31  ELECTRICAL INSTALLATIONS AND MACHINERY ON CONSTRUCTION SITES – Regulation 22

Before construction commences or any other related works and during the progress thereof, adequate steps shall be taken to establish the presence of and guard against any danger to the workers in respect to electrical cables or apparatus.

In areas where it cannot be established where electrical items are, the employees must use tools of which the handles are insulated or rubber insulated gloves.

Any temporary electrical installation set up by the principal contractor or contractor must be inspected at least once a week by a competent person. The inspections shall be recorded in a Register and kept in Health and Safety File.
When working on or next to live electrical machinery, the Principal Contractor or Contractor must provide insulated stands, trestles and mats.

When Distribution Boards are removed, the incoming power supplies shall be cut by the Client’s authorised Electrician. The incomer electricity supply feeder shall be earthed by a suitable earth wire or spike to prevent cable of becoming live during the installation of new Distribution Boards.

No person shall continue with wiring of premises unless the supply to the premises has been rendered dead and the above effective measures have been taken to ensure that such cables remain dead. When rewiring of premises is done, the feeder breakers at the other end of the supply cables shall be locked out and the cable earthed to prevent any injury to workers by electrical shock.

A register shall be kept on site in the Health and Safety File indicating all signatures of competent persons switching electricity supply on or off with time and date stamps.

No person shall use or permit to use a portable electric load operating at a voltage exceeding 50V to earth unless it is connected to a source of electrical energy incorporating an earth leakage protection device.

A register shall be kept on site in which all daily checks of portable electric tools are performed and signed by the responsible person. Checks shall include condition of plug top, power cord, on-off switch and insulation condition of electric tool. All tools shall be numbered and entered into the tool register accordingly. Condition of tools as listed in the register shall be inspected and signed by the construction supervisor at regular intervals as required by the nature of the equipment.

PS 10.32  REGISTERS REQUIRED ON SITE

PPE

➢ Personal Protective Clothing and Equipment issued

MACHINERY
Health and safety specifications
Revision 1
2013

- Daily Checklist - Compaction Machinery - Bomag
- Daily Checklist - Compaction Machinery - Plate Compactor
- Daily Checklist - Compaction Machinery - Tipper
- Daily Checklist - Compaction Machinery - Excavator
- Daily Checklist - Compaction Machinery - TLB
- Daily Checklist - Compaction Machinery - Material Handler
- Daily Checklist - Compaction Machinery - Water Lorry
- Daily Checklist - Compaction Machinery - Bomag
- Daily Checklist - Compaction Machinery - Mini Excavator
- Daily Checklist - Compaction Machinery - Bobcat
- Daily Checklist - Compaction Machinery - Concrete Mixer

EQUIPMENT

- Ladder inspection Register
- Scaffold inspection Register
- Safety Harness inspection Register
- Gas Cutting and Welding inspection Register

TOOLS

- Monthly checklist on Hand Tools
- Monthly checklist on Portable Electrical Equipment

HOUSE KEEPING

- Stacking inspection Register
- Excavation inspection Register
- Monthly Environmental and Deviation Checklist
- Monthly Hygiene Facility inspection Register – Mobile Ablution and Eating Areas

INCIDENTS

- Minor Incidents Recording Form
- Near Miss Recording Form
- Major Incident Recording Forms (WCL1 and WCL2) – Injury/occupational diseases record book (Recording and Investigation of Incidents)
- Annexure 1 – report to Department of Labour (DoL)
- Motor Vehicle Accident Report
- Safety statistics Record book

FIRE

- Fire Extinguishing Equipment Register
- Register of Trained Employees in Fire Fighting
Health and safety specifications
Revision 1
2013

- Fire Awareness Training Attendance Register

**FIRST AID**

- First Aid Box and Equipment Checklist
- Register of Trained Employees in Basic First Aid
- First Aid Awareness Training Attendance Register

**TRAINING**

- Induction Training Attendance Registers
- Risk Assessment Communication Registers
- Safe Work Procedures Communication Registers

**PERMITS**

- Lock-out Request Forms (Water and Electricity)
- Lock-out Permits (Water and Electricity)

**INSPECTIONS**

- SHE Coordinator inspection Register – Monthly checklist and deviations
- Minutes of Safety Committee Monthly meetings

**SAFE WORK PROCEDURES REQUIRED IN HEALTH AND SAFETY FILE**

- Stacking of materials
- Working with angle grinders
- Working with drills
- Working with glass panes
- Excavation of trenches
- Loading and transportation of material
- Working with cement and concrete mixers
- Driving company vehicles
- Approaching construction vehicles
- Maintaining scaffolding
- Form work repair guide
- Roof work
- Correct use of Fire Extinguishers
- Engaging and working with Contractors
- Heat Stress
- Electrical safety
- Maintenance of ladders
- Silica
- Trenches and open excavations
- Any other as required by activities on site
Health and safety specifications
Revision 1
2013

PS 10.34  WRITTEN TRAINING COURSE MATERIAL TO BE FILED IN HEALTH AND SAFETY FILE

- Induction Training (Workplace Awareness – Site specific)
- Training of operators on Construction Vehicles and Mobile Plant (Certificates)
- First Aid Awareness
- Fire Fighting Awareness
- Toolbox talks and Hand Tools
- Toolbox talks on Machine Guarding
- Toolbox talks on Hand Tool Accidents
- Toolbox talks on the TEN Commandments of Safety
- Toolbox talks on Fire Prevention
- Toolbox talks on lifting materials by hand
- Toolbox talks on Safe Loading
- HIV Training Unit – The Nature of HIV/Aids
- HIV Training Unit 2 - Transmission of the HIV virus
- HIV Training Unit 3 - HIV/AIDS preventative measures
- HIV Training Unit 4 - Voluntary HIV/AIDS counselling and testing
- HIV Training Unit 5 - Living with HIV/AIDS
- HIV Training Unit 6 - Treatment options for people with HIV/AIDS
- HIV Training Unit 7 - The rights and responsibilities for workers in the workplace with regard to HIV/AIDS
- Toolbox talks on Environmental influences

PS 10.35  TRAINING COURSES TO BE PRESENTED

PHASE 1

- Toolbox talks on the Functions of the SHE Representative (SHE Rep)
- Induction Training (Workplace Awareness) Ten Commandments of Safety
- Training of the Community on Construction Workplace Hazards
- HIV Training Unit 1 - The Nature of HIV/AIDS
- Toolbox Talks on Environmental Awareness

PHASE 2

- Training of Operators of Construction Vehicles and Mobile Plant
- First Aid Awareness
- Fire Fighting Awareness
- Toolbox Talks on Hand Tools and Hand Tool Accidents
- Toolbox Talks on Machine Guarding
- Toolbox Talks on Lifting Materials by Hand
- Toolbox talks on Safe Loading
- Toolbox talks on Safety Signs
- HIV Training Unit 2 - Transmission of the HIV virus
- HIV Training Unit 3 – HIV/AIDS preventative measures
- HIV Training Unit 4 – Voluntary HIV/AIDS counselling and testing
- HIV Training Unit 5 – Living with HIV/AIDS
- HIV Training Unit 6 – Treatment options for people with HIV/AIDS
Health and safety specifications
Revision 1
2013

- HIV Training  Unit 7 – The rights and responsibilities for workers in the workplace with regard to HIV/AIDS
- Toolbox Talks on Environmental Awareness

PS 10.36  EQUIPMENT ON SITE

First Aid Kit (basic)
Fire extinguishers

PS 10.37  PERSONAL PROTECTIVE EQUIPMENT (CLOTHING)

The Contractor shall provide the necessary personal protective equipment for its employees in hazardous areas, appropriate to the nature of the hazard.

PS 10.37.1  Hard Hats

All employees of the Contractor shall wear hard hats in areas where appropriate hazard notices are displayed. The Engineer shall have rights to ban certain colours if they are similar to the Employer’s identifying colours. Hard hats shall not be painted or otherwise defaced.

Colours

Red  -  Fire Fighter
Green  -  First Aider
White  -  Professional Team
Yellow  -  Supervisor
Blue  -  Workers
Pink  -  SHE Representatives

PS 10.37.2  Eye Protection

Suitable eye protection shall be worn in areas where appropriate hazard notices are displayed or where grinding, chipping, breaking, drilling, arc welding, cutting with oxy-acetylene equipment or similar activities are taking place.

PS 10.37.3  Hearing Protection

Suitable hearing Protection shall be worn in areas where appropriate hazard notices are displayed.

PS 10.37.4  Foot Wear

All employees of the Contractor shall wear undamaged, laced-up safety boots or safety shoes suitable for the intended purpose in prescribed areas where appropriate hazard notices are displayed.
**Gloves**

All employees of the Contractor shall wear suitable protective gloves in areas where appropriate hazard notices are displayed or when handling hot or hazardous materials or chemicals.

**Clothing**

All employees of the Contractor shall wear suitable protective clothing when working in proximity of machinery, power tools, hazardous materials or chemicals.

**Proposed Personal Protective Equipment required on this project:**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>TYPE</th>
<th>WHEN TO WEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hard hats</td>
<td>Always</td>
</tr>
<tr>
<td>2.</td>
<td>400mm Shoulder Length PVC Gloves</td>
<td>Working with Cement</td>
</tr>
<tr>
<td>3.</td>
<td>Plastic Trousers</td>
<td>Working with Cement</td>
</tr>
<tr>
<td>4.</td>
<td>Safety Goggles</td>
<td>Grinding, Cutting Cement</td>
</tr>
<tr>
<td>5.</td>
<td>Gumboots</td>
<td>Working in water</td>
</tr>
<tr>
<td>6.</td>
<td>Welding Helmet</td>
<td>Welding</td>
</tr>
<tr>
<td>7.</td>
<td>Gas Welding safety goggles</td>
<td>Gas welding</td>
</tr>
<tr>
<td>8.</td>
<td>Safety shoes</td>
<td>Off-loading and positioning of materials</td>
</tr>
<tr>
<td>9.</td>
<td>Dust Masks</td>
<td>Grinding</td>
</tr>
<tr>
<td>10.</td>
<td>Ear Muffs</td>
<td>Grinding</td>
</tr>
<tr>
<td>11.</td>
<td>Leather Apron</td>
<td>Welding and Gas Welding</td>
</tr>
<tr>
<td>12.</td>
<td>Reflective vests</td>
<td>Operators and workers near public road</td>
</tr>
<tr>
<td>13.</td>
<td>Protective Overalls</td>
<td>Depends on nature of work</td>
</tr>
</tbody>
</table>

**AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, NO.85 OF 1993.**

The Employer and the Contractor hereby agree in terms of the provisions of Section 37(2), 9 and 8(2) of the Occupational Health and Safety Act, No. 85 of 1993, hereinafter referred to as “the Act”, that the Contractor as an employer in its own right and in its capacity as Contractor for the execution of the works, shall have certain obligations and that the following arrangements shall apply between them to ensure compliance by the Contractor with the provisions of the Act, namely:

1) The Contractor undertakes to acquaint the appropriate officials and the employees of the Contractor with all relevant provisions of the Act and the Regulations promulgated in terms of the Act and

2) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of the Act and its Regulations will be fully complied with and
3) The Contractor hereby accepts sole liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and its Regulations and expressly absolve the Employer and the Employer’s Consulting Engineers from being obliged to comply with any of the aforesaid duties, obligations and prohibitions.

4) The Contractor shall be obliged to report forthwith to the Employer any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and its Regulations pursuant to work performed on behalf of the Employer and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge.

Signed at ........................................on this...................day of.........................20...........
For and on behalf of the Contractor:

................................................. Print Name: .................................................

AS WITNESSES

1. ................................................. 2. .................................................

Print Name: ................................................. Print Name: .................................................

For and on behalf of the Employer:

................................................. Print Name: .................................................

AS WITNESSES

1. ................................................. 2. .................................................

Print Name: ................................................. Print Name: .................................................
MANDATORY NOTIFICATION OF CONSTRUCTION WORK

This document is to be forwarded by the Contractor to the office of the Department of Labour prior to commencement of the Works. The Contractor shall ensure that all Sub-Contractors accountable to him forward similar documents to the mentioned Authority prior to commencement with the Works.

Particulars of Contractor

A. Name: ........................................................................................................................................

Postal Address: ................................................................................................................................

Compensation Fund Registration No.: ..............................................................................................

Particulars of Contractor’s CEO or Managing Member

B. Name: ........................................................................................................................................

ID No.: ...........................................................................................................................................

Postal Address: ................................................................................................................................

Telephone No.: ...................................................................................................................................

C. Particulars of Contractor’s designated Construction Safety Officer appointed in terms of Clause 6(1) as the Construction Supervisor with the duty of supervising health and safety at the Works:

Name: ........................................................................................................................................

ID No.: ...........................................................................................................................................

Postal Address: ................................................................................................................................

Telephone No.: ...................................................................................................................................

D. Particulars of Contractor’s sub-ordinate supervisor at the works as appointed in terms of Clause 6(2):

<table>
<thead>
<tr>
<th>NAME</th>
<th>ID NUMBER</th>
<th>POSTAL ADDRESS</th>
<th>TELEPHONE NUMBER</th>
<th>CELL PHONE NUMBER</th>
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</table>
E. **Physical address of the Works (Construction Site)**

Co-ordinates (if available)  
Latitude (S)  
Longitude(E)  

F. **Nature of the construction work:**

G. **Expected commencement date of works:**  

H. **Expected completion date:**  

I. **Estimated maximum number of persons on the construction site:**  

J. **Planned number of Sub-Contractors on the construction site accountable to Principal Contractor:**

K. **Particulars of Employer (Client)**

Name:  
Postal Address:  
Name of Employer’s designated Representative or Agent:  
Telephone number of Employer’s Representative or Agent:
L. **Particulars of Design Engineer:**
Name: ..................................................................................................................

Postal Address: ....................................................................................................

Telephone number: ......................................................... Cell phone: .........................

Signed at ............................................. on this ........ day of ......................... 20.....

---

**INFORMATION TO BE SUPPLIED BY THE TENDERER**

The following forms shall be completed by the Tenderer.

A. **Particulars of WCF**
 Compensation Fund Registration No.: .................................................................

Expiration Date: ....................................................................................................

B. **Particulars of Contractor’s designated Construction Safety Officer** appointed in terms of Clause 6(1) as the Construction Supervisor with the duty of supervising health and safety at the Works.

Name: ..................................................................................................................

ID No.: .............................................. Postal Address: ................................................

Telephone No.: ......................................................... Cell phone No.: ...........................

C. **Particulars of Contractor’s Health and Safety Representatives:**

Name: .............................................. Qualifications: ................................................

Name: .............................................. Qualifications: ................................................

Name: .............................................. Qualifications: ................................................

Name: .............................................. Qualifications: ................................................

D. **Particulars of First Aider:**

Name: ..................................................................................................................
E. Particulars of Fire Fighters:

Name: ...........................................................................................................

ID No.: ........................................ Valid Fire Training Certificates: Y/N

F. Training Records of Construction Vehicle Operators:

Name: ........................................ Qualifications: ...........................................

Name: ........................................ Qualifications: ...........................................

Name: ........................................ Qualifications: ...........................................

Name: ........................................ Qualifications: ...........................................

G. Incident statistics Register:

<table>
<thead>
<tr>
<th>Incidents During Last 12 months</th>
<th>Date of Incident</th>
<th>Degree of Injury</th>
<th>Man-Days Lost</th>
<th>Costs Involved</th>
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