

Annexure A

Construction Health and Safety Baseline Specification

APPROVAL OF THE PROCUREMENT STRATEGY TO APPOINTMENT ONE PROFESSIONAL SERVICE PROVIDER FOR THE UPGRADE OF THE NANDONI WATER TREATMENT WORKS (WTW).

DETAILS

**SUPERVISION BY THE CLIENT
DBSA – DEVELOPMENT BANK OF SOUTHERN AFRICA**

**SUPERVISION BY THE PROFESSIONAL SERVICE PROVIDER
TBA**

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1. INTRODUCTION

- 1.1. In terms of Construction Regulation 5(1) (b) of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), DBSA – Development Bank of Southern Africa, as the Client and/or its Agent on its behalf, shall be responsible to prepare Health & Safety Specifications for any intended construction project and provide any Principal Contractor who is making a bid or appointed to perform construction work for the Client and/or its Agent on its behalf with the same.
- 1.2. The Principal Contractor and contractors shall be responsible for the Health & Safety Policy for the site in terms of Section 7 of the Act and in line with Construction Regulation 7 as well as the Health and Safety Plan for the project.
- 1.3. This 'Health and Safety Specifications' document is governed by the "Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) Edition 23, hereinafter referred to as 'The Act'. It should be noted that no single Act or its set of Regulations be read in isolation. Furthermore, although the definition of Health and Safety Specifications stipulates 'a documented specification of all health and safety requirements pertaining to associated works on a construction site, so as to ensure the health and safety of persons', it is required that the entire scope of the Labour Legislation, including the Basic Conditions of Employment Act be considered as part of the legal compliance system. With reference to this specification document this requirement is limited to all health, safety and environmental issues pertaining to the site of the project as referred to here-in. Despite the foregoing it is reiterated that environmental management shall receive due attention.
- 1.4. Prior to drafting the Health and Safety Plan, and in consideration of the information contained here-in, the contractor shall set up a Risk Assessment Program to identify and determine the scope and details of any risk associated with any hazard at the construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard. This Risk Assessment and the steps identified will be the basis or point of departure for the Health and Safety Plan. The Health and Safety Plan shall include documented 'Method Statements of Work' detailing the key activities to be performed in order to reduce as far as reasonably practicable, the hazards identified in the Risk Assessment.
- 1.5. Every effort has been made to ensure that this specification document is accurate and adequate in all respects. Should it however, contain any errors or omissions they may not be considered as grounds for claims under the contract for additional reimbursement or extension of time, or relieve the PSP/ Principal Contractor and contractors from his responsibilities and accountability in respect of the project to which this specification document pertains. Any such inaccuracies,

inconsistencies and/or inadequacies must immediately be brought to the attention of the Agent and/or Client.

2. SCOPE OF HEALTH AND SAFETY SPECIFICATION DOCUMENT

The Health and Safety Specifications pertaining to **the Procurement Strategy to Appointment one Professional Service Provider for the upgrade of the Nandoni Water Treatment Works (WTW).**

These specifications are contained in the index and intend to specify the normal and specific requirements of **DBSA – Development Bank of Southern Africa** pertaining to the health and safety matters (including the environment) applicable to the project in question. These Specifications should be read in conjunction with the Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, Edition 23 (latest edition), Construction Regulations 2014, including the Code of Practice: Managing exposure to SARS-CoV-2 in the workplace. This will also include any Safety Standards which were or will be promulgated under the Act or incorporated into the Act and be in force or come into force during the effective duration of the project. The stipulations in this specification, as well as those contained in all other documentation pertaining to the project, including contract documentation and technical specifications shall not be interpreted, in any way whatsoever, to cancel or nullify any stipulation of the Act, Regulations and Safety Standards which are promulgated under, or incorporated into the Act.

3. PURPOSE

The purpose of this specification document is to provide the **TBA** (PSP and Contractors) with any information other than the standard conditions pertaining to construction sites which might affect the health and safety of persons at work and of persons in connection with the use of plant and machinery. It further aims to protect persons other than its employees against any potential hazards to their health and safety arising out of or in connection with the activities of persons at work during the construction work for **DBSA – Development Bank of Southern Africa.**

- 3.1** To brief the PSP/Principal Contractor/Contractor on the significant health and safety requirements and aspects of the project. This shall include the provision of the following information and requirements namely:
- a) safety considerations affecting the site of the project and its environment;
 - b) health and safety aspects of the associated structures and equipment;

- c) required submissions on health and safety matters required from the Principal Contractor (and Contractors);
- d) and the Principal Contractor's (and Sub - Contractors) health and safety plans.

3.2 To serve to ensure that the PSP (and Contractors) is fully aware of what is expected from them with regards to the Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, Edition 23 (latest edition), Construction Regulations 2014, including the Code of Practice: Managing exposure to SARS-CoV-2 in the workplace and the Regulations made there-under including the applicable safety standards, and in particular in terms of Section 8 of the Act.

3.3 To inform the PSP that the Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, Edition 23 (latest edition) and the Code of Practice: Managing exposure to SARS-CoV-2 in the workplace in its entirety shall apply to the contract to which this specification document applies. The Construction Regulations promulgated on 7 February 2014 and incorporated into the above Act by Government Notice R 84, published in Government Gazette 37305 and Code of Practice: Managing exposure to SARS-CoV-2 shall specifically apply to all persons involved in the construction work pertaining to this project.

4. DEFINITIONS

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

"the Act" means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) Edition 23;

"Agent" –means a competent person who acts as a representative for a client;

"Client" –means any person for whom construction work is performed;

"Construction manager" means a competent person responsible for the management of the physical construction processes and the coordination, administration and management of resources on a construction site;

"Construction site" means a work place where construction work is being performed;

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

"Construction work" means any work in connection with -

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

"Contractor" –means an employer who performs construction work;

"Designer" means-

- (a) a competent person who-
 - (i) prepares a design;
 - (ii) checks and approves a design;
 - (iii) arranges for a person at work under his or her control to prepare a design, including an employee of that person where he or she is the employer; or
 - (iv) designs temporary work, including its components;
- (b) an architect or engineer contributing to, or having overall responsibility for a design;
- (c) a building services engineer designing details for fixed plant;
- (d) a surveyor specifying articles or drawing up specifications;
- (e) a contractor carrying out design work as part of a design and building project; or an interior designer, shop-fitter or landscape architect;

"Excavation work" means the making of any man-made cavity, trench, pit or depression formed by cutting, digging or scooping;

"Fall protection plan" means a documented plan, which includes and provides for—

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

“Health and Safety File” –means a file, or other record containing the information in writing required by the Construction Regulations 2014;

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

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

“Method Statement” –means a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment;

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

“Risk Assessment” –means a program to determine any risk associated with any hazard at a construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard.

"National Building Regulations" means the National Building Regulations made under the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), and promulgated by Government Notice No. R. 2378 of 30 July 1990, as amended by Government Notices No's R. 432 of 8 March 1991, R. 919 of 30 July 1999 and R. 547 of 30 May 2008;

"Structure" means—

- a) any building, steel or reinforced concrete structure (not being a building), railway line or siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, bulk mixing plant, pylon, surface and underground tanks, earth retaining structure or any structure designed to preserve or alter any natural feature, and any other similar structure;
- b) any falsework, scaffold or other structure designed or used to provide support or means of access during construction work; or
- c) any fixed plant in respect of construction work which includes installation, commissioning, decommissioning or dismantling and where any construction work involves a risk of a person falling;

5. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

5.1 Organizational Structure of HSMS Responsibilities

All responsibilities fall under the legal requirement of legal appointment letters – each responsible person must have an appointment letter.

ROLE	RESPONSIBILITIES
Client Client Agent	The Client and/or its Agent shall ensure that the Principal Contractor, appointed in terms of Construction Regulation 5(1) (k), implements and maintains the agreed and approved Health and Safety Plan. Failure on the part of the Client or Agent to comply with this requirement will not relieve the Principal Contractor from any duties under the Act and Regulations.
CEO – Principal Contractor	The Chief Executive Officer of the Principal Contractor in terms of Section 16 (1) of the OHS Act to ensure that the Employer (as defined in the Act) complies with the Act. The pro forma Legal Compliance Audit may be used for this purpose by the Principal Contractor or his/her appointed contractor.
Person responsible for Health and Safety Section 16(2)	All OHS Act (85 /1993), Section 16 (2) appointee/s as detailed in their respective appointment forms shall regularly, in writing, report to management on health and safety matters or deviations identified during routine or ad hoc inspections/ audits. All reports shall be made available to the principal Contractor to become part of their site records (Health & Safety File).
Construction Manager Or Assistant	The Construction Manager and Assistant Construction Supervisor/s appointed in terms of Construction Regulation 8 shall regularly, in writing, report to their managers on health and safety matters or deviations identified during inspections. All reports shall be made available to the principal Contractor to become part of site records (Health & Safety File).
SHE Representatives	All Health and Safety Representatives (SHE-Reps) shall act and report as per Section 18 of the OHS Act. She Representatives shall inspect and monitor activities on a daily basis and report findings to the Client and Health and Safety manager immediately. These safety representatives have the right to stop any unsafe work or work due to unsafe conditions and report findings and reason immediately to TBA Management.
Other Legal Appointees	Further (Specific) Supervision Responsibilities for OH&S Several appointments or designations of responsible and /or competent people in specific areas of construction work are required by the OHS Act and Regulations. The following competent appointments, where applicable, in terms of the Construction Regulations 2014 are required to ensure compliance to the Act, Regulations and Safety Standards.

LEGAL APPOINTMENTS AS REQUIRED IN THE CONSTRUCTION REGULATIONS 2014			
Item	Construction Regulation	Appointment	Responsible Person
1.	5(1)(k)	Principal contractor for each phase or project	Client / Agent
2.	6	Designer	Client / Agent
3.	7(1)(c)(v)	Contractor	Principal Contractor
4.	7(2)(c)	Sub-Contractor	Contractor
5.	8(1)	Construction Manager	Principal Contractor
6.	8(2)	Assistant Construction Manager	Principal Contractor
7.	8(5)	Full-time Construction Health and Safety Officer (CHSO)	Principal Contractor & Contractor
8.	8(7)	Construction Supervisor	Construction Manager
9.	8(8)	Assistant Construction Supervisor	Principal Contractor & Contractor
10.	9(1)	Person to carry out risk assessment	Principal Contractor & Contractor
11.	9(4)	Trainer/Instructor	Principal Contractor & Contractor
12.	10(1)(a)	Fall protection planner	Principal Contractor & Contractor
13.	11(2)	Competent structure inspector	Owner
14.	6(2) & 12(1)	Temporary Works Designer	Principal Contractor & Contractor
15.	12(2)	Temporary Works Supervisor	Principal Contractor & Contractor
16.	13(1)(a)	Excavation supervisor	Principal Contractor & Contractor
17.	13(2)(b)(ii)(bb)	Professional engineer or technologist	Principal Contractor & Contractor
18.	13(2)(k)	Explosives expert	Principal Contractor & Contractor
19.	14(1)	Supervisor demolition work	Principal Contractor & Contractor
20.	14(2) + (3)	Demolition expert	Principal Contractor & Contractor
21.	14(11)	Explosives expert	Principal Contractor & Contractor
22.	16(1)	Scaffold supervisor, Scaffold erector & Scaffold Inspector	Principal Contractor & Contractor
23.	17(1)	Suspended platform supervisor	Principal Contractor & Contractor
24.	17(2)(c)	Compliance plan developer	Principal Contractor & Contractor
25.	17(8)(c)	Suspended platform expert	Principal Contractor & Contractor
26.	17(13)	Outrigger expert	Principal Contractor & Contractor
27.	18(1)(a)	Rope access supervisor	Principal Contractor & Contractor
28.	19(8)(a)	Material hoist inspector	Principal Contractor & Contractor
29.	20(1)	Bulk mixing plant supervisor	Principal Contractor & Contractor

30.	20(2)	Bulk mixing plant operator	Principal Contractor & Contractor
31.	21(2)(b)	Explosive actuated fastening device expert	Principal Contractor & Contractor
32.	21(2) (g) (i)	Explosive actuated fastening device controller	Principal Contractor & Contractor
33.	22(a)	Tower crane supervisor	Principal Contractor & Contractor
34.	22(e)	Tower crane operator	Principal Contractor & Contractor
35.	23(1)(d)(i)	Construction vehicle and mobile plant operator	Principal Contractor & Contractor
36.	23(1)(k)	Construction vehicle and mobile plant inspector	Principal Contractor & Contractor
37.	24(d)	Temporary electrical installations inspector	Principal Contractor & Contractor
38.	24 (e)	Temporary electrical installations controller	Principal Contractor & Contractor
39.	28 (a)	Stacking and storage supervisor	Principal Contractor & Contractor
40.	29 (h)	Fire equipment inspector	Principal Contractor & Contractor

This list may be used as a reference or tool to determine which components of the Act and Regulations would be applicable to a particular site, as was intended under paragraph 3 & 4 of the Chapter “Introduction” (page 4) above. This list shall not be assumed to be exclusive or comprehensive.

5.2 Communication & Liaison

- 5.2.1 Communication between the Employer, the PSP, the Principal Contractor, Contractors, Project manager, Architect and other concerned parties shall take place in the SHE Committee or Project meeting;
- 5.2.2 In addition to the above, communication may be directed to the Client or Client Agent, in writing, as and when the need arises;
- 5.2.3 The workforce may consult on Health and Safety matters with their Supervisor or She Representative;
- 5.2.4 The PSP shall be responsible for the dissemination of all relevant Health and Safety information to Contractors and other Contractors e.g. design changes agreed with the Client and its Agent; instruction issued by the Client agent, exchange of information between Contractors, the reporting of hazardous/dangerous conditions/situations etc.

6. INTERPRETATION

- 6.1 The Occupational Health and Safety Act and all its Regulations, with the exception of the Construction Regulations 2014, distinguish between the roles, responsibilities and functions of employers and employees respectively. It views consultants and contractors as employees of the “owner” of a construction or operational project, the “owner” being regarded as the employer. Only if formally agreed to by way of the written agreement in this regard between the “owner(s)” and consultant and /or between the “owner(s)” and the contractor(s), will these assumptions be relinquished in favour of the position agreed upon between the relevant parties;
- 6.2 In terms of the Construction Regulations 2014 the “**owner**”, in terms of its instructions, operates (has to operate) in the role of client as per relevant definition;
- 6.3 The **contractors** working for the “client” are seen to be in two categories, i.e. the Principal Contractor and Contractors. The Principal Contractor has to take full responsibility for the health and safety on the site of the relevant project / contract. This includes monitoring health and safety conditions and overseeing administrative measures required by the Construction Regulations 2014 from all contractors on the project site;
- 6.4 **Contractors** are required to operate under the control (in terms of all health and safety measures which are covered in the Construction Regulations 2014). Where, for the work the **TBA** will have to execute himself, practical health and safety measures are applicable, he will also be subject to the relevant requirements with which Contractors have to comply. The PSP / Principal Contractor will, however, not have to actually fulfill such requirements in respect of any of the work / functions of any Contractors on the site for which he has been appointed as Principal Contractor. However, he has to monitor / oversee such processes, ensuring that the requirements are complied with and that the required appointments / evaluations / inspections / assessments and tests are done and that the records are duly generated and kept as prescribed in the Construction Regulations 2014. This has to feature clearly in the Principal Contractor’s Health and Safety Plan.

7. RESPONSIBILITIES

- 7.1 In terms of Construction regulation 5 a Client must-
- 1 (a) prepare a baseline risk assessment for an intended construction work project;
 - (b) prepare a suitable, sufficiently documented and coherent site specific health and safety specification for the intended construction work based on the baseline risk assessment contemplated in paragraph (a);
 - (c) provide the designer with the health and safety specification contemplated in paragraph (b);

- (d) ensure that the designer takes the prepared health and safety specification into consideration during the design stage;
- (e) ensure that the designer carries out all responsibilities contemplated in regulation 6;
- (f) include the health and safety specification in the tender documents;
- (g) ensure that potential principal contractors submitting tenders have made adequate provision for the cost of health and safety measures;
- (h) ensure that the principal contractor to be appointed has the necessary competencies and resources to carry out the construction work safely;
- (i) take reasonable steps to ensure co-operation between all contractors appointed by the client to enable each of those contractors to comply with these Regulations;
- (j) ensure before any work commences on a site that every principal contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993 (Act No. 130 of 1993);
- (k) appoint every principal contractor in writing for the project or part thereof on the construction site;
- (l) discuss and negotiate with the principal contractor the contents of the principal contractor's health and safety plan contemplated in regulation 7(1), and must thereafter finally approve that plan for implementation;
- (m) ensure that a copy of the principal contractor's health and safety plan is available on request to an employee, inspector or contractor;
- (n) take reasonable steps to ensure that each contractor's health and safety plan contemplated in regulation 7(1)(a) is implemented and maintained;
- (o) ensure that periodic health and safety audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days;

- (p) ensure that a copy of the health and safety audit report contemplated in paragraph (o) is provided to the principal contractor within seven days after the audit;
 - (q) stop any contractor from executing a construction activity which poses a threat to the health and safety of persons which is not in accordance with the client's health and safety specifications and the principal contractor's health and safety plan for the site;
 - (r) where changes are brought about to the design or construction work, make sufficient health and safety information and appropriate resources available to the principal contractor to execute the work safely; and
 - (s) ensure that the health and safety file contemplated in regulation 7(1)(b) is kept and maintained by the principal contractor.
- (2) Where a client requires additional work to be performed as a result of a design change or an error in construction due to the actions of the client, the client must ensure that sufficient safety information and appropriate additional resources are available to execute the required work safely.
- (3) Where a fatality or permanent disabling injury occurs on a construction site, the client must ensure that the contractor provides the provincial director with a report contemplated in section 24 of the Act, in accordance with regulations 8 and 9 of the General Administrative Regulations, 2003, and that the report includes the measures that the contractor intends to implement to ensure a safe construction site as far as is reasonably practicable.
- (4) Where more than one principal contractor is appointed as contemplated in sub-regulation (1)(k), the client must take reasonable steps to ensure co-operation between all principal contractors and contractors in order to ensure compliance with these Regulations.
- (5) Where a construction work permit is required as contemplated in regulation 3(1), the PSP must, without derogating from his or her health and safety responsibilities or liabilities, appoint a competent person in writing as an agent to act as his or her representative, and where such an appointment is made the duties that are imposed by these Regulations upon a client, apply as far as reasonably practicable to the agent so appointed.

An agent contemplated in sub-regulations (5) and (6) must—

- (a) manage the health and safety on a construction project for the client; and
 - (b) be registered with a statutory body approved by the Chief Inspector as qualified to perform the required functions;
- (8) When the chief inspector has approved a statutory body as contemplated in sub regulation (7)(b), he or she must give notice of that approval in the Gazette.

7.2 PSP / Principal Contractor

- a) The PSP shall accept the appointment under the terms and Conditions of Contract. The PSP shall sign and agree to those terms and conditions and shall, before commencing work, ensure the Principal Contractor submits all CWP application documents as per the Construction Health and Safety Agents request, for review and approval. The Construction Health and Safety Agent will submit the permit application to Department of Employment and Labour to notify of the intended construction work in terms of Construction Regulation 3 at least 30 days prior to commencement of work;
- b) The PSP shall ensure that the Principal Contractor is fully conversant with the requirements of this Specification and all relevant health and safety legislation. This Specification is not intended to supersede the Act nor the Construction Regulations 2014 or any part of either. Those sections of the Act and the Construction Regulations 2014 which apply to the scope of work to be performed by the Principal Contractor in terms of this contract (entirely or in part) will continue to be legally required of the Principal Contractor to comply with. The Principal Contractor will in no manner or means be absolved from the responsibility to comply with all applicable sections of the Act, the Construction Regulations 2014 or any Regulations proclaimed under the Act or which may perceivable be applicable to this contract;
- c) (1) A principal contractor must further —
 - (a) provide and demonstrate to the client a suitable, sufficiently documented and coherent site specific health and safety plan, based on the client's documented health and safety specifications contemplated in regulation 5(1)(b), which plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the principal contractor as work progresses;

(b) open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, which must be made available on request to an inspector, the client, the client's agent or a contractor; and

(c) on appointing any other contractor, in order to ensure compliance with the provisions of the Act—

(i) provide contractors who are tendering to perform construction work for the principal contractor, with the relevant sections of the health and safety specifications contemplated in regulation 5(1)(b) pertaining to the construction work which has to be performed;

(ii) ensure that potential contractors submitting tenders have made sufficient provision for health and safety measures during the construction process;

(iii) ensure that no contractor is appointed to perform construction work unless the principal contractor is reasonably satisfied that the contractor that he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely;

(iv) ensure prior to work commencing on the site that every contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993;

(v) appoint each contractor in writing for the part of the project on the construction site;

(vi) take reasonable steps to ensure that each contractor's health and safety plan contemplated in sub-regulation (2)(a) is implemented and maintained on the construction site;

(vii) ensure that the periodic site audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days;

(viii) stop any contractor from executing construction work which is not in accordance with the client's health and safety specifications and the principal contractor's health and safety plan for the site or which poses a threat to the health and safety of persons;

(ix) where changes are brought about to the design and construction, make available sufficient health and safety information and appropriate resources to the contractor to execute the work safely; and

(x) discuss and negotiate with the contractor the contents of the health and safety plan contemplated in sub-regulation (2)(a), and must thereafter finally approve that plan for implementation;

(d) ensure that a copy of his or her health and safety plan contemplated in paragraph (a), as well as the contractor's health and safety plan contemplated in sub-regulation (2)(a), is available on request to an employee, an inspector, a contractor, the client or the client's agent;

(e) hand over a consolidated health and safety file to the client upon completion of the construction work and must, in addition to the documentation referred to in sub-regulation (2)(b), include a record of all drawings, designs, materials used and other similar information concerning the completed structure;

(f) in addition to the documentation required in the health and safety file in terms of paragraph (c)(v) and sub-regulation (2)(b), include and make available a comprehensive and updated list of all the contractors on site accountable to the principal contractor, the agreements between the parties and the type of work being done; and

(g) ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.

(2) A contractor must prior to performing any construction work—

(a) provide and demonstrate to the principal contractor a suitable and sufficiently documented health and safety plan, based on the relevant sections of the client's health and safety specification contemplated in regulation 5(1)(b) and provided by the principal contractor in terms of sub-regulation (1)(a), which plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the contractor as work progresses;

(b) open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, and which must be made available on request to an inspector, the client, the client's agent or the principal contractor;

(c) before appointing another contractor to perform construction work be reasonably satisfied that the contractor that he or she intends to appoint has the necessary competencies and resources to perform the construction work safely;

(d) co-operate with the principal contractor as far as is necessary to enable each of them to comply with the provisions of the Act; and

(e) as far as is reasonably practicable, promptly provide the principal contractor with any information which might affect the health and safety of any person at work carrying out construction work on the site, any person who might be affected by the work of such a person at work, or which might justify a review of the health and safety plan.

(3) Where a contractor appoints another contractor to perform construction work, the duties determined in sub-regulation (1)(b) to (g) that apply to the principal contractor apply to the contractor as if he or she were the principal contractor.

(4) A principal contractor must take reasonable steps to ensure co-operation between all contractors appointed by the principal contractor to enable each of those contractors to comply with these Regulations.

(5) No contractor may allow or permit any employee or person to enter any site, unless that employee or person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.

(6) A contractor must ensure that all visitors to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site and must ensure that such visitors have the necessary personal protective equipment.

(7) A contractor must at all times keep on his or her construction site records of the health and safety induction training contemplated in sub-regulation (6) and such records must be made available on request to an inspector, the client, the client's agent or the principal contractor;.

(8) A contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.

8. SITE SPECIFIC WORKS INFORMATION

These specifications are applicable to the specific scope of work pertaining to **the Procurement Strategy to Appointment one Professional Service Provider for the upgrade of the Nandoni Water Treatment Works (WTW)** as detailed in the tender documents.

DESCRIPTION OF THE SCOPE OF WORK

8.1 Employer's objectives

The Development Bank of Southern Africa (DBSA) and Department of Water and Sanitation have entered into a Memorandum of Agreement for the rendering of programme management services for the upgrading of the Nandoni Water Treatment Works.

Appointment of a Professional Service Provider for the upgrading of the Nandoni Water Treatment Works.

High Level Scope

The Client wishes to procure effective and efficient multi-disciplinary professional services from suitably qualified and experienced Professional Services Providers (PSPs) to oversee the implementation of the Project as detailed further in this document. The Professional Services Provider (PSP) is expected to assist the Employer to implement the Project.

The allocated work entails:

PROJECT OBJECTIVES AND JUSTIFICATION:

The existing Nandoni WTW forms part of the Middle Letaba/Luvuhu Group or Northern Cluster water services schemes, but more specifically part of the Luvuvhu group of schemes and supplies water to the Vondo and Malamulele West Regional schemes. This project entails the upgrading of the existing WTW plant.

The appointed PSP will be expected to use all existing documentation, reports etc. as the basis to continue with and finalise the design to achieve the required outcome and delivery capacity.

The scope consists of:

1. Updating the cost estimates in the Preliminary Design Report completed in 2016,
2. Verification of the current water quality at the inlet / outlet works, to understand whether the water quality has been compromised since 2016 and if not, then the preliminary design is still acceptable
3. The completion of the Implementation Readiness Study (IRS).

The upgrade must include and address bulk delivery / supply and distribution capacity, electrical supply, water quality and all other related factors, ensuring the successful operation of the WTW and upgraded WTW as well.

All legal requirements pertaining to a project of this scope and magnitude, must be considered and taken into account, including but not limited to: Constitution of SA, Reginal Corporate Laws, National Acts and Laws [Health, Environmental (NEMA, NEMWA), Building, OH&S, Employment, Municipal Acts, Laws, Bi-laws, etc.

All design codes applicable to this type of project, as well as applicable design / analysis software, used for this type of project, shall be utilised by the successfully appointed service provider.

The following (but not limited to) will be provided by the service providers as a minimum:

1. Design Calculations
2. Preliminary Design Report
3. Detail Design Report
4. Drawings (survey, site layout, Inlet works, flocculation channels, settling tanks, sand filters, raw water pump station, typical, electrical drawings and process flow diagrams)
5. Bill of Quantities
6. Geotechnical Report
7. Hazard Identification Report
8. Hazard & Operability Study
9. Operational Documents

10. Process Audit Reports
11. Design Close Out Report

The following information (if available) will be provided for review and if applicable may be used in finalising the design and deliverables as per the scope of work:

1. Reports and concept reports done to date.

PROJECT SCOPE DESCRIPTION

The capacity of the existing works is 60 MI/d and the scope of this project is to extend this capacity by another 60 MI/d. This extension will be done in similar sized modules to the existing works, thus three 20 MI/d modules.

The scope of work to be implemented can be described as follows:

1. Upgrade of the existing Raw water pump facilities to a 120 MI/d capacity. This will be achieved by upgrading all of the existing motors and adding a fourth pump set.
2. The lime-, flocculant and chlorine dosing systems will all be upgraded to accommodate a flow of 120 MI/d.
3. Three additional clarification process units, consisting of flocculation channels and settling tanks with a capacity of 20 MI/d each will be constructed.
4. Six additional gravity filters will be constructed.
5. All the associated pipe work for the abovementioned process units will be constructed to ensure hydraulic tie-in with the existing works.
6. The associated automation and control instrumentation will also be installed and integrated with the existing system to ensure a fully integrated treatment works.

The DBSA wishes to procure effective and efficient multi-disciplinary professional services from suitably qualified and experienced Professional Services Provider (PSP) to oversee the implementation of the upgrading of the Nandoni Water Treatment Works (WTW) detailed above. The Professional Services Provider (PSP) is expected to assist DBSA to implement the Project. The Professional Services Provider (PSP) is also expected to show a range of percentages of fees in schedule.

The specific primary objective of procuring the services of the PSP is to obtain multi-disciplinary technical project implementation expertise and reporting support to the DBSA (Employer) regarding the

implementation of the Project. This can be defined as providing support in design and construction of facilities, as determined by the Employer.

C3.1.2. SCOPE OF WORKS

The Professional Services Team requires minimum but not limited to the following.

1. Project Manager
2. Architect
3. Quantity Surveyor
4. Civil Engineer (specialising in water treatment works)
5. Structural Engineer
6. Electrical Engineer
7. Mechanical/Fire Engineer
8. Construction Health & Safety Agent
9. Social / Development Facilitator
10. Environmental Assessment Practitioner
11. Geotechnical engineer / specialist
12. Surveyor (Land surveyor)
13. Site supervision
 - a. Resident Engineer
 - b. Site supervisor / QA inspectors
 - c. Assistant site supervisor
 - d. Project administrator
 - e. Environmental Control officer (ECO)
 - f. QA/QC compliance officer

High Level implementation stages

- Stage 1: Initiation
- Stage 2: Concept
- Stage 3: Design Development
- Stage 4: Design Documentation
- Stage 5: Works
- Stage 6: Handover
- Stage 7: Close out

THABOTONA FARM PS 700341321 ES	Replacement of full mobile school with brick & mortar on a new site.
THOLIMFUNDO PS 700111914 JC	Major additions to an existing Primary School
Kaalfontein No.2 PS (No EMIS yet) JE	Construction of a new brick and mortar primary school
KAALFONTEIN PS 700400078 JE	Replacement of full mobile school with brick & mortar on the same site.
DR MATHOLE MOTSHEKGA PS 700400080 JE	Replacement of a full mobile school on the same site.
Pennyville PS (No EMIS yet) JN	Construction of a new Brick and Mortar Primary School
KIBLER PARK SS 700400584 JS	Replace existing mobile school with brick & mortar. Build 30x classrooms, 2x labs, computer room, library, multipurpose room, admin block, guardhouse, hall/nutrition centre (as per approved Business Case/PIR).
ECD Centre of Excellence Northern Corridor TW [Soshanguve East]	Build Brick & Mortar ECD Centre of Excellence with 5x Grade R and 5x Grade RR classrooms.
Soshanguve VV PS (No EMIS yet) TW	Construction of a new Brick and Mortar Primary School

Deliverables per stage:

In terms of the project stages, the following activities will be undertaken:

Stage 1.1: Strategic Briefing

- Attendance of briefing meeting.
- Set-up and signing of DBSA-PSP contract.
- Obtaining locality/ Facility manager information, document and report templates and information prepared by previous consultants on site development plans.
- Compile Project Execution Plan (PEP) for approval by DBSA.
- Obtain DBSA approval of PEP.
- Stage Gate Notification / Client Approval to Proceed to Next Stage.
- Pr. Construction Safety Agent shall render services, as per SACPCMP scope of services on stage 1.

Stage 1.2: Initiation

During the initiation phase the following items will be address

- Stakeholder Register & Consultations with local Municipalities; DoD; (if required).
- Conducting condition assessments for existing facility and produce reports with recommendations on remedial works / improvements.
- Assessment of the existing facility for suitability to withstand proposed additions.
- Conduct relevant studies and obtain necessary approvals for proposed work (e.g. Heritage Impact Assessment, etc.)
- Produce indicative site development plan.
- Develop Cost Estimates, Suggested Procurement Strategies, and Indicative Implementation Schedules for recommended interventions.

Stage 2: Concept

- Prepare concept design drawings
- Prepare implementation (decanting, decommissioning, and demolishing) plan.
- Prepare preliminary cost estimate.
- Prepare site-specific Health and Safety specification including a detailed Baseline Risk Assessment.
- Identify and prepare work packages for SMMEs.
- Submit concept design drawings and preliminary cost estimate to DBSA for approval.
- Client review and approval of concept design drawings and preliminary cost estimate.
- Submit Site Development Plans to local authorities.
- Stage Gate Notification / Client Approval to Proceed to Next Stage.
- Pr. Construction Safety Agent shall render services, as per SACPCMP scope of services on stage 2.

Stage 3: Design Development: detailed design, bill of quantities, full construction drawing and specifications:

- Review as necessary the site development plans and/or other suitable schematic layouts of the works and obtain the necessary statutory permissions, funding approvals or utility approvals to proceed with the works associated with the package.
- Prepare coordinated detailed design drawing/schedules, i.e. detailed architectural drawings and specifications (from existing generic blueprints) and detailed engineering drawing and specifications (from existing engineering designs). This includes to produce the final detailing,

performance definition, specification, sizing and positioning of all systems and components enabling either construction (where the contractor is able to build directly from the information prepared) or the production of manufacturing and installation information for construction.

- Prepare detailed design reports.
- Designs and specifications to be in full accordance with SANS 10400 (all sections, including XA). Specification for all components are to be written with reference to the specification guidelines (where relevant) to be provided by the DBSA (and others where relevant).
- Submit detailed design drawing, reports, bill, and tender document to DBSA.
- All design information to be presented & submitted in hard copy & 3D model format – native format (Revit, ArchiCAD, AutoCAD, etc) as well as in IFC format. BIMx & A360 to be used during design reviews.
- DBSA review of detailed designed drawings.
- DBSA approval of detailed design drawing.
- Review documentation programme with principal consultant and other consultants involved.
- Update a baseline program schedule for the project.
- Stage Gate Notification / Client Approval to Proceed to Next Stage.
- Pr. Construction Safety Agent shall render services, as per SACPCMP scope of on stage 3.

Stage 4: Design documentation: tender documentation, tender process, evaluation, and recommendations for award of construction contracts.

- Submit design documentation to local authority.
- Prepare detailed cost estimates (full bill of quantities from elemental bill of quantities).
- Preparation of Contract Documents and specification for signing.
- Produce tender documents.
- Prepare specification and preambles for the works.
- Check cost estimates and adjust design and documents if necessary, to remain within budget.
- Review design, drawings, and schedules for compliance with approved budget.
- Facilitate the compulsory site inspection meetings.
- Updated written report on budget, construction cost using site specific scope and tendered rates.
- Stage Gate Notification / Client Approval to Proceed to Next Stage.
- Pr. Construction Safety Agent shall render services, as per SACPCMP scope of on stage 4.

Stage 5: Works: site handover and construction up to practical completion (site activities)

Full inspection and oversight of construction: provide services related to the full inspection and oversight of the construction in line with the standard professional practices as per the gazette guidelines of the scope of services of the relevant professional bodies such as the Engineering Council of Southern Africa (ECSA). This includes liaison with the user client to take over the completed area on agreed basis and appoint a full-time clerk of work for administration and supervision of the work on-site. Examples of the services expected include the following.

- Facilitate site hand-over.
- Facilitate sustained development facilitation and attainment of set socio-economic objectives of project,
- Ensures compliance to OHSA, Environmental and all applicable regulations.
- Issue construction documentation in accordance with the documentation schedule.
- Carry out contract administration procedures in terms of contracts.
- Provides monthly progress reports as and required and update PMIS regularly (at least once a month).
- Prepare schedules of predicted cash-flow.
- Prepare pro-active estimates of proposed variation for client-decision making.
- Attend regular site, technical, steering committee, and progress meetings.
- Inspect works for conformity to compliance to design intent.
- Resolution of contractual issues by the contractor.
- Establish and maintain a financial control system.
- Clarify details and descriptions during construction as required.
- Prepare valuation for payment certificates, financial control report. Progressive and draft final accounts.
- Witness and review all test and mock-ups carried out both on and off-site.
- Check and approve contractor drawings.
- Update and issue drawings register.
- Issue contract instructions as and when required.
- Review and comment on operation and maintenance manuals, guarantee certificates, and warranties.
- Inspect the works and issues practical completion and defects lists.
- Arranges for the delivery of all test certificates, including electrical certificates of compliances, statutory and other approvals, as-built drawing, and operating manuals.

- Evaluate and adjudicates all claim events submitted by contractor and submit recommendations with substantiation to the DBSA.
- Manage scope change and prepare motivation for variation order if required.
- Review the contractor's quality control program and advice and agree a quality assurance plan including ensuring testing and quality control for conformity with specification and standards.
- Provide information for report as required.
- Oversight reports on construction inspection and progress to include, amongst other things the following:
 - Minutes of site handover to contractors and copies of site possession certificates,
 - Proof of compliance to OHSA, Environmental and all applicable regulations.
 - Construction documentation and drawing issue register.
 - Schedule of predicted cash-flow.
 - Monthly progress report.
 - Minutes of all site meetings held.
- Estimates of proposed variation.
- Pr. Construction Safety Agent shall render services, as per SACPCMP scope of on stage 5.
- Construction Programme and ongoing updates thereof
- Contract instruction to contractor.
- Financial control reports.
- Monthly updated quantities in relevant software applications.
- Payment certificates.
- Progressive and draft final accounts.
- Practical completion certificates and defects lists.
- Certificate of Compliance, e.g. Fire installation, electrical, plumbing, etc.
- Municipal/building control approvals.
- Record of hand over provisional departments.

Stage 6: Handover: Works which have been taken over by user or owner; completed training; Record Information:

- Finalise and assemble record information which accurately reflects the infrastructure that is acquired, rehabilitated, refurbished, or maintained
- Hand over the works and record information to the user organisation and if necessary, train end user staff in the operation of the works

- Stage 6 is complete when the Handover/Record Information Report is approved.
- Pr. Construction Safety Agent shall render services, as per SACPCMP scope of on stage 6.

Stage 7: Close out: Defects Certificate or Certificate of Final Completion; Final Account; Close-Out Report:

- Record information is archived
- Defects certificates and certificates of final completion are issued in terms of the contract
- Final amount due to the contractor is certified, in terms of the contract
- Close-Out Report is prepared by the Implementer and approved by the Client Department

Further to the implementation stages and requirements listed above, it also important to note that the payment will be done in accordance with the approval of the different stage listed below:

- Stage 1 Needs Assessment
- Stage 2 Scoping Report
- Stage 3 Feasibility Study Professional fees
- Stage 4 Preliminary Design Professional fees
- Stage 5 IRS Professional fees

It is anticipated that the involvement of a PSP will only be required from Stage 3 forwards and will be paid according to those deliverables as required and on approval. As mentioned earlier, the PSP will have to review, revise and resubmit the deliverables for Stage 1. the Needs Assessment and Stage 2, the Scoping Report included within their Professional Fees for Planning and in line with RBIG requirements.

Stage	Deliverable	Components	Delivery Period
Stage 1:	Needs Assessment	Project identification	TBC after appointment (will be a fast-paced project with very short timeline).
		Project type	
		Project location	
		Project Challenge / Needs	
		High-level Solution	
		High Level cost/viability	

Stage	Deliverable	Components	Delivery Period
Stage 2:	Scoping and Inception Report	Project identification	TBC after appointment (will be a fast-paced project with very short timeline).
		Project type	
		Project location	
		Motivation and Need for Study	
		Overview Demographics	
		Planned Infrastructure	
		Estimated Cost	
		Calculate prioritisation template	

Stage	Deliverable	Components	Delivery Period
Stage 3	Feasibility Study	Executive Summary	TBC after appointment (will be a fast-paced project with very short timeline).
		Introduction	
		Overview of Demographics	
		Water Supply Service Level Profile	
		Water Use Efficiency	
		Resource Balance/ Availability	
		Infrastructure Requirements	
		Costing Scenarios – capital O&M /, life cycle	
		Co funding comparisons	
		Institutional Perspective	
		Social Perspective:	
		Economic Perspective Affordability:	
		Environmental related impacts	

Stage	Deliverable	Components	Delivery Period
		Viability Scenarios	
		Preferred option with benefits/challenge to justify preference	

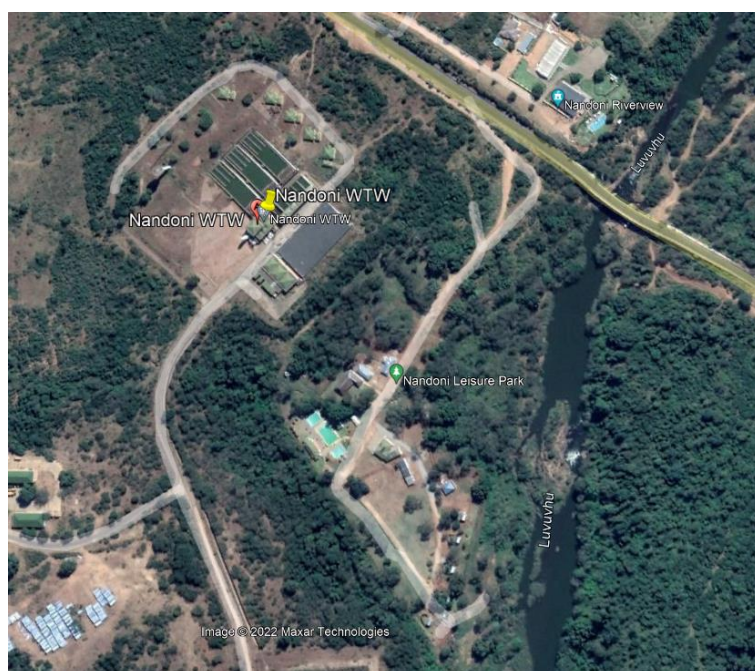
Stage	Deliverable	Components	Delivery Period
Stage 4	Preliminary Design and Research	Preliminary design	
		Field research / investigations	
		Geohydrological/ geotechnical investigations	
		Detailed cost estimates and time frames for implementation	
		O&M / asset management plans	
		Water Conservation/ Demand Management Plans	
		Water Use license application	
		Environmental Impacts Approvals	
		Determine risks	
		Stakeholder consensus	
		Service Level Agreements	
			TBC after appointment (will be a fast-paced project with very short timeline).

Stage	Deliverable	Components	Delivery Period
Stage 5	Implementation Ready Study/ Report	Management and Institutional Processes	
		Financial Modelling	
		O&M Commitments	
		Determine risks	
			TBC after appointment (will be a fast-paced project with very short timeline).

Stage	Deliverable	Components	Delivery Period
		Stakeholder consensus	
		Service Level Agreements	
		Servitude Agreements	
		Environmental Impact Assessment approved	
		Water Use Licence in place	
		Water Service Development Plan (project included and aligned with reticulation needs)	
		Water Conservation and Demand Management Plan in place / operational	

8.2 Location of the works

Nandoni Water Treatment Works Lat: 22°58'19.07"S, Long: 30°35'58.91"E



8.3 Occupational Health and Safety

The contractor needs to comply with the following legal requirements:

- Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, Edition 23 (latest edition) and Construction Regulations 2014
- Code of Practice: Managing exposure to SARS-CoV-2 in the workplace
- DBSA Occupational Health and Safety specification.
- DBSA Baseline Risk Assessment
- DBSA Safety, Health, Environment and Quality Policy.

8.4 Other

The Principal Contractor/Client or its Agent will provide a scope of work to the Principal Contractor. As a result of the inherent nature of the Health and Safety Baseline Specifications document, specific relevant information on the project must be provided and it may be necessary to draft the required information under this paragraph on a separate attached document.

If at any time after commencement of the project changes are brought about to the design or construction, sufficient health and safety information and appropriate resources are to be made available to the Principal Contractor to execute the work safely. **TBA** – shall for the duration of the project make available SHE Representatives on a daily basis to inspect the workplace.

According to Construction Regulation 7(1) (c) (ii) all potential contractors submitting tenders must make provision for the cost of health and safety measures during the construction process. When submitting a tender the Principal Contractor shall therefore, make provision for the cost of health and safety measures in terms of their documented Health and Safety Plan and DBSA – Development Bank of Southern Africa Health and Safety Specifications. The cost shall be clearly specified and quantified within the tender document under a section for health and safety.

The Health and Safety Plan is therefore to be included with the Tender documents when Tenders are invited for the Project.

9. HEALTH AND SAFETY FILE

The PSP must ensure the Principal Contractor must, in terms of Construction Regulation 7(2) (b), keep a Health & Safety File on site at all times that must include all documentation required in terms of the Act and Regulations and must also include a list of all Contractors on site that are

accountable to the Principal Contractor and the agreements between the parties and details of work being done. A more detailed list of documents and other legal requirements that must be kept in the Health and Safety File is attached as an addendum to this document.

IMPORTANT:

The Health and Safety File will remain the property of the Client and/or its Agent on its behalf throughout the period of the project and shall be consolidated and handed over to the Client and/or its Agent on its behalf at the time of completion of the project.

The Construction Health and Safety Agent appointed through the PSP will be responsible for the review and approval of the Health and Safety Plan.

10. OH&S GOALS AND OBJECTIVES AND ARRANGEMENTS FOR MONITORING AND REVIEWING OH&S PERFORMANCE

The Principal Contractor is required to maintain an acceptable disabling incident frequency rate (DIFR) and report monthly on their performance to the Client or its Agent.

11. IDENTIFICATION OF HAZARDS AND DEVELOPMENT OF RISK ASSESSMENTS, STANDARD WORKING PROCEDURES (SWP) AND METHOD STATEMENTS

The Principal Contractor is required to perform risk assessments, compile Standard Working Procedures (SWP) and Method Statements for each activity executed in the contract or project (see 13. below "Project/Site Specific Requirements").

The identification of hazards is over and above the hazards identification program and those hazards identified during the drafting of the Health and Safety Plan.

12. ARRANGEMENTS FOR MONITORING AND REVIEW

12.1 Periodical Audit by Principal Contractor/ Client or its Agent.

The Client and/or its Agent on its behalf will be conducting Periodic Audits at times agreed with the Principal Contractor to comply with Construction Regulation 7(1) (c) (vii) to ensure that the principal Contractor has implemented, is adhering to and is maintaining the agreed and approved OH&S Plan (audits must be done at least once every 30 days).

12.2 Other audits and inspections by client or agent.

The Client or its Agent reserves the right to conduct any ad hoc audits and inspections as it deems necessary.

A representative of the Principal Contractor and the relevant Health and Safety Representative(s) (SHE-Reps) must accompany the Client and/or its Agent on all Audits and Inspections and may conduct their own audit/inspection simultaneously. Each party will, however, take responsibility for the results of his/her own audit/inspection results. The Client or its Agent may request a copy of the Principal Contractor SHE Committee meeting minutes, reflecting possible recommendations made by that committee to the employer for reference purposes.

12.3 Incident Investigation and Reporting

12.3.1 The PSP and Principal Contractor shall report all incidents where an employee is injured on duty to the extent that he/she:

- Dies;
- becomes unconscious;
- loses a limb or part of a limb;
- is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed.

or where:

- a major incident occurred;
- the health or safety of any person was endangered (this could be a near miss);
- where a dangerous substance was spilled;
- the uncontrolled release of any substance under pressure took place;
- machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects;
- machinery ran out of control.

To the Provincial Director of the Department of Labour within seven days and at the same time to the Client or its Agent.

Refer in this regard to Section 24 of the Act, Construction Regulation 5(3) & General Administrative Regulation 8.

- 12.3.2 The Principal Contractor is required to provide the Client and/or its Agent on its behalf with copies of all statutory reports required in terms of the Act and the Regulations;
- 12.3.3 The Principal Contractor is required to provide the Client and/or its Agent on its behalf with a monthly Internal OHS Compliance Audit Report
- 12.3.4 The Principal Contractor is required to provide a.s.a.p. the Client and/or its Agent on its behalf with copies of all internal and external accident/incident investigation reports including the reports contemplated in clause 12.7, 12.8.2, 15, 16, 17, 21 and 22 below. As soon as the occurrence of any accident/incident of whatever nature comes to the notice of the Principal Contractor, it shall be reported immediately to any of the following:
- Project Manager / Client / Agent; and
 - Health and Safety Manager / Consultant.

12.4 Review

- The Principal Contractor is to review the Hazard Identification, Risk Assessments and Standard Work Processes at each Construction Planning and Progress Report meeting as the construction work develops and progresses. Each time changes are made to the designs, plans and construction methods and processes. These items must be reviewed;
- The Principal Contractor must provide the Client and/or its Agent on its behalf, other Contractors and all other concerned parties with copies of any changes, alterations or amendments as contemplated in the above paragraph.

12.5 Site Rules and other Restrictions

12.5.1 Site OH&S Rules

The Principal Contractor must develop a set of site-specific Health and Safety Rules that will be applied to regulate the Health and Safety Plan and associated aspects of the construction project.

When required for a site by law, visitors and non-employees upon entering the site shall be issued with the proper Personal Protective Equipment (PPE) as and when necessary.

12.5.2 Security Arrangements

- The Principal Contractor must establish site access rules and implement and maintain these throughout the construction period. Access control must include the rule that non-employees shall at all times be provided with fulltime supervision while on site;
- Additional Access Rules may be imposed by the Project Manager or Client Agent in the interest of the safety of TBA employees, visitors and customers;
- The Principal Contractor must develop a set of Security rules and procedures for their allocated site and maintain these throughout the construction period. These security rules must be submitted to the Client for approval. Additional security measures or rules may be specified for risk minimisation purposes;
- If not already tasked to the H&S Officer appointed in terms of Construction Regulation 8(5), the Principal Contractor must appoint a competent Emergency Controller who must develop contingency plans for any emergency that may arise on site as indicated by the risk assessments.

These must include a monthly practice/testing programme for the plans e.g. January: trench collapse, February: flooding etc. and practiced/tested with all persons on site at the time, participating.

12.6 Training

The contents and syllabi of all training required by the Act and Regulations including any other related or relevant training as required must be included in the Principal Contractor's Health and Safety Plan and Health and Safety File.

12.6.1 General Induction Training

All employees of the Principal and other Contractors must be in possession of proof of General Induction training.

12.6.2 Site Specific Induction Training

All employees of the Principal and other Contractors must be in possession of Site Specific Occupational Health and Safety Induction or other qualifying training.

12.6.3 Other Training

- All operators, drivers and users of construction vehicles, mobile plant and other equipment must be in possession of valid licenses and proof of training;
- All employees performing jobs requiring specific training in terms of the OHS Act 85, 1993 and Regulations must submit proof of such training;
- Occupational Health and Safety Training Requirements: (as required by the Construction Regulations 2014 and as indicated by the Health and Safety Specification Document & the Risk Assessment/s and recommendations by the Health and Safety Committee):
 - General Induction (Section 8 of the Act & CR 7(5));
 - Site/Job Specific Induction (also visitors) (Sections 8 & 9 of the Act & CR 7(5)&(6));
 - Site/Project Manager;
 - Construction Supervisor;
 - OH&S Representatives (Section 18 (3) of the Act);
 - Training of the Appointees indicated in 12.6.1 & 12.6.2 above;
 - Operation of Cranes (Driven Machinery Regulations 18 (11);
 - Operators & Drivers of Construction Vehicles & Mobile Plant (Construction Regulation 23);
 - Basic Fire Prevention & Protection (Environmental Regulations 9 and Construction Regulation 29);
 - As a minimum basic First Aid to be upgraded when necessary (General Safety Regulations 3);
 - Storekeeping Methods & Safe Stacking (Construction Regulation 28);
 - Emergency, Security and Fire Coordinator.

12.7 Incident Investigation

The Principal Contractor is responsible to oversee the investigation of all incidents. This will include first aid, medical treatment by a doctor and hospital or clinic cases. (General Administrative Regulation 9).

All incidents must be recorded in the Accident/Incident Register. (General Administrative Regulation 9).

The Principal Contractor is responsible for the investigation of all incidents as described in Section 24 (1) (b) & (c) of the Act and keeping a record of the results of such investigations including the corrective action to prevent similar incidents in future.

The Principal Contractor is responsible for the investigation of all road traffic accidents relating to the construction site and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.

Notwithstanding the requirements of Section 24 of the Act, All incidents shall be investigated and reported on in writing, irrespective of whether such incident gave rise to injury or damage.

12.8 SHE Representatives and SHE Committees

12.8.1 Designation of SHE Representatives

- Where the Principal Contractor employs more than 20 persons (including the employees of the Contractors) he has to appoint a minimum of one SHE Representatives, then he must appoint one for every 50 employees or part thereof. (*OHS Act 85, 1993 - Section 17 and GAR 6; 7.*);
- These SHE Representatives shall be designated in writing.

12.8.2 Duties and Functions of the H&S Representatives (*This is based on the Construction norms and is not an exhaustive list*)

- The Principal Contractor must ensure that the designated SHE Representatives conduct a formal weekly inspection of their respective areas of responsibility using a checklist. All findings must be reported to the Principal Contractor. The reports shall be submitted to the Health and Safety Committee for action. Record shall be kept in the form of minutes;
- SHE Representatives must take part in incident investigations;
- SHE Representatives shall be members of at least one SHE Committee and attend all the SHE Committee meetings.

12.8.3 Establishment of H&S Committee(s)

The Principal Contractor must establish H&S Committees consisting of designated H&S Representatives together with a number of Employers Representatives appointed as per Section 19(3) that are not allowed to exceed the number of H&S Representatives on the committee. The persons nominated by the employer on an H&S Committee must be designated in writing for such period as may be determined by him. The H&S Committee shall co-opt advisory (temporary) members (who are not allowed to vote on issues discussed) and determine the procedures of the meetings including the chairmanship.

Legally, the H&S Committee must meet minimum every 3 months, but it is advised that they meet at least once a month and consider, at least, the following Agenda for the *first meeting*. Thereafter the H&S Committee shall determine its own procedures as per the previous paragraph.

Agenda:

- 1) Opening and determining of chairmanship (only when necessary);
- 2) Facilities and Hygiene;
- 3) Housekeeping ;
- 4) Incidents and incident investigation; and
- 5) Inspection checklists and Registers:
 - a. H&S Rep. Inspections;
 - b. Matters of First Aid;
 - c. Scaffolding;
 - d. Ladders;
 - e. Excavations;
 - f. Portable Electric Equipment;
 - g. Fire Equipment;
 - h. Explosive Power Tools;
 - i. Power Hand tools;
 - j. Incident Investigation reports;
 - k. Pressure Equipment and vessels under pressure;
 - l. Personal Protective Equipment.
- 6) Safety Statistics;
- 7) Health and Safety Awareness / Training / Posters and Symbolic signs;
- 8) First Aiders and First Aid equipment;
- 9) Demarcation of work- /hazardous-/safe areas/walkways;
- 10) Safety Suggestions;
- 11) Environmental Management;
- 12) General;
- 13) Date of Next Meeting; and
- 14) Closing.

13. PROJECT/SITE SPECIFIC REQUIREMENTS

The following is a list of specific activities and considerations that have been identified for the project and site and for which Risk Assessments, Standard Working Procedures (SWP), management and control measures and Method Statements (where necessary) have to be developed by **TBA** to ensure legal compliance to legislation:

Description of the site and scope of works (CR5 (1) (b);

Scope of works;

The PC is to display a site lay-out drawing to indicate at least the following (Not exclusive):

- PC site office, access and egress arrangements inclusive of delivery arrangements, employee facilities and highlighted “No-Go” areas;
- Emergency assembly points.

Other

- Project title sheet;
- A depiction of total people on site daily;
- A list of Sub-contractors active on site with contact details;
- Plant and material listings;
- Emergency contact numbers;
- SHE files to note where all drawings, plans and permits are stored for all the disciplines involved in the construction phase of the project;
- Chemical inventory with MSDS references;
- First aid box and first aid arrangements;
- Fire extinguisher(s);
- Employee shaded eating area;
- Communication board.

Task Activities undertaken in the execution of the above mentioned work packages, and must be addressed in the safety plan of the contractor.

- Installation and Maintenance of Temporary Construction Electrical Supply, Lighting and Equipment;
- Adjacent properties and surrounding building exposures;
- Boundaries and Access control/Public Liability Exposures;
- Exposure to Noise;

- Exposure to Vibration;
- Protection against dehydration and heat exhaustion;
- Protection from the elements.
- Handling, Storage, removal and disposal of Asbestos Contaminated Material.

Use and Storage of Flammable Liquids and other Hazardous Substances – (the client and/or its agent appointed on its behalf to be informed of this prior to commencing of the project).

Backfilling and compacting of Trenches.

Protection against Flooding.

Use of Explosives – (the client and/or its Agent appointed on its behalf to be informed of this prior to commencing of the project) when necessary.

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 and/or its Agent on its behalf or by the Principal Contractor or any other Contractor on site.

As discovered from any accident/incident investigation.

13.1 The following are in particular requirements depending on scope of works and will form a basis for compliance audits.

1. Administrative and Legal Requirements
2. Education, Training & Promotion
3. Public Safety and Emergency Preparedness
4. Personal Protective Equipment
5. Housekeeping
6. Scaffolding, Formwork & Support work
7. Ladders
8. Electrical Safeguarding
9. Emergency Procedures /Fire Prevention and Protection
10. Excavations and Demolition
11. Tools
12. Cranes and other driven machinery
13. Personnel and Material Hoists
14. Transport and Materials Handling
15. Site Plant and Machinery

16. Stacking and Storage Site/ Yards/ Site Workshops Specifics
17. Health and Hygiene; and
18. Facilities.

14. OUTLINED DATA, REFERENCES AND INFORMATION ON CERTAIN AND/OR SPECIFIC OBLIGATORY REQUIREMENTS TO ENSURE COMPLIANCE

Administrative & Legal Requirements

OHS Act Section/ Regulation	Subject	Requirements
Construction Regulations 3 & 4	Application for construction work permit Notice of carrying out Construction work	Department of Labour must be notified by the client and by the contractor. Copy of Notice available on Site. Work permit to be displayed at the entrance if required.
General Admin Regulations 4	Copy of OH&S Act (Act 85 of 1993)	Updated copy of Act & Regulations available on site. Readily available for perusal by employees.
COID Act Section 80	Registration with Compensation Insurer	Written proof of registration/Letter of good standing available on Site
Construction Regulations 5(1)	SHE Specification and Program	SHE Spec received from Client and/or its Agent SHE Program developed and updated.
Section 8(2)(d) of the OHS Act and Regulations 5(1) & 7 of the Construction.	Hazard Identification & Risk Assessment	Identifications of hazards/Recorded Risk Assessment and – Plan drawn up/Updated Risk Assessment Plan available on Site Employees/Contractors informed/trained
Section 16(2)	Assigned duties (Managers)	Responsibility of complying with the OH&S Act assigned to other person/s by CEO.
Construction Regulations 8(1)	Designation of Person Responsible on Site	Competent person appointed in writing as Construction Manager with job description
Construction Regulations 8(2)	Designation of Assistant for above	Competent person appointed in writing as Assistant Construction Manager with job description
Section 17 & 18 General Administrative Regulations 6 & 7	Designation of SHE Representatives	More than 20 employees - one H&S Representative, one additional H&S Rep. for each 50 employees or part thereof. Designation in writing, period and area of responsibility specified in terms of GAR 6 & 7 Meaningful H&S Rep. reports. Reports actioned by Management.
Section 19 & 20 General Administrative Regulations 5	Health & Safety Committee/s	SHE Committee/s established. All SHE Reps shall be members of SHE Committees Additional members are appointed in writing. Meetings held monthly, Minutes kept. Actioned by Management.
Section 37(1) & (2)	Agreement with Mandatories/ Contractors	Written agreement with Contractors List of Contractors displayed. Proof of Registration with Compensation Insurer/Letter of Good Standing (COID) Construction Manager designated Written arrangements regarding SHE Reps and Committee (OHSA Section 17,18) Written arrangements for First Aid (COID)

Section 24 & General Admin Regulations 8, Construction Regulation 5(3) & COID Act Sect.38, 39 & 41	Reporting of Incidents (Dept. of Labour)	Incident Reporting Procedure displayed. All incidents in terms of Sect. 24 reported to the Provincial Director, Department of Labour, within 3 days. (Annexure 1?)(WCL 1 or 2) and to the Client and/or its Agent on its behalf Cases of Occupational Disease Reported Copies of Reports available on Site Record of First Aid injuries kept
General Admin Regulations 9	Investigation and Recording of Incidents	All injuries which resulted in the person receiving medical treatment other than first aid, recorded and investigated by investigator designated in writing. Copies of Reports (Annexure 1) available on Site Tabled at H&S Committee meeting Action taken by Site Management.
Construction Regulations 10	Fall Prevention & Protection	Competent person appointed to draw up and supervise the Fall Protection Plan Proof of appointees competence available on Site Risk Assessment carried out for work at heights Fall Protection Plan drawn up/updated and available on Site
Construction Regulations 10(5)	Roof work	Competent person appointed to plan & supervise Roof work. Proof of appointees competence available on Site Risk Assessment carried out Roof work Plan drawn up/updated Roof work inspect before each shift. Inspection register kept Employees medically examined for physical & psychological fitness. Written proof on site
Construction Regulations 11	Structures	Information re. the structure being erected received from the Designer including: - geo-science technical report where relevant - the design loading of the structure - the methods & sequence of construction - anticipated dangers/hazards/special measures to construct safely Risk Assessment carried out Method statement drawn up All above available on Site Structures inspected before each shift. Inspections register kept
Construction Regulations 12	Temporary Works	Competent persons appointed in writing to: - Inspect structures - Ensure that design are followed
Construction Regulations 13	Excavations	Competent person/s appointed in writing to supervise and inspect excavation work Written Proof of Competence of above appointee/s available on Site Risk Assessment carried out Inspected: - before every shift - after any blasting - after an unexpected fall of ground - after any substantial damage to the shoring - after rain. Inspections register kept Method statement developed where explosives will be/ are used

Construction Regulations 14	Demolition Work	Competent person/s appointed in writing to supervise and control Demolition work Written Proof of Competence of above appointee/s available on Site Risk Assessment carried out Engineering survey and Method Statement available on Site Inspections to prevent premature collapse carried out by competent person before each shift. Inspection register kept
Construction Regulations 15	Tunneling	No people permitted to enter a tunnel if which has a height dimension of less than 800 millimetres
Construction Regulations 16	Scaffolding	Competent persons appointed in writing to: - erect scaffolding (Scaffold Erector/s) - act as Scaffold Team Leaders - inspect Scaffolding weekly and after inclement weather (Scaffold Inspector/s) Written Proof of Competence of above appointees available on Site Copy of SANS 10085 available on Site Risk Assessment carried out
Construction Regulations 17	Suspended Platforms	Competent persons appointed in writing to: - control the erection of Suspended platforms - act as Suspended platforms Team Leaders - inspect Suspended Scaffolding weekly and after inclement weather Risk Assessment conducted Certificate of Authorization issued by a registered professional engineer available on Site/copy forwarded to the Department of Labour The following inspections of the whole installation carried out by a competent person - after erection and before use - daily prior to use. Inspection register kept The following tests to be conducted by a competent person: - load test of whole installation and working parts every three months - hoisting ropes/hooks/load attaching devices quarterly. Tests log book kept Employees working on Suspended Platform medically examined for physical & psychological fitness. Written proof available
Construction Regulations 18	Rope Access Work	Competent person appointed in writing as a rope access supervisor to supervise the activities. Operators must be licensed to carry out their work. A site specific fall protection plan must be available to the specific site and environment.
Construction Regulations 19	Materials Hoist	Competent person appointed in writing to inspect the Material Hoist Written Proof of Competence of above appointee available on Site. Materials Hoist to be inspected weekly by a competent person. Inspections register kept.
Construction Regulations 20	Bulk Mixing Plants	Competent person appointed to control the operation of the Batch Plant and the service, maintenance and cleaning. Register kept of above

		Risk Assessment carried out Batch Plant to be inspected weekly by a competent person. Inspections register kept
Construction Regulations 21	Explosive actuated fastening device	Competent person appointed to control the issue of the Explosive Powered Tools & cartridges and the service, maintenance and cleaning. Register kept. Empty cartridge cases/nails/fixing bolts returns recorded Cleaned daily after use Work areas are demarcated!
Construction Regulations 22/ Driven Machinery Regulations 18 & 19	Cranes & Lifting Machines Equipment	Competent person appointed in writing to inspect Cranes, Lifting Machines & Equipment Written Proof of Competence of above appointee available on Site. Cranes & Lifting tackle identified/numbered Register kept for Lifting Tackle Log Book kept for each individual Crane Inspection: - All cranes - daily by operator - Tower Crane/s - after erection/6monthly - Other cranes - annually by comp. person - Lifting tackle(slings/ropes/chain slings etc.) - daily or before every new application
Construction Regulations 24/Electrical Machinery Regulations 9 & 10/ Electrical Installation Regulations	Inspection & Maintenance of Electrical Installation & Equipment (including portable electrical tools)	Competent person appointed in writing to inspect/test the installation and equipment. Written Proof of Competence of above appointee available on Site. Inspections: - Electrical Installation & equipment inspected after installation, after alterations and quarterly. Inspection Registers kept Portable electric tools, electric lights and extension leads must be uniquely identified/numbered. Weekly visual inspection by User/Issuer/Storeman. Register kept.
Construction Regulations 25	Use of temporary storage of flammable liquids on construction site	Flammable liquids must be stored in a way that it does not cause a fire or explosion hazard, and that the workplace is well ventilated. Suitable notices to be posted.
Construction Regulations 26	Water environments	If construction is performed over on in close proximity of water, then provision must be made to prevent persons from falling into water and have a rescue plan in case of such incident happening to prevent drowning.
Construction Regulations 27	Housekeeping	Suitable housekeeping measures must be implemented to reduce the risk of injuries and damage to the structures, machinery, etc. Debris must be removed with a chute from a high place. Construction area must be fenced off.
Construction Regulations 28/ General Safety Regulations 8(1)(a)	Designation of Stacking & Storage Supervisor.	Competent Person/s with specific knowledge and experience designated to supervise all Stacking & Storage Written Proof of Competence of above appointee available on Site
Construction Regulations 29/ Environmental Regulation 9	Designation of a Person to Co-ordinate Emergency Planning and Fire Protection	Person/s with specific knowledge and experience designated to co-ordinate emergency contingency planning and execution and fire prevention measures Emergency Evacuation Plan developed: - Drilled/Practiced - Plan & Records of Drills/Practices available on Site Fire Risk Assessment carried out All Fire Extinguishing Equipment identified and on <i>register</i>. Inspected weekly. And inspection register kept. Serviced

		annually
Construction Regulations 30	Employees Facilities	The contractor must provide and maintain in hygienic condition facilities for employees that include: • Showers (1 for every 15 employees) • Sanitary facilities for each sex (1 for every 30 employees) • Changing facilities for each sex • Sheltered eating areas
General Safety Regulations 3	First Aid	Every workplace provided with sufficient number of First Aid boxes. (Required where 5 persons or more are employed) First Aid freely available Equipment as per the list in the OH&S Act. One qualified First Aider appointed for every 50 employees. (Required where more than 10 persons are employed) List of First Aid Officials and Certificates Name of person/s in charge of First Aid box/es displayed. Location of First Aid box/es clearly indicated. Signs instructing employees to report all injuries/illness including first aid injuries
General Safety Regulations 2	Personal Safety Equipment (PPE)	PPE Risk Assessment carried out Items of PPE prescribed/use enforced Records of Issue kept Undertaking by Employee to use/wear PPE. PPE remains property of Employer, and is not to be removed from the premises GSR 2(4)
General Safety Regulations 9	Inspection & Use of Welding/Flame Cutting Equipment	Competent Person/s with specific knowledge and experience designated to Inspect Electric Arc, Gas Welding and Flame Cutting Equipment Written Proof of Competence of above appointee available on Site All new vessels checked for leaks, leaking vessels NOT taken into stock but returned to supplier immediately Equipment identified/numbered and entered into a register Equipment inspected weekly. Inspection Register kept Separate, purpose made storage available for full and empty vessels
Hazardous Chemical Substances (HCS) Regulations Construction Regulations 25	Control of Storage & Usage of HCS and Flammables	Competent Person/s with specific knowledge and experience designated to Control the Storage & Usage of HCS (including Flammables) Written Proof of Competence of above appointee available on Site Risk Assessment carried out Register of HCS kept/used on Site Separate, purpose made storage available for full and empty containers
Pressure Equipment Regulations	Pressure Equipment	Competent Person/s with specific knowledge and experience designated to supervise the use, storage, maintenance, statutory inspections & testing of Pressure Equipment. Written Proof of Competence of above appointee available on Site Risk Assessment carried out Certificates of Manufacture available on Site Register of Pressure Equipment on Site Inspections & Testing by Approved Inspection Authority

		(AIA): - after installation/re-erection or repairs - Every 36 months. - Register/Log kept of inspections, tests. Modifications & repair
Construction Regulations 23	Construction Vehicles and Earth Moving Equipment	Operators/Drivers appointed to: - Carry out a daily inspection prior to use - Drive the vehicle/plant that he/she is competent to operate/drive Written Proof of Competence of above appointee available on Site. Record of Daily inspections kept
General Safety Regulations 13A	Inspection of Ladders	Competent person appointed in writing to inspect Ladders Ladders inspected at arrival on site and weekly thereafter. Inspections register kept. Application of the types of ladders (wooden, aluminum etc.) regulated by training and inspections and noted in register
General Safety Regulations 13B	Ramps	Competent person appointed in writing to Supervise the erection & inspection of Ramps. Inspection register kept. Daily inspected and noted in register
Asbestos Regulations 2 - 21	Handling, storage, transportation	All applicable requirements as per scope of work; Asbestos regulations 2 - 21

Education & Training

Subject	Requirement
Company OH&S Policy Section 7(1)	Policy signed by CEO and published/Circulated to Employees Policy displayed on Employee Notice Boards Management and employees committed.
Company/Site SHE Rules (Section 13(a))	Rules published Rules displayed on Employee Notice Boards Rules issued and employees effectively informed or trained: written proof Follow-up to ensure employees understand/adhere to the policy and rules.
Induction & Task Safety Training (Section 13(a))	All new employees receive SHE Induction Training. Training includes Task Safety Instructions. Employees acknowledge receipt of training. Follow-up to ensure employees understand/adhere to instructions.
General SHE Training (Section 13(a))	All current employees receive specified SHE training: written proof Operators of Plant and Equipment receive specified training Follow-up to ensure employees understand/adhere to instructions.

Public Safety, Security Measures & Emergency Preparedness

Subject	Requirement
Notices & Signs	Notices & Signs at entrances / along perimeters indicating "No Unauthorized Entry" . Notices & Signs at entrance instructing visitors and non - employees what to do, where to go and where to report on entering the site/yard with directional signs. e.g. "Visitors to report to Office" Notices & Signs posted to warn of overhead work and other hazardous activities. e.g. General Warning Signs
Site Safeguarding	Nets, Canopies, Platforms, Fences etc. to protect members of the public passing / entering the site.
Security Measures	Access control measures/register in operation Security patrols after hours during weekends and holidays

Emergency Preparedness	Sufficient lighting after dark Guard has access to telephone/ mobile/other means of emergency communication Emergency contact numbers displayed and made available to Security & Guard Emergency Evacuation instructions posted up on all notice boards (including employees' notice boards) Emergency contingency plan available on site/in yard Doors open outwards/unobstructed Emergency alarm audible all over (including in toilets)
Emergency Drill and Evacuation	Adequate No. of employees trained to use Fire Fighting Equipment. Emergency Evacuation Plan available, displayed and practiced.

Personal Protective Equipment

Subject	Requirement
PPE needs analysis	Need for PPE identified and prescribed in writing. PPE remain property of Employer, not to be removed from premises GSR 2(4)
Head Protection 	All persons on site wearing Hardhats including Contractors and Visitors (where prescribed)
Foot Protection 	All employees on site wearing Safety Footwear including Gumboots for concrete / wet work and non-slip shoes for roof work. Visitors to wear same upon request or where prescribed
Eye and Face Protection 	<u>Eye and Face (also Hand and Body) Protection</u> (Goggles, Face Shields, Welding Helmets etc.) used when operating the following: • Jack/ Kango Hammers • Angle / Bench Grinders • Electric Drills (Overhead work into concrete / cement / bricks • Explosive Powered tools • Concrete Vibrators / Pokers • Hammers & Chisels • Cutting / Welding Torches • Cutting Tools and Equipment • Guillotines and Benders • Shears • Sanders and Sanding Machines • CO2 and Arc Welding Equipment • Skill / Bench Saws • Spray Painting Equipment etc.
Hearing Protection 	<u>Hearing Protectors</u> (Muffs, Plugs etc.) used when operating the following: • Jack / Kango Hammers • Explosive Powered Tools • Wood/Aluminum Working Machines e.g. saws, planers, routers
Hand Protection 	<u>Protective Gloves</u> worn by employees handling / using: • Cement / Bricks / Steel / Chemicals • Welding Equipment • Hammers & Chisels

	• Jack / Kango Hammers etc. Suitable/efficient prescribed <u>Respirators</u> worn correctly by employees handling / using: • Dry cement • Dusty areas • Hazardous chemicals • Angle Grinders • Spray Painting etc.
Fall Prevention Equipment 	Suitable <u>Safety harnesses</u> / Fall Arrest Equipment correctly used by persons working on / in unguarded, elevated positions e.g.: • Scaffolding • Riggers • Lift shafts • Edge work • Ring beam edges etc. Other methods of fall prevention applied e.g. catch nets
Protective Clothing 	All jobs requiring protective clothing (Overalls, Rain Wear, Welding Aprons etc.) Identified and clothing worn. Disposable overalls when Asbestos is handled.
PPE Issue & Control	Identified Equipment issued free of charge. All PPE maintained in good condition. (Regular checks). Workers instructed in the proper use & maintenance of PPE. Commitment obtained from wearer accepting conditions and to wear the PPE. Record of PPE issued kept on H&S File. PPE remain property of Employer, not to be removed from premises GSR 2(4)

Housekeeping

Subject	Requirement
Scrap Removal System	All items of Scrap/Unusable Off-cuts/Rubble and redundant material removed from working areas on a regular basis. (Daily) Scrap/Waste removal from heights by chute/hoist/crane. Nothing thrown/swept over sides. Scrap disposed of in designated containers/areas Removal from site/yard on a regular basis.
Stacking & Storage (See Section 1 for Designation & Register)	<u>Stacking:</u> * Stable, on firm level surface/base. * Prevent leaning/collapsing * Irregular shapes bonded * Not exceeding 3x the base * Stacks accessible * Removal from top only. <u>Storage:</u> * Adequate storage areas provided. * Functional – e.g. demarcated storage areas/racks/bins etc. * Special areas identified and demarcated e.g. flammable gas, cement etc. * Neat, safe, stable and square. * Store/storage areas clear of superfluous material. * Storage behind sheds etc. neat/under control.

	* Storage areas free from weeds, litter etc.
Waste Control/Reclamation	Re-usable off-cuts and other re-usable material removed daily and kept to a minimum in the work areas. All re-usable materials neatly stacked/stored in designated areas. (Nails removed/bent over in re-usable timber). Issue of hardware/nails/screws/cartridges etc. controlled and return of unused items monitored.
Asbestos contaminated material (waste)	On site storage prior removal of this material must be advised by a registered Asbestos Contractor (AAIA certified). Asbestos contaminated material must be removed from the site by a company registered for handling and transportation of Asbestos, certificate of accreditation to be obtained from the owner. This material must be disposed of on sites specifically designated for this purpose.
Contractors (Housekeeping)	Contractors required to comply with Housekeeping requirements.

Working at Heights (including roof work)

Subject	Requirement
Openings	Unprotected openings adequately guarded/fenced/barricaded/catch nets installed
Roof work	Roof work discontinued when bad/hazardous weather Fall protection measures (including warning notices) when working close to edges or on fragile roofing material Covers over openings in roof of robust construction/secured against displacement

Scaffolding / Formwork / Support Work

Subject	Requirement
Access/System Scaffolding	- Foundation firm / stable - Sufficient bracing. - Tied to Structure/prevented from side or cross movement - Platform boards in good condition/sufficient/secured. - Handrails and toe boards provided. - Access ladders / stairs provided. - Area/s under scaffolding tidy. - Safe/unsafe for use signs - Complying with OH&S Act/SANS 10085
Free Standing Scaffolding	- Foundation firm / stable - Sufficient bracing. - Platform boards in good condition/sufficient/secured. - Handrails and toe boards provided. - Access ladders / stairs provided. - Area/s under scaffolding tidy. - Safe/unsafe for use signs - Height to base ratio correct - Outriggers used /tied to structure where necessary - Complying with OH&S Act/SANS 10085
Mobile Scaffolding	- Foundation firm / stable - Sufficient bracing. - Platform boards in good condition/sufficient/secured. - Handrails and toe boards provided.

	• Access ladders / stairs provided. • Area/s under scaffolding tidy. • Safe/unsafe for use signs
Mobile Scaffolding	• Wheels / swivels in good condition • Brakes working and applied. • Height to base ratio correct. • Outriggers used where necessary • Complying with OH&S Act/SANS 10085
Formwork / Support Work	• All components in good condition. • Foundation firm / stable. • Adequate bracing / stability ensured. • Good workmanship / uprights straight and plumb. • Good cantilever construction. • Safe access provided. • Areas under support work tidy. • Same standards as for system scaffolding.
Special Scaffolding	• Special Scaffolding e.g. Cantilever, Jib and Truss-out scaffolds erected to an acceptable standard and inspected by specialists.
Edges & Openings	• Edges barricaded to acceptable standards. • Manhole openings covered / barricaded. • Openings in floor / other openings covered, barricaded/fenced. • Stairs provided with handrails. • Lift shafts barricaded / fenced off.

Ladders

Subject	Requirement
Physical Condition / Use & Storage	• Stepladders - hinges/stays/braces/stiles in order. • Extension ladders - ropes/rungs/stiles/safety latch/hook in order. • Extension / Straight ladders secured or tied at the bottom / top. • No joined ladders used • Wooden ladders are never painted except with varnish • Aluminum ladders NOT to be used with electrical work • All ladders stored on hooks / racks and not on ground. • Ladders protrude 900 mm above landings / platforms / roof. • Fixed ladders higher than 5 m have cages/Fall arrest system

Electricity (as part of, or additional to the manual "Safety & Switching Procedures for Electrical Installations" - see attached document)

Subject	Requirement
Electrical Distribution Boards & Earth Leakage	• Color coded / numbered / symbolic sign displayed. • Area in front kept clear and unobstructed. • Fitted with inside cover plate / openings blanked off / no exposed "live" conductors / terminals/Door kept close • Switches / circuit breakers identified. • Earth leakage protection unit fitted and operating. • Tested with instrument: Test results within 15 – 30 milliamps • Aperture/Opening/s provided for the plugging in and removal of extension leads without the need to open the door • Apertures and openings used for extension leads to be protected against the elements and especially rain.

Electrical Installations & Wiring	Temporary wiring / extension leads in good condition / no bare or exposed wires. Earthing continuity / polarity correct: Looking at the open connectors to connect the wiring, the word “Brown” has the letter ‘R’ in it, so the b’R’own wire connects to the ‘R’ight hand connector. “Blue” has the letter ‘L’ in it, so the b’L’ue wire connects to the ‘L’eft hand connector. Cables protected from mechanical damage and moisture. Correct loading observed e.g. no heating appliance used from lighting circuit etc. Light fittings/lamps protected from mechanical damage/moisture. Cable arrestors in place and used inside plugs
Physical condition of Electrical Appliances & Tools	<u>Electrical Equipment and Tools:</u> (includes all items plugging in to a 16 Amp supply socket) • Insulation / casing in good condition. • Earth wire connected/intact where not of double insulated design • Double insulation mark indicates that no earth wire is to be connected. • Cord in good condition/no bare wires/secured to machine & plug. • Plug in good condition, connected correctly and correct polarity.

Emergency and Fire Prevention and Protection

Subject	Requirement
Fire Extinguishing Equipment 	Fire Risks Identified and on record <u>The correct and adequate Fire Extinguishing Equipment available for:</u> • Offices • General Stores • Flammable Store • Fuel Storage Tank/s and catchment well • Gas Welding / Cutting operations • Where flammable substances are being used / applied. • * Equipment Easily Accessible
Maintenance	Fire equipment checked minimum monthly, serviced yearly
Location & Signs	<u>Fire Extinguishing Equipment:</u> • Clearly visible • Unobstructed • Signs posted including “No Smoking” / “No Naked Lights” where required. (Flammable store, Gas store, Fuel tanks etc.)

Storage Issue & Control of Flammables (incl. Gas cylinders) 	Storage Area provided for flammables with suitable doors, ventilation, bund etc. • Flammable store neat / tidy and no Class A combustibles. Decanting of flammable substances carried out in ignition free and adequately ventilated area. Container bonding principles applied • Only sufficient quantities issued for one task or one day’s usage • Separate, special gas cylinder store/storage area. • Gas Cylinders stored / used / transported upright and secured in trolley/cradle/structure and ventilated. • Types of Gas Cylinders clearly identified as well as the storage area and stored separately. • Full cylinders stored separately from empty cylinders. • All valves, gauges, connections, threads of all vessels to be checked regularly for leaks. • Leaking acetylene vessels to be returned to the supplier IMMEDIATELY.
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Storage, Issue & Control of Hazardous Chemical Substances (HCS) 	• HCS storage principles applied: products segregated • Only approved, non-expired HCS to be used • Only the prescribed PPE shall be used as the minimum protection • Provision made for leakage/spillage containment and ventilation • Emergency showers/eye wash facilities provided • HCS under lock & key controlled by designated person • Decanted/issued in containers as prescribed with information/warning labels • Disposal of unwanted HCS by accredited disposal agent • No dumping or disposal of any HCS on or inside the storage area or anywhere else on the project site • All vessels or containers to be regularly checked for leaks
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Excavations

Subject	Requirement
Excavations deeper than 1.5 m. Based on the risk assessment.	• Shored / braced to prevent caving / falling in. • Provided with an access ladder. • Excavations guarded/barricaded/lighted after dark in public areas • Soil dumped at least 1 m away from edge of excavation • On sloping ground soil dumped on lower side of excavation • All excavations are subject to daily inspections

Tools

Subject	Requirement
Hand Tools	<u>Shovels / Spades / Picks:</u> • Handles free from cracks and splinters • Handles fit securely • Working end sharp and true <u>Hammers:</u> • Good quality handles, no pipe or reinforcing steel handles. • Handles free from cracks and splinters • Handles fit securely <u>Chisels:</u> • No mushroomed heads / heads chamfered • Not hardened • Cutting edge sharp and square <u>Saws:</u> • Teeth sharp and set correctly • * Correct saw used for the job
Explosive Powered Tools.	• Only used by trained / authorized personnel. • Prescribed warning signs placed / displayed where tool is in use. • Work area must be properly isolated/demarcated during use of tool. • Inspected at least monthly by competent person and results recorded. • Issue and return recorded including cartridges / nails and unused cartridges / nails / empty shells recorded. • Cleaned daily after use.

Cranes

Subject	Requirement
Mobile Crane	• Only operated by trained authorized operator with valid certificate of training • Rear view mirrors • Windscreen visibility good • Windscreen wipers operating effectively • Indicators operational • Hooter working • Tyres safe/sufficient tread/pressure visibly sufficient • No missing Wheel nuts • Headlights, taillights operational • Reverse alarm working and audible and known by all employees
Mobile Crane continued	• Grease nipples and grease on all joints • No Oil leaks • Hydraulic pipes visibly sound/no leaks • No corrosion on Battery terminals • Boom visibly in good condition/no apparent damage • Cable/sheaves greased/no visible damage/split wires/corrosion and checked daily • Brakes working properly • Crane hook: Throat pop marked/safety latch fitted/functional • SWL/MML displayed • By-pass valves operational • Deflection chart displayed/visible to operator/driver • Outriggers functional used

Builder's Hoist

Subject	Requirement
Builder's Hoist	"Hoist In Operation" - sign displayed. General construction strong and free from patent defects. <u>Tower:</u> * Adequately secured / braced. * At least 900 mm available for over travel. * Barricaded at least 2 100 mm high at ground level and floors. * Landing place provided with gate at least 1 800 high. <u>Platform:</u> * No persons conveyed on platform * Steel wire ropes with breaking strength of six times max. load. * Signal systems used which may include two way radio connection. * Goods prevented from moving / falling off. * Effective brake capable of stopping and holding max. load.

Transport & Materials Handling Equipment

Subject	Requirement
Site Vehicles	• All Site Vehicles, Dumpers, Bobcats, Loaders etc.; checked daily before use by driver / operator. • Inventory of vehicles used/operated on site • Inspection by means of a checklist / results recorded. • No persons riding on equipment not designed or designated for passengers. • Site speed limit posted, enforced and not exceeded. • Drivers / Operators trained / licensed and carrying proof. • No unauthorized persons allowed to drive / operate equipment.
Conveyors	Conveyor belt nip points and drive gear guarded.

	Emergency stop/lever/brake fitted, clearly marked & accessible and tested to be functional under full load.
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Site Plant and Machinery

Subject	Requirement
Brick Cutting Machine	- Operator Trained. - Only authorized persons use the machine. - Emergency stop switch clearly marked and accessible. - Area around the machine dry and slip/trip free/clear of off-cuts - All moving drive parts guarded/electrical supply cable protected - Operator using correct PPE - eye/face/hearing/foot/hands/body.
Electric Arc Welder	- Welder Trained. - Only authorized / trained persons use welder. - Earth cable adequately earthed to work. - Electrode holder in good condition/safe - Cables, clamps & lugs/connectors in good condition. - Area in which welding machine is used is dry/protected from wet. - Welder using correct PPE - eye/ face/foot/body/respirator. - Correct transparent screens & warning signs placed
Woodworking Machines	- Operators Trained. - Only authorized persons use machines. - Provided with guards. - Guards used. - Operators using correct PPE - eye/face/feet/hearing - Circular saws strictly operated according to prescribed methods and settings - Only prescribed saw blades (cross-cut, ripping blade, smooth cut, aluminum) shall be used for various applications
Compressors	- Relief valves correctly set and locked / sealed. - Maximum Safe Working Pressure (MSWP) indicated on face of pressure gauge: not on glass cover. - All drives adequately guarded. - Receiver/lines drained daily - Hoses good condition/clamped, not wired - Compressed air NEITHER used to dust off clothing/PPE/ and work areas NOR on bare skin.
Concrete Mixer / Batch Plant	- Top platform provided with guardrails. - Dust abatement methods in use. - Operators using correct PPE - eye / hands / respirators. - All moving drive parts guarded. - Emergency stops identified / indicated and accessible. - Area kept clean/dry/and free from tripping and slipping hazards. - Operator's overseer identified and crane signals displayed and used.
Gas Welding / Flame Cutting Equipment	- Only authorized/trained persons use the equipment. - Torches and gauges in good condition. - Flashback arrestors fitted at cylinders and gauges. - Hoses in good condition/correct type/all connections with clamps. - Cylinders stored, used and transported in upright position, secured in trolley / cradle / to structure. - All cylinders regularly checked for leaks, leaking cylinders returned immediately. - Fire prevention/control methods applied/hot work permits.

Plant & Storage Yards/Site Workshops Specifics

Subject	Requirements
Section 8(2)(1) General Machinery Regulation 2(1): Supervision of the Use & Maintenance of Machinery	- Person/s with specific knowledge and experience designated in writing to supervise the Use & Maintenance of Machinery. - Critical items of Machinery identified/numbered/placed on register/inventory. - Inspection/maintenance schedules for abovementioned. - Inspections/maintenance carried out to above schedules. - Results recorded.
General Machinery Regulation 9(2): Notices re. Operation of Machinery	Schedule D Notice posted in Work areas.
Pressure Equipment Regulation 13(1)(b): Supervision of the Use & Maintenance of Vessels under Pressure or Pressure Equipment	- Person/s with specific knowledge and experience designated in writing to supervise the Use & Maintenance of Pressure Equipment. - Pressure Equipment identified/numbered/placed on register/Manufacturers plate intact. - Inspection/maintenance carried out according to schedule. - Results recorded/Test certificates available.
Lock-out Procedure	Lock-out procedure in operation
Ergonomics	- Ergonomics survey conducted – results on record. - Survey results applied.
Demarcation & Color Coding	- Demarcation principles applied - All services, pipes, electrical installation, stop-start controls, emergency controls etc. colour coded to own published or SABS standard - Employees trained to identify colour coding
Portable & Bench Grinders	- Area around grinder clear/trip/slip free - Bench grinders mounted securely/grinder generally in good condition/No excessive vibration - On/Off switch/button clearly demarcated/accessible - Adequate guards in place - Tool rest – secure/square/max. 2 mm gap, perpendicular to drive shaft - Stone/disk - correct type and size/mounted correctly/dressed - Use of Eye protection enforced
Battery Storage & Charging	- Adequately ventilated, ignition free room/area/no smoking sign/s - Batteries placed on rubber/wooden surface - Emergency shower/eye wash provided - No acid storage in area - Prescribed methods in place and adhered to when charging batteries
Ancillary Lifting Equipment	- Chain Blocks/Tirfors/jacks/mobile gantries etc. identified/numbered on register - Chains in good condition/links no excessive wear/checked daily - Lifting hooks – throat pop marked/safety latch fitted - SWL/MML marked/displayed
Presses/Guillotines/Shears	Only operated by trained/authorised persons Interlocks/lock-outs fitted/PPE worn or used at all times

Workplace Environment, Health and Hygiene

Subject	Requirement
Lighting	Adequate lighting in places where work is being executed e.g. stairwells and basements. Light fittings placed / installed causing no irritating/blinding glare. Stroboscopic effect eliminated (not only reduced) where moving objects or machinery is used
Ventilation	Adequate ventilation / extraction / exhausting in hazardous areas e.g. chemicals / adhesives / welding / petrol or diesel/ motors running and in confined spaces / basements.
Noise	Tasks identified where noise levels exceeds 85 dB at any one time. All reasonable steps taken to reduce noise levels at the source. Hearing protection used where noise levels could not be reduced to below 85 dB.
Heat Stress	Measures in place to prevent heat exhaustion in heat stress problem areas e.g. steel decks, when the WBGT index reaches 30. (See Environmental Regulation 4) Cold drinking water readily available at all times.
Ablutions	Sufficient hygiene facilities provided - 1 toilet per 30 employees (National Building Regulations prescribe chemical toilets for Construction sites) • Toilet paper available. • Sufficient showers provided. • Facilities for washing hands provided. • Soap/cleaning agent available for washing hands. • Means of drying hands available. • Lock-up changing facilities / area provided. • Ablution facilities kept hygienic and clean.
Eating / Cooking Facilities	Adequate storage facilities provided. Weather protected eating area provided, separate from changing area. Refuse bins with lids provided. Facilities kept clean and hygienic.
Pollution of Environment	Measures in place to minimize dust generation. Accumulation or littering of empty cement pockets, plastic wrapping / bags, packing materials etc. prevented. Spillage / discarding of oil, chemicals and diesel into storm water and other drains or into existing or newly dug holes/cavities on site expressly prohibited.
Hazardous Chemical Substances	All substances identified and list available e.g. acids, flammables, poisons etc. Material Safety Data Sheets (MSDS) indicating hazardous properties and emergency procedures in case of incident on file and readily available. Substances stored safely. Expiry dates meticulously checked where applicable.

15. THE PSP GENERAL DUTIES

The PSP shall at all times ensure his status of an “employer” as referred to in the Act, and will abide by his/her responsibilities, duties and functions as per the requirements of the Act and Regulations with specific reference to Section 8 of the Act.

16. THE PRINCIPAL CONTRACTOR’S SPECIFIC DUTIES

The Principal Contractor’s specific duties in terms of these specifications are detailed in the Construction Regulations as published under government notice No. 84 dated 7 February 2014.

The Principal Contractor is specifically referred to the following elements of the Construction Regulations 2014:

- Regulation No. 1 - Definitions
- Regulation No. 2 - Scope of application
- Regulation No. 3 - Application for construction work permit
- Regulation No. 4 - Notification of construction work
- Regulation No. 5 - Duties of client
- Regulation No. 6 - Duties of designer
- Regulation No. 7 - Principal Contractor and Contractor
- Regulation No. 8 - Management and supervision of construction work
- Regulation No. 9 - Risk Assessment for construction work
- Regulation No. 10 - Fall protection
- Regulation No. 11 - Structures
- Regulation No. 12 - Temporary works
- Regulation No. 13 - Excavation
- Regulation No. 14 - Demolition work
- Regulation No. 15 - Tunneling
- Regulation No. 16 - Scaffolding
- Regulation No. 17 - Suspended platforms
- Regulation No. 18 - Rope access work
- Regulation No. 19 - Material hoists
- Regulation No. 21 - Explosive actuated fastening device
- Regulation No. 22 - Cranes
- Regulation No. 23 - Construction vehicles and mobile plant
- Regulation No. 24 - Electrical installations and machinery on construction sites
- Regulation No. 25 - Use and temporary storage of flammable liquids on construction sites
- Regulation No. 26 - Water environments
- Regulation No. 27 - Housekeeping and general safeguarding on construction sites
- Regulation No. 28 - Stacking & Storage on construction sites
- Regulation No. 29 - Fire precautions on construction sites
- Regulation No. 32 - Approved Inspection authorities
- Regulation No. 33 - Offences and penalties

The Principal Contractor shall ensure compliance to the Act and its Regulations and specifically to the above regulations, and document each record in the Health and Safety File.

17. THE PRINCIPAL CONTRACTOR'S SPECIFIC RESPONSIBILITIES WITH REGARDS TO HAZARDOUS ACTIVITIES

The following activities are identifiable as hazardous in terms of the Construction Regulations 2014.

The contractor shall execute the activities in accordance with the following Construction Regulations 2014 and other applicable regulations of the Act:

Regulation No. 10 - Fall protection

Regulation No. 11 - Structures

Regulation No. 13 - Excavation work

Regulation No. 14 - Demolition work

Regulation No. 15 - Tunneling

Regulation No. 16 - Scaffolding

Regulation No. 17 - Suspended platforms

Regulation No. 18 - Rope access work

Regulation No. 19 - Material hoists

Regulation No. 20 - Bulk mixing plant

Regulation No. 21 - Explosive actuated fastening device

Regulation No. 22 - Cranes

Regulation No. 23 - Construction vehicles and mobile plant.

Regulation No. 24 - Electrical installations and machinery on construction sites

Regulation No. 25 - Use and temporary storage of flammable liquids on construction sites

Regulation No. 26 - Water environments

Regulation No. 27 - Housekeeping on construction sites

Regulation No. 29 - Fire precautions on construction sites.

All of the above requirements will be read in conjunction with the relevant regulations and health and safety standards as required by the Act. All documents and records required by the Construction Regulations 2014 will be kept in the Health and Safety File and will be made available at any time when required by the client or his representative, or on request to an interested party.

18. GENERAL NOTES TO THE PRINCIPAL CONTRACTOR

Legal Framework and obligations

The more important Acts and relevant subordinate/secondary legislation as well as other (inter alia Local Government) legislation that also apply to the project as well as to project owned buildings and premises: -

(i) The latest issue of SABS 0142: "Code of Practice for the Wiring of Premises";

- (ii) The Local Government Ordinance 1939 (Ordinance 17 of 1939) as amended and the municipal by-laws and any special requirements of the local supply authority;
- (iii) The Fire Brigade Services Act 1987, Act 99 of 1987 as amended;
- (iv) National Building Regulations made under the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), and promulgated by Government Notice No. R. 2378 of 30 July 1990, as amended by Government Notices No's R. 432 of 8 March 1991, R. 919 of 30 July 1999 and R. 547 of 30 May 2008; (SANS 100400);
- (v) The Post Office Act 1958 (Act 44 of 1958) as amended;
- (vi) The Electricity Act 1984, Act 41 of 1984;
- (vii) The Regulations of Local Gas Board(s), including Publications of the SABS Standards and Codes of Practice, with specific reference to GNR 17468 dated 4th October 1997;
- (viii) Legislation pertaining to water usage and the environment;
- (ix) Legislation governing the use of equipment, which may emit radiation (e.g. X-Rays etc.)
- (x) Common Law

Legal Liabilities

Common Law and Legislation
Based on two main criteria –

- Would the reasonable person have foreseen the hazard?
That is a reasonable person in that specific position, taking experience, qualifications, authority, position in the organization etc. into consideration
- Would the reasonable person have taken precautionary measures (action) to prevent or limit the hazard?

Negligence can be proven on failure on any or both of the above criteria

(There may not necessarily be a relationship between criminal and civil liability!)

19. HOUSE KEEPING

Good housekeeping will be maintained at all times as per Construction Regulation 27. Poor housekeeping contributes to three major problems, namely, costly or increased accidents, fire or fire hazards and reduction in production. Good housekeeping will enhance production time.

Particular emphasis is to be placed on the following crucial elements of a construction site:

- Phase priorities and production/plant layout;
- Enclosures;

- Pits, openings and shoring;
- Storage facilities;
- Effective, sufficient and maintained lighting or illumination;
- Principal sources of injuries e.g. stairways, runways, ramps, loose building material;
- Oil, grease, water, waste, rubble, glass, storm water;
- Color coding;
- Demarcations;
- Pollution;
- Waste disposal;
- Ablution and hygiene facilities; and
- First aid.

This list must not be taken to be exclusive or exhaustive!

In promotion of environmental control all waste, rubble, scrap etc., will be disposed of at a registered dump site and records will be maintained. Where it is found to be impractical to use a registered dump site or it is not available, the Principal Contractor will ensure that the matter is brought to record with the client or his representative, after which suitable, acceptable alternatives will be sought and applied.

Dross and refuse from metals, and waste matters or by-products whose nature is such that they are poisonous or capable of fermentation, putrefaction or constituting a nuisance shall be treated or disposed of by methods approved of by an inspector.

NOTE: No employer (Principal Contractor) shall require or permit any person to work at night or after hours unless there is adequate, suitable artificial lighting including support services in respect of Health and Safety.

20. LOCKOUT SYSTEMS - ELECTRICAL

A system of control shall be established in order that no unauthorized person can energize a circuit, open a valve, or activate a machine on which people are working or doing maintenance, even if equipment, plant or machinery is out of commission for any period, thus eliminating injuries and damage to people and equipment as far as is reasonably practicable.

Physical/mechanical lock-out systems shall be part of the safety system and included in training.

Lockouts shall be tagged and the system tested before commencing with any work or repairs.

21. INCIDENT INVESTIGATION

Inspection and reporting is the best way in which a responsible contractor can control his area of responsibility. All incidents therefore, irrespective of whether it gave rise to loss, injury, damage or not, shall be investigated and the results recorded in the Health and Safety File.

22. GENERAL

The project under control of the Principal Contractor shall be subject to periodic health and safety audits that will be conducted by the client at intervals agreed upon between the Principal Contractor and the client, provided such intervals will not exceed periods of one month. The Principal Contractor is to ensure that he/she and all persons under his control on the construction site shall adhere to the above specifications, as non-conformance will lead to the client taking action as directed by Construction Regulation 5.1(q). The Principal Contractor should note that he/she shall be held liable for any anomalies including costs and resulting deficiencies due to delays caused by non-conformance and/or non-compliance to the above Health and Safety Specifications and the Health and Safety Plan based on these specifications.

23. IMPORTANT LISTS AND RECORDS TO BE KEPT

The following are lists of several records that are to be kept in terms of the Construction Regulations 2014. The lists are:

- List of appointments;
- List of record keeping responsibilities; and
- Inspection checklist.

These lists and documents are to be used as a point of reference to determine which components of the Act would be applicable to a particular site or task or project, as was intended under paragraph 1 ("Preamble") above.

23.1 LIST OF APPOINTMENTS

See clause 5.1 of appointments needed

23.2 LIST OF RECORD KEEPING RESPONSIBILITIES

ITEM	CR	RECORD TO BE KEPT	RESPONSIBLE PERSON
1.	3(2)	Application for construction work permit to Provincial Director – Annexure 1, where applicable Available on site	Client
2.	4(1)	Notification to the Provincial Director – Annexure 2, where applicable	Principal Contractor & Contractor

		Available on site	
3.	5(1)(m)	Copy of Principal Contractor's Health & Safety Plan Available on request	Client
4.	7(d)	Copy of Principal Contractor's Health & Safety Plan As well as each Contractor's Health & Safety Plan Available on request	Principal Contractor
5.	7(b)	Health and Safety File opened and kept on site (including all documentation required i.t.o. OHSA & Regulations Available on request	All Contractor
6.	7(e)	Consolidated Health and Safety File handed to Client on completion of Construction work. To include all documentation required i.t.o. OHSA & Regulations and records of all drawings, designs, materials used and similar information on the structure	Principal Contractor
7.	7(f)	Comprehensive and Updated List of all Contractors on site, the agreements between the parties and the work being done Included in Health and Safety file and available on request	Principal Contractor
ITEM	CR	RECORD TO BE KEPT	RESPONSIBLE PERSON
8.	8(6)	Keep record on the Health and Safety Officers registration with a statutory body approved by the Chief Inspector.	Contractor
9.	9(1)	Risk Assessment - Available on site for inspection	Contractor
10.	7 (5)	Proof of Health and Safety Induction Training	Every Employee on site
11.	10(3)	Construction Manager [CR 8(1)] has latest updated version of Fall Protection Plan [CR 10(1)]	Contractor
12.	11(2)(b)	Record of inspections of the structure [First 2 years – once every 6 months, thereafter yearly] - Available on request	Owner of Structure
13.	11(2)(c)	Maintenance records - safety of structure - Available on request	Owner of Structure
14.	13(2)(h)	Record of excavation inspection - On site available on request	Contractor
15.	17(11)	Suspended Platform inspection and performance test records Kept on site available, on request	Contractor
16.	19(8)(c)	Material Hoist daily inspection entered and signed in record book kept on the premises	Contractor
17.	19(8)(d)	Maintenance records for Material Hoist - Available on site	Contractor
18.	20(8)	Records of Batch Plant maintenance and repairs On site available for inspection	Contractor
19.	21(2)(g)(ii)	Issuing and collection of cartridges and nails or studs (Explosive Powered Tools) recorded in register – recipient signed for receipt as well as return	Contractor
22.	23(1)(k)	Findings of daily inspections (prior to use) of Construction Vehicles and Mobile Plant	Contractor
23.	24(d)	Record of temporary electrical installation inspections [once a week] and electrical machinery [daily before use] in a register and kept on site	Contractor
24.	29(f)	Fire Evacuation Plan	Contractor

23.3 INSPECTION CHECKLIST

EMPLOYER DETAILS	
Employer:	
Registered Name of Enterprise:	
Trade Name of Enterprise:	
Company Registration No.:	
SARS Registration No.:	
UIF Registration No.:	
COIDA Registration No.:	
Relevant SETA for EEA purposes:	
Industry Sector:	
Bargaining Council:	
Contact Person:	
Address of Premises:	
Postal Address:	
Telephone Number:	
Fax Number:	
E-mail Address:	
Chief Executive Officer:	
Chief Executive Officer Address:	
Competent Person:	
Maximum power demand: in KW	
Health and Safety Representatives:	
Activities, products manufactured and/ services rendered:	
Raw materials, materials and chemical/ biological substances:	
Total Number of Employees:	Male: Female:

CONTRACTOR INFORMATION	
Contractors:	
Site Address:	
Contracts Manager:	
Managing Director:	
Competent Persons:	
CR16: SCAFFOLDING:	
CR17: SUSPENDED SCAFFOLDING:	
CR19(6): MATERIAL HOIST (S):	
CR20(1): BULK MIXING PLANT:	
CR10(1)(a): FALL PROTECTION:	
CR13(1)(a): EXCAVATION WORK:	
CR14: DEMOLITION WORK:	
CR21(2)(b): EXPLOSIVE ACTUATED FASTENING DEVICES:	
CR28(a): STACKING	

INSPECTION SHEET				
SECTION/REGS	ITEM CHECKED	N/A	YES	NO
APPOINTMENTS				
5(1)(k)	Principal contractor for each phase or project			
6	Designer			
7(1)(c)(v)	Contractor			
7(2)(c)	Sub-Contractor			
8(1)	Construction Manager			
8(2)	Assistant Construction Manager			
8(5)	Construction Safety Officer			
8(7)	Construction Supervisor			
8(8)	Assistant Construction Supervisor			
9(1)	Person to carry out risk assessment			
9(4)	Trainer/Instructor			
10(1)(a)	Fall protection officer			
11(2)	Competent structure inspector			
6(2) & 12(1)	Temporary Works Designer			
12(2)	Temporary Works Supervisor			
13(1)(a)	Excavation supervisor			
13(2)(b)(ii)(bb)	Professional engineer or technologist			
13(2)(k)	Explosives expert			
14(1)	Supervisor demolition work			
14(2) + (3)	Demolition expert			
14(11)	Explosives expert			
16(1)	Scaffold supervisor, Scaffold Erector & Scaffold Inspector			
17(1)	Suspended platform supervisor			
17(2)(c)	Compliance plan developer			
17(8)(c)	Suspended platform expert			
17(13)	Outrigger expert			
19(8)(a)	Material hoist inspector			
18(1)(a)	Rope access supervisor			
20(1)	Bulk mixing plant supervisor			
20(2)	Bulk mixing plant operator			
21(2)(b)	Explosive actuated fastening device expert			
21(2) (g) (i)	Explosive actuated fastening device controller			
22(a)	Tower crane supervisor			
22(e)	Tower crane operator			
23(1)(d)(i)	Construction vehicle and mobile plant operator			
23(1)(k)	Construction vehicle and mobile plant inspector			
24(d)	Temporary electrical installations inspector			
24 (e)	Temporary electrical installations controller			
28 (a)	Stacking and storage supervisor			
29 (h)	Fire equipment inspector			
DOCUMENTS				
GAR 9(1)	Records of Incidents			
GAR 4	Copy of the Act			
GAR 7	Safety Reps Report			

GAR 8	Safety Committee Minutes			
DMR 18(7)	Lifting Machinery Log (Crane)			
CR 3(3)	Application for construction work permit			
CR 9(2)	Risk Assessment			
CR 9(9)(e)	Proof of the Health & Safety Induction Training			
CR 13(13)(h)	Inspection of Excavation (Records)			
CR 22(g)	Crane Operator Medical Certificate			
CR 23(11)	Mobile Plant Operator Medical Certificate			
CR 20(9)	Batch Plant Repairs & Maintenance Records			
CR24(d)	Temporary Electrical Installation Record			
CR 7(1)(b)	Health & Safety File			
CR 17(11)	Suspended Platforms' Performance Records			
CR 19(b)& (c)	Material Hoists Record Book			
	Scaffolding Log Book			
CR 7(8)	Medical Certificate of Fitness			
CR 23(1)(l)	Construction Vehicle & Mobile Plant Register			
CR 24(d)	Electrical Installation & Machinery Register			
INCIDENTS				
GAR 8(1) S24	Reported			
GAR 9(1)	Recorded, Investigated and action taken			
PUBLIC SITE				
FR 2(1)	Sanitary Facilities			
CR 30(1) (c)	Changing Facilities for each sex			
NB Notice	Pedestrian warning			
PERSONAL SAFETY EQUIPMENT				
GSR 2(3)	Items Issued:			
GSR 2(3)	Items Required:			
S23	(What is the payment on each item?)			
SAFETY PLANS				
FIRST AID				
GSR 3(6)	Name(s) of First Aider(s):			
CR 5(1)(b)	Client's Health & Safety Specification			
CR7(1)(b)	Principal's contractor H&S Plan			
FIRE HAZARD & PRECAUTIONS				
GSR 4	Flammables used, waste, hot work, diesel, fuel, gas			
ER 9(1)	Portable Extinguishers			
ELECTRICAL INSTALLATIONS & MACHINERY				
CR24	Guarding & PPE to Electrical Installations			
ILLUMINATION				
ER 3(6)	Dangerous Places and signage as well			
ER 3	Housekeeping			
ER6(2)(b),(c),(d)	Clear space storage			
ER6(3)	Disposal of waste			

EXCAVATIONS				
CR 13(3)(l)	Barricades (plus illumination!)			
CR 13(3)(c)	Safe Depth Shoring/Bracing			
CR 13(1)(a)	Monitored			
CR 13(3)(h)	Excavation Inspection Record			
GUARDING				
ER 6(2)(f)	Floor Openings (plus illumination!)			
	Floor slab sides, Shafts (plus illumination!)			
SITE EQUIPMENT				
GSR 13A(a)	Ladders condition, secured			
SANS 10085	Scaffold condition, secured			
SANS 10085	Platforms no. of boards condition Support 1.25. Toe Boards			
SANS 10085	Hand Rails			
SITE MACHINES				
DMR 3(2)(3)	Circulars, guards, riving knives			
GMR 3	Mixers guarded			
ELECTRIC POWER				
EMR 6(1)	Switchboards			
GMR	Condition of Tools, Leads, Plugs, etc			
LIFTING MACHINE/TACKLE				
DMR 18(8)	Lifting of persons			
DMR 18(8)	Condition, Securing of Load			
EXPLOSIVE ACTUATED FASTENING DEVICE				
CR 21(1)	Fastening Device			
IMPROV	Warning Notice			
ROOF WORK				
CR 10(1)	Safety equipment & precautions			
CR 10(2)	Fall protection plan			
CR 10(3)	Updated fall protection plan			
CR 10(5)	Roof Work			
CEMENT				
AR 10(a)	Suitable Tools			

ACCEPTANCE

Confirmation and Acceptance	Signature	Date
I _____ confirm that I have read and understood the Health and Safety Specifications as set out above.		
I _____ confirm that I have read and understood and confirm my intention to comply with all the legal requirements.		
I _____ confirm my acceptance and understanding of the assigned responsibilities and duties involved.		