

SOUTH AFRICAN REVENUE SERVICE

ANNEXURE A:

TENDER SPECIFICATIONS – SCOPE OF WORKS

RFP 44-2023

APPOINTMENT OF A SUITABLE CONTRACTOR, GRADE 6SB OR HIGHER, FOR
REPAIRS AND MAINTENANCE OF THE PARKING DECKS AT LEHAE LA SARS
INCLUDING RE-WATERPROOFING AND RE-LAYERING THE ASPHALT SURFACES

SCOPE OF WORKS

C3.1 DESCRIPTION OF WORKS

Note that dimensions and quantities stated in this description are approximate and for demonstration of order size purposes only.

C3.1.1 Employer's Objectives

The employer's objective is to refurbish and re-surface (asphalt) concrete slab parking deck.

Objectives during construction are to provide black economic enterprise contractors with a substantial portion of the work, provide work and training to local and other labourers and to execute the work with a high degree of safety.

C3.1.2 General Description of the Project

The project is at Lehae La SARS campus which is located at 299 Bronkhorst Street in Brooklyn, Pretoria (25°46'23.35"S, 28°13'57.20"E).

The project entails the cleaning and repairing of cracks, resurfacing with a new layer of asphalt, repairing the waterproofing membrane, replacing dilapidated expansion joints, and applying road markings after the repairs.

C3.1.3 Extent of Works

The main work items to be undertaken on the two sections in terms of the contract involve the following:

PARKING LOT DECK 1:

- Clean the cracks, grout and fill
- Remove and replace expansion joints
- Repair and waterproof at edges floor to wall transition
- Prime coat
- Seal only with 40mm Asphalt
- Construct asphalt humps
- Repair and clean drains
- Re-instate road markings.

PARKING LOT DECK 2:

- Slurry surface
- Re-instate road markings.

General:

- Remove and replace expansion joints
- Clean out and reinstate and repair all drainage structures
- Reinstate road markings.

C3.1.4 Temporary Works

No temporary works are foreseen.

C3.1.5 General Information**C3.1.5.2 Services**

Due to the nature of the construction it is not anticipated that any services will be affected. However, the contractor shall do a reconnaissance of the route for possible services that may be affected.

C3.1.5.3 Construction Materials

Concrete, making-up material and surfacing materials shall be obtained from commercial sources.

C3.1.5.4 Drawings

All drawings necessary to complete the works are bound in Volume 4: Contract Drawings. The drawings indicating the extent of the works are for tendering purpose only. The final extent of the work will be as instructed by the engineer.

Any information in the possession of the contractor which is required by the resident engineer to complete his as-built drawings shall be supplied to the resident engineer before a certificate of completion will be issued.

Only figured dimensions shall be used and drawings shall not be scaled unless so instructed by the engineer. The Engineer will supply any figured dimensions which may have been omitted from the drawings.

The levels given on the structural drawings are subject to confirmation on site, and the contractor shall submit all levels to the engineer for confirmation before commencing any structural work. The contractor shall check all clearances given on the drawings and shall inform the engineer of any discrepancies.

C3.1.5.5 Power Supply and other Services

The contractor shall make his own arrangements regarding the supply of electrical power and all other services. No direct payment will be made for the provision of electrical and other services. The cost thereof shall be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required.

C3.1.5.6 Water for Construction Purposes

The contractor shall make his own arrangements regarding a suitable supply of water for the

project and he must make adequate provision in his tender for all negotiations and procurement of water for construction activities and all related costs will be deemed to be included in his tendered rates.

C3.1.5.7 Construction in Confined Areas

It may be necessary for the Contractor to work within confined areas. No additional payment will be made for work done in restricted areas, except in the case of structures as described in Subclause 6108(d) of the Standard Specifications. In certain places the width of the fill material and pavement layers may decrease to zero and the working space may be confined. The method of construction in these confined areas largely depends on the Contractor's constructional plant.

However, the Contractor must note that measurement and payment will be in accordance with the specified cross-sections and dimensions only, irrespective of the method used for achieving these cross-sections and dimensions and that the tendered rates and amounts shall include full compensation for all special equipment and construction methods and for all difficulties encountered when working in confined areas and narrow widths, and at or around obstructions, and that no extra payment will be made nor will any claim for additional payment be considered in such cases.

C3.1.5.8 Contractor's Camp Site

The contractor shall make his own arrangements regarding the establishment of a camp site and housing for his construction personnel. The choice of all sites for the establishment of camps is subject to the approval of the engineer. Camp sites inside the campus will not be permitted.

The establishment of all labour, plant and materials on site is the responsibility of the Contractor and all arrangements in this respect are the Contractors' responsibility; however:

- Provision has been made in the Schedule of Quantities for the Contractor to tender for his independent establishment on site (Section 1300);
- Base camp(s) established by the Contractor for his use must be approved by the Engineer before the Contract begins and this approval must be obtained in writing but must also meet the approval of the local authorities, headmen or residents' associations, as well as the Environmental Management Programme with regard to batching plants, bitumen storage areas and plant maintenance areas.

The Contractor shall provide and maintain a continuous means of on-site communication between his site supervision staff (i.e. the people responsible for the day to day running of the Contract) and the staff of the Engineer's Representative. The Contractor must provide the Engineer with at least two cell phones which will be paid for under Item B14.03. The provision and use of cellular phones for the Contractor's personnel will be for his own cost.

C3.1.5.9 Security

The contractor shall be responsible for the security of his personnel and constructional plant

on and around the site of the works and for the security of his camp, and no claims in this regard shall be considered by the employer. The Contractor shall also be responsible for the security of the areas around the Engineer's offices.

C3.1.5.10 Programme of the Work

The contractor shall take note of various factors contained in these specifications which will have a significant influence on the compilation of the programme of work. Detailed directives for compiling the programme of work are given in clause B1204 of section 1200 of the project specifications.

It shall be noted that the specified contract period is three (3) months.

C3.1.5.11 Environmental Requirements

The Contractor shall be responsible for implementing and managing an Environmental Management Plan (also referred to as the "Environmental Management Programme") in terms of C3.5.2.

The Contractor's authorised agent shall report to the Engineer regarding compliance with the conditions as stipulated in the Environmental Management Plan.

The Contractor shall take the utmost care to minimise the impact of his establishment and other construction activities on the environment and shall adhere to the requirements as set out in C3.5.2. The Contractor shall prepare a detailed Method Statement to the Engineer detailing his construction activities and what measures will be implemented to prevent the pollution of streams, rivers and countryside through the spilling of fuels, bituminous binders, sewage from the temporary toilets and other deleterious materials. Where in the opinion of the Engineer, the Contractor has not adhered to these requirements; the Contractor shall rectify the damage at his own cost and to the satisfaction of the Engineer.

C3.1.5.12 Minimum requirements for sub-contractors, females, local labour and training

Refer to Clause C3.3 relating to procurement and training.

C3.1.5.15 Occupational Health and Safety (OHS)

(Refer C3.5.1: Occupational Health and Safety Act 1993: Health and Safety Specification.

(a) General statement

It is a requirement of this contract that the Contractor shall provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his activities, are not exposed to hazards to their health and safety. To this end the Contractor shall assume full responsibility to conform to all the provisions of the Occupational Health and Safety (OHS) Act (Act 85 and Amendment Act 181) of 1993, and the Construction Regulations 2014 issued in February 2014 by the Department of Labour. Contractor to complete Schedules T2.1 K: Occupational Health and Safety.

The additional specification regarding health and safety issues on this contract have been

included in Part C3.5: Management.

For the purpose of this contract the Contractor is required to confirm his status as mandatory to the Employer (Client) and employer in his own right for the execution of the contract, and he shall enter into an agreement in respect of the Occupational Health and Safety Act in the schedule as included in Part T2.4: Other Schedules and Documents that will be Incorporated in the Contract (Schedule T2.4 B).

(b) Health and Safety Specifications and Plans to be submitted at tender stage

(i) Employer's Health and Safety Specification

The Employer's Health and Safety Specification will be included in the tender documents as part of the Project Specifications.

(ii) Tenderer's Health and Safety Plan

The Tenderer shall submit with his tender sufficient proof that he has a Health and Safety Plan in place. The Contractor will, however, have to submit his Health and Safety Plan on request by the Employer during the tender evaluation stage.

In terms of the OHS Act the tender will be disqualified if the tenderer has no Health and Safety Plan.

The Contractor's Health and Safety Plan will be subject to approval by the Employer, or amendment, if necessary, before commencement of construction work. The Contractor will not be allowed to commence work, or his work will be suspended if he had already commenced work before he has obtained the Employer's written approval of his Health and Safety Plan.

The Contractor shall not be entitled to claim for extension of time or standing time and the related costs for any delays due to delayed commencement or suspension of the work arising from the lack of approval of an approved Health and Safety Plan.

C3.1.5.14 Temporary latrines

The Contractor shall provide sufficient portable chemical latrine units for the use of his employees. Furthermore, the Contractor shall also provide a portable chemical latrine unit at each temporary traffic control facility. He shall be entirely responsible for enforcing their use and for maintaining such latrines in a clean, orderly and sanitary condition to the satisfaction of the Engineer and the Employer. Latrines shall be positioned within walking distance from wherever employees or labourers are employed on the Works.

Where required, latrines shall be provided at the rate of one for ten persons and where applicable, the Contractor shall make his own arrangements and pay all charges for the removal of sewage.

No separate payment shall be made for this requirement and the costs thereof shall be deemed to be included in the rates tendered for the Contractor's time-related obligations.

C3.2 ENGINEERING DESIGN

C3.2.1 Design

- The employer is responsible for the design of the permanent Works as reflected in these Contract Documents unless otherwise stated.
- The contractor is responsible for the design of the temporary Works and their compatibility with the permanent Works.
- The contractor shall supply all details necessary to assist the engineer in the compilation of the as-built drawings.

C3.2.2 Employer's Design

C3.2.2.1 Detail description of Works

PARKING LOT DECK 01

- **Waterproofing:** Install the second layer 4mm dual reinforced waterproofing membrane (specialized for under tar placement) at staggered joints, and terminate all waterproofing and flashing details using a non-woven polyester industrial grade waterproofing membrane impregnated with 100% pure acrylic waterproofing compound.
- **Re-surfacing:** The parking deck shall be crack sealed and overlaid with 40mm Asphalt of which will include hump construction.
- **Drainage:** All drainage and drainage structures are to be cleared, cleaned, repaired and reinstated. Where elements of drainage structures are missing, these shall be constructed.
- **Joints:** Removal of existing obsolete expansion jointing material and Install 55mm watertight deck expansion joint system.
- **Road Signs and Markings:** Road markings shall be re-instated.

PARKING LOT DECK 02

- **Waterproofing:** Apply flexible waterproofing slurry coating around the parking deck edges.
- **Slurry:** Application of slurry seal over the whole area of parking lot deck.
- **Drainage:** All drainage and drainage structures are to be cleared, cleaned, repaired and reinstated. Where elements of drainage structures are missing, these shall be constructed.
- **Joints:** Removal of existing obsolete expansion jointing material and Install 55mm watertight deck expansion joint system.

- **Road Signs and Markings:** Road markings shall be re-instated.

C3.2.3 Drawings

The drawings for the design of the permanent Works are bound in Volume 4 or as supplied during the contract. Contractor and engineer to maintain master lists indicating the supply and revision of such documents. The contractor will be supplied with one set of A0 plans and a CD containing all the plans. He can have copies made as required at his own cost.

C3.2.4 Design Procedures

All designs and modifications thereto shall be communicated in writing and the contractor and engineer shall maintain master lists to record and track all transactions.

C3.4 CONSTRUCTION

C3.4.1 STANDARD SPECIFICATIONS

The following specifications shall apply for the construction of the Works.

- (a) The COLTO Standard Specifications for Road and Bridge Works for State Road Authorities (1998).

The contractor may purchase copies from the South African Institution of Civil Engineers.

SAICE		Tel : (011) 805-5947
SAICE House	/ Postnet Suite 81	Fax : (011) 805-5971
Block 19	/ Private Bag X65	
Thornhill Office Park	/ Halfwayhouse	Contact Person : Angeline Aylward
Becker Street	/ 1685	
Vorna Valley X21		
MIDRAND		

- (b) SABS or BS Specifications and Codes of Practice

Wherever any reference is made to the South African Bureau of Standards (SABS) and the British Standards Specification (BSS) in either these Bill of Quantities or the Specification of Materials and Methods to be Used (OOG-001E), this reference shall be deemed to read "SABS or equivalent standard" and BS or equivalent standard" respectively.

- (c) Various other specifications specified in the COLTO Standard Specifications or the Project Specifications.

C3.4.2 PROJECT SPECIFICATIONS: GENERAL

These specifications shall address project specific matters such as:

- Restrictions on construction
 - Site usage
 - Permits and wayleaves
 - Confined areas
- Services
- Materials
- Traffic Volumes
- Drawings
- Site Establishment
 - Contractor and engineers camp
 - Security, etc
 - Water for construction
 - Power supply
 - Telkom Service
 - Other Services
 - Survey control
 - Notices, signs and advertisements

C3.4.3 PROJECT SPECIFICATIONS RELATING TO STANDARD SPECIFICATIONS

C3.4.3.1 General Conditions of Contract Referred to in the Standard Specifications

The references to the General Conditions of Contract appearing in the COLTO Standard Specifications refer to the COLTO General Conditions of Contract which is superseded in this contract by the General Conditions of Contract for Construction Works 2015. The corresponding clauses in the latter document pertaining to the reference in the COLTO Standard Specifications are listed in the table in Section 1100: Definitions and Terms

C3.4.3.2 Particular Project Specifications

The following specifications, in addition to the standard specification, apply:

Part B	Matters relating to the COLTO Standard Specification
Part E	Health and Safety Specification

C3.4.4 SPECIFIED MANAGEMENT REQUIREMENTS

The requirements stated in the Management part of the contract shall be considered as further specified requirements of the contract.

PROJECT SPECIFICATIONS

MATTERS RELATING TO THE STANDARD SPECIFICATIONS

PROJECT SPECIFICATIONS REFERRING TO THE STANDARD SPECIFICATIONS AND ADDITIONAL SPECIFICATIONS

The Standard Specifications for Road and Bridge Works for State Road Authorities 1998, prepared by the Committee of Land Transport Officials (COLTO), as amended, shall apply to this Contract. The amendments are those issued by COLTO and reproduced below, together with additional amendments as set out herein.

1 STANDARD AMENDMENTS TO THE STANDARD SPECIFICATIONS ISSUED BY COLTO

No amendments have been issued.

2 PROJECT SPECIFICATIONS REFERRING TO THE STANDARD SPECIFICATIONS AND ADDITIONAL SPECIFICATIONS

In certain clauses the Standard Specifications allow a choice to be specified in the project specifications between alternative materials or methods of construction and for additional requirements to be specified to suit a particular contract. Details of such alternatives or additional requirements applicable to this Contract are contained in this part of the Project Specifications. It also contains some additional specifications required for this particular Contract.

The number of each clause and each payment item in this part of the Project Specifications consists of the prefix B followed by a number corresponding to the number of the relevant clause or payment item in the Standard Specifications. The number of a new clause or a new payment item which does not form part of a clause or a payment item in the Standard Specifications and which is included here, is also prefixed by B followed by a new number. The new numbers follow on the last clause or item number used in the relevant section of the Standard Specifications.

**PROJECT SPECIFICATION REFERRING TO THE STANDARD SPECIFICATIONS AND
ADDITIONAL SPECIFICATIONS**

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SECTION 1100: DEFINITIONS AND TERMS

B1115 GENERAL CONDITIONS OF CONTRACT

Replace Clause 1115 with the following:

The General Conditions applicable to this Contract are the General Conditions of Contract for Construction Works, 2015, Third Edition, (GCC 2015).

Accordingly, all reference in the Standard Specifications to any other General Conditions of Contract (GCC) has to be amended. The Standard Specifications have been scrutinised and clauses, which refer to another GCC, identified. These are tabulated below together with the relevant equivalent clause in the GCC 2015 Conditions of Contract. The context of the reference to the GCC is also noted.

Whereas every effort has been made to include all of the affected clauses in the table, there may be some omissions. In every case, however, the GCC 2015 Conditions of Contract for Construction, as amended by the Special Conditions of Contract in Section C1.2 of this Volume, shall apply and the contractor shall be responsible for interpretation of the equivalent clause.

CHANGES TO ALL REFERENCES BY THE COLTO STANDARD SPECIFICATIONS TO THE COLTO GENERAL CONDITIONS OF CONTRACT AND 2015 GENERAL CONDITIONS (GCC2015*)

COLTO Standard Specification		COLTO General Conditions of Contract 1998 (GCC)		GCC2015 General Conditions of Contract for Construction Works, 2015	
Clause No	Page No	Cl. No	Description or Reference	Cl. No	Description or Reference
1115	1100-2		Definition of applicable GCC and special conditions of contract		GCC2015 together with project documents
1204	1200-2	15	Construction programme	5.6.1	Construction programme
1204	1200-2		General reference to GCC		GCC 2015, as applicable
1206	1200-3	14	Setting out of works	5.4	
1209(a)	1200-4		General references to GCC		GCC 2015, as applicable
1209(e)	1200-5	52(2)	Valuation of material brought onto site	6.10.2	Valuation of material brought onto site
1210	1200-5	54	Certificate of practical completion	5.14.4	Certificate of practical completion
1212(1)	1200-7	49(2)	Cost of checking alternative designs		
1215	1200-9	45	Extension of time for completion due to abnormal rainfall.	5.12	Extension of time for completion
1217	1200-10	35	Care of the works	8.2	Care of the works
1303(ii)	1300-1		General reference to GCC		GCC 2015, as applicable
1303(iii)	1300-1	49	Price adjustment Item 13.01 (a)	6.11	Variations exceeding 15%
1303 (iii)	1300-2	49	Price adjustment Item 13.01 (b)	6.11	Variations exceeding 15%
1303 (iii)	1300-1	53	Variations exceeding 20%	6.11	Variations exceeding 15%
1303 (iii)	1300-2	53	Variations exceeding 20%	6.11	Variations exceeding 15%
1303	1300-2	12	Payment Item 13.01 (c)	1.5.2	Commencement Date

COLTO Standard Specification		COLTO General Conditions of Contract 1998 (GCC)		GCC2015 General Conditions of Contract for Construction Works, 2015	
Clause No	Page No	Cl. No	Description or Reference	Cl. No	Description or Reference
1303	1300-2	49	Payment of Item 13.01 (c) Time Related Obligations	6.11	Variations exceeding 15%
1403(c) (ii)	1400-4	40	Variation for rented accommodation	6.4	Valuations of Variations
1505	1500-3	40	Payment for damage caused by temporary drainage	6.4	Valuations of Variations
Item 15.08	1500-8	48	Payment of Provisional Sum	6.6	Provisional and Prime Cost Sums
Item 15.09	1500/8	48	Payment of Provisional Sum	6.6	Provisional and Prime Cost Sums
Item 15.11	1500-8	48	Payment of Provisional Sum	6.6	Provisional and Prime Cost Sums
Note (2)	3100-4	40	Payment for prospecting for materials	6.4	Valuations of Variations
3204(b) (iii)	3200-2	40	Determining Compensation for varied methods and equipment	6.4	Valuations of Variations
3303(b)	3300-2	2	Engineer's decisions, with reference to materials classification	3	Engineer and Engineer's Representative
Item 44.06	4400-3		General reference to GCC, PC Sums	6.6	Provisional and Prime Cost Sums
Item 45.06	4500-3		General reference to GCC, PC Sums	6.6	Provisional and Prime Cost Sums
5803 (c)	5800-3	40	Variation, for landscaping	6.4	Valuations of Variations
5805 (d)	5800-4	40	Variation, for grassing	6.4	Valuations of Variations
Item 58.10	5800-10	48	Payment for Extra Work	6.6	Provisional and Prime Cost Sums
8103 (c)	8100-1	40	Testing materials	6.9	Materials, Workmanship and Construction Equipment
			Valuation of Variations	6.4	Valuations of Variations
Item 81.02	8100-26		General reference to GCC, Provisional Sums	6.6	Provisional and Prime Cost Sums
Item 81.03	8100-26	22	Removal of Test Equipment and Clearance of Site on Completion	5.15	Clearance of Site

SECTION 1300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

B1302 GENERAL REQUIREMENTS

(a) Camps, construction plant and testing facilities

Add the following to this clause:

“The contractor shall make his own arrangements regarding the establishment of a camp site and housing for his construction personnel. No personnel will be allowed to reside on the site. Only night-watchmen may be on the site after hours.

The contractor shall be responsible for the security of his personnel, construction plant on and around the site of the works, and of his camp. The cost of this will be deemed to be included in item 13.01.

The contractor shall provide security guards from a reputable security company for protection of the offices. The security guards must be provided with a two-way radio and be in constant contact with the control room of the security company and an armed response unit. The security guards must be armed and accompanied by trained guard dogs. Payment for the above shall be included in item 13.01.

The contractor shall provide at each work site at least one portable chemical latrine unit per 10 workers for use by construction workers employed on the project. The latrine units shall be serviced daily and kept in a hygienic and orderly state to the satisfaction of the engineer. The contractor shall move them to the required positions, and finally remove them, on completion of the works, all to the satisfaction of the Health Department of the relevant authority. Toilets must be screened from public view and their use shall be enforced. No separate payment shall be made for this requirement and payment shall be deemed to be included in the rates tendered for the contractor's time-related obligations.”

B1303 PAYMENT

Add the following sub-item:

“Item	Unit
(d) Time related obligations for approved extension of time due to inclement weather.	Days (d)

The tendered rate shall be as specified for subitem 13.01 (c)”.

In subsubsection (iii)(3) paragraph 8 change “from the date on which ...plus” to “the commencement date until the end of the period for completion of the works, plus...”

Add the following to pay item B13.01:

"The combined total tendered for subitems B13.01 (a), (b) and (c) shall not exceed 15% of the tendered sum, excluding VAT. The rate tendered for subitem 13.01(d) shall not differ by more than 5% from the rate tendered for in subitem B13.01(c) divided by 22."

**SECTION 1400: HOUSING, OFFICES AND LABORATORIES FOR THE
ENGINEER'S SITE PERSONNEL**

B1402 OFFICES AND LABORATORIES

(a) General

Add the following:

"It is a requirement of the contract that the offices for the engineer's supervisory staff shall be supplied with approved burglar proofing, the cost of which shall be included in the relevant tendered rates.

Add the following new paragraph at the end of this clause:

'The offices, laboratory and stores shall, unless otherwise agreed, be erected in close proximity to the contractor's offices and laboratory, and the entire area shall be fenced with security fencing and provided with a gate. The contractor shall take all reasonable precautions to prevent unauthorised entry to the offices and laboratories and to ensure the general security of the offices and laboratories.'

(b) Offices

Replace sub-subclause (xii) with the following:

"A complete telephone service together with fax equipment shall be provided. The cost of telephone calls and fax transmissions are included in the prime cost sum for the provision of the telephone service".

Add the following:

'(xvii) Steel plan cabinets which are able to accommodate AO plans hung from the narrow side.

(xviii) Microwave oven with a minimum capacity of 30 litres.

(xxii) Computers and printers

The computers shall have, as a minimum, Windows 10 installed together with Microsoft Office 2019.

The printers shall be a high-speed colour printer capable of printing A3 size prints. It shall also have the ability to scan and copy.'

(g) Ablution units

Add the following:

"Two separate ablution units are required on site. Each unit shall contain at least a wash-hand basin, flush toilet, urinal, shower unit and the necessary accessories.

Both ablution units shall be provided with hot and cold water.

The towels shall be replaced with clean towels every second day and soap and other toiletries supplied as necessary.

One of the units shall contain a lockable clothing cupboard for at least eight employees. The other unit shall contain a lockable clothing cupboard for at least three employees.

The ablution units shall each have an interior floor area of at least 10m² and a 1,5m wide veranda on one side with a 100mm concrete floor.

The tendered rate under Item B14.01(e) shall include full compensation for the supply, erection and maintenance of the complete units as specified."

Add the following subclauses:

"(i) Kitchen units

The contractor shall provide two kitchen units with minimum interior floor area of 12m², a 1,5m wide veranda on one side with a 100 mm thick concrete floor in the vicinity of the offices.

The unit shall contain at least two opening windows, a lockable door, a three-plate electrical stove with oven, a steel framed formica topped table (0,6 m x 1,2 m), four steel framed bar or kitchen stools, a lockable refrigerator of one hundred and fifty litres capacity, a kitchen sink supplied with clean hot and cold potable water, a drain board coupled to a suitable drainage system and a lockable steel grocery cupboard.

B1404 SERVICES

(b) Water, electricity and gas

Add the following:

The power supply shall be regulated by suitable UPS units in order to maintain a constant current and voltage level at all times to prevent damage to the office and laboratory equipment and related electronic equipment during power surges. In the event of damage to the office and laboratory equipment and related electronic equipment because of a faulty voltage, the contractor shall be liable for payment of all repair or replacement costs of such damaged items.

B1406 MEASUREMENT AND PAYMENT

Change the unit of measurement of item 14.01(e) to number and renumber as follows:

"B14.01 (g) Kitchen units number (No.)

The unit of measurement and payment shall be the authorized number of units erected, complete and in accordance with the specifications and together with all items as specified in Clause B1402.

The tendered rate shall include full compensation for the supply and erection of units, accessories, furniture, etc. as specified and for the proper maintenance, cleaning and provision of daily requirements."

B14.03 Office and laboratory fittings, installations and equipment

(a) Items measured by number

Add the following new sub-items:

'Item	Unit
(xix) Steel plan cabinets	Number (No)
(xx) Microwave oven 30litre	Number (No)
(xxi) Supply of computer equipment	
(1) Computer	Number (No)
(2) Printer/fax/copier	Number (No)
(3) Supply of ink, paper and other consumables	Month
(xxii) Flood lights complete with poles and 500watt minimum globes	Number (No)
(xxiii) Uninterrupted power supply units	Number (No)

The tendered rate shall be full compensation for providing all the equipment specified and all maintenance repairs to ensure that the equipment is maintained in fully serviceable condition. In addition, the equipment shall be provided with ink/toner, paper and other consumables as required on a monthly basis.'

(a) Prime-Cost items and items paid for in a lump sum

Add to (b) (i) the following:

"Included, is the payment of rental and calls made by cell phone by the Engineer and his staff in the execution of their duties in respect of the contract administration."

Amend pay item "B14.03(b)(v) The provision of a fax apparatus as specified" to read "B14.03(b)(v) Provision of a fax, scanner, copier apparatus."

SECTION B4100: PRIME COAT

B4102 MATERIALS

b) Aggregate for blinding

Add the following sentence:

“Blinding of the primed surface with aggregate shall only be permitted to facilitate vehicular access”

B4106 APPLICATION OF THE PRIME COAT

Replace paragraph (c) with the following:

“The type of prime and application rate best suited for the deck shall be determined during construction. The Contractor shall provide about 20ℓ of each prime and apply it at different application rates with a brush on the base. Then engineer will then instruct the type of prime and application rate to be used. No payment shall be made for tests to determine the type of prime.

B4108 TOLERANCES

Replace the first paragraph with the following:

"The actual spray rates measured at spraying temperature shall not deviate by more than 8.0% from that ordered by the engineer. The engineer may, at his discretion, conditionally accept application rates falling outside this tolerance at reduced payment in accordance with Table B4108/1.

TABLE B4108/1: PAYMENT REDUCTION FACTORS FOR CONDITIONALLY ACCEPTED PRIME COAT

Deviation specified spray rate at spraying temperature. (%)	Payment reduction factor of tendered rate.
±8,0	1.00
±9,0	0.97
±10,0	0.95
±11,0	0.90
±12,0	0.85
±13,0	0.80

Any deviation outside these limits shall not be paid for, however, the engineer shall have the right to instruct the contractor to make up any deficiency, or blind excessive prime without additional payment. Where so instructed, the material for blinding shall consist of approved, but shall consist of screened 4,75mm nominal single size aggregate. The use of crusher dust for blinding shall not be permitted. If under-spraying occurs, and it is accepted by the engineer, only the actual quantities applied shall be paid for."

B4109 TESTING

Add the following:

"No payment will be made if this condition is not adhered to. The contractor shall provide, at his cost, representative samples of every batch of prime delivered onto site."

SECTION 4200: ASPHALT SURFACING

B4201 SCOPE

B4202 MATERIALS

(a) Bituminous binders

(i) Conventional binders

Add the following:

“The binders to be used shall be as follows:

- (a) Continuously graded surfacing course: 50/70 penetration grade bitumen
- (b) Continuously graded base: 30/50 penetration grade bitumen”.

(b) Aggregates

Add the following paragraph to the introductory description:

“Asphalt mixes shall be manufactured using different individual single size coarse aggregates fractions and crushed fine aggregates blended to conform to the specified grading requirements. The use of natural sands shall only be permitted if approved by the engineer and shall be limited to a maximum of 5% for continuously graded mixes. All aggregate in excess of 4,75 mm shall consist of individual nominal single sized aggregate. For stone mastic asphalt mixes all aggregate fractions in excess of 2,36 shall consist of individual single size fractions. Contractors shall note that commercial suppliers may not be able to supply all the required single size aggregates, in which instance arrangements will have to be made for additional on-site screening. No additional payment shall be made for screening aggregate. The use of crusher type materials shall not be permitted.”

(ii) Shape of the aggregate

Add the following after the last paragraph: “For tender purposes the surfacing asphalt maximum flakiness index % shall be Grade 1 in accordance with Table 4202/5

(v) Absorption

Add the following sentence

“In addition, the total binder absorption of the combined coarse and fine aggregate blend shall not exceed 0,5%”

(viii) Grading

Delete the second paragraph commencing with "The target grading..." and add the following paragraphs:

The grading limits for the combined aggregate grading for the asphalt surfacing shall be as specified in table 4202/7: Continuously graded medium grade.

(c) Fillers

Add the following after the last paragraph: “For tender purposes the active filler shall be hydrated lime”.

(h) General

Add the following after the second paragraph:

“Sufficient aggregate for a minimum of 3 days production shall be separately stockpiled and tested for conformance and uniformity prior to use. The test results shall be presented to the engineer”.

B4204 PLANT AND EQUIPMENT

(c) Spreading equipment

Add the following:

“For tender purposes the contractor may use other suitable plant rather than asphalt paver due to accessibility of site”

B4205 GENERAL LIMITATIONS AND REQUIREMENTS AND THE STOCKPILING OF MIXED MATERIAL

(c) Surface Requirements

(i) Tack Coat

Add the following paragraph:

“Hand spraying shall be permitted on areas approved by the engineer. The binder distributor shall not be capable to access the site. The equipment shall comply with clause 4103. Tack coat shall be applied to all transverse and longitudinal joints by hand utilizing a paint brush.”

B4206 PRODUCING AND TRANSPORTING THE MIXTURE

(b) Production of the mixture

(ii) Using drum-type mixer plants:

Add the following:

“Pre-blending of aggregate fractions shall not be permitted and the contractor shall ensure that sufficient cold-feed bins are installed to accommodate each individual aggregate fraction, including the filler.”

(c) Transporting the mixture

Add the following paragraph:

“Special precautions shall be taken by the contractor to ensure that the temperature of the total mass of asphalt does not decrease by more than 10°C from point of dispatch to the point where it is to be paved. The use of the thermal blankets is obligatory.

The contractor shall ensure that trucks used to haul asphalt are not overloaded and the legal axle loads are not exceeded. Before any asphalt can be transported, the contractor must provide the engineer with the certified carrying capacity of each truck intended for the purpose of transporting the mix. The contractor shall provide the engineer with a weighbridge ticket before discharging into the paver’s hopper.

Any truck that is overloaded shall not be allowed to discharge its load and shall return to the depot/batching plant for adjustment of the load. In addition, a penalty shall be applied for the overload.”

Add the following subclause:

“(f) Approval of asphalt mixture

Before any asphalt is placed on the road, the engineer shall verify the mix design. The verification process shall be as follows:

The contractor shall prepare and submit a laboratory design mix with test results at four different bitumen contents. The design mix shall be submitted on the prescribed form D3 of TMH 10: “Instruction for the Completion of As-Built Materials Data Sheets” with all the necessary test results completed. In addition, the proposed asphalt mixture shall be subjected to gyratory testing. All the expenses in preparing and submitting the laboratory design mix shall be to the contractor’s cost.

Samples of all aggregate and bitumen shall be submitted with the laboratory design mix to enable the engineer to carry out check design testing as necessary. The above design and aggregate shall be submitted to the engineer at least six weeks before it is intended to commence with any asphalt production.

After the engineer has verified and confirmed that the laboratory design mix conforms to the specification, a plant mix at varying binder contents of approximately 5 to 10 tons each shall be produced. The purpose of the plant mix is for the contractor to prove that the laboratory design mix can be produced successfully. The engineer shall conduct the necessary testing on the plant mix. The plant mix shall not be placed on the road. During the production of the plant mix, the engineer shall be afforded the opportunity to inspect the asphalt plant.

After the plant mix has been proven to conform to the specification, permission shall be given for laying a trial section at varying binder contents in accordance with the requirements of section 4211 of the specifications. The engineer may require that the mix be further assessed by means of CSIR Wheel Tracking or MMLS testing, the cost of which will be borne by the Employer. Mass production of asphalt shall only commence after the trial section has been successfully placed, which should be given within a maximum of ten days.

The engineer may instruct the contractor at any time to halt his paving process and to review the whole or part of the above process should a change of aggregate properties occur, the specified asphalt requirements not being met and/or a consistent asphalt mixture not be produced.”

B4210 COMPACTION

B4214 QUALITY OF MATERIAL AND WORKMANSHIP

(a) Sampling

(c) Routine inspection and tests

Add the following paragraph:

"The contractor shall keep accurate records of:

- (i) The temperatures of the asphalt in the trucks both at the mixing plant and at the paving equipment immediately prior to discharging the load.
- (ii) The truck and load number from which control samples are taken. All samples taken shall be appropriately numbered."

Add the following subclause:

(d) Special tests

n-Heptane-Xylene Equivalent (Spot test) (AASHTO-T102)

If the engineer suspects that bitumen or asphalt has been overheated, he may order that the bitumen, or the bitumen recovered from the asphalt, be subjected to the Spot Test. Recovery of binder for use in the Spot Test shall be carried out according to an approved method.

Any bitumen having an n-Heptane-Xylene equivalent in excess of 36, or in excess of the manufacturers test result on the dispatched stock, shall be considered to have been overheated and shall be deemed to be rejected unless proven otherwise."

B4215 MEASUREMENT AND PAYMENT

"Item	Unit
B42.21 Aggregate variations	ton (t)

The unit of measurement in respect of increases or decreases in the aggregate content from that specified in the nominal mix shall be the ton.

Payment for variations shall be made as specified for clause 1213."

"Item	Unit
B42.22 Penalty for overloading	ton (t)

The unit of measurement for the calculation of the penalty shall be the ton of mix transported in excess of the legal load. The rate applied shall be twice the contractor's tendered rate for placing the mix under B42.02.

For the purposes of the calculation, the so called 5% grace shall not be used. The following example is provided:

Tare Weight of vehicle certified by RTI weighbridge = 6 tons

Maximum carrying capacity certified by RTI weighbridge = 8 tons

Gross vehicle mass = 14 tons

Actual Load (Weighbridge ticket) = 14.6tons

Overload = 0.6 tons

Contractors rate tendered under item B42.01 = R350/ton

Penalty = 2 x R350/ton x 0.6 tons

= R 420.00"

"Item

Unit

B42.23 Initial design testing costs

Lump Sum

The unit of measurement shall be the lump sum cost tendered for the testing of the design criteria in accordance with the Table B4203/2 on the plant/production mixed mix and binder combinations from the designated asphalt supplier.

The tendered rate shall include full compensation for all related testing costs, including material (production mix runs, modifiers etc) costs, transport/courier costs and specialist lab testing costs."

SECTION 4800: TREATMENT OF AN EXISTING SURFACE EXHIBITING CERTAIN DEFECT.

4802 MATERIALS

(a) Bituminous binder

- (i) Primer for sealing cracks

The primer shall be an invert bitumen emulsion manufactured from 80/100 penetration-grade bitumen such as MSP/1 or similar.

- (vi) Slurry-seal

The following shall be used:

Tack coat: 30% stable-grade emulsion

Slurry seal: 60% slurry-grade emulsion

4804 CONSTRUCTION

(c) Slurry seal

- (i) Where the slurry can be applied by hand methods only or where the engineer so directs where it is specified that the slurry shall be applied by hand methods.

(f) Sealing cracks

- (ii) Preparation

The cracks shall be blown clean with compressed air, and all foreign and loose material shall be removed from the cracks.

Replace second paragraph with the following:

A supply of approved environmentally compatible herbicide diluted in accordance with the requirements of the Project Specifications shall be prepared. The solution shall be sprayed into cracks on the surfaced shoulders of the road or on such extended area as specified in the Project Specifications by means of rucksack type sprayers, and allowed to dry. Care shall be taken to spray only undesirable plants and spray drift shall not affect adjacent vegetation or fall onto water courses.

Twenty-four hours after application of the herbicide, the cracks shall be penetrated with primer specified by the Engineer.

- (iii) Cracks narrower than 3 mm

Cracks narrower than 3 mm shall be treated with an emulsion or by means of resealing the surface.

- (iv) Cracks 3 mm and wider

After the primer has been applied, anionic stable-grade emulsion shall be mixed with synthetic modifiers, as specified in the Project Specifications, and applied by means of pneumatic

spraying equipment or other approved equipment at the rate specified in the Project Specifications.

Where the cracks are to be rolled, the Contractor, in accordance with the provisions of the Project Specifications or the prescriptions of the Engineer, shall treat the cracks as follows:

Add the following:

- (1) The cracks shall initially be treated for cleaning out and priming the crack as described above.
- (2) The surface on either side of the crack shall be sprayed with an approved rejuvenator for a width of 300 mm on either side of the crack and allowed to soften the existing surface.
- (3) The crack shall then be filled with cold rubber slurry which shall be worked in with rubber squeegees. Any excess slurry shall be removed from the sides of the crack.
- (4) Once the emulsion has broken, the crack can be rolled with a pedestrian vibratory roller until a smooth finish is obtained.

The surface shall be heated in an approved manner along the full length of the crack and over a width of 250mm on each side of the crack and then rolled with approved rollers until an even surface has been obtained.

Depending on the instruction of the engineer, the cracks shall be treated with cold rubber slurry, hot bitumen rubber, or any other approved sealant.

(v) Restrictions

Cracks may be sealed only where the temperature of the road surface exceeds 10°C. Crack sealing may not be done within three days after rain has fallen on the site, unless otherwise instructed by the Engineer.

The contractor shall note that a single application of crack sealant is usually insufficient and that the application will have to be repeated.

4807 MEASUREMENT AND PAYMENT

Item	Unit
48.06 Cleaning the cracks with compressed air	metre (m)

The unit of measurement for cleaning the cracks with compressed air shall be the metres of length along which all the cracks have been blown clean.

The tendered rate shall include full compensation for providing all equipment, labour, supervision and incidentals for blowing clean the cracks over the full width of the road to the satisfaction of the Engineer.

SECTION 5700: ROAD MARKINGS

B5701 SCOPE

Replace South African Road Traffic Signs Manual in the second paragraph with:

“SADC Road Traffic Signs Manual”

B5702 MATERIALS

Insert the following before subclause (a) Paint:

“The selection of appropriate road marking materials for permanent road markings to ensure conformance with the requirements of this specification rests with the Contractor. Road marking materials for temporary road markings as clarified in SANS 731-1 shall be equal to or more durable than road marking paint specified in subclause B5702(a)(i) and (ii), provided it meets the specified initial performance criteria.”

(a) Paint

(i) Road-marking paint

Add the following:

“The commercial product supplied by the contractor shall be subject to the approval by the engineer and the submission of a certificate of the SABS permitting the manufacturer to apply the SABS standardising mark to the supplied product.”

B5705 SURFACE PREPARATION

Add the following at the end of the second paragraph:

“The onus is on the contractor to ensure that the surface on which the road markings are to be applied is sufficiently clean and dry to ensure that the quality of the road markings will not be adversely affected.

B5706 SETTING OUT THE ROAD MARKINGS

Add the following:

“For the purpose of this tender road markings setting out must follow the existing parking layout”

B5707 APPLYING THE PAINT

Replace the second last paragraph with the following:

“Road marking materials shall be applied at application rates which would suit the traffic conditions in such a way that the functional life of the temporary road markings would exceed six months, whilst the expected functional life of the permanent road markings should exceed 36 months.”

PROJECT SPECIFICATIONS

SECTION 9000: STORMWATER DRAINAGE

101 SCOPE

Cleaning, unblocking and refurbishing of the existing drainage system.

102 EXECUTION

- All existing stormwater drainage inlet gratings will be removed and replaced with 400 x 200mm, 4.5mm thick MANTEX 43A/VEM 305A steel grating sheets(or similar).
- All existing stormwater drains will be unblocked and cleaned by means of hydro jetting. Dilapidated difficult drain structures will be replaced with new and functional structures.

SECTION 10 000: WATERPROOFING

201 SCOPE

Removing and replacing of existing mastic asphalt, waterproofing material and termination flashings along the edges and by joints.

202 MATERIALS

- (a) Testudo waterproofing membrane.
- (b) non-woven polyester industrial-grade waterproofing membrane impregnated with a 100% pure acrylic waterproofing compound.
- (c) 4mm dual reinforced torch on waterproofing membrane.
- (d) Heat activated primer.

203 CONSTRUCTION

Before installation of new waterproofing, existing asphalt has to be broken and remove in-effective waterproofing. Installation is as follows:

Install primer to entire area using a heat activated bitumous primer.

Install a 4mm dual reinforced torch on waterproofing membrane where the existing waterproofing was removed.

- Install the second layer 4mm dual reinforced waterproofing membrane (specialized for under tar placement) at staggered joints.
- Terminate all waterproofing and flashing details using a non-woven polyester industrial grade waterproofing membrane impregnated with a 100 percent pure acrylic waterproofing compound.

SECTION 11 000: EXPANSION JOINTS

301 SCOPE

Removing and Replacing parking lot concrete deck expansion joints.

302 MATERIAL

- (a) Emseal Thermaflex Joint

A 55mm Thermaflex emseal joint are to be used as replacement to the existing expansion joints.

303 CONSTRUCTION

Removal of existing obsolete expansion jointing material, then chip and remove all damaged, honeycombed and crumbling concrete and to a solid substrate. Prepare existing chase joint in concrete, ensuring there is sufficient depth and width for the emseal thermaflex 55mm joint. There next thing is to install the watertight deck expansion joint system utilising emcrete elastomeric industrial nosing material, also install emseal thermaflex to the specialised and 90-degree joints.

C3.5 MANAGEMENT - OCCUPATIONAL HEALTH AND SAFETY

C3.5.1 OCCUPATIONAL HEALTH AND SAFETY ACT 1993: HEALTH AND SAFETY MANAGEMENT SPECIFICATION AND CONSTRUCTION REGULATIONS OF 2014

CONTENTS

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- C3.5.1.2 DEFINITIONS
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- C3.5.1.13 ARRANGEMENTS FOR MONITORING AND REVIEW
- C3.5.1.14 MEASUREMENT AND PAYMENT

C3.5.1.1 Scope

This specification covers the health and safety requirements to be fulfilled by the contractor to ensure a continued safe and healthy environment for all workers, employees and subcontractors under his control and for all other persons entering the site of works.

This specification shall be read with the Occupational Health and Safety Act (Act No 85 and amendment Act No 181) 1993, and the corresponding Construction Regulations 2014, and all other safety codes and specifications referred to in the said Construction Regulations.

In terms of the OHS Act Agreement in Section 12 (Forms to be Completed by Successful Tenderer) of the tender document, the status of the contractor as mandatory to the employer (Client) is that of an employer in his own right, responsible to comply with all provisions of OHS Act 1993 and the Construction Regulations 2014.

This health and safety specification and the contractor's own Health and Safety Plan as well as the Construction Regulations 2014, shall be displayed on site and made available for inspection by all workers, employees, inspectors and any other persons entering the site of works.

C3.5.1.2 Definitions

For the purpose of this contract the following shall apply:

- (a) **“Employer”** where used in the contract documents and in this specification, means the Employer as defined in the General Conditions of Contract 2015 and it shall have the exact same meaning as **“Client”** as defined in the Construction Regulations 2014. **“Employer”** and **“Client”** is therefore interchangeable and shall be read in the context of the relevant document.
- (b) **“Contractor”**, wherever used in the contract documents and in this specification, shall have the same meaning as **“Contractor”** as defined in the General Conditions of Contract.

The “Contractor” is the “Principal Contractor” in terms of the Construction Regulations 2014. The “Contractor” and “Subcontractor” are “Contractors” in terms of the Construction Regulations 2014.

For the purpose of this contract the **Contractor** will, in terms of OHS Act 1993, be the mandatory of the employer, without derogating from his status as an employer in his own right.

“Engineer” where used in this specification, means the Engineer as defined in the General Conditions of Contract. The employer may appoint the Engineer or any other person to act as his “Agent” in terms of the Construction Regulations 2014.

C3.5.1.3 Project Description

The work to be carried out under this contract is as described in Section 3.1 Description of the Works.

C3.5.1.4 Tenders

The contractor shall make available the following during the tender evaluation:

- (a) a documented Health and Safety Plan as stipulated in Regulation 5 of the Construction Regulations 2014. The Safety Plan must be based on the Health and Safety Specification in the Project Specifications and will be subject to approval by the employer;
- (b) a declaration to the effect that he has the competence and necessary resources to carry out the work safely in compliance with the Construction Regulations 2014; Complete Form T2.1 K, page T2.24.

Failure to make available the foregoing with his tender or during tender evaluation, will lead to the conclusion that the tenderer is not able to carry out the work under the contract safely in accordance with the Construction Regulations and will result in the tender being disqualified.

C3.5.1.5 Notification of Commencement of Construction Work

After award of the contract, but before commencement of construction work, the contractor shall, in terms of Regulation 3, notify the Provincial Director of the Department of Labour in writing if the following work is involved:

- (a) the demolition of structures and dismantling of fixed plant of height of 3,0 m or more;
- (b) the use of explosives;
- (c) construction work that will exceed 30 days or 300 person-days;
- (d) excavation work deeper than 1,0 m; or
- (e) working at a height greater than 3,0 m above ground or landings.

The notification must be done in the form of the pro forma included under Section 11 (The Occupational Health and Safety Act) of the tender document. See Annexure A for a copy of the notification.

A copy of the notification form must be kept on site, available for inspection by inspectors, employer, Engineer, employees and persons on site.

C3.5.1.6 Guidelines for the Development of a Health & Safety Plan

C3.5.1.6.1 Project Background

In terms of the Construction Regulations 2014 [Regulation 4 (1) (a)] of the Occupational Health and Safety Act, No 85 of 1993, the Client is required to compile an Occupational Health and Safety specification the construction work and the contractor, appointed by the Client in terms of Regulation 4 (1) (c), is required to prepare an Occupational Health and Safety Plan. This plan has to be prepared in terms of Regulation 5 (1) as well as the Client's Occupational Health & Safety Specification. In terms of Regulation 4 (2), the client and the contractor are required to agree on the Occupational Health and Safety Plan before any work may commence.

C3.5.1.6.2 Framework for an Occupational Health and Safety Plan

C.3.5.1.6.2.1 Introduction

The contractor has to demonstrate to the Client that he has a suitable and sufficiently documented Occupational Health and Safety Plan as well as the necessary competencies, experience and resources to perform the construction work safely. The contractor could be required to submit the following documentation for perusal and verification by the Client:

- Management Structure
- Quality Plan
- Human Resources Plan
- Registered Workplace Skills Plan
- "Letter of good standing" from the Compensation Commissioner or licensed compensation insurer.
- Proof of induction and other training of employees
- Example copy minutes of previous Occupational Health and Safety Committee meetings and copies of Incident Investigation Reports

C3.5.1.6.2.2 Contents of an Occupational Health and Safety Plan

The Occupational Health and Safety Plan shall include the following:

C3.5.1.6.2.3 Occupational Health and Safety Management Programme

- Management of Occupational Health and Safety risks
- Occupational Health and Safety structures and appointments
- Programme of Occupational Health and Safety inspections
- Occupational Health and Safety Representatives
- Occupational Health and Safety committee

C3.5.1.6.2.4 Communication and Management of the Work

- Management structure and responsibilities
- Occupational Health and Safety objectives for the project and arrangements for monitoring and review of Occupational Health and Safety performance
- Arrangements for
 - Regular liaison between parties on site
 - Consultation with the workforce
 - The exchange of design information between the Client, Engineer, supervisors and subcontractors on site
 - Handling design changes during the project
 - Selection and control of subcontractors
 - The exchange of Occupational Health and Safety information between all subcontractors
 - Security
 - Site induction and on-site training
 - Facilities and first-aid
 - The reporting and investigation of accidents and incidents
 - The production and approval of risk assessments and method statements
 - Site Occupational Health and Safety rules
 - Fire and emergency procedures
 - Reporting to the Client i.e. results of Occupational Health and Safety inspections, incident
 - and incident investigations and committee meetings
 - Reporting of incidents to the Department of Labour and Compensation insurer where appropriate

C3.5.1.6.2.5 Arrangements for controlling significant site risks

The following are some examples requiring arrangements for controlling the most significant site risks:

- Safety risks

- Services, including temporary electrical installations
- Preventing employees from falling into excavations, from trucks etc.
- Work with, on or near fragile materials
- Control of lifting operations
- The maintenance of plant and equipment
- Poor ground conditions
- Traffic routes and segregation of vehicles and pedestrians
- Storage of hazardous materials
- Dealing with existing unstable structures/land
- Accommodating adjacent land use
- Other significant safety risks as and when identified
- Health risks
 - Storage and use of hazardous chemical substances
 - Dealing with contaminated land or material
 - Manual handling
 - Reducing noise and vibration
 - Provision of adequate lighting
 - Ventilation considerations
 - Extreme heat and cold temperature considerations
 - Dealing with HIV/Aids and other illnesses
 - Provision of and maintaining ablution and eating facilities
 - Other significant health risks as and when identified

C3.5.1.7 Health and Safety File

The contractor shall in terms of Construction Regulation 5(7) maintain a Health and Safety File on site at all times. The Health and Safety File is a file or other permanent record containing information on aspects of the construction project - which will be necessary to ensure the health and safety of any person who may be affected by the construction work.

The contractor shall appoint a suitably qualified person to prepare the Health and Safety File and to keep it up to date for the duration of the contract. The Health and Safety file shall include the following information:

- Notification of Construction Work (Construction Regulation 3.) (Annexure A)
- Copy of OH&S Act (updated) (General Administrative Regulation 4.)
- Proof of Registration and good standing with a COID Insurer (Construction Regulation 4 (g))
- Copy of health and safety plan (construction regulation 5 (1))

- OH&S Programme agreed with Client including the underpinning Risk Assessment and Method Statements (Construction regulation 5 (1))
- Designs/drawings (Construction Regulation 5 (8))
- A list of contractors (subcontractors) including copies of the agreements between the parties and the type of work being done by each contractor (Construction Regulation 9)
- Appointment / Designation forms required by the ACT and Regulations.
- Registers as follows:
 - * Accident/Incident Register (Annexure 1 of the General Administrative Regulations)
 - * OH&S Representatives Inspection Register
 - * Form/Support work Inspection
 - * Excavations Inspection
 - * Lifting Equipment
 - * Demolition Inspections
 - * Designer's Inspection of Structures Record
 - * Batch Plant Inspections
 - * Arc & Gas Welding & Flame Cutting Equipment Inspections
 - * Construction Vehicles & Mobile Plant Inspections
 - * Electrical Installation and Machinery Inspections
 - * Fire Equipment Inspection & Maintenance
 - * First Aid
 - * Hazardous Chemical Substances
 - * Lifting Tackle and Equipment Inspections
 - * Inspection of Cranes
 - * Inspection of Ladders
 - * Inspection of Vessels under Pressure
 - * Machinery Inspections
 - * Drivers/Operators of Mobile Plant/Construction Vehicles Daily Inspections
 - * Accommodation of traffic daily inspection book

Annexure B is a list of the records to be kept on site.

The Health & Safety File shall be handed over to the Client on completion of the contract. It must contain all the documentation handed to the contractor by any subcontractors together with a record of all drawings, designs, materials used and other similar information concerning the completed project.

C3.5.1.8 Risk Assessment

Before commencement of any construction work during the construction period, the contractor shall have a risk assessment performed and recorded in writing by a competent person. (Refer Regulation 7 of the Construction Regulations 2014).

Risk is a measure of the likelihood that the harm from a particular hazard will be realized, taking into account the possible severity of the harm. Harm to people includes death, injury (permanent or temporary), physical or mental health or any combination thereof. Risk management in health and safety includes the identification of hazards, assessing risks, taking action to eliminate or reduce the risk, monitoring the effectiveness and performing regular reviews of the entire process. The contractor shall compile method statements to address or handle the following:

- Hazards particulars to contract
- Identify what could go wrong and how
- Identify the likelihood of this happening
- Identify the persons at risk
- Identify the extent of possible harm
- Eliminating or reducing this risk
- A monitoring plans
- A review plans

contractors must ensure that all subcontractors conduct risk assessments for their scope of work as well.

The risk assessment shall identify and evaluate the risks and hazards that may be expected during the execution of the work under the contract, and it shall include a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards identified.

The risk assessment shall be available on site for inspection by inspectors, employer, engineer, subcontractors, employees, trade unions and health and safety committee members, and must be monitored and reviewed periodically by the contractor.

C3.5.1.9 Appointment of Employees and Subcontractors

C3.5.1.9.1 Health and Safety Plan

The contractor shall appoint his employees and any subcontractors to be employed on the contract, in writing, and he shall provide them with a copy of his documented Health and Safety Plan, or relevant sections thereof. The contractor shall ensure that all subcontractors and employees are committed to the implementation of his Safety Plan.

C3.5.1.9.2 Health and safety induction training

The contractor shall ensure that all employees under his control, including subcontractors and their employees, undergo a health and safety induction training course by a competent person before commencement of construction work. No visitor or other person shall be allowed or permitted to enter the site of the works unless such person has undergone health and safety training pertaining to hazards prevalent on site.

The contractor shall ensure that every employee or visitor on site shall at all times be in possession of proof of the health and safety induction training issued by a competent person prior to commencement of construction work.

C3.5.1.9.3 OH&S Training Requirements: (as required by the Construction Regulations and as indicated by the OH&S Specification and the Risk Assessment/s):

- * General Induction (Section 8 of the Act)
- * Site/Job Specific Induction (also visitors) (Sections 8 & 9 of the Act)
- * Site/Project Manager
- * Construction Supervisor
- * OH&S Representatives (Section 18 (3) of the Act)
- * Training of the Appointees indicated in 3.1.1. & 3.1.2. above
- * Operation of Cranes (Driven Machinery Regulations 18 (11))
- * Operators and Drivers of Construction Vehicles & Mobile Plant (Construction Regulation 21)
- * Basic Fire Prevention & Protection (Environmental Regulations 9 and Construction regulation 27)
- * Basic First Aid (General Safety Regulations 3)
- * Storekeeping Methods & Safe Stacking (Construction Regulation 26)
- * Emergency, Security and Fire Co-ordinator

C3.5.1.10 Appointment of Safety Personnel

C3.5.1.10.1 Construction supervisor

The contractor shall appoint a full-time Construction Supervisor with the duty of supervising the performance of the construction work.

He may also have to appoint one or more competent employees to assist the construction supervisor where justified by the scope and complexity of the works.

C3.5.1.10.2 Health and safety representatives

In terms of Sections 17 and 18 of the Act (OHSA 1993) the contractor shall appoint a health and safety representative whenever he has more than 20 employees in his employ on the works. The health and safety representative must be selected from employees who are employed in a full-time capacity at a specific workplace.

The number of health and safety representatives for a workplace shall be at least one for every 50 employees.

The function of the health and safety representative(s) will be to review the effectiveness of health and safety measures, to identify potential hazards and major incidents, to examine causes of incidents (in collaboration with his employer, the contractor), to investigate complaints by employees relating to health and safety at work, to make representations to the employer (contractor) or inspector on general matters affecting the health and safety of employees, to inspect the workplace, plant,

machinery etc. on a regular base, to participate in consultations with inspectors and to attend meetings of the health and safety committee.

C3.5.1.10.3 Health and safety committee

In terms of Sections 17 and 18 of the Act (OHSA 1993) the contractor (as employer), shall establish one or more health and safety committee(s) where there are two or more health and safety representatives at a workplace. The persons selected by the contractor to serve on the committee shall be designated in writing.

The function of the health and safety committee shall be to hold meetings at regular intervals, but at least once every three months, to review the health and safety measures on the contract, to discuss incidents related to health and safety with the contractor and the inspector, and to make recommendations regarding health and safety to the contractor and to keep record of meetings, recommendations and reports made by the committee.

C3.5.1.10.4 Competent persons

In accordance with the Construction Regulations the contractor shall appoint, in writing, competent persons responsible for supervising construction work for the following work situations that may be expected on the site of the works.

- (a) Risk assessment (Regulation 7);
- (b) Fall protection (Regulation 8);
- (c) Structures (Regulation 9);
- (d) Formwork and support work (Regulation 10);
- (e) Excavation work (Regulation 11);
- (f) Demolition work (Regulation 12);
- (g) Tunnelling (Regulation 13);
- (h) Scaffolding work (Regulation 14);
- (i) Suspended platform operations (Regulation 15);
- (j) Boatswain chairs (Regulation 16);
- (k) Material Hoists (Regulation 17);
- (l) Batch plant operations (Regulation 18);
- (m) Explosive powered tools (Regulation 19)
- (n) Cranes (Regulation 20);
- (o) Construction vehicle and mobile plant (Regulation 21);
- (p) Electrical installation and machinery on construction site (Regulation 22);
- (q) Use of temporary storage of flammable liquids on construction site (Regulation 23);
- (r) Water environments (Regulation 24):
- (s) Housekeeping on construction sites (Regulation 25)
- (t) Stacking and storage on construction sites (Regulation 26);

- (u) Fire precautions on construction sites (Regulation 27); and
- (v) Construction welfare facilities (Regulation 28).

A competent person may be appointed for more than one part of the construction work with the understanding that the person must be suitably qualified and able to supervise at the same time the construction work on all the work situations for which he has been appointed.

The appointment of competent persons to supervise parts of the construction work does not relieve the contractor from any of his responsibilities to comply with all requirements of the Construction Regulations.

C3.5.1.11 Contractor's Responsibilities

Before commencement of work under the contract, the contractor shall enter into an agreement with the employer (Client) to confirm his status as mandatary (employer) for the contract under consideration.

The contractor's duties and responsibilities are clearly set out in the Construction Regulations 2014, and are not repeated in detail but some important aspects are highlighted hereafter, without relieving the contractor of any of his duties and responsibilities in terms of the Construction Regulations.

In addition, the contractor shall also comply with the requirements of the Compensation of Occupational Injuries and Diseases Act 130 of 1993 (COIDA) and to this effect shall submit a letter of good standing with the compensation Insurer to the Client before work on site commences.

(a) Contractor's position in relation to the Employer (Client) (Regulation 4)

In accordance with Section 4 of the Regulations, the contractor shall liaise closely with the employer or the engineer on behalf of the employer, to ensure that all requirements of the Act and the Regulations are met and complied with.

(b) The Contractor and subcontractor (Regulation 5)

The contractor is in terms of the definition in Regulation 2(b) the equivalent of contractor as defined in the Construction Regulations, and he shall comply with all the provisions of Regulation 5.

Any subcontractors employed by the contractor must be appointed in writing, setting out the terms of the appointment in respect of health and safety. An independent subcontractor shall, however, provide and demonstrate to the contractor a suitable, acceptable and sufficiently documented health and safety plan before commencement of the subcontract. In the absence of such a health and safety plan the subcontractor shall undertake in writing that he will comply with the contractor's safety plan, the health and safety specifications of the employer and the Construction Regulations 2014.

(c) Supervision of construction work (Regulation 6)

The contractor shall appoint the safety and other personnel and employees as required in terms of Regulation 6 and as set out in paragraph 7 above. Appointment of those personnel and employees does not relieve the contractor from any of the obligations under Regulation 6.

The contractor shall appoint a safety officer in terms of Regulation 6(6).

(d) Risk assessment (Regulation 7)

The contractor shall have the risk assessment is performed as set out in paragraph 7 above before commencement of the work, and it must be available on site for inspection at all times. The contractor shall consult with the health and safety committee or health and safety representative(s) etc. on a regular basis to ensure that all employees, including subcontractors under his control, are informed and trained by a competent person regarding health hazards and related work procedures.

No subcontractor, employee or visitor shall be allowed to enter the site of works without prior health and safety induction training, all as specified in Regulation 7.

(e) Fall protection (Regulation 8)

Fall protection, if applicable to this contract shall comply in all respects with Regulation 8 of the Construction Regulations.

(f) Structures (Regulation 9)

The contractor will be liable for all claims arising from the collapse or failure of structures if he failed to comply with all the specifications, project specifications and drawings related to the structures, unless it can be proved that such collapse or failure can be attributed to faulty design or insufficient design standards on which the specifications and the drawings are based.

In addition, the contractor shall comply with all aspects of Regulation 9 of the Construction Regulations.

(g) Formwork and support work (Regulation 10)

The contractor will be responsible for the adequate design of all formwork and support structures by a competent person.

All drawings pertaining to formwork shall be kept on site and all equipment and materials used in formwork, shall be carefully examined and checked for suitability by a competent person. A design certificate of the formwork and support structures shall be submitted by a professional engineer.

The provisions of Regulation 10 of the Construction Regulations shall be followed in every detail.

(h) Excavation work (Regulation 11)

It is essential that the contractor shall follow the instructions and precautions in the Standard Specifications and Project Specifications as well as the provisions of the Construction Regulations to the letter as unsafe excavations can be a major hazard on any construction site. The contractor shall therefore ensure that all excavation work is in terms of the Standard Specifications and Project Specifications and the Construction Regulations and carried out under the supervision of a competent person, that inspections are carried out by a professional engineer or technologist, and that all work is done in such a manner that no hazards are created by unsafe excavations and working

conditions. An excavation supervisor will be appointed for all types of excavation irrespective of the depth and a daily register will be kept on site.

Supervision by a competent person will not relieve the contractor from any of his duties and responsibilities under Regulation 11 of the Construction Regulations.

(i) Demolition work (*Regulation 12*)

Whenever demolition work is included in a contract, the contractor shall comply with all the requirements of Regulation 12 of the Construction Regulations. The fact that a competent person has to be appointed by the contractor, does not relieve the contractor from any of his responsibilities in respect of safety of demolition work.

(j) Tunnelling (*Regulation 13*)

The contractor shall comply with Regulation 13 wherever tunnelling of any kind is involved.

(k) Scaffolding (*Regulation 14*)

The contractor shall ensure that all the provisions of Regulation 14 of the Construction Regulations are complied with. [Note: Reference in the Regulations to “Section 44 of the Act” should read “Section 43 of the Act”].

(l) Suspended platforms (*Regulation 15*)

Wherever suspended platforms will be necessary on any contract, the contractor shall ensure that copies of the system design issued by a professional engineer are submitted to the engineer for inspection and approval. The contractor shall appoint competent persons as supervisors and competent scaffold erectors, operators and inspectors and ensure that all work related to suspended platforms are done in accordance with Regulation 15 of the Construction Regulations.

(m) Boatswain's chairs (*Regulation 16*)

Where boatswain's chairs are required on the construction site, the contractor shall comply with Regulation 16.

(n) Material Hoists (*Regulation 17*)

Wherever applicable, the contractor shall comply with the provisions of Regulation 17 to the letter.

(o) Batch plants (*Regulation 18*)

Wherever applicable, the contractor shall ensure that all lifting machines, lifting tackle, conveyors, etc. used in the operation of a batch plant shall comply with, and that all operators, supervisors and employees are strictly held to the provisions of Regulation 18. The contractor shall ensure that the General Safety Regulations (Government Notice R1031 of 30 May 1986), the Driven Machinery Regulations (Government Notice R295 of 26/2/1988) and the Electrical Installation Regulations (Government Notice R2271 of 11/10/1995) are adhered to by all involved.

In terms of the Regulations, records of repairs and maintenance shall be kept on site.

(p) Explosive powered tools (*Regulation 19*)

The contractor shall ensure that, wherever explosive-powered tools are required to be used, all safety provisions of Regulation 19 are complied with.

It is especially important that warning notices are displayed and that the issue and return of cartridges and spent cartridges be recorded in a register to be kept on site.

(q) Cranes (*Regulation 20*)

Wherever the use of tower cranes becomes necessary, the provisions of Regulation 20 shall be complied with.

(r) Construction vehicles and mobile plant (*Regulation 21*)

The contractor shall ensure that all construction vehicles and plant are in good working and roadworthy condition and safe for use, and that they are used in accordance with their design and intended use. All vehicles shall be licensed and insured. All drivers shall have a relevant driving license. The vehicles and plant shall only be operated by workers or operators who have received appropriate training, all in accordance with all the requirements of Regulation 21.

All vehicles and plant must be inspected on a daily basis, prior to use, by a competent person and the findings must be recorded in a register to be kept on site.

The contractor shall comply to Regulation 21(2)(a) and (i) when transporting employees.

(s) Electrical installation and machinery on construction sites (*Regulation 22*)

The contractor shall comply with the Electrical Installation Regulations (Government Notice R2920 of 23 October 1992) and the Electrical Machinery Regulations (Government Notice R1953 of 12 August 1993). Before commencement of construction, the contractor shall take adequate steps to ascertain the presence of, and guard against dangers and hazards due to electrical cables and apparatus under, over or on the site.

All temporary electrical installations on the site shall be under the control of a competent person, without relieving the Contractor of his responsibility for the health and safety of all workers and persons on site in terms of Regulation 22.

(t) Use of temporary storage of flammable liquids on construction sites (*Regulation 23*)

The contractor shall comply with the provisions of the General Safety Regulations (Government Notice R1031 of 30 May 1986) and all the provisions of Regulation 23 of the Construction Regulations to ensure a safe and hazard-free environment to all workers and other persons on site.

(u) Water environments (*Regulation 24*)

Where construction work is done over or in close proximity to water, the provisions of Regulation 24 shall apply.

(v) Housekeeping on Construction sites (*Regulation 25*)

Housekeeping on all construction sites shall be in accordance with the provisions of the environmental Regulations for workplaces (Government Notice R2281 of 16 October 1987) and all the provisions of Regulation 25 of the Construction Regulations.

(w) Stacking and storage on construction sites (*Regulation 26*)

The provisions for the stacking of articles contained in the General Safety Regulations (Government Notice R1031 of 30 May 1986) as well as all the provisions of Regulation 26 of the Construction Regulations shall apply.

(x) Fire precautions on construction sites (*Regulation 27*)

The provisions of the Environmental Regulations for Workplaces (Government Notice R2281 of 16 October 1987) shall apply.

In addition, the necessary precautions shall be taken to prevent the incidence of fires, to provide adequate and sufficient fire protection equipment, sirens, escape routes etc. all in accordance with Regulation 27 of the Construction Regulations.

(y) Construction welfare facilities (*Regulation 28*)

The contractor shall comply with the construction site provisions as in the Facilities Regulations (Government Notice R1593 of 12 August 1988) and the provisions of Regulation 28 of the Construction Regulations.

(z) Non-compliance with the Construction Regulations 2014

The foregoing is a summary of parts of the Construction Regulations applicable to all construction projects.

The contractor, as employer for the execution of the contract, shall ensure that all provisions of the Construction Regulations applicable to the contract under consideration are complied with to the letter.

Should the contractor fail to comply with the provisions of the Regulations 3 to 28 as listed in Regulation 30, he will be guilty of an offence and will be liable, upon conviction, to the fines or imprisonment as set out in Regulation 30.

C3.5.1.11.1 Compensation registration

The Contractor shall ensure that it has a valid registration with the Compensation Commissioner, as required in terms of the Compensation for Occupational Injuries and Diseases Act, 1993 ("**COLD**"), and that all payments owing to the Compensation Commissioner are discharged. The Contractor shall further ensure that the cover shall remain in force whilst any such Employee is present at the Project Site.

C3.5.1.11.2 Medical examinations

The Contractor shall ensure that all workmen employed by it or its Employees undergo routine medical examinations where these are necessary in terms of

the working environment and that they are medically fit for the purposes of providing the Project Deliverables at the Project Site.

The Contractor shall ensure that any disease which in the belief of a medical practitioner, arose out of the employment of an Employee, shall be reported in accordance with Section 25 of OHSA.

C3.5.1.11.3 Incident reporting and investigation

All incidents referred to in Section 24 of OHSA shall be reported by the Contractor to the Department of Labour and to the Department. The Department shall further be provided with copies of any written documentation relating to any incident.

The Department retains an interest in the notification of any incident as described above, as well as in any investigation contemplated under Section 31 of OHSA and/or formal inquiry conducted in terms of Section 32 of OHSA into such incident.

The Contractor is advised in his own interest to make a careful study of the Act and the Construction Regulations as ignorance of the Act and the Regulations will not be accepted in any proceedings related to non-conformance to the Act and the Regulations

C3.5.1.12 Project / Site Specific Requirements

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

- * Clearing & Grubbing of the Site
- * Site Establishment
- * Dealing with existing structures
- * Location and relocation of existing services
- * Installation and maintenance of temporary construction electrical supply, lighting and equipment
- * Health risks arising from neighbouring as well as own activities and from the environment e.g. threats by dogs, bees, snakes, lightning etc.
- * Accommodation of traffic
- * Exposure to noise
- * Exposure to vibration
- * Exposure to bituminous products
- * Protection against dehydration and heat exhaustion
- * Protection from wet & cold conditions
- * Dealing with HIV/Aids and other diseases
- * Use of Portable Electrical Equipment including

- Angle grinder
- Electrical drilling machine
- * Excavations including
 - Ground/soil conditions
 - Trenching
 - Shoring
 - Drainage of trench
- * Foundation excavations for structures
- * Use of LP gas torches and appliances
- * Loading & offloading of trucks
- * Aggregate/sand and other materials delivery
- * Manual and mechanical handling
- * Lifting and lowering operations
- * Driving & operation of construction vehicles and mobile plant including
 - Excavator
 - Bomag roller
 - Plate compactor
 - Front end loader
 - Mobile cranes and the ancillary lifting tackle
 - Parking of vehicles & mobile plant
 - Towing of vehicles & mobile plant
- * Use and storage of flammable liquids and other hazardous substances
- * Bedding of trench floor
- * Installation of pipes in trench
- * Backfilling of trench
- * Protection against flooding
- * Gabion work
- * Use of explosives
- * Protection from overhead power lines
- * As discovered by the Principal Contractor's hazard identification exercise
- * As discovered from any inspections and audits conducted by the Client or by the Principal Contractor or any other contractor on site
- * As discovered from any accident/incident investigation.

C3.5.1.13 Arrangements for Monitoring and Review

The Client will conduct a Monthly Audit to audit compliance with Construction Regulation 4(1)(d) to ensure that the contractor has implemented and is maintaining the agreed and approved OH&S Plan. Annexure C will be used as format when conducting the audit.

The Client reserves the right to conduct other ad hoc audits and inspections as deemed necessary.

A representative of the contractor must accompany the client on all audits and inspections and may conduct his own audit/inspection at the same time. Each party will, however, take responsibility for the results of his own audit/inspection results.

C3.5.1.14 Measurement and Payment

In tendering rates for the following three items the contractor shall ensure that the sum of the amounts for the three items shall not be less than one percent (1%) of the Tender Amount.

Item	Unit
-------------	-------------

C3.5.1.14.02 Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	Lump Sum
--	----------

The full amount will be paid in one instalment only once: -

- (a) The contractor has notified the Provincial Director of the Department of Labour in writing of the project.
- (b) The contractor has made the required initial appointments of employees and sub-contractors.
- (c) The client has approved the contractor's Health and Safety Plan.
- (d) The contractor has set up his Health and Safety File.

Item	Unit
-------------	-------------

C3.5.1.14.03 Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations	Month
---	-------

The tendered monthly amount shall represent full compensation for that part of the contractor's general obligations in terms of the Occupational Health and Safety Act and the Construction Regulations which are mainly a function of time. This includes inter alia payment of all costs for the appointment of all staff contemplated in the construction regulations and the transport of employees on site. Payment will be monthly only after payment for Item D14.01 has been made.

Item	Unit
-------------	-------------

C3.5.1.14.04 Submission of the Health and Safety File	Prov. Sum
--	-----------

Expenditure under this item shall be made in accordance with the general conditions of contract.

This amount will be paid only once the contractor has met all his obligations in respect of the Occupational Health and Safety Act and the Construction Regulations and has submitted his Health and Safety File complete as envisaged on this specification to the Client's satisfaction.

The following pay item is for the implementation of safety requirements on the site of the works.

Item	Unit
-------------	-------------

C3.5.1.14.05 Protection of pedestrians at excavations

Prov. Sum

The provisional sum shall cover all measures ordered by the engineer to ensure the safety of pedestrians in and around the works and shall include compensation for the acquisition, installation and maintenance of materials used for the demarcation of potentially dangerous areas, including excavations.

Expenditure under this item shall be made in accordance with the general condition of contract.

ANNEXURE A

NOTIFICATION OF CONSTRUCTION WORK Regulation 3 of the Construction Regulations, 2014

1. (a) Name and postal address of principal contractor:
.....
- (b) Name and telephone number of principal contractor's contact person:
.....
2. Principal contractor's compensation registration number:
.....
3. (a) Name and postal address of client:
.....
- (b) Name and telephone number of client's contact person or agent:
.....
4. (a) Name and postal address of designer(s) for the project:
.....
- (b) Name and telephone number of designer's contact person:
.....
5. Name and telephone number of principal contractor's construction supervisor on site appointed in terms of regulations 6 (1):
.....
6. Name/s of principal contractor's sub-ordinate supervisors on site appointed in terms of regulation 6 (2):
.....
7. Exact physical address of the construction site or site office:
.....
8. Nature of the construction work:
.....
.....
.....
.....
9. Expected commencement date:
10. Expected completion date:
11. Estimated maximum number of persons on the construction site:
.....

12. Planned number of contractors on the construction site accountable to principal contractor:

.....

13. Name(s) of contractors already chosen:

.....

.....

.....

.....

Principal Contractor

.....

Date

.....

Client

.....

Date

- THIS DOCUMENT IS TO BE FORWARDED TO THE OFFICE OF THE DEPARTMENT OF LABOUR **PRIOR TO COMMENCEMENT** OF WORK ON SITE.
- **ALL PRINCIPAL CONTRACTORS** THAT QUALIFY TO NOTIFY MUST DO SO EVEN IF ANOTHER PRINCIPAL CONTRACTOR ON THE SAME SITE HAD DONE SO PRIOR TO THE COMMENCEMENT OF WORK.

ANNEXURE B

RECORDS TO BE KEPT ON SITE

ITEM	CR	RECORD TO BE KEPT	RESPONSIBLE PERSON
1.	3(3)	Notification to Provincial Director – Annexure A Available on site	Principal Contractor
2.	4(3)	Copy of Principal Contractor's Health & Safety Plan Available on request	Client
3.	5(6)	Copy of Principal Contractor's Health & Safety Plan As well as each contractor's Health & Safety Plan Available on request	Principal Contractor
4.	5(7)	Health & Safety File opened and kept on site (including all documentation-required i.t.o. OHSA & Regulations Available on request	Every Contractor
5.	5(8)	Consolidated Health & 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
6.	5(9)	Comprehensive and Updated List of all contractors on site, the agreements between the parties and the work being done Included in Health & Safety file and available on request	Principal Contractor
7.	6(7)	Keep record on the Health & safety File of the input by Construction Safety Officer [CR 6 (6)] at design stage or on the Health & Safety Plan	Contractor
8.	7(2)	Risk Assessment Available on site for inspection	Contractor
9.	7(9)	Proof of Health & Safety Induction Training	Every Employee on site
10.	8(3)	Construction Supervisor [CR 6 (1)] has latest updated version of Fall Protection Plan [CR 8 (1)]	Contractor
11.	9(2)(b)	Inform contractor in writing of dangers and hazards relating to construction work	Designer of Structure
12.	9(3)	All drawings pertaining to the design of structure On site available for inspection	Contractor
13.	9(4)	Record of inspection of the structure [First 2 years – once every 6 months, thereafter yearly]	Owner of Structure
14.	9(5)	Maintenance records – safety of structure Available on request	Owner of Structure

ITEM	CR	RECORD TO BE KEPT	RESPONSIBLE PERSON
15.	10(1)(d)	Drawings pertaining to the design of formwork/support work structure Kept on site, available on request	Contractor
16.	11(3)(h)	Record of excavation inspection On site available on request	Contractor
17.	15(11)	Suspended Platform inspection and performance test records Kept on site available on request	Contractor
18.	17(8)(c)	Material Hoist daily inspection entered and signed in record book kept on the premises	Contractor
19.	17(8)(d)	Maintenance records for Material Hoist Available on site	Contractor
20.	18(9)	Records of Batch Plant maintenance and repairs On site available for inspection	Contractor
21.	19(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.	21(1)(d)	Findings of daily inspections (prior to use) of Construction Vehicles and Mobile Plant	Contractor
23.	22(d)	Record of temporary electrical installation inspections [once a week] and electrical machinery [daily before use] in a register and kept on site	Contractor

ANNEXURE C

CONSTRUCTION OCCUPATIONAL HEALTH – SAFETY – ENVIRONMENT CHECK LIST

CONTRACT No: _____
DESCRIPTION: _____
CONTRACTOR: _____
CLIENT: _____
AUDIT No: _____
DATE OF AUDIT: _____
PERSONNEL AUDITED: _____
AUDIT PERFORMED BY: _____

1. ADMINISTRATIVE & LEGAL REQUIREMENTS

OHS Act Section/ Regulation	Subject	Requirements	Yes/No	Remarks
Construction. Regulation 3	Notice of carrying out Construction work	Department of Labour notified Copy of Notice available on Site		
General Admin. Regulation 4	*Copy of OH&S Act (Act 85 of 1993)	Updated copy of Act & Regulations on site. Readily available for perusal by employees.		
COID Act Section 80	*Registration with Compens. Insurer. Copy of COID Act. (Act 130 of 1996)	Written proof of registration/Letter of good standing available on Site Copy of Compensation for Occupational Injuries and Diseased Act (COID Act) on site		
Construction. Regulation 4 & 5(1)	OH&S Specification & Programme	OH&S Spec received from Client OH&S programmed developed Updated regularly		
Section 8(2)(d) Construction. Regulation	*Hazard Identification & Risk Assessment	Hazard Identification carried out/Recorded Risk Assessment and – Plan drawn up/Updated RA Plan available on Site Employees/Sub-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. Regulation 6(1)	Designation of Person Responsible	Competent person appointed in writing as Construction Supervisor		

OHS Act Section/ Regulation	Subject	Requirements	Yes/No	Remarks
	on Site			
Construction. Regulation 6(2)	Designation of Assistant for above	Competent person appointed in writing as Assistant Construction Supervisor		
Section 17 & 18 General Administrative Regulations 6 & 7	*Designation of Occupational Health & Safety Representatives	More than 20 employees - one OH&S Representative, one additional OH&S Rep. for each 50 employees or part thereof. Designation in writing, period and area of responsibility specified. Meaningful OH&S Rep. reports. Reports actioned by Management.		
Section 19 & 20 General Administrative Regulations 5	*Occupational Health & Safety Committee/s	OH&S Committee/s established. Members appointed in writing. Meetings held monthly. Minutes kept. Actioned by Management.		
Section 37(1) & (2) Construction Regulation 5	*Agreement with Mandataries/ (Sub-)Contractors	Written agreement with (Sub-)Contractors List of (Sub) Contractors displayed. Proof of Registration with Compensation Insurer/Letter of Good Standing Construction Supervisor designated Written arrangements re. OH&S Reps & OH&S Committee Written arrangements re. First Aid Written arrangements re. Construction Vehicles & Mobile Plant		
Section 24 & General Admin. Regulation 8 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) Cases of Occupational Disease Reported Copies of Reports available on Site Record of First Aid injuries kept		
General Admin. Regulation 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 OH&S Committee meeting		

OHS Act Section/ Regulation	Subject	Requirements	Yes/No	Remarks
		Action taken by Site Management.		
Construction. Regulation 8	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 Available on Site		
Construction. Regulation 8(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. Regulation 9	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. Regulation 10	Formwork & Support work	Competent person appointed in writing to supervise erection, maintenance, use and dismantling of Support & Formwork Design drawings available on site Risk Assessment carried out Support & Formwork inspected: - before use/inspection - before pouring of concrete - weekly whilst in place		

OHS Act Section/ Regulation	Subject	Requirements	Yes/No	Remarks
		- before stripping/dismantling. Inspection register kept		
Construction. Regulation 14	Scaffolding	<p>Competent persons appointed in writing to:</p> <ul style="list-style-type: none"> - erect scaffolding (Scaffold Erector/s) - act as Scaffold Team Leaders - inspect Scaffolding weekly and after inclement weather (Scaffold Inspector/s) <p>Written Proof of Competence of above appointees available on Site Copy of SABS 085 available on Site Risk Assessment carried out Inspected weekly/after bad weather. Inspection register/s kept</p>		
Construction. Regulation 15	Suspended Platforms	<p>Competent persons appointed in writing to:</p> <ul style="list-style-type: none"> - control the erection of Suspended platforms - act as Suspended platforms Team Leaders - inspect Suspended Scaffolding weekly and after inclement weather <p>Risk Assessment conducted Certificate of Authorisation 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</p> <ul style="list-style-type: none"> - after erection and before use - daily prior to use. Inspection register kept <p>The following tests to be conducted by a competent person:</p> <ul style="list-style-type: none"> - load test of whole installation and working parts every 12 months - hoisting ropes/hooks/load attaching devices quarterly. Tests log book kept <p>Employees working on Suspended Platform medically examined for physical & psychological fitness. Written proof available</p>		
Construction. Regulation 11	Excavations	<p>Competent person/s appointed in writing to supervise and inspect excavation work</p> <p>Written Proof of Competence of above appointee/s available on Site Risk Assessment carried out</p>		

OHS Act Section/ Regulation	Subject	Requirements	Yes/No	Remarks
		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. Regulation 12	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. Regulation 17	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. Regulation 24	Water Environments (Incl. Caissons & Cofferdams)	Competent person appointed in writing to supervise, control & inspect work on or over water and the construction, installation/dismantling of caissons/ cofferdams Written Proof of Competence of above appointee available on Site Risk Assessment carried out To be inspected daily by a competent person. Inspections register kept		
Construction. Regulation 19	Explosive Powered Tools	Competent person appointed to control the issue of the Explosive Powered Tools & cartridges and the service, maintenance and cleaning. Register kept of above Empty cartridge cases/nails/fixing bolts returns recorded Cleaned daily after use		
Construction. Regulation 18	Batch Plants	Competent person appointed to control the operation of the Batch Plant and the service, maintenance and cleaning. Register kept of		

OHS Act Section/ Regulation	Subject	Requirements	Yes/No	Remarks
		above Risk Assessment carried out Batch Plant to be inspected weekly by a competent person. Inspections register kept		
Construction. Regulation 130/ Mine H&S Act	Tunnelling	Complying with Mines Health & Safety Act (29 of 1996) Risk Assessment carried out		
Construction. Regulation 20/ 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.) - 3 monthly		
Construction. Regulation 22/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 and -lights and extension leads identified/ numbered. Monthly visual inspection by User/Issuer/ Storeman. Register kept.		
Diving Regulations	Diving Operations	Competent person appointed in writing to Supervise Diving Operations and ensure maintenance, statutory inspection and testing by an Approved Inspection Authority of equipment used		
Construction. Regulation 26/ General Safety Regulation 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		

OHS Act Section/ Regulation	Subject	Requirements	Yes/No	Remarks
Construction. Regulation 27/ Environmental Regulation 9	*Designation of a Person to Co-ordinate Emergency Planning And Fire Protection	<p>Person/s with specific knowledge and experience designated to co-ordinate emergency contingency planning and execution and fire prevention measures</p> <p>Emergency Evacuation Plan developed:</p> <ul style="list-style-type: none"> - Drilled/Practiced - Plan & Records of Drills/Practices available on Site <p>Fire Risk Assessment carried out</p> <p>All Fire Extinguishing Equipment identified and on register.</p> <p>Inspected weekly. Inspection Register kept</p> <p>Serviced annually</p>		
General Safety Regulation 3	*First Aid	<p>Every workplace provided with sufficient number of First Aid boxes. (Required where 5 persons or more are employed)</p> <p>First Aid freely available</p> <p>Equipment as per the list in the OH&S Act.</p> <p>One qualified First Aider appointed for every 50 employees. (Required where more than 10 persons are employed)</p> <p>List of First Aiders and Certificates</p> <p>Name of person/s in charge of First Aid box/es displayed.</p> <p>Location of F/Aid box/es clearly indicated.</p> <p>Signs instructing employees to report all</p> <p>Injuries/illness including first aid injuries</p>		
General Safety Regulation 2	Personal Safety Equipment (PSE)	<p>PSE Risk Assessment carried out</p> <p>Items of PSE prescribed/use enforced</p> <p>Records of Issue kept</p> <p>Undertaking by Employees to use/wear PSE</p>		
General Safety Regulation 9	*Inspection & Use of Welding/Flame Cutting Equipment	<p>Competent Person/s with specific knowledge and experience designated to Inspect Electric Arc, Gas Welding and Flame Cutting Equipment</p> <p>Written Proof of Competence of above appointee available on Site</p> <p>Equipment identified/numbered and entered into a register</p> <p>Equipment inspected monthly. Inspection Register kept</p>		
Hazardous Chemical Substances (HCS)	*Control of Storage & Usage of HCS and	Competent Person/s with specific knowledge and experience designated to Control the Storage & Usage of HCS (including		

OHS Act Section/ Regulation	Subject	Requirements	Yes/No	Remarks
Regulations Construction Regulation 23	Flammables	Flammables) Written Proof of Competence of above appointee available on Site Risk Assessment carried out Register of HCS kept/used on Site		
Vessels under Pressure Regulations	Vessels under Pressure (VUP)	Competent Person/s with specific knowledge and experience designated to supervise the use, storage, maintenance, statutory inspections & testing of VUP's Written Proof of Competence of above appointee available on Site Risk Assessment carried out Certificates of Manufacture available on Site Register of VUP's 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. Regulation 21	Construction Vehicles & 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 Regulation 13A	*Inspection of Ladders	Competent person appointed in writing to inspect Ladders Ladders inspected at arrival on site and monthly there after. Inspections register kept		
General Safety regulation 13B	Ramps	Competent person appointed in writing to Supervise the erection & inspection of Ramps. Inspection register kept.		

2. EDUCATION & TRAINING

OHS Act Section/ Regulation	Subject	Requirements	Yes/No	Remarks
Section 7(1)	*Company OH&S Policy	Policy signed by CEO and published/Circulated to Employees Policy displayed on Employee Notice Boards Management and employees committed.		
Section 13(a)	*Company/Site OH&S Rules	Rules published Rules displayed on Employee Notice Boards Rules issued and explained to employees: written proof Follow-up to ensure employees understand/adhere to the rules.		
Section 13(a)	*Induction & Task Safety Training	All new employees receive OH&S Induction Training. Training includes Task Safety Instructions. Employees acknowledge receipt of training. Follow-up to ensure employees understand/adhere to instructions.		
Section 13(a)	*General OH&S Training	All employees receive basic OH&S training: written proof Operators of Plant & Equipment receive specialised training Follow-up to ensure employees understand/adhere to instructions.		
Section 13(a)	*Occupational Health & Safety Promotion	<u>Incident Experience Board indicating e.g.</u> * No. of hours worked without an Injury * No. of days worked without an Injury Star Grading - Board kept up to date. Safety Posters displayed & changed regularly Employee Notice Board for OH&S Notices. Site OH&S Competition. Company OH&S Competition. Participation in Regional OH&S Competition Suggestion scheme.		

3. PUBLIC SAFETY, SECURITY MEASURES & EMERGENCY PREPAREDNESS

Subject	Requirement	Yes/No	Remarks
*Notices & Signs	<p>Notices & Signs at entrances / along perimeters indicating “No Unauthorised Entry”.</p> <p>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”</p> <p>Notices & Signs posted to warn of overhead work and other hazardous activities. e.g. General Warning Signs</p>		
Site Safeguarding	Nets, Canopies, Stalls, Fans etc. to protect members of the public passing / entering the site.		
*Security Measures	<p>Access control measures/register in operation</p> <p>Security patrols after hours/weekends</p> <p>Sufficient lighting after dark</p> <p>Guard has access to telephone/other means of emergency communication</p>		
*Emergency Preparedness	<p>Emergency contact numbers displayed near Telephone</p> <p>Emergency Evacuation instructions posted up on all notice boards (including employees' notice boards)</p> <p>Emergency contingency plan available on site/in yard</p> <p>Doors open outwards/unobstructed</p> <p>Emergency alarm audible all over (including in toilets)</p>		
*Emergency Drill & Evacuation	<p>Adequate No. of employees trained to use Fire Equipment.</p> <p>Emergency Evacuation Plan available, displayed and practised.</p> <p>(See Section 1 for Designation & Register)</p>		

4. PERSONAL PROTECTIVE EQUIPMENT

Subject	Requirement	Yes/No	Remarks
*PPE needs analysis	Need for PPE identified and prescribed in writing.		
*Head Protection	All persons on site wearing Safety Helmets including Sub-contractors and Visitors (where prescribed)		
*Foot Protection	All persons on site wearing Safety Footwear including Gumboots for concrete / wet work and non-slip shoes for roof work.		
Eye and Face Protection	<p><u>Eye and Face Protection</u> (Goggles, Face Shields, Welding Helmets etc.) used when operating the following:</p> <p> Jack/ Kango Hammers</p> <p>* Angle / Bench Grinders</p>		

Subject	Requirement	Yes/No	Remarks
	<ul style="list-style-type: none"> * Electric Drills (Overhead work into concrete / cement / bricks * Explosive Powered tools * Concrete Vibrators / Pokers * Hammers & Chisels * Cutting / Welding Torches * Arc Welding Equipment * Skill / Bench Saws * Spray Painting Equipment etc. 		
*Hearing Protection	<u>Hearing Protectors</u> (Muffs, Plugs etc.) used when operating the following: <ul style="list-style-type: none"> * Jack / Kango Hammers * Explosive Powered Tools * Wood/Aluminium Working Machines e.g. saws, planers, routers 		
*Hand Protection	<u>Protective Gloves</u> worn by employees handling / using: <ul style="list-style-type: none"> * Cement / Bricks / Steel / Chemicals * Welding Equipment * Hammer & Chisels * Jack / Kango Hammer etc. 		
*Respiratory Protection	Suitable/efficient <u>Respirators</u> worn correctly by employees handling / using: <ul style="list-style-type: none"> * Dry cement * Dusty areas * Hazardous chemicals * Angle Grinders * Spray Painting etc. 		
*Fall Prevention Equipment	Suitable <u>Safety Belts</u> / Fall Arrest Equipment correctly used by persons working on / in unguarded, elevated positions e.g.: <ul style="list-style-type: none"> * 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.		

Subject	Requirement	Yes/No	Remarks
*PPE Issue & Control	<p>Identified Equipment issued free of charge.</p> <p>All PPE maintained in good condition. (Regular checks).</p> <p>Workers instructed in the proper use & maintenance of PPE.</p> <p>Commitment obtained from wearer accepting conditions and to wear the PPE.</p> <p>Record of PPE issued kept on file.</p>		

5. HOUSEKEEPING

Subject	Requirement	Yes/No	Remarks
*Scrap Removal System	<p>All items of Scrap / Unusable Offcuts / Rubble and redundant material removed from working areas on a regular basis. (Daily).</p> <p>Scrap / Waste removal from heights by chute / hoist / crane.</p> <p>(Nothing thrown / swept over sides).</p> <p>Scrap disposed of in designated containers / areas.</p> <p>Removal from site/yard on a regular basis.</p>		
Stacking & Storage (See Section 1 for Designation & Register)	<p><u>Stacking:</u></p> <p>Stable/* On firm level surface / base.</p> <p>Not leaning / collapsing.</p> <p>* Irregular shapes bonded.</p> <p>* Not exceeding 3 x the base.</p> <p>* Stacks accessible</p> <p>* Removal from top only</p> <p><u>Storage:</u></p> <p>Adequate storage areas provided.</p> <p>* Functional - e.g. demarcated storage areas/racks / bins etc.</p> <p>* Special areas identified and demarcated. e.g. Flammable Gas, Cement etc.</p> <p>* Neat, safe, stable and square.</p> <p>* Store/storage areas clear of superfluous material.</p> <p>* Storage behind sheds etc. neat/under control</p> <p>* Storage areas free from weeds, litter etc.</p> <p>*Waste Control/Reclamation</p>		
*Waste Control/Reclamation	<p>Re-usable Offcuts and other re-useable material removed daily and kept to a minimum in the work areas.</p>		

	All re-useable materials neatly stacked / stored in designated areas. (Nails removed / bent over in re-useable timber). Issue of hardware/nails/screws/cartridges etc. controlled and return of unused items monitored.		
Sub-Contractors (Housekeeping)	Sub-contractors required to comply with Housekeeping requirements.		

6. WORKING AT HEIGHTS (including Roofwork)

Subject	Requirement	Yes/No	Remarks
Openings	Unprotected openings adequately guarded/fenced/barricaded/catch nets installed		
	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		

7. SCAFFOLDING / FORMWORK / SUPPORT WORK

Subject	Requirement	Yes/No	Remarks
Access/System Scaffolding (See Section 1 for Designation & Register)	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/SABS 085		
Free Standing Scaffolding	Foundation firm / stable Sufficient bracing. Platform boards in good condition/sufficient/secured. Handrails and toe boards provided. Access ladders / stairs provided. Safe/unsafe for use signs Height to base ratio correct Outriggers used /tied to structure where necessary Complying with OH&S Act/SABS 085		

Subject	Requirement	Yes/No	Remarks
*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/SABS 085		
Suspended Scaffolding	Outriggers securely supported and anchored. Correct No. of steel wire ropes used. Platform as close as possible to the structure. Handrails on all sides All winches / ropes / cables / brakes inspected regularly. Scaffolding complies with OHS Act (Act 85/93) Winch/es maintained by competent person		
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.		N/A
Edges & Openings	Edges barricaded to acceptable standards. Manhole openings covered / barricaded. Openings in floor / other openings covered, barricaded/fenced.		N/A

Subject	Requirement	Yes/No	Remarks
	Stairs provided with handrails. Lift shafts barricaded / fenced off.		

8. LADDERS

Subject	Requirement	Yes/No	Remarks
*Physical Condition / Use & Storage (See Section 1 for Designation & Register	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 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		N/A

9. ELECTRICITY

Subject	Requirement	Yes/No	Remarks
*Electrical Distribution Boards & Earth Leakage	Colour 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. Earth leakage protection unit fitted and operating. Tested with instrument: Test results within 15 – 30 milli-amps Aperture/Opening/s provided for the plugging in and removal of extension leads without the need to open the door		
*Electrical Installations & Wiring	Temporary wiring / extension leads in good condition / no bare or exposed wires. Earthing continuity / polarity correct: " Brown is live, Blue is not, Green and Yellow earth the lot" 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.		

*Physical condition of Electrical Appliances & Tools	<u>Electrical Equipment and Tools:</u> (includes all items plugging in to a 15 Amp supply socket) Insulation / casing in good condition. Earth wire connected/intact where not of double insulated design Double insulation mark where no earth wire. Cord in good condition/no bare wires/secured to machine & plug. Plug in good condition, connected correctly and correct polarity.		
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10. EMERGENCY/FIRE PREVENTION AND PROTECTION

Subject	Requirement	Yes/No	Remarks
*Fire Extinguishing Equipment (See Section 1 for Designation & Register)	Fire Risks Identified and on record <u>Fire Extinguishing Equipment available for:</u> * Offices * General Stores * Flammable Store * Fuel Storage Tank/s * Gas Welding / Cutting operations * Where flammable substances are being used / applied.		
*Maintenance	Fire equipment serviced minimum annually/preferably 6 monthly		
*Location & Signs	<u>Fire Extinguishing Equipment:</u> * Clearly visible * Unobstructed * Sign 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 day's usage Special gas cylinder store/storage area. Gas Cylinders stored / used / transported upright and secured in trolley/cradle/structure and ventilated. Types of Gas Cylinders identified/stored separately Full cylinders stored separately from empty cylinders		

Subject	Requirement	Yes/No	Remarks
*Storage, Issue & Control of Hazardous Chemical Substances (HCS) (See Section 1 for Designation & Register)	HCS storage principles applied: products segregated Provision made for leakage/spillage containment Emergency showers/eye wash facilities provided HCS under lock & key controlled by designated person Decanted/issued in containers with information/warning labels Disposal of unwanted HCS by recognised disposal agent		

11. EXCAVATIONS

Subject	Requirement	Yes/No	Remarks
Excavations deeper than 1.5 m. (See Section 1 for Designation & Register)	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		

12. TOOLS

Subject	Requirement	Yes/No	Remarks
*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		

Subject	Requirement	Yes/No	Remarks
	* Correct saw used for the job		
*Explosive Powered Tools. (See Section 1 for Designation & Register)	Only used by trained / authorised personnel. Prescribed warning signs placed / displayed where tool is in use. 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.		

13. CRANES

Subject	Requirement	Yes/No	Remarks
Tower Crane (See Section 1 for Designation & Register)	Only operated by trained authorised operator with valid certificate of training Structure - no visible defects Electrical installation good/safe Crane hook: Throat pop marked/safety latch fitted/functional SWL/MML displayed Limit switches fitted/operational Access Ladder fitted with backrests/Fall arrest system installed Lifting tackle in good condition/inspection colour coding current		
*Mobile Crane (See Section 1 for Designation & Register)	Only operated by trained authorised 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		
*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		

Subject	Requirement	Yes/No	Remarks
(See Section 1 for Designation & Register	Cable/sheaves greased/no visible damage/split wires/corrosion		
	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		
*Gantry Crane	Only operated by trained authorised persons Correct slinging techniques used Recognised/displayed on chart signals used Log book kept/up to date Prescribed inspections conducted on crane & lifting tackle "Crane overhead" signage, where applicable Crane hook: Throat pop marked/safety latch fitted/functional SWL/MML displayed/load limiting switches fitted/operational		

14. BUILDER'S HOIST

Subject	Requirement	Yes/No	Remarks
Builder's Hoist (See Section 1 for Designation & Register)	<p>"Hoist In Operation" – sign displayed.</p> <p>General construction strong and free from patent defects.</p> <p><u>Tower:</u> * Adequately secured / braced.</p> <ul style="list-style-type: none"> * 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. <p><u>Platform:</u> * No persons conveyed on platform</p> <ul style="list-style-type: none"> * Steel wire ropes with breaking strain of six times max. weight. * Signal systems used. * Goods prevented from moving / falling off. * Effective brake capable of holding max. weight. 		

15. TRANSPORT & MATERIALS HANDLING EQUIPMENT

Subject	Requirement	Yes/No	Remarks
*Site Vehicles	All Site Vehicles, Dumpers, Bobcats, Loaders etc; checked daily before used 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 for passengers. Site speed limit posted and not exceeded. Drivers / Operators trained / licensed.		
Conveyors	No unauthorised persons allowed to drive / operate equipment. Conveyor belt nip points and drive guarded. Emergency stop/lever/brake fitted, clearly marked & accessible.		

16. SITE PLANT AND MACHINERY

Subject	Requirement	Yes/No	Remarks
Brick Cutting Machine	Operator Trained. Only authorised persons use the machine. Emergency stop switch clearly marked and accessible. Area around the machine dry and slip/trip free/clear of offcuts 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 authorised / trained persons use welder. Adequately earthed. 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. Screens & warning signs placed		
*Woodworking Machines	Operators Trained. Only authorised persons use machines. Provided with guards. Guards used.		

Subject	Requirement	Yes/No	Remarks
	Operators using correct PPE - eye/face/foot/hearing		
*Compressors	Relief valves set and locked / sealed. Maximum Safe Working Pressure (MSWP) indicated on face of pressure gauge face: not on glass cover. All drives adequately guarded. Receiver/lines drained daily Hoses good condition/clamped, not wired		
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. Banksman identified and crane signals displayed and used.		
*Gas Welding / Flame Cutting Equipment	Only authorised/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. Fire prevention/control methods applied/hot work permits		

17. PLANT & STORAGE YARDS/SITE WORKSHOPS SPECIFICS

Subject	Requirements	Yes/No	Remarks
Section 8(2)(1) General Machinery Regulation 2(1): Supervision of the Use & Maintenance of Machinery	Person/s with specific knowledge and experience designated 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	Schedule D Notice posted in Work areas		

Subject	Requirements	Yes/No	Remarks
re. Operation of Machinery			
Vessels under Pressure Regulation 13(1)(b): Supervision of the Use & Maintenance of Vessels under Pressure (VuP)	Person/s with specific knowledge and experience designated to Supervise the Use & Maintenance of VuP's VuP's identified/numbered/placed on register/Manufacturers plate intact Inspection/maintenance schedules for abovementioned Inspections/maintenance carried out to above schedules Results recorded/Test certificates available		
Lock-out Procedure	Lock-out procedure in operation		
Ergonomics	Ergonomics survey conducted – results on record Survey results applied		
Demarcation & Colour 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 Toolrest – secure/square/max. 2 mm gap 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		
Ancillary Lifting Equipment	Chain Blocks/Tirfors/jacks/mobile gantries etc. identified/numbered on register Chains in good condition/links no excessive wear Lifting hooks – throat pop marked/safety latch fitted SWL/MML marked/displayed		

Subject	Requirements	Yes/No	Remarks
Ancillary Lifting Equipment	Chain Blocks/Tirfors/jacks/mobile gantries etc. identified/ numbered on register Chains in good condition/links no excessive wear 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		

18. WORKPLACE ENVIRONMENT, HEALTH AND HYGIENE

Subject	Requirement	Yes/No	Remarks
*Lighting	Adequate lighting in places where work is being executed e.g. stairwells and basements. Light fittings placed / installed causing no irritating/blinding glare.		
*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 exceeds 85 dBa. All reasonable steps taken to reduce noise levels at the source. Hearing protection used where noise levels could not be reduced to below 85 dBa.		N/A
*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 when extreme temperatures are experienced.		
*Ablutions	Sufficient toilets provided – 1 per 30 employees (National Building Regulations prescribe chemical toilets for Construction sites) Toilet paper available. Male/ Female use indicated. Sufficient showers provided. Facilities for washing hands provided Soap available for washing hands Means of drying hands available Changing facilities / area provided Ablution facilities hygienic and clean.		
*Eating / Cooking Facilities	Adequate storage facilities provided. Ablution facilities hygienic and clean. Weather protected eating area provided, separate from changing area		

Subject	Requirement	Yes/No	Remarks
	Refuse bins with lids provided. Facilities clean and hygienic.		
*Pollution of Environment	Measures in place to minimize dust generation. Accumulation of empty cement pockets, plastic wrapping / bags, packing materials etc. prevented. Spillage / discarding of oil, chemicals and diesel into storm water and other drains prevented.		
*Hazardous Chemical Substances (See Section 1 for Designation & Register)	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.		

Auditor Signature

Date

Received by
Manager/ Supervisor

Date

Tabled at OH&S Committee
