



Item  
No

Quantity                      Rate                      Amount

**SALVAGING AND CREDIT FOR  
MATERIALS ON SITE (PROVISIONAL)**

**The following materials are available for use from  
the previous Contractor:**

**SUPPLEMENTARY PREAMBLES**

Salvaging of Reinforcing:

Reinforcing for the raft foundations was delivered to site under the previous contract. The tags have been removed from the reinforcing and spread across the storage area. Some have been fixed into beam cages with stirrups.

The reinforcing for the raft foundations must be salvaged by identifying, arranging in groups, and tagging the reinforcing. The original reinforcing layouts and bending schedules is available for this.

The contractor must assign a competent person to plan and oversee the salvage operation and must provide the necessary labour and equipment for this purpose.

The contractor must compile an inventory of all the reinforcing with bar marks and quantities and submit it to the Principle Agent for verification.

The Principle Agent will then issue instructions for the ordering of additional reinforcing that could not be salvaged or the alternative use of bars that could not be identified to have a specific bar mark.

Any reinforcing that could not be incorporated into the works, must be sold off under the control of the Principle Agent and passed as a credit to the Contract.

The configuration of most of the reinforcing in the raft foundations are repetitive in nature and can be grouped as follows:

- Longitudinal bars in main beams
- Stirrups in internal beams
- Stirrups in edge beams
- Reinforcing in floor slabs, mostly Y10 at 200 c/c each way.
- Dowel bars (R25)
- Column starter bars

**Carried to Collection**

Bill No. 20

Salvaging and Credit for Materials on Site

R

<b><u>Salvaging of Reinforcing:</u></b>				
1	Provide a competent person to oversee the process of salvaging the reinforcing.		Item	
2	Identify, group and tag reinforcing on site.	kg	123,949	
3	Submission of detailed inventory of tagged reinforcing.		Item	
4	Provide Credit for reinforcing which cannot be used.	kg	12,394	
<b><u>Credit for Materials on Site:</u></b>				
Note: the item below must be negative values.				
<b><u>Mild steel reinforcement on site:</u></b>				
5	8mm Diameter bars.	kg	625	
<b><u>High tensile steel reinforcement on site:</u></b>				
6	25m Diameter bars.	kg	48,665	
7	20mm Diameter bars.	kg	33,215	
8	16mm Diameter bars.	kg	2,408	
9	12mm Diameter bars.	kg	22	
10	10mm Diameter bars.	kg	26,620	
<b><u>Bricks on Site:</u></b>				
11	Makana Qunu Travertine Face Bricks.	No	12,600	
12	Makana Heritage Travertine Face Bricks.	No	11,700	
13	Plaster Bricks.	No	14,400	
<b>Carried to Collection</b>				
Bill No. 20				
Salvaging and Credit for Materials on Site				R



Item No		Quantity	Rate	Amount
	<b><u>REMEDIAL WORKS (PROVISIONAL)</u></b>			
	<b><u>TRENCH EXCAVATIONS:</u></b>			
	<b><u>Excavation in earth not exceeding 2m deep:</u></b>			
1	Trenches.	m3	169	
	<b><u>Extra over all excavations for carting away:</u></b>			
2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor.	m3	169	
	<b><u>Risk of collapse of excavations:</u></b>			
3	Sides of trench and hole excavations not exceeding 1,5m deep.	m2	744	
	<b><u>BULK EARTHWORKS:</u></b>			
	<b><u>Site clearance etc:</u></b>			
4	Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, trees with trunks not exceeding 200mm girth, debris, etc., including grubbing up all roots, scoffling up as required and cart away all vegetation and debris.	m2	11,275	
	<b><u>Open face excavation not exceeding 2m deep:</u></b>			
5	Over site to reduce levels and depositing excavated material in prescribed stock piles on site.	m3	1,691	
	<b><u>Extra over all excavations for carting away:</u></b>			
6	Surplus material from stock piles on site to a dumping site to be located by the contractor.	m3	1,691	
	<b><u>Earth filling supplied by the contractor under pavings etc.</u></b>			
7	Over site of G6-SUBGRADE material compacted to 93% Mod A.A.S.H.T.O. density.	m3	1,860	
	<b>Carried to Collection</b>			R
	Bill No. 21			
	Remedial Works			

	<b><u>Compaction of surfaces.</u></b>			
8	Compaction of ground surface under roads, etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material from excavated material where necessary and compacting to 90% Mod AASHTO density.	m2	11,275	
	<b><u>Prescribed density tests on filling:</u></b>			
9	In-situ dry density test.	No	56	
	<b><u>ALTERATIONS</u></b>			
	<b><u>Soil Drainage:</u></b>			
10	Rodding through and proofing of existing sewers (160 and 110mm) for cleaning out and discovery of deficiencies.	m	1,000	
	<b><u>Concrete repairs:</u></b>			
11	Break up reinforced concrete in existing reinforced raft foundations to replace underfloor services.	m3	10	
12	Break up concrete encasement under existing raft foundations to replace underfloor services.	m3	6	
13	Treat existing concrete with approved 'wet to dry' agent before placing of new concrete.	m2	13	
14	Casting of 35Mpa concrete for repairs to existing rafts.	m3	10	
15	Casting of 15Mpa concrete for concrete encasement under existing rafts.	m3	6	
16	Chipping open of cracks in concrete elements not deeper than 100mm.	m	16	
17	Chipping open of cracks in concrete elements deeper than 100mm but not deeper than 200mm.	m	16	
18	Treating of cracks that has been chipped open with approved 'wet to dry' agent.	m2	10	
19	Repairing of cracks with approved non-shrink cementitious grout.	Litres	125	
	<b>Carried to Collection</b>			R
	Bill No. 21 Remedial Works			



<b>Bill No</b>	<b><u>FINAL SUMMARY</u></b>	<b>Page No</b>	<b>Amount</b>
1	Preliminaries	37	
2	Earthworks	42	
3	Concrete, Formwork and Reinforcement	50	
4	Masonry	57	
5	Waterproofing	60	
6	Roof Coverings Etc.	64	
7	Carpentry and Joinery	82	
8	Ceilings, Partitions and Access Flooring	86	
9	Floor Coverings, Wall Linings, Etc.	90	
10	Ironmongery	104	
11	Structural Steelwork	112	
12	Metalwork	120	
13	Plastering	123	
14	Plumbing and Drainage	141	
15	Tiling	144	
16	Glazing	145	
17	Paintwork	150	
18	External Work	209	
19	Budgetary Allowances	212	
20	Salvaging and Credit for Materials on Site	215	
21	Remedial Works	218	
	<b>Carried Forward</b>		R

Bill No	<u>FINAL SUMMARY</u>	Page No		Amount
	<b>Brought Forward</b>		R	
	<b><u>PART B:</u></b>			
	Brought forward Total for Electrical Installation (Part B) excluding VAT see separate Electrical document after the final Summary.	Item		
	<b><u>PART C:</u></b>			
	Brought forward Total for Mechanical installation (Part C) excluding VAT see separate Mechanical installations document after the Final Summary.	Item		
	<b><u>MONETARY PROVISION FOR CONTINGENCIES</u></b>			
	Provide the sum of R2,750,000.00 (Two Seven Hundred and Fifty Thousand Rand) for Contingencies, to be adjusted, used and paid as instructed and approved by the Client in terms of clauses 17,31 and 32 of the Principal Building Agreement (refer JBCC).		R	2,750,000.00
	<b><u>STATUTORY INCREASES</u></b>			
	Provide the amount of R14,400,000.00 (Fourteen Million Four Hundred Thousand Rand) for Statutory increases (CPAP), to be adjusted, used and paid as instructed by the Client for and based on contractually calculated escalation per item 3.2.4 of the contract data of the Preliminaries Bill and in terms of clauses 17,31 and 32 of the Principal Building Agreement (refer JBCC).		R	14,400,000.00
	Sub Total		R	
	<b>Add Value Added Tax at the rate of 15%</b>		R	
	<b>Carried to Form of Tender</b>		R	

## INDEPENDENT DEVELOPMENT TRUST

Construction of Dining Hall, Kitchen & Laundry, Construction of Dormitories (712 Learners), Dormitory Security Fence, pedestrian entrance, vehicular access gate & road (south east side of site), Dormitory furniture, cutlery, crockery, etc

**External work:** - Parking area and delivery area for dormitories, Stormwater management around buildings, Seating space around buildings.

**Bulk Infrastructure:** - Electrical upgrade (Construction of switch room (4 x 5m) with adjacent generator area).

**Sewerage Ponds:** (New sewer lines from dormitories; Connection points for proposed classroom upgrades for Team B)

**Water Harvesting:** (Water storage tanks to lowest part of site; Installation of water pumps; High level water tanks to high part of site).

Fire High level water tanks - highest part of the site, Fire Management System, Borehole and/or municipal supply upgrade, Landscaping, Fencing school site at Ntsonkotha SSS.

### C3 Scope of Work

#### 1 DESCRIPTION OF THE WORKS

##### 1.1 Employer's objectives

The employer's objective is to provide:

Construction of Dining Hall, Kitchen & Laundry, Construction of Dormitories (712 Learners), Dormitory Security Fence, pedestrian entrance, vehicular access gate & road (south east side of site), Dormitory furniture, cutlery, crockery, etc

**External work:** - Parking area and delivery area for dormitories, Stormwater management around buildings, Seating space around buildings.

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##### 1.2 Overview and Order of the works

Construction of the Hostels will be Phased over the 42 Months.

Phase 1 – 15 Months

Construction of the Dining Hall, Kitchen and Laundry and all Bulk Services.

Phase 2 – 30 Months (To run concurrently with Phase 1)

Construction of Dormitory for 356 Learners

Phase 3 – 12 Months

Construction of Dormitory for 356 Learners

### 1.3 Extent of the works

Construction of Dining Hall, Kitchen & Laundry, Construction of Dormitories (712 Learners), Dormitory Security Fence, pedestrian entrance, vehicular access gate & road (south east side of site), Dormitory furniture, cutlery, crockery, etc

**External work:** - Parking area and delivery area for dormitories, Stormwater management around buildings, Seating space around buildings.

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### 1.4 Location of the works

The designated site to be shown to the contractor is at **NTSONKOTHA SENIOR SECONDARY SCHOOL, LADY FRERE DISTRICT OF THE EASTERN CAPE**

#### Temporary works

To be communicated to the winning bidder before construction commences

## 2 DRAWINGS

The drawings used for setting up the Bills of Quantities are attached on a compact disc at the back of this tender document.

- **Architectural drawings**

Three (3) sets to be provided to the successful tenderer at site hand over

## 3 PROCUREMENT

### 3.1 Preferential procurement procedures

The works shall be executed in accordance with the conditions attached to preferences granted in accordance with the preferencing schedule.

#### 3.1.1 Requirements for the sourcing and engagement of labour.

3.1.1.1 Labour required for the execution of all labour intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.

3.1.1.2 The rate of pay set for this project is as follows:

Description	Daily wage for 8 hour work day (Minimum)	Important Note to Bidders
Unskilled labour	R 120.00	<b>NB:</b> Bidders are to check and verify

Semi-skilled labour	R 160-00	rates used in the area during compulsory briefing or before submitting bid document.
Skilled labour	R 190-00	
Supervisor	R 230-00	

- 3.1.1.3 Tasks established by the contractor must be such that:
- a) the average worker completes 5 tasks per week in 40 hours or less; and
  - b) the weakest worker completes 5 tasks per week in 55 hours or less.
- 3.1.1.4 The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 3.1.1.3.
- 3.1.1.5 The Contractor shall, through all available community structures, inform the local community of the labour intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:
- a) where the head of the household has less than a primary school education;
  - b) that have less than one full time person earning an income;
  - c) where subsistence agriculture is the source of income;
  - d) those who are not in receipt of any social security pension income
- 3.1.1.6 The Contractor shall endeavor to ensure that the expenditure on the employment of temporary workers is in the following proportions:
- a) 25 % women;
  - b) 50% youth who are between the ages of 18 and 25; and
  - c) 2% on persons with disabilities.

**3.1.2 Specific provisions pertaining to SANS 1914-5**

**3.1.2.1 Definitions**

- 3.1.2.1.1 Targeted labour: Unemployed persons who are employed as local labour on the project.

**3.1.2.2 Contract Participation Goal**

- 3.1.2.2.1 The minimum Contract Participation Goal applicable to the Contract is 30%.
- 3.1.2.2.2 The wages and allowances used to calculate the contract participation goal shall, with respect to both time-rated and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes. The Person / days will be calculated in accordance with Addendum F: Contract Person / Days Calculation Format.

**3.1.2.3 Terms and conditions for the engagement of targeted labour**

- 3.1.2.3.1 Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts to be signed between the Contractor and workers will be in accordance with the pro-forma contract, attached as Addendum D.
- 3.1.2.3.2 Further to the provisions of clause 5.2 of SANS 1914-5, the Contractor will use the pro-forma attendance register, attached as Addendum E, to record the required information as per said clause.

**3.1.2.4 Variations to the SANS 1914-5**

None

**3.1.2.5 Training of targeted labour**

- 3.1.2.5.1 The Employer will appoint a service provider that will provide training to the workers. The Contractor need not to provide for payment of said service provider.
- 3.1.2.5.2 Workers will receive 2 days training per every 22 working days for the duration of the Contract.
- 3.1.2.5.3 An allowance equal to 100% of the task rate or daily rate shall be paid by the Contractor to workers who attend training, in terms of 3.1.2.5.
- 3.1.2.5.4 Records pertaining to the attendance, progress and performance of trainees will be kept by the Contractor and made available to the Employer monthly. These records shall be attached to the monthly progress payment certificates to the Employer.
- 3.1.2.5.5 The Contractor shall do nothing to dissuade targeted labour from participating in training programmes.

## **3.2 Subcontracting**

### **3.2.1 Scope of mandatory subcontract work**

As per the mandatory sub-contracting clause, the Contractor must not sub-contract more than 30% of work to Domestic Sub-contractors.

The Contractor shall without delay enter into contracts with the Domestic Subcontractors as submitted on the returnable schedule and forward a copy of these agreements to the Principal Agent. The Contractor shall remain responsible for providing the subcontracted portion of the works as if the work had not been subcontracted.

The Contractor to take note of item 3.2.2 below

### **3.2.2 Preferred subcontractors / suppliers**

### **3.2.3 Subcontracting procedures**

See items 3.2.1 and 3.2.2 as well as tender data

### **3.2.4 Attendance on subcontractors**

Attendance to Domestic Sub-contractors as stated above should be priced under the relevant items in the Preliminaries section of the bills of quantities. Attendance to nominated sub-contractors should be priced under the relevant items in the Provisional Sums section of the bills of quantities.

## **4. MANAGEMENT**

### **4.1 Recording of weather**

The Contractor shall erect an effective rainfall gauge on the site and record the daily rainfall figures in a book. Such book shall be handed to the employer's representative for his signature no later than 12 days after rain that is considered to justify an extension of time occurs.

### **4.2 Unauthorized persons**

The Contractor shall keep unauthorized persons from the works at all times. Under no circumstances may any person except guards be allowed to sleep on the building site.

### **4.3 Management meetings**

The Employer's Representative and the Contractor shall hold meetings relating to the progress of the works at regular intervals and at other such times as may be necessary. The Contractor shall attend all site meetings and shall ensure that all persons under his jurisdiction are notified timeously of all site meetings should the Employer's Representative require their attendance at such meetings.

The Contractor shall keep on site a set of minutes of all site meetings, daily records of resources (people and equipment employed), a site instruction book, a complete set of contract working drawings and a copy of the procurement document and make these available at all reasonable times to all persons concerned with the contract.

#### **4.4 Forms for contract administration**

The Contractor shall be required to submit an updated contractor monthly report during site meetings, which will be used by the consultant to update the client.

#### **4.5 Payment certificates**

The Contractor to ensure that the VAT invoice required with each certificate is delivered timeously. The date of the certificate will be that of the date when the certificate is received by the consultant.

The Contractor to ensure timeous submission of all required documentation for the expedient processing of payment certificates, as required by the client, eg BAS entity forms, company registration details, VAT clearance certificates, etc. The Contractor is responsible for such documentation submission.

#### **4.6 Addenda**

- 4.6.1 Occupational Health and Safety Site Specific Specification (*ADDENDUM A*)
- 4.6.2 Baseline Risk Assessment (*ADDENDUM B*)
- 4.6.3 Environmental Management Plan (*ADDENDUM C*) (will be made available to the successful bidder)
- 4.6.4 Pro-forma contract between Contractor and Worker (*ADDENDUM D*)
- 4.6.5 Pro-forma Attendance Register (*ADDENDUM E*)
- 4.6.6 Contract Person / Days Calculation Format (*ADDENDUM F*)
- 4.6.7 Contractor monthly report format (see 4.4 above) also available in electronic format (*ADDENDUM G*)
- 4.6.8 Guidelines for the implementation of labour-intensive infrastructure projects under the Expanded Public Works Programme (*ADDENDUM H*) (available on the following *website [www.epwp.gov.za](http://www.epwp.gov.za)*)
- 4.6.9 Specifications and Drawings (*ADDENDUM I*)
- 4.6.10 IDT Addendum to the JBCC (*ADDENDUM J*)
- 4.6.11 Mechanical and Electrical Specifications and Bills of Quantities

## INDEPENDENT DEVELOPMENT TRUST

Construction of Dining Hall, Kitchen & Laundry, Construction of Dormitories (712 Learners), Dormitory Security Fence, pedestrian entrance, vehicular access gate & road (south east side of site), Dormitory furniture, cutlery, crockery, etc

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### C4 Site Information

# Occupational Health and Safety Site Specific Specification

Issued in terms of the Occupational Health and Safety Act, 1993  
Construction Regulations 2014 & Applicable Legislation.

**PROJECT DESCRIPTION: NTSONKOTHA SECONDARY SCHOOL**

**PROJECT NUMBER: DoE14ECAR003**

Client: Department of Basic Education  
DPW and the Implementing Agent: IDT  
Principal Agent: R QS & Project Managers  
Leonard Roeleveld  
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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

## 1 SCOPE

### 1.1 Scope of Application

This site-specific health and safety specification shall apply to the Ntsonkotha Secondary School for the complete project life cycle, aiming to provide the client with a completed, fit for use school that will address current and projected student demands.

It provides the overarching framework within which the principal contractor is required to demonstrate compliance with certain, specifically critical requirements for occupational health and safety established by the Occupational Health and Safety Act 85 of 1993 during the construction work, according to the information made available on the project scope at the time of tender:

- Establishes the way the principal contractor is to manage the prevention risk to health and safety incidents that may occur during construction stage 5; and
- Establishes the way the Client's Health and Safety Agent (CHSA) will interact with the principal contractor during the project life cycle

This specification establishes general requirements to enable the principal contractor to satisfy aspects of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Construction Regulations 2014; and any other applicable legislation as relevant to the project. The specification refers to the geotechnical design reports and the drawings issued by the PA at time of tender. No EIA was done as this is an existing school. It notes concerns raised from the information given that the contractor must be aware of in designing a suitable works program with the approved Health and Safety Plan, based on this Specification.

The client is required to provide certain site-specific information to the principal contractor for the works to enable such a plan to be formulated. Accordingly, this specification whilst based on current and relevant information to the project at tender phase, cannot ensure compliance with the requirements of "The Act" in full. This highlights the dynamic nature of OHS management systems, the relationship between parties and construction processes.

The Construction Regulations 2014, requires a client to stop any contractor from executing construction work which is not in accordance with the approved contractor's health and safety plan for the site or which poses to be a threat to the health and safety of persons. The duty to stop work not done according to plan or where a risk exists, lies with the designers, client and mandatory CHSA, the contractor and the registered appointed Construction Health and Safety Officer. (CHSO) This requires the construction team to be committed to the relevance of "caring to not do harm" as a moral obligation that requires teamwork to ensure that Health and Safety is a critical function required in doing construction works.

### 1.2 Scope of Works

The Baseline scope received in November 2021 as a guideline:

#### a) **Extent of works**

For the scope of works, refer to part C3 of the tender document as prepared by the principal agent.

#### b) **Order of works**

To be confirmed on site, but phasing anticipated.

3 Phases anticipated as summarized:

- Phase 1- Dining and nutrition and bulk infrastructure 24 Months (NOTE PLANNING FOR TEMPORARY STORMWATER CONTROL DURING CONSTRUCTION and BULK EARTHWORKS)
- Phase 2- Girl's hostel running concurrently
- Phase 3- Boys Hostel.

---

Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

**c) Buildings In Use:**

Existing structure is currently occupied, and so are the adjacent buildings therefore noted:

- Noise levels are to be kept at a minimum.
- Minimal disruption to the neighbors
- Security and identification of workers
- Hoarding to be specified as required
- Employer to provide all worker facilities.

The Bidder is to allow for liaising with occupants of the adjacent buildings as and when it becomes necessary to work in/or around occupied buildings in reasonable time. No further claims for delays will be considered in this.

**d) Access**

Not deemed to be problematic but the site lay-out plans will have to indicate road access and controls.

**e) Project**

The appointed PC will need to manage multiple SMME's and sub-contractors and should have a competency of a CIBD above level 8. The PC must be able to ensure competent resources on site. The appointed personal noted in the Permit application must be the persons on site for the project life cycle. Changes deemed utterly necessary as result of unforeseen circumstances will have to be approved by the PA, CHSA and project team, before implementation. A Permit is granted on those conditions.

A large number of people will be required to be employed on site: they must all have the required training, supervision, inductions and medicals, plan for costs and processes.

**1.3 Site location:**

Lady Frere, Eastern Cape

**1.4 Site program and works scope:**

The construction works areas will need to be fenced and controlled.

*Fire prevention, security protection and environmental management* must have method statements for review with the OHS Plan and File for review. It must be noted that the work will happen over a large area and therefor co-ordinating supervision and OHS control will need good daily planning.

*All personal on site must wear reflective overalls or vests and be identifiable as working under the appointed PC.*

*(Note that items in italic is for inclusion in the OHS plan and file)*

**1.5 Anticipated works:**

- Plant and Earthworks
- Temporary stormwater management during works
- Build of Permanent Stormwater and Sewer Reticulation
- Excavations must receive specific attention due to the soil conditions noted in the geotechnical reports and indicated as concern on the site lay-out drawings. All trenches and narrow excavations more that 1m deep will require shoring or bracing should the engineers so require. The anticipated depth is 1.8m is specified area. It is noted that the Geotechnical report classified the works and indicated that due care should be taken during excavations.

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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

Temporary storm water will need attention at all times and permanent stormwater construction should be considered to be a critical task and the contractor is advised to put this on the construction program early. This will serve to protect the embankments and facilitate later works such as having the correct platform for scaffold erection, preventing building temporary works platforms over collapsing embankments which would require special designer inputs. *Temporary storm water plan and method statements.*

Specific focus must be planned for all excavation related functions, and will require competent supervision of works.

- Work at height where the maximum anticipated height is 3.5M. Safe work platforms will have to be planned to be as if working safely from ground level and SANS 100085 is to be utilised on site and in The SHE files.
- Conventional brick and mortar construction works
- Temporary works
- Fit for work for every person working on site must be on file and recorded on Annexure 3.
- Upgrade to better energy efficient systems is planned for: Lighting, aircons, fire suppression
- Anticipated steel works require a risk analysis and strict compliance with engineers' drawings, bending schedules and other, and hazards for employees doing the work: at heights, or lay down areas, established and controlled.
- Access and egress must be planned for: no climbing of structures. Ladders to comply with each practical use, and if giving access to roof or height platform, be secured and reach 900mm above step over area.
- No unsafe use of trestles during the construction works planning: *Method statements required.*
- Openings and holes must be made safe during the works and dust build up prevented through a *dust control method statement.*
- Rain ingress during the works will need planning to prevent ingress to buildings.
- Improved water reticulation will be constructed and the PC must ensure all required controls are met.
- Note that awareness of electrical risks must be addressed before any electrical works commences.  
Existing services may not be negatively impacted upon.
- PC facilities: No VIP toilets: Plan for *serviced chemical toilets* that are to be kept clean and hygienic, strategically placed for use during the works. Should the contractor be allowed to tie into existing sewer: permission must be given in writing by the PA.
- PC to provide drinking water, undercover eating areas, domestic waste removal for employee wastes, hand hygiene stations and ablutions, chemical toilets to site. The PC works camp must be fenced off and strictly controlled and protected.
- PC must have a Covid monitoring station before employees enter works areas and the full Covid 19 plan applies. See notes on doc and advance practical controls on confirmed positive cases.
- PC will be required to have and relevant emergency protocol during the works.
- *PC to have reflective marked over all's.* No one may work in their own clothes.
- *All employees must be identifiable to the project works.*
- PC to note risk on public roads and construction activities: Signage to warn, flag person when required.
- New construction works:
  - Mixing of concrete, stockpiling and collection of build materials will be done without approvals
- All wastes to a registered municipal waste site

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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

**1.6 Notes on Scope:**

- Strict time frames
- Co-operation and co-ordination between all parties
- Strict enforcement of competent supervision, specifically where unskilled labour or SMMEs are used, thus focus on knowledge transfer and quality project delivery.
- Contractual information in writing
- Site diary to note OHS incidence and daily risks.
- Visitors' registers.
- Access constraints and risks for PC to control
- Temporary works competency, planning and appointees will be critical for PC to manage.
- Making and checking that works areas are safe:
  - PC employees, PSP, suppliers and sub-contractors and all stakeholders.
    - Confined areas for project service delivery
    - Working over others
    - Protection of build works and structural integrity controls
    - Protection against ingress of water or other external damages.

**2 DEFINITIONS**

As per the Occupational Health and Safety Act (85 of 1993) and the relevant regulations and applicable standards.

**2.1 List of Abbreviations**

CC	Compensation Commissioner
CHSA	Construction Health and Safety Agent
CHSO	Construction Health and Safety Officer
CR	Construction Regulations (Gazette 10113 of 07/02/2014)
DoEL	Department of Employment & Labour
GAR	General Administration Regulations
GSR	General Safety Regulations
HCSR	Hazardous Chemical Substances Regulations
HIRA	Hazard Identification Risk Assessment
H&S	Health and Safety
OHSA	Occupational Health and Safety Act No. 85 of 1993 (as amended)
OHSS	Occupational Health and Safety Specification
PA	Principal Agent
PSHSS	Project Specific Health and Safety Specification
PC	Principal Contractor
PPE	Personal Protective Equipment
SANS	South African National Standards (Authority)
SDS	Safety Data Sheet
SWP	Safe Work Procedure
PSP	Professional Service Providers
CEMP	Construction Environment Management Plan

**2.2 Key References**

- Occupational Health and Safety Act, No. 85 of 1993 and Regulations (as amended)
- Construction Regulations 2014;
- Hazardous Biological agents Regulation
- ER
- Hazardous Chemical Regulations
- Compensation for Occupational Injuries and Diseases Act, No. 130 of 1993 (as amended);
- Consolidated Directions on OH&S Measures in Certain Workplaces, 2020;
- SANS Standards; and

Contractor \_\_\_\_\_ Witness 1 \_\_\_\_\_ Witness 2 \_\_\_\_\_ Employer \_\_\_\_\_ Witness 1 \_\_\_\_\_ Witness 2 \_\_\_\_\_

- Codes of Practice (COPs).
- Drawings: Tender Phase: Site Layout drawing Ntsonkotha -101 and Cross section drawing with same reference without levels.
- NBR
- EIA
- Geotechnical report

### 3 INTERPRETATION

The Occupational Health and Safety Act 85 of 1993, herein after referred to as “the Act” and its associated regulations, particularly the Construction Regulations 2014, shall have precedence in the interpretation of any ambiguity or inconsistency between it and this specification.

#### 3.1 Purpose of the Project Specific Health and Safety Specification (PSHSS)

The PSHSS is a performance specification to ensure that the client and any organization that enter into formal agreements with the client / agents, professional service consultants (Engineers, Quantity Surveyors and Architects (PSP), principal contractors (PC) and contractors achieve an above acceptable level of OHS performance on the project, reducing loss incidence drastically.

No advice, approval of any document required by the PSHSS, such as hazard identification and risk assessments, or any other form of communication from the client shall be construed as acceptance by the client of any obligation that absolves the principal contractor from achieving the required level of performance and compliance with legal requirements. Furthermore, there is no acceptance of liability by the client, which may result from the principal contractor failing to comply with the PSHSS, i.e., the principal contractor remains responsible for achieving the required performance levels.

Post approval of the site specific OH&S plan (based on the PSHSS) and implementing file, a mandatory agreement in terms of Section 37.2 of the OHS Act will be signed between parties prior to any works commencing. The PSHSS highlights the aspects to be implemented over and above the minimum requirements of current legislation. Requirements may be changed should new risks, changes in design or other issues be identified, which could not have been foreseen during the design phase of the project this is also true for the construction phase, stressing the dynamic nature of risk control during construction. Any new legislation or standards (legislated or determined by the client) that are promulgated or accepted during the contract will automatically be applied.

It should be well noted that in no way does this PSHSS relieve the contractor of any of his responsibilities set out in the Act and Regulations.

### 4 THE OCCUPATIONAL HEALTH AND SAFETY FILE

As required by Construction Regulation 7, the Principal Contractor shall keep and maintain a Site Health and Safety File where all relevant health & safety records will be kept, including the Site-Specific Health & Safety Plan, COVID-19 Plan and the relevant construction risk assessments as referred to above. *This is compulsory.* Relevant information includes but is not limited to:

- a) Client Site Specific specification and HIRA
- b) PC appointment letter
- c) 37.2
- d) PC approved OHS Plan and approval letter
- e) OHS Administrative statutory documents:
  - Valid Letter of Good Standing with the Workmen’s Compensation Commissioner
  - UIF

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Contractor \_\_\_\_\_ Witness 1 \_\_\_\_\_ Witness 2 \_\_\_\_\_ Employer \_\_\_\_\_ Witness 1 \_\_\_\_\_ Witness 2 \_\_\_\_\_

- SARS clearance certificates
- Permit from DoEL in the file with project number clearly displayed at site access.
- f) OHS Policies and procedures signed by the CEO, dated with a review provision. Ensure that a Smoking Policy is in the file.
- g) Organogram with appointments, competencies and current statutory registrations
- h) HIRA for proposed site activities and works.
- i) Safe work procedures / Methodologies/ Plans: inclusive of but not limited to:
  - CEMP
  - Dust and Waste control processes for works.
  - Noise reduction plan
  - Hoarding and lock out controls
  - Prevention of water ingress to works: storm water
  - Facility management and planning for safe access to the works areas.
  - FPP done by a competent person specific to works.
  - Covid 19 mitigation and transmission control plan.
  - Security of assets planning
  - Fire prevention plan
  - Emergency Management plan
  - Hazardous chemical Management plan.(Note items highlighted with Italics under scope)
- j) Induction program that must include work in security environments, with registers
- k) Training and toolbox talks. Upliftment of competency requirements as required for this works
- l) Inspection registers with appropriate policies and procedures
- m) Emergency HIRA, contact numbers
- n) Laws and Regulations
- o) Communications
- p) OHS Committee
- q) Sub-Contractor Management
- r) Employee medical monitoring:
  - POPIA: Permission to use information
  - OHS Medicals fit for work
  - Employee ID; s
  - Covid daily monitoring
  - Assessment for work at heights
  - Ergonomic surveys
  - Proof of UIF payments to be done by CLO: CHSO to be informed that DOL will check.
- s) Incident Management:
  - Procedures
  - General incident management register (Monthly)
  - Annexure 1
  - COIDA forms
  - Covid Reporting COIDA forms.
- t) Audits
  - Internal
  - Subbie Audits
  - CHSA Audits and Inspections

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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

- CR. Inspections as noted under Cr. 11. 12. 13(e) 14. 16. 17. 19. Relating to competency and quality.

*Sub-contractor control Register:*

Contractor Contact Details	COIDA expiry date	37.2	Appointed	Approved plan	Audit date	Score	Comment.

*General Incident Monthly Register*

No	Name Id	Date	Incident summary	Near Miss	FA	Med	LWDC	Fatality	Other: Enviro, Equipment Community unrest+

## 5 GENERAL REQUIREMENTS

### 5.1 Client Hazard Notification

Site establishment and Site camp to be in a designated controlled area to be agreed on site

- Access to works: Plan for employee safety, traffic flow, control deliveries and parking, sub-contractor lay down areas.
- Employees to be visible and everyone working there to have a reflector vest with employer name displayed on at all times or a reflector on the works over-alls.
- Public complaints: Site to be fenced off
- Access to works areas to be pre: planned and coordinated with client
- Laydown areas to be planned, run off prevented.
- Works planning: Cut and fill, Scaffold and fall prevention at drop of edges planned for.
- Inductions must inform employees about fire prevention, access controls and security needs. They may not smoke in works areas.
- Ablutions will have to be provided: Porta toilets or other approved chemical ablutions.

Access, restricted space for construction works, security, noise and dust hazards

Site creep to be avoided.

The PC will have to plan for safe works access and ensure work under controlled conditions:

- Employee movement control and visibility
- No smoking unless in designated areas
- Covid transmission mitigation
- Electrical and services have applicable COC's from a DOL registered electrical contractor.
- Enough ventilation and light for works
- Noise and dust reduction in works areas Temporary works

CR 12 Competency, planning and appointed accountability.

Work at height: Maximum expected work at height level 9M at roof height, 6m for 2 storeys. check structural risks when roof work occurs.

- Cr 10. Note that all employees must be assessed for safety at work and have general competency and capacity to do this work.
- FPP must be qualified and 8.1 must sign off on plans.
- Appointment of a competent scaffold planner, inspector supervisors and erectors with proof of competency provided.
- Specific hazards monitoring on EMP.

Excavations: See notes under scope and ensure competent excavation supervisors are appointed. Max anticipated depth 3M. Shoring may be required.

Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

- CR 13. PC must ensure information and risks related to underground services or overhead hazards are addressed. Excavations, trenching or other must not disturb scaffold footings or undermine other structures. Barricading will be orange 900 visible barricade. Signage will be required to warn others of risk, not remain open for longer than absolutely necessary and access controlled. No trench will be longer than 400m unless near a community, in which case the maximum distance is

150M. Lack of coordination and communications with Client

- Preplanning and programming
- Written agreements
- Customer complaints register to be kept and addressed by

8.1 Specific Hazards unknown at tender time:

- Soil conditions and earthworks
- Excavations
- Work at height, fall off, into, though
- New construction access challenges
- Community consultation is critical
- SMME Management

Structural work will require methodologies to address unknown risks. Construction is a multi-functional discipline and dynamic. OHS is an aspect of construction control.

Scope creep will need to be managed continually.

Potential Hazardous substances: Cement, fuel, lubricants, aggregates and silica, Paint, turpentine, and so on. PC to remain alert and notify on incidents or spills immediately.

Project risks: Not using competent persons, Not planning and failure to program and report. Lack of resources and funding. **Changing CR 8 appointments is a red flag.**

Construction traffic: Planning concrete pours, deliveries, employee drop off, pedestrian path ways will all have hazards. Removal of waste form site will have hazards associated with the task and must be done to authorised municipal waste sites regularly.

Collection of effluent waste may create additional risks and will be monitored.

## **5.2 General Risk Management**

The principal contractor must provide a detailed risk assessment for the entire works on site. Certain construction activities, equipment, substances etc. represent significantly higher safety risks than others. The risk assessment is required to define systems and safe working procedures that will be implemented on site in an endeavor to complete the construction activities safely. The set of risk assessments required to be submitted to the client must include the assessment of health risks such as those that are associated with COVID-19, and other health risks which may result from lack of personal hygiene, ergonomic hazards, etc.

The contractor is required to:

- Identify health and safety hazards and risks to which persons may be exposed during the construction period;
- Analyze and evaluate the identified hazards and risks;
- Document a plan which will highlight safe working procedures to mitigate, reduce or control the identified risks; and
- Develop a *monitoring and review Plan* of the hazards and risks.
- Index the tasks for which there are a completed risk analysis.

The client baseline risk assessment provided with this specification aims to provide the framework within which the risks must be assessed for the construction phase of the project, and to highlight any reasonably foreseeable risks which may be inherent to the project based on its current scope of works.

The BRA is therefore not the replacement of the contractor's risk assessment but rather functions to assist the contractor towards risks he might not be aware of during tendering stage

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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

and while conducting his formal risk assessment. The baseline risk assessment, which is attached as an Annexure to this specification must be used as a guide in conducting the construction phase risk assessments. Refer to Cr.9 for minimal requirements relating to doing a HIRA. Be mindful that the aim is hazard identification, risk ratios will guide the required control focus on site.

## **6 TRAINING, AWARENESS AND COMPETENCY**

### **6.1 Health & Safety Training**

The principal contractor must ensure that all his / her staff is adequately trained to perform the tasks allocated to them and that there is the correct amount of supervision at all times to maintain safe work practices and standards, particularly where semi-skilled and unskilled personnel are involved. The contractor shall *conduct a training needs analysis* to ascertain what health and safety training and re-training is required. No employees shall be allowed on site unless there is proof of induction training and identification.

Competency for the following is un-negotiable, list is not limited to:

- 8.1 and 8.1 alternate, also competency in CR 10, CR 11, CR13, Cr.12, 16.
- 8.5, Risk, Incident investigators competencies, Emergency Response, Covid 19 controls
- CEO must have basic competency in environmental management and auditing
- FPP
- Scaffold Planner, Erector, Inspector and supervisor. CR 16 and SANS 100085 to be on site.
- Temporary works planner and controller
- SHE Reps
- First Aiders
- Fire extinguisher Inspectors
- CCO and CCM
- All appointed inspectors and supervisors must understand liability and duty of signing appointments.
- General work at heights competencies.
- Awareness of existing services and current activities of neighbours, school and other.

### **6.2 Induction**

The contractor shall conduct a site-specific health & safety induction for all the employees, contractors and visitors to the site.

Copies of the attendance registers signed by the attendees as acknowledgement of attendance are to be kept on site in the health & safety file for verification during inspections and Client Audits.

The onsite induction training must also include precautionary measures to be taken on site to prevent the spread of COVID-19. Such measures shall include inter alia the importance of disclosure of any COVID-19 related symptoms, good personal hygiene, observing and maintaining safe social distancing, use of suitable PPE such as face masks, etc.

Site specific Induction must address:

- Access risk including traffic hazards.
- Security
- Fire Prevention
- Noise and behavior
- Client rules
- Reporting of incidence should be encouraged

Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

### 6.3 Awareness

The Principal Contractor shall conduct on-site periodic toolbox talks, preferably weekly or before commencing a hazardous work (activity). The talks shall cover the relevant activity and an attendance register and the contents of the topics discussed must be kept on site in the health & safety file.

Safety notices and symbolic signs, including health and safety awareness posters must be displayed at the site entrance and at strategic positions on the site to create health and safety awareness.

COVID-19 awareness signs, notices and posters must also be displayed at strategic positions.

Environmental awareness training which should also inform on why the wetlands are so precious to the environment.

### 6.4 Competency

The Principal Contractor shall send relevant persons to appropriate courses as required by the Act, relevant Regulations, and applicable safety standards. The type of training to be conducted will be determined after conducting a Hazard Identification and Risk Assessment (HIRA). Copies of training certificates must be kept on site in the health & safety file.

The training to be conducted is, but not limited to:

- Health & Safety Representative Course;
- First Aid Training,
- Fall Protection Planner (SAQA US 229994);
- Working at Heights (SAQA US 229998)
- Scaffolding Erectors and Inspectors;
- Incident investigation; and
- Hazard Identification & Risk Assessment Course.

## 7 OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

### 7.1 Notification of Construction Work: The Permit

Permit project: Display Number at entrance and keep DOL Permit on file

### 7.2 Appointment of Competent Site Personnel

The CEO (OHSA S16.1) of the PC will take overall responsibility for the appointment of competent site staff for the duration of the project. Should the CEO not be personally at the project, the H&S responsibilities are to be delegated to the Acting CEO (OHSA 16.2). Knowledge and training in H&S are required, and certificates indicating H&S training as well as experience to be included in CVs. The designated Construction Manager (CR 8.1) shall also be empowered to appoint personnel on the site as part of his / her duty to ensure health and safety compliance. Note the overarching legal requirements and responsibilities placed on CR 8 appointees.

All other legal appointments are to be made with relevance to the type of work to be performed.

### 7.3 Construction Manager (CR 8.1)

The Principal Contractor must in writing appoint one full time competent person as the construction manager with the duty of managing all the construction work on this single site, including the duty of ensuring occupational health and safety compliance. **In the absence of the designated Construction Manager, an alternate must be appointed and the appointed shall have training and/or experience in the area of responsibility.**

### 7.4 Construction Work Supervisor (CR 8.7)

The Construction Manager must in writing appoint construction work supervisor/s responsible for construction activities and ensuring occupational health and safety compliance on the construction site.

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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

8.8 appointments must clarify the area of supervisory controls.

**7.5 Construction Health and Safety Officer (CR 8.5)**

The principal contractor must appoint a suitably competent Construction Health & Safety Officer (CHSO) to co-ordinate his or her organization's health & safety efforts on the site.

The CV for the proposed CHSO must be submitted to the Client appointed CHSA for approval. The appointed CHSO must be full time and readily available on site during working hours. The CHSO must conduct monthly internal audits and random site safety and equipment checks, including overall compliance with the site-specific construction health and safety plan and procedures, and compile a monthly CHSO report to be tabled at each site progress meeting. The CHSO reports to the 8.1. The minimum qualification for the CHSO must be a matric certificate, SAMTRAC qualification with at least two years and more experience on civil engineering and/or building projects.

The CHSO that the Principal Contractor *intends to appoint must be registered as a CHSO* with the SACPCMP and shall provide a valid registration certificate with the Council.

**The personnel noted in the permit application file must be the role players on site, any changes, or absence on site must immediately be brought to the CHSA attention whom may notify DoEL if concerned. Permits can be withdrawn in cases where PC's mislead on appointments. Lack of Section 8 personnel on site will lead to a 5.1.q instruction.**

**7.6 Health & Safety Representative / H&S Committee Member (OHS Act 17 & 19)**

Irrespective of the number of employees employed on the site, the PC and contractors must each appoint a full-time health and safety representative, who at least has completed the necessary health and safety representative course. The election or appointment of health & safety representatives must be in writing.

Regular inspections are to be carried out by health & safety representatives; records must be kept on site in the health & safety file. Deviations must be rectified by the responsible person immediately.

The H&S representative will liaise and report to the health and safety officer.

In cases where there are more than two health & safety representatives elected, a health & safety committee must be established. Health and safety committee meetings must be held at least monthly to discuss relevant health & safety topics.

**7.7 First Aider / First Aid Attendant**

The principal contractor must appoint at least two Level 1 First Aider for the project and where practicable, one First Aid attendant for each work team or section of the works. The appointed First Aid attendants must be suitably qualified and have valid training certificates.

The principal contractor together with the responsible First Aid attendant must ensure that the first aid boxes(s) are fully stocked.

First Aid incidence must be registered on the monthly register, investigated and closed out like any other incident, to avoid more catastrophic incidence to occur.

**7.8 Risk Assessor**

The principal contractor is required to appoint a competent risk assessor and must understand the process of identifying hazards and assessing risks emanating from the identified hazards.

This appointed person can be an already designated health & safety officer because the task of assessing risks is an ongoing process and therefore risk review process must be done regularly.

This will also mean that that person will be responsible to put together a risk profile, rate the risks, and ensure that there are appropriate corrective action plans.

Further to that, there must be a direct link to the personal protective equipment / clothing and training to be conducted throughout the contract.

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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

**7.9 Other Appointments are stated below but not limited to:**

- Drivers / Operators of Construction Vehicles and Plant;
- Electrical Installation & Equipment Inspector;
- Excavations Supervisor;
- Emergency / Security / Fire Co-Ordinator;
- Fire Equipment Inspector;
- Temporary Works Supervisor and Inspector;
- Scaffolding Erector/s and Inspector;
- Stacking and Storage Supervisor;
- Hand Tools Inspector;
- Ladder Inspector; and
- COVID19 Compliance Officer;
- All other relevant Appointments for the Project.
- CEO

The Principal Contractor shall, when appointing contractors, shall do so in terms of the Construction Regulations 2014, and in terms of the requirements of Section 37(2) of the Occupational Health and Safety Act, 85 of 1993 (As amended).

The appointments shall be in writing and the responsibilities clearly stated together with the period for which the appointment / designation is valid. This information shall be communicated and agreed with the appointees as well as all the mandataries.

The principal contractor must provide a project specific health and safety organogram of all appointed / designated personnel and a list of contractors appointed on the project and shall always keep an up-to-date copy of each on site. The site organogram and list of contractors shall also be displayed on the site notice board.

The principal contractor is to ensure that each contractor's H&S documentation is evaluated and approved in accordance with the Occupational Health and Safety Act 85 of 1993 (As amended) and applicable regulations. A copy of the contractor's H&S Plan Approval is to be sent through to the appointed H&S Agent and reflected on the contractor's monthly register.

The principal contractor must ensure that an audit is conducted on each Contractor on a monthly basis before the arranged site progress meeting. This audit is to be conducted by the appointed CHSO and a report is to be given on each contractors H&S performance for the past month.

## **8 GENERAL RISK MANAGEMENT**

### **8.1 Health Risks and Medical Surveillance**

The appropriate MSDSs are to be obtained for all products and used to develop the H&S documentation as they relate to the works. The PC is to ensure and supervise safe use of products / chemicals, and their inclusion into risk assessments. The MSDS documents must be checked for monitoring requirements: Hygiene monitoring requirements and use it to guide medical surveillance.

This project does not have such a need, however managing dust and pollutants must be a standard control to reduce risk.

All employees on the site, including contractors, must be in possession of valid medical certificates of fitness to work, issued by an Occupational Health Medical Practitioner in the form of Annexure 3.

These medical certificates shall be in the categories of pre-employment, annual and exit medical evaluation. This must be noted under the OHS BoQ.

Furthermore, the medical surveillance program shall include initial screening of COVID-19 symptoms based on the professional advice of the OHMP / OHNP. Good personal hygiene must be promoted on the site and the sanitary and hand washing facilities with soap and running water must be provided.

Contractor \_\_\_\_\_ Witness 1 \_\_\_\_\_ Witness 2 \_\_\_\_\_ Employer \_\_\_\_\_ Witness 1 \_\_\_\_\_ Witness 2 \_\_\_\_\_

Note that work at height monitoring require continued assessment of employee ability to work at height, and thus the PC must plan to address this in a DSTI, or other monitoring system.

IDs of all must on file on site for use should a medical or more severe incident occur.

## **8.2 Emergency Procedures**

An emergency plan and procedure that is appropriate to the risks is required prior to commencement on site. It is advised that the system should be simple and easy for any worker to follow. The plan / procedure must include COVID-19 related emergencies such as responding to COVID-19 case/s on the site. Assembly point / area to be large enough to allow for social distancing during roll call.

The emergency plan is to ensure the inclusion of local service providers where possible, including nearest COVID-19 testing station. Such arrangements should be made with the service providers prior to the commencement of the project. An isolation area for COVID-19 suspected persons must be made available on site, preferably an enclosed area or room.

Local emergency telephone numbers must be displayed and made part of the emergency procedure. COVID-19 Emergency Contact numbers must also be included on the list

The general principals of emergency management are to be applied as it applies to the hierarchy of control and management.

An emergency exercise must be done annually.

## **8.3 Security and Access Control**

The Principal Contractor shall establish site access rules, implement, and maintain these throughout the construction period. The PC employees and other employees of subbies must wear reflector vests with contractor names for easy identification and security controls.

The wet land areas are PROHIBITED ACCESS AREAS.

Access control procedure shall ensure that non-employees do not proceed on to work areas unaccompanied by a senior site responsible person. All workers and visitors to site must be screened for COVID-19 symptoms before they can be allowed on site. Should a person exhibit any of the COVID-19 symptoms, that person shall not be allowed to site and must either be transported home or to the nearest testing center.

## **8.4 Fires and Emergency Management Potential Risks (Not limited to)**

Attention to emergency planning and procedures is very important. Requirement in terms of identified risks:

- Traffic and access to site and works
- Fire;
- Public Safety;
- Working on damaged structures;
- Falls from heights;
- Electricity
- Collapse of structures
- Riots and community unrest.
- PC activities causing an electrical risk for Client operations
- HBA outbreak
- Asbestos and other Hazardous chemical exposures

The emergency plan is to ensure the inclusion of local service providers where possible. Such arrangements should be made with these persons prior to the commencement of the project; the emergency plan is to include the risks of fire on site and related to any specific activities.

Fire extinguishers will be appropriate for the risk and in sufficient numbers to deal with the type of fires that could occur.

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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

### **8.5 Incident Management and Compensation Claims**

All incidents and accidents are to be investigated internally using a form similar to Annexure 1 hereto attached. All serious incidents requiring medical attention or involving any form of disabling or lost time injury or fatality are to be reported to the Client /CHS Agent immediately. This shall be confirmed in writing following the incident. Covid 19 is a section 25 incident and must be treated as such.

A monthly incident register recording all classes of incidents: Near Miss, F.A, Medical, LWDC, Fatality,

Visitors' complaints, Environmental, Equipment, Covid, Other must be used and updated for audits.

All claims, incident investigations and corrective actions taken must be on site in the file.

### **8.6 Personal Protective Equipment (PPE) and Clothing**

The PC is to provide PPE to all employees free of charge, based on the risk assessments and the type of work to be performed.

The wearing of the identified SANS approved PPE at all times is non-negotiable.

- Hard hats; for work at heights there should be a chin strap. Only Balaclavas may be worn under a hard hat.
- Protective footwear;
- Overalls that ensure worker visibility and should id whom the worker is working for
- Eye protection (when required)
- Hearing protection to reduce noise to 85dB
- Reflective jackets (No bibs) with Contractor name to be worn at all times, if not noted on the overalls.
- Respiratory Protection (minimum of FFP2) for activities where a more effective mask other than a cloth mask is required.
- Safety Harnesses with double big hooks used at correct height, where a safe working platform is not enough.
- Safe working platforms and load controls with applicable signage.
- Applicable gloves in good condition correct for the required task
- Any other necessary PPE identified from MSDS's and/or risk assessments.

All employees and visitors to the site must always wear face masks over the nose and mouth to prevent the spread of COVID-19 both at the workplaces and within the surrounding communities.

### **8.7 Occupational Health and Safety Signage**

As mentioned earlier on this document, on-site H&S awareness signage is required. Signage shall be posted up at fixed or temporary working areas, or other potential risk areas/operations. These signs shall be in accordance with the requirements of the General Safety Regulations or SANS requirements as amended. Signage is to be noted on the site layout drawing indicating where fixed/temporary signage is required.

The signage to be displayed shall be in respect of the following (Not limited to):

- No Un-authorized entry – Report to Site Office;
- COVID-19 Awareness Signage / Rules / Notices (i.e., Symptoms; Wearing of Masks; Personal Hygiene; Social Distancing; Isolation Area / Room, etc.)
- 'Hard hat area' or other PPE requirements;
- First aid box positions (including vehicles);
- Fire extinguishers;
- Assembly Area;
- Scaffold Signage; and
- Deep Excavations.
- Unknown hazard or danger sign

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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

- Authorized personal only
- Asbestos hazards
- Electrical warning or lock out in place signage.

Signs shall be posted at areas of work on site indicating that a construction site is being entered and that persons should take note of H&S requirements.

#### **8.8 Induction of Employees and Visitors, General H&S Training**

A simple, formal induction program is to be prepared which is site specific. Inductions must be carried out for all workers and visitors (including Client) to the site.

Environmental aspects must be included into the induction.

DSTI training is required to ensure workers are familiar with the risks and H&S measures of the work or tasks to be done on a specific day.

#### **8.9 Communication on Site**

All H&S communication during the project between the CHS Agent and the PC will be done in writing, including the issues and responses to non-conformances and H&S audit results. These shall be filed in the OHS file.

1. All Method statement and HIRA's must be received 14 days before works may commence on site, allowing time for approval by relevant PSP.
2. All arrangements made with the client must be in writing and filed for review.
3. DOL prohibitions, Inspections or notices must be displayed.
4. Contact numbers for site Section 8 personal should be in the OHS file.
5. Sub-Contractors index list with contact details must be displayed.
6. COIDA must be displayed.
7. OHS Policy to be displayed.

#### **8.10 Care of Workers on Site (Welfare)**

The provision of toilets at reasonable distances within the work areas is required in terms of the National Building Regulations and Construction Regulation 30. Chemical toilets must be serviced and kept clean. Male and female ablutions should be spilt for safety and protection from sexual abuse issues. Ablutions should be anchored. 1 for every 30 Males or females.

Clean drinking water is to be available to all employees at all times. Water is a precious resource: protect it.

Hand washing stations and / or 70% alcohol-based hand sanitizer must be provided. Hand washing soap must also be provided.

At any one time, no employee's belongings are to be found on the active construction area, the Principal Contractor is to ensure that adequate storage facilities are available for employee's belongings.

Employees will not be allowed to smoke during works or works areas: Designated area to be provided and controlled.

Sheltered eating area to be provided for the workers on site. All facilities to be COVID-19 compliant. An isolation room / area for suspected COVID-19 cases must also be provided on site.

An area where there is an information board within the employee facilities must be used to display audits and notices.

#### **8.11 Demolition**

Should an instruction be given to demolish works: a methodology and review of the HIRA is required.

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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

### 8.12 Discipline, Alcohol and Substance Abuse

All employees (management included) are to follow all lawful instructions given in the interest of H&S. Disciplinary action is to be imposed on those who do not follow such instructions or company rules or policies.

No person shall be allowed to work or access the site if under the influence of alcohol or other substances that could impact on their own or others safety. Random alcohol testing shall be conducted on site. Care should be taken not encourage the spread of COVID-19. Single-use disposable alcohol test units to utilized and appropriately disposed of. A policy statement in this regard must be on file.

Strict control and clarity on employment policies should address absenteeism and the employees informed about what is required when booked off sick, or stay away on Mondays and Fridays, post payment. This policy must be strictly enforced on site as absenteeism impacts on project progress and rushing of work, leads to accidents.

### 8.13 Working At Heights

A practical site-specific fall protection plan as per the requirements of CR 10 needs to be compiled by a competent person as per unit standard 229994. The Fall Protection Plan must be submitted to the client appointed CHSA for evaluation and approval. The approved plan must be signed off by the 8.1 and in his possession for controlling. The plan must reflect the chosen works method for the scope of works.

It is envisaged that scaffolding as well as ladders may be utilized to gain access to heights during construction work. Ground conditions play an important part in scaffold safety: ensure level, compacted and not close to the leading edge of an embankment.

Scaffold erector/s and the scaffold inspector with relevant competencies must be appointed in writing for the purpose of erecting and inspecting scaffolding on the site. A scaffold supervisor must also be appointed to supervise all scaffolding operations on site.

All employees who will be required to work at heights must be declared medically fit to work at heights by an occupational health medical practitioner and the medical certificates must be made available prior to work at heights. Medical assessments are ongoing and may be addressed under the DSTI. All employees working at height shall be in possession of working at heights certificates in line with US 229998.

When working at heights, the effects of wind forces must be considered, and the work must be stopped where significant wind forces are experienced. No work at height is allowed during a thunder storm or rain.

SANS 100085 to be on site.

Consider environmental impact risks: Excessive heat and cold when planning for work at heights. Scaffold safety starts at the foundation.

### 8.14 Excavations

The anticipated depth for excavations can be up to 3m. Any trench or tight square excavation must have shoring. Be extremely cautions as noted under the scope the project soil conditions may present unique challenges. Although no underground or overhead services were noted or anticipated, the contractor must remain vigilant in this regard. There are existing services.

Area being worked at needs to be properly barricaded or fenced off. Barricading must be done in such a manner that prevents people from falling into open excavations. Excavations should preferably not be opened beyond what can be worked in daily. **Danger tape or candy tape is not permitted to be used on site as a means of barricading!** Suitable material such as hard-plastic mesh (long durability) adequately supported and being able to withstand a normal person's weight and the elements (wind, rain) must be utilized as barricading.

All open excavations shall be kept clean (dewatered) of standing water.

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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

### **8.15 Temporary Works**

The principal contractor must appoint a competent person as a Temporary Works Designer to design, inspect and approve the erected temporary works on site before use. The appropriate competent persons are to be appointed to manage and monitor such works to the satisfaction of the Engineer and CHS Agent. Records of temporary works inspections and approvals are to be properly completed by the relevant competent persons and kept in the H&S file.

All temporary works must comply with the requirements of Regulations 6 and 12 of the Construction Regulations 2014. Workers who shall be required to erect, move, or dismantle temporary works structures must be provided with adequate training and instruction to perform those operations safely. If temporary works are to be erected by a contractor, this must be notified to the Architect / Engineer / CHS Agent. All necessary calculations and drawings of temporary works must be kept on site and available to the PA and CHSA.

### **8.16 Construction and Mobile Plant**

The principal contractor must ensure that equipment in use is in good working order and fit for purpose. The PC must plan for access and egress, ensuring no unsafe situation or blocking of emergency routes occur unless planned for and coordinated.

All plant operators have valid medicals, trainings, knowledge of on-site risks, rules and CR 23.

This includes delivery vehicles. Cut and fill operations must be strictly supervised and vertical cut of embankments avoided. No dumping of spoil will be allowed unless authorised in writing by the local municipality.

### **8.17 Cranes and Lifting Operations**

Although not known if this may be required, should any form of lifting device or crane (fixed or mobile) be used during the project for deliveries, moving of supplies or equipment, the appropriate documentation must be made available. Valid load test certificates for cranes and lifting tackle must be made available before use on site. The PC must ensure that the ground conditions are safe for use where required.

Method statements, risk assessments, safe work procedures and training records are to be available prior to work commencing. A procedure for managing loads and lifting operations on the site must be made available as an addendum to the Construction H&S Plan.

### **8.18 Electrical and Mechanical Installations**

All electrical and mechanical installations must comply with the requirements of the Health and Safety Act, the Construction Regulation 2014, other relevant regulations and applicable safety standards and industry best practice. This type of work may be done by specialist contractors, in which case, the requirements of Regulation 7 of the Construction Regulations 2014 must be complied with in respect of appointing such contractors. The PC must be registered with DOL and have competency to manage the voltages the work require. Proof of competency is required. COC must be issued by a competent person: this will include any temporary electrical installation done by the PC. All electrical tools must be checked before use and may not at any time cause Client electricity to trip.

Relevant safe work procedures and technical method statements must be submitted for approval by the PC.

### **8.19 Delivery of Materials to Site**

The PC must reasonably manage all deliveries of material to site. Stacking and storage of materials to be properly coordinated by a person designated for that purpose to ensure all construction materials and articles are safely stacked in areas designated for that purpose and demarcated accordingly as material laydown areas. It is stressed that the site lay down area and camp is going to have access difficulties and these must be managed under the risk profile, be included in site planning and cost requirements.

Display a site lay: out plan. Site creep to be avoided and all work to be done within site boundaries with respect of the EIA.

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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

## **8.20 Contractor Management**

The Principal Contractor shall remain responsible for all the contractors appointed by him or her, including nominated and selected contractors and shall ensure that they also comply with requirements of this specification and legislated requirements.

All contractors shall be appointed in terms of the requirements of Regulation 7 of the Construction Regulations 2014 and shall enter into a written agreement with the principal contractor as stipulated in Section 37(2) of the Occupational Health and Safety Act, 85 of 1993.

Contractors must be appointed in writing by the principal contractor and they must submit health and safety plans which shall be evaluated and approved in writing by the Principal Contractor.

Each contractor must be registered and in good standing with a licensed Compensation Insurer or Compensation Commissioner and a valid letter of good standing must be submitted to the PC.

The PC must audit all the contractors at least monthly and follow up on non-compliances and ensure such are attended to within reasonable time periods as agreed between the principal contractor and each contractor. Audit reports to be made available for verification.

Work between the relevant parties must be coordinated and co-operation is key in work scheduling.

The Contractor register noted in this specification must be displayed and updated constantly. Where a contractor leaves, it must be noted.

SMME's must be managed in the same way as they are contractors under the construction regulations.

## **9 NON-CONFORMANCES**

The Principal Contractor may be penalized for critical and / or repeat non-conformances with the requirements of this specification, the Principal Contractor's health and safety plan and current health and safety legislation. Penalties shall be in the form of monetary value or work stoppage or both. Penalties of monetary value shall be at the discretion of the CHSA, after consultation with the Client / Consulting Engineer or Architect, ranging between R100.00 to R5000.00 per count, depending on the nature and seriousness of the offence in question.

Refer to **Annexure E** for further details pertaining to the penalties applicable.

Should, at any time, the works, or part of the works, be stopped due to unsafe acts or non-compliance with this specification, the PC's H&S Plan or any legislative requirements; the PC shall have no claim for extension of time or any other compensation.

## **10 PROJECT CLOSE OUT REQUIREMENTS**

The documentation submitted and approved following the awarding of the contract will be used to form the H&S file. On completion of the project, a consolidated health and safety file consisting of the following documents but not limited to, shall be submitted to the client appointed CHSA:

- The H&S Plan and the approval by Client;
- PC Appointment Letter;
- Mandatory Agreement with Client;
- Notification of Construction work and Confirmation letter from DOL.
- Record of Competencies (CVs) and appointments;
- Training Records;
- Method statements;
- Risk assessments;
- Safe work procedures;
- Emergency and Injury Management (Accident Stats and Investigations);

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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

- Medical surveillance records;
- Registers and Checklist;
- Internal H&S Audit Reports;
- Contractor H&S Audit Reports;
- Non-Conformance Reports; and
- Any other documents which may be required by the appointed CHSA.

The file must be submitted for close out and sign off by the CHSA, and then submitted with a performance close out report to the Client for storage via the PA.

**11 ANNEXURE A: INCIDENT RECORDING**

**ANNEXURE 1**

**OCCUPATIONAL HEALTH AND SAFETY ACT, 1993  
(ACT NO 85 OF 1993)**

**REGULATION 9 OF THE GENERAL ADMINISTRATIVE REGULATIONS  
RECORDING AND INVESTIGATION OF INCIDENTS**

**A. RECORDING OF INCIDENT**

1. Name of employer .....
2. Name of affected person.....
3. Identity number of affected person.....
4. Date of incident .....
5. Time of incident.....

6. Part of body affected

Head or Neck	Eye	Trunk	Finger	Hand
Arm	Foot	Leg	Internal	Multiple

7. Effect on person

Sprains or strains	Contusion or wounds	Fractures	Burns	Amputation
Electric shock	Asphyxiation	Unconsciousness	Poisoning	Occupational Disease

8. Expected period of disablement

0-13 days	2-4 weeks	>4-16 weeks	>16-52 weeks	>52 weeks or permanent disablement	Killed
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9. Description of occupational disease.....

10. Machine/process involved/type of work performed/exposure\*\* .....

11. Was the incident reported to the Compensation Commissioner and Provincial Director?

Yes	No
-----	----

12. Was the incident reported to the police?\*

Yes	No
-----	----

13. SAPS office and reference .....

\* to be completed in case of a fatal incident.\*\* in case of a hazardous chemical substance, indicate substance exposed to

Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_



**12 ANNEXURE B: MANDATORY DOCUMENTS**

**OCCUPATIONAL HEALTH AND SAFETY ACT (85 OF 1993)  
CONSTRUCTION REGULATIONS 2014**

**AGREEMENT WITH MANDATARY**

In terms of Section 37(1) and (2)

**WRITTEN AGREEMENT ENTERED INTO AND BETWEEN**

---

**AND**

---

***Agreement with Mandatary to be completed in black ink and  
each page and any change made to be initialled***

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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

**OCCUPATIONAL HEALTH AND SAFETY ACT OF 1993  
AND CONSTRUCTION REGULATIONS 2014  
REQUIREMENTS:**

1. Your attention is drawn to "General Duties of Employers to their Employees" as required by Section 8 of the Act.
2. You are required to:
  - 2.1. Sign a written "Agreement with Mandatary" as required by Sect 37(1)(2) of the Act before commencing any work on site.
  - 2.2. Ensure that all your employees receive the necessary Induction Training and have proof thereof. Note:  
You must ensure that all employees under your control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences.
  - 2.3. Ensure the provision of Welfare Facilities for your employees as per Construction Regulation 28.
  - 2.4. Provide the Client/Principal Contractor with your SHE Plan and Specifications
  - 2.5. Ensure that Method Statements, Risk Assessments and Safe Work Procedures are done and available.
  - 2.6. Provide the Client/Principal Contractor with written appointment of the person who is going to supervise the Construction Work per Construction Reg. 8
  - 2.7. Provide the Client/Principal Contractor with written designation of your nominated Health and Safety Representative as per Section 17(1).  
Note: Your Health and Safety Representative will be expected to attend the Client/Principal Contractor safety meetings.
  - 2.8. If you employ more than five (5) persons, you are required to provide your own First Aid Box (GSR 3(2)).
  - 2.9. If you employ more than ten (10) persons, you are required to provide your own qualified First Aider as per GSR 3(4)  
Note: If you have difficulty in complying with items 2.7 and 2.8 above, you may arrange/come to an agreement with the Client/Principal Contractor to make use of his First Aid facilities in case of injury. You will be expected to communicate such an agreement to your employees.
  - 2.10. When working with Hazardous Chemical Substances, comply with HCS Reg. 3  
Note: Asbestos and Lead Regulations are separate.
  - 2.11. When using a Materials Hoist, comply with the requirements of Construction Reg. 19.
  - 2.12. When using Lifting Machines and Lifting Tackle, comply with DMR 19  
Note: You may be required to appoint a Banksman to control Lifting/Slinging operations
  - 2.13. When erecting/using Scaffolding comply with the requirements of SANS/0085 "Access Scaffolding"
  - 2.14. When doing Demolition Work, comply with Construction Reg. 14
  - 2.15. When doing blasting to comply with Explosives Regulations Chapter 10
  - 2.16. When doing Excavation Work, comply with Construction Reg. 13
  - 2.17. When doing Electrical Installations, comply with the requirements of Construction Reg. 24  
Note: Electrician to provide copy of registration as per Elect. Install. Reg. 9(3)
  - 2.18. When using Construction Vehicles, comply with Construction Reg. 23
  - 2.19. When using/erecting Support/Form Work, comply with Construction Reg. 12
  - 2.20. When working over or in close proximity to Water, comply with Construction Reg. 26
  - 2.21. Ensure that good Housekeeping, Stacking and Storage principles are applied on this project as per Construction Reg. 27 and 28
  - 2.22. Ensure that appropriate measures are taken to avoid the risk of Fire/Explosion and comply with requirements of Construction Reg. 29
  - 2.23. If you are going to work at heights a Fall Protection Plan must be submitted (roof work included) as per requirements of Construction Reg. 8
  - 2.24. When using Explosive Powered Tools, comply with GSR 19
  - 2.25. When Welding, Flame Cutting/Soldering, comply with GSR 9
  - 2.26. When working in Confined Spaces, comply with GSR 5
3. You are responsible for providing your own legal safety documents and registers to comply with the Act's requirements a copy of the OHS Act of 1993 and the Construction Regulations ;2003 will be available for perusal in the Principal Contractor's site office.
4. You are required to comply with General Safety Regulations 2(1) to (7) and provide your employees with: personal protective equipment which will allow them to carry out their work in a safe manner, e.g., hard hats, safety harnesses, gloves, safe footwear, eye protection, ear protection, waterproof clothing etc.
5. Reporting of Incidents of Occupational Diseases shall be done as per General Admin. Regulation 8 (Also see Sect 24 of the Act)
6. Compensation for Occupational Injuries and Diseases Act (No 130 of 1993) You are required to provide the Client/Principal Contractor with proof of registration with the Compensation Commissioner/Federated Employer(s) Mutual when signing this agreement. If you are not registered, the Client/Principal Contractor may deduct the necessary amounts from your progress payments and pay it over to the Commissioner to ensure that you are insured. See Section 80 and 89 of the COID Act.

\_\_\_\_\_  
**Client Signature**

\_\_\_\_\_  
**Principal Contractor Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Date**

Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

## AGREEMENT WITH MANDATARY IN TERMS OF SECTION 37(1) AND (2)

### DEFINITION OF MANDATARY

- includes an agent, a contractor or sub-contractor for work, but without derogating from his status in his own right as an employer or user

### SECTION 37(1)

Whenever an employee does or omits to do any act which it would be an offence in terms of this Act for the employer of such employee or a user to do or omit to do, then, unless it is provided that –

- (a) in doing or omitting to do that act the employee was acting without the connivance or permission of the employer or any such user;
- (b) it was not under any condition or in any circumstance within the scope of the authority of the employee to do or omit to do an act, whether lawful or unlawful, of the character of the act or omission charged; and
- (c) all reasonable steps were taken by the employer or any such user to prevent any act or omission of the kind in question, the employer or any such user himself shall be presumed to have done or omitted to do that act, and shall be liable to be convicted and sentenced in respect thereof; and the fact that he issued instructions forbidding any act or omission of the kind in question shall not, in itself, be accepted as sufficient proof that he took all reasonable steps to prevent the act or omission.

### SECTION 37(2)

The provisions of subsection (1) shall mutates mutandis apply in the case of a mandatary of any employer or user, except if the parties have agreed in writing to the arrangements and procedures between them to ensure compliance by the mandatary with the provisions of this Act.

### ACCEPTANCE BY MANDATARY

In terms of the provisions of Section 37(2) of the Occupational Health and Safety Act 1993

I, \_\_\_\_\_ acting for and on behalf of

**(Company/Close Corporation/Enterprise/**

**Owner/User)** undertake to ensure that the requirements and provisions of the Act and Regulations are complied with.

Signature: \_\_\_\_\_ Print Name: \_\_\_\_\_

### **Contractor:**

Designation: \_\_\_\_\_ Date: \_\_\_\_\_

Mandatary-Workmen's Compensation/Federated Employers Mutual No:  
\_\_\_\_\_

Signature: \_\_\_\_\_

### **Client:**

Designation: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

**OCCUPATIONAL HEALTH AND SAFETY ACT OF 1993  
CONSTRUCTION REGULATIONS 2014**

**PRINCIPAL CONTRACTOR APPOINTMENT**

**CONSTRUCTION REGULATION 5**

5(1): A Client shall be responsible for the following:

- k) to appoint every principal contractor in writing for the project or part thereof on the construction site

**APPOINTMENT**

Principal Contractor, \_\_\_\_\_ (name)

of: \_\_\_\_\_ (Company/Close Corporation/Enterprise/Owner/and Labour Only Contractor) is hereby appointed to perform construction work

at: \_\_\_\_\_  
Job/Safety specifications:

You are reminded that:

1. your documented Health and Safety plan based on the Clients Health and Safety Specifications, is provided to the Client before commencing work on site
2. the Client will discuss/negotiate with you regarding the contents of the Health and Safety Plan to approve it for implementation
3. a Health and Safety File, which shall include all documentation required in terms of the provisions of the Act and Regulations are kept available on site for inspection (Risk Assessments and Fall Protection Plan)
4. should you appoint a Contractor to perform or assist you with Construction Work, the responsibilities as required by the Construction Regulations shall apply to you as if you were the Client
5. you are to promptly provide the Client with any information which might affect the Health and Safety of any person at work carrying out Construction Work or any person who might be affected by the work of such a person at work or which might justify a review of the Health and Safety Plan
6. as per Regulation 5(1)(o) audits of your Health and Safety Plan will be undertaken on at least a monthly basis.
7. all your Employees must undergo Safety Induction before starting work

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_  
(Client)

Designation: \_\_\_\_\_

**ACCEPTANCE OF APPOINTMENT**

I, \_\_\_\_\_ accept and understand the requirements of this appointment

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_  
(Principal Contractor)

Designation: \_\_\_\_\_

\_\_\_\_\_  
Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_



**14 ANNEXURE D: NON-CONFORMANCES AND PENALTIES**

Should, at any time, the works, or part of the works, be stopped due to unsafe acts or noncompliance with the Clients specifications or PCs H&S Plan; neither the Principal Subcontractor nor any other Subcontractor shall have a claim for extension of time or any other compensation.

The following constitute the types of non-conformances that will attract penalties:

<b>Minor: Fine: R100/count</b>	<b>Medium: Fine: R500/count and a non-conformance</b>	<b>Severe Fine: R5000/count, a non-conformance and/or activity stoppage</b>
Non-use of PPE supplied	Toilets not supplied or regularly serviced; lack of drinking water	Subcontractors working without Health and Safety Plan approval
Non completion of registers for plant and equipment on site	Subcontractors not audited	Workers transported in contravention of the OHS plan or legal requirements
Lack of H&S signage at work areas	Working without training or the appropriate H&S method statements	Invalid Letters of Good Standing
Tools and equipment identified in poor condition during inspections	Legal non-conformances identified during the previous audit and not addressed within the agreed time frame	Noncompliance with traffic accommodation requirements: layout or physical conditions
	No monthly OHS report at site meeting to report on	Fall protection harness not tied off/ not worn
	No certificates of fitness for workers as required	Any breach of legal requirements
	Working without approved method statements	Item not attended to as identified in the audit report – second transgression
	Item not attended to as identified in audit report – first transgression	

Failure or refusal on the part of the subcontractor to take the necessary steps to ensure the safety of workers and other person involved in accordance with these specifications, the OHS Act and the regulations shall be sufficient cause to apply the above penalties.

Contractor \_\_\_\_\_ Witness 1 \_\_\_\_\_ Witness 2 \_\_\_\_\_ Employer \_\_\_\_\_ Witness 1 \_\_\_\_\_ Witness 2 \_\_\_\_\_

**15 ANNEXURE E: BASELINE RISK ASSESSMENT**

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Contractor \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_ Employer \_\_\_\_ Witness 1 \_\_\_\_ Witness 2 \_\_\_\_

# Risk Assessment Matrix

**Risk Prioritisation Number / Risk Rating = Severity x Likelihood**

**New construction on an existing active school site. Lady Frere.**

**Severity Table**

Pt	Severity level	Workplace Safety	Workplace Health	Loss / Damage	Downtime Incurred
5	Critical	Fatality, <sup>single</sup> or multiple	Acute Poisoning, Failure of Major Bodily Functions	More Than R10 million damages	More than 1 year for full re-instatement
		Permanent Body Injury or Loss of Use for more than 30 days	Infection with No Known Cure		
4	Very Serious	Injury requiring 30 days of hospitalisation and/or medical leave	Moderate exposure, Reversible injury to Bodily Functions on prolong recovery	More Than R1 million damages	More than 3 months for full re-instatement
		Temporary Body Injury or Loss of Use for more than 10 days but not exceeding 30 days	Infection with Known Cure but extensive treatment		
3	Serious	Injury requiring 10 days of hospitalisation and/or medical leave	Mild exposure, Reversible injury to Bodily Functions with less than 30 days recovery	More Than R100k damages	More than 1 month for full re-instatement
		Temporary Body Injury or Loss of Use for up to 10 days	Infection with Known Cure but extensive treatment		
2	Marginal	Injury requiring maximum of 3 days of medical leave only	Very Mild exposure, Reversible injury to Bodily Functions with less than 3 days recovery	More Than R10k damages	More than 5 days for full re-instatement
		Temporary Body Injury or Loss of Use for 3 days or less	Infection with Known Cure but treatment needed		
1	Negligible	First aid treatment only	Very Mild exposure, Reversible injury to Bodily Functions with less than 3 days recovery	Less than R5k damages	No significant downtime
		No or superficial injury	No Exposure		

**Likelihood Table**

Pt	Likelihood level	Likelihood of Occurrence / Exposure Criteria
5	Frequent	Likely to occur many times per year
4	Moderate	Likely to occur once per year
3	Occasional	Might occur once in three years
2	Remote	Might occur once in five years
1	Unlikely	Might occur once in ten years

**Risk level Determination - 5 x 5 Matrix**

		SEVERITY				
		Critical (5)	Very Serious (4)	Serious (3)	Marginal (2)	Negligible (1)
LIKELIHOOD	Frequent (5)	25 Operation not permissible	20 Operation not permissible	15 High priority	10 Review at appropriate time	5 Risk acceptable
	Moderate (4)	20 Operation not permissible	16 Operation not permissible	12 High priority	8 Review at appropriate time	4 Risk acceptable
	Occasional (3)	15 High priority	12 High priority	9 Review at appropriate time	6 Risk acceptable	3 Risk acceptable
	Remote (2)	10 Review at appropriate time	8 Review at appropriate time	6 Risk acceptable	4 Risk acceptable	2 Risk acceptable
	Unlikely (1)	5 Risk acceptable	4 Risk acceptable	3 Risk acceptable	2 Risk acceptable	1 Risk acceptable

Review the risk assessment records every year or whenever there are changes in processes, work activities or upon any incident occurrence, whichever is earlier.

Action Table	Colour	Score	Risks	Action
		16 - 25	High	Manage risk Stop operation & review controls. If necessary abort experimentation.
			12 - 15 Warning	High priority remedial action Proceed with extreme caution with supervision at all times. Implement additional (secondary) controls immediately. Review within 7 days. Emergency control measures shall be in place.
			8 - 10 Medium	Take remedial action at appropriate time Proceed with care. Additional control is advised. Review shall be implemented within 30 days.
			1 - 6 Warning	Risk acceptable: Residual risk If possible, risk reduction should be further considered, particularly severity. There are no imminent dangers. Frequent review shall be in place especially changes in procedures, materials or environment.

**BASELINE HAZARD IDENTIFICATION AND RISK ASSESSMENT**

**CLIENT / EMPLOYER**

Independent Development Trust

**PROJECT / CONSTRUCTION SITE & EXACT LOCATION OF THE WORKS**

Ntsokotha Senior Secondary School

New construction on an existing active school site. Lady Frere.

Hazard & Risk Identification		Risk Control Measures & Residual Risk Rating										
1a. S/N	1b. Work activity	1c. Hazard	1d. Consequential Risk / Possible Accident / Ill health to persons, fire or property loss	2a. Severity	2b. Likelihood	2c. RPN	3a. Risk Control Measures	3b. Severity	3c. Likelihood	3d. RPN	3e. Responsible Party/ Person	3f. Remarks
<b>SITE SPECIFIC RISK ASSESSMENT</b>												
1	Permit application to DOL	Principal Contractor not submitting the required documentation timely. Client information delays. PC not keeping competency as per approved permit	Delayed submission of documentation to the Department of Employment and Labour resulting in project delays.	4	3	12	Principal Contractor to begin with document preparation immediately after formal appointment and liaise with the Client appointed Pr-CHSA. Client appoint CHSA at design stage.	2	2	4	N/A	Manage
2	Gaining access to site. OHSA 8,9,12,15.	Access not planned, site creep not controlled, traffic not planned, Noise and dust.	Loss of life. Loss of material, time, finance, reputation. Public liability risks.	4	3	12	Proper layout of site by Construction Manager, taking into consideration all transport plant and material movements and storage on site.	2	3	6	8,1,8&5	Manage: Provide site lay out plans and method statements.
3	Site security and safeguarding	Lack or absence of access control. Inadequate security controls. Loss of client documents and processes. Fire and community unrest. Lack of Covid monitoring at access point. Access to works by animals and children. Wetlands not protected. Archilogical findings ignored.	Theft and delays. Loss of contract, finance. Life. Covid-19 transmission. Loss of material. Loss of contract and lives	5	5	25	Security guards to be appointed to keep watch. No smoking in works areas, Police clearances, supervision, work scheduling. Symbolic safety signage. Covid warning and monitoring	3	3	9	Principal Implemented Contractor	To be monitored and on an ongoing basis
4	Storage of flammables GSR 4 & CR25	Unsafe storage of flammables. Mixing polymers, combustibles and flammables. Lack of MSDS controls.	Risk of fire, explosions resulting to burns to the body or even multiple fatalities. Fire spreading to adjacent structures. Serious damages to property. Loss of finance, time, life	5	3	15	Flammable store to be well ventilated and fitted with a roof to protect from direct exposure to sunlight. HCS Supervisor / Controller to be designated in writing. Induction of workers and visitors. No smoking controls and signage.	5	1	5	Principal Contractor	Proceed with care. Additional control is advised.
5	Electrical Installations Temporary electrical Installations CR 24 and ER, EMR	Incompetent and/or unregistered electricians. Incorrect/unsafe installations. Damaged cables. Exposed wires. Failure to ensure lock out and dead conditions on major electrical servers: Generator, UPS and E. Supply. Wrong lead use.	Electrocution, fires. Serious damages to property. Serious injuries, possible fatalities.	4	3	12	Installation to be done by a competent registered electrician or registered electrical contractor. Electrical Installations Inspector to be designated in writing. PC to ensure dead conditions prior to work activity and demolition. Lock out procedures as required. COCs and lock out where required.	4	1	4	Principal Contractor	Proceed with care. Additional control is advised. Temporary Electrical Installations Inspector to monitor and control.
6	Availability of basic facilities and emergency services / equipment. CR. 29, 30.	Not having the essential services readily available.	Worsening of first aid injuries. Detrimental health to employees. Spread of fires, disease and increased risk.	4	3	12	Plan, Provide and implement.	3	2	6	Principal Contractor	Proceed with care. Additional control is advised.
7	Public safety OHSA 8.	Transmission of Covid Lack of safety hoarding and works controls. Lack of managing deliveries. Lack of access control. Environmental destruction of wetlands. Loss of water quality. Poor communication with public: unrest	Injuries to persons and / or the public. Public liability / court claims. Transmission of Virus, death. Loss of time, reputation and monies.	4	4	16	Induction of workers and visitors. Symbolic safety signs and notices. Work scheduling and traffic routes planned and controlled. Covid 19 controls. ID of workers. Promote liaison with community and keep agreements in writing.	3	2	6	Principal Contractor	Proceed with care. Remedial actions to be taken at appropriate times.

Hazard & Risk Identification			Raw Risk Evaluation			Risk Control Measures & Residual Risk Rating						
1a. S/N	1b. Work activity	1c. Hazard	1d. Consequential Risk: Possible Accident, Ill health to persons, fire or property loss	2a. Severity	2b. Likelihood	2c. RPN*	3a. Risk Control Measures	3b. Severity	3c. Likelihood	3d. RPN*	3e. Responsible Party/Person	3f. Remarks
8	Designation of laydown areas various	With inadequate space materials will be stacked on top of each other causing unstable stacks. Lack of cleaning of material and equipment, poor maintenance and control of areas. Site creep. Pollution of external areas.	Loss of life. Loss of material, time, finance, reputation. Public liability risks.	5	3	15	Laydown areas to be sufficient in size. Timber poles and/or other suitable base material to be available to stack materials on. Laydown areas to be of firm level ground. Laisse with Client and plan. Do not allow demolition rubble, deliveries to crowd access. Lay down areas must be inspected, Spill control is critical.	3	2	6	Principal Contractor appropriate	Proceed with care, Remedial actions to be taken at times.
9	Employee Facilities: ablution s, water, shelter and services, and unhygienic ablution facilities, Mosquitos and odour, Covid transmission. Lack of drinking water. Employee neglect.	Illegal facilities: pit latrines. Non-ventilated ablution facilities, Mosquitos and odour, Covid transmission. Lack of drinking water. Employee neglect.	Environmental pollution, legal liability Loss of time, health, reputation and contract.	3	3	9	Toilets are to be well ventilated and kept clean and hygienic at all times. Chemical ablutions is specified. Water for washing of hands to be readily available. PC to discuss porta loo from registered supplier or building ablutions and connecting into structural sewer as arranged with PA. Provide under cover eating areas, domestic waste bins. Hand wash stations. Ablutions on level ground, secured against turning over. Prevent sexual harassment.	3	2	6	Principal Contractor	Failure to provision and maintain: 5.1,q
10	Poor waste management	pollutants. Site creep.	Loss of life. Loss of material, time, finance, reputation. Public liability risks.	4	3	12	Good housekeeping and waste disposal always in work areas and laydown areas. PC will have to ensure that demolition rubble is correctly timorously disposed off.+ Recycle, Reuse, and minimize	2	2	4	Principal Contractor	Monitor.
11	Selection of workers / staff for site	Employees medically unfit and incorrectly placed for job categories. Vulnerable employees. Fear of reporting illness	Accidents resulting in injuries and/or damage to property.	3	5	15	All employees to have medicals done before commencing work on site. Employment of local labour to be done in accordance to issued specification relating to the matter. Ensure communication without victimization.	3	3	9	Principal Contractor	Proceed with care, Remedial actions to be taken at appropriate times.
		Incompetent staff appointed on project, Lack of police clearance certificates	Accidents due to incompetency resulting in serious injuries and/or damage to property. Possible fatality/is.	5	4	20	Skilled staff to have proof of competencies available. A appointed contractor to ensure all qualifications of staff are verified before appointment for project.	3	3	9	Principal Contractor	Pre-employment controls
		Lack of adequate staffing for work Lack of Statutory compliance UJF and contracts	Accidents resulting in injuries and/or damage to property.	5	3	15	All staff to be inducted for site before work commences. Contractor to ensure induction is project specific. Every one coming into the site for the first time must be inducted (Visitors). Staff to have COIDA, Contracts and UJF. fit 4 work	5	1	5	Principal Contractor	Proceed with care, Additional control is advised.

RPN= Risk Prioritization Number

Hazard & Risk Identification		Raw Risk Evaluation		Risk Control Measures & Residual Risk Rating								
1a. S/N	1b. Work activity	1c. Hazard	1d. Consequential Risk / Possible Accident / Ill health to persons, fire or property loss	2a. Severity	2b. Likelihood	2c. RPN	3a. Risk Control Measures	3b. Severity	3c. Likelihood	3d. RPN	3e. Responsible Party/ Person	Remarks
<b>WORK SPECIFIC RISK ASSESSMENT</b>												
1	Use of hand tools	Sub-standard and unsafe hand tools; Incorrect use. Lack of hygiene	Injury to parts of the body. Spread of disease	2	5	10	PPE, checks/inspection registers, control, training.	2	3	6	Principal Contractor	Monitor.
2	Use of portable power tools	Sub-standard electrical power tools and incorrect use thereof. Lack of hygiene. Tripping client operations.	Loss of health and injuries. Loss of material, time, finance, reputation. Public liability risks.	3	5	15	Control, checks, issue and inspection registers to be completed. Training, emergency action / plan, COC's for compliance	3	3	9	Principal Contractor	Monitor.
3	Loading and Off-loading	Unsafe offloading of material and unsafe material stacks; Heavy objects and manual handling; Shortage of persons for task; Vehicle accidents, Pollution	Injury and loss of finance, reputation and contract. Loss of time and material.	3	4	12	Adequate number of workers for the task at hand; Proper training and induction on manual handling techniques; PPE and adequate supervision; Use designated area for offloading, stacking and storage of material. Plan. Delivery of supplies must ensure no dumping external to site.	3	3	9	Principal Contractor	Site layout plans should be used check delivery impacts.
4	Stacking and storage	Improper stacking and storage.	Serious injuries and/or fatalities.	3	4	12	Good housekeeping; Competent Stacking & Storage Supervisor; Demarcated material laydown areas; Stacking and storage inspections;	3	3	9	Principal Contractor	Remedial action is required
5	Lifting operations	Unsafe use of lifting equipment and Lifting plant (Cranes); Lifting Equipment / Tackle not load tested; Incompetent Operators; spread of Covid	Falling of suspended loads due to equipment failure causing serious injuries / fatalities, property damage, production loss. Manage and maintain hygiene off equipment used by multiple people	5	4	20	Load testing and inspections, Inspection registers & load test certificates; Control by equipment identification, replace defective equipment; Accredited training per category/unit standards of Lifting machines. Supplier deliveries and Plant to be managed.	5	3	15	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
6	Working in Elevated Areas/ Heights CR, 10 and 16 GSR6. SANS 100085.	Unsafe / incorrect use of ladders / scaffolding; Non-Use of Recommended FAS; Lack of Edge Protection;	Falling from height resulting in serious injuries or fatality; Scrambling collapse leading to multiple serious injuries or fatalities, damage to property and production loss.	5	4	20	dining room, roof height +-3.5M. Comprehensive fall protection plan developed by a competent fall protection plan developer; Competent scaffold erectors and inspectors; Proper erection and inspection of all scaffolding; Work at heights training and competency; Adequate supervision;	5	3	15	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
7	Excavation Work Cr 13 GSR7. Bulk earth works.	Falling objects. Ill employee. Weather: lightning, high winds and rain, Poor housekeeping  Use of heavy equipment on site to excavate; Incompetent operators; Poor visibility; Underground or overhead services. Poor soil conditions, vertical cut to embankments, rain and lack of storm water controls  Working beneath structures	Collisions with other machines or workers resulting in serious injuries or fatality and property damage; Heavy machinery falling into excavations; Injuries due to unsafe use of pricks and shovels; Collapse of excavations while workers inside leading serious injuries.	5	4	20	Installation of nets and toe boards; Worker training and induction; Regular tool box talks; Identification of "no go areas" and putting up warning signage; Provision of hard hats and other PPE, DSTI's and control off loads  Appoint competent Excavations Supervisor; Fit and competent operators to be appointed for the job; Workers to wear high visibility clothing at all times; Worker training and induction; Regular safety talks; Workers to stay clear of heavy machinery; Dust control measures to be in place; Storm water management  Workers keep a safe distance from each other when using pricks and shovels; Induction and clear work instruction; Adequate	4	2	8	Principal Contractor	Remedial action is required
		Open trenches / unprotected excavations. Soil conditions and depth and size of excavation location.	Physical injury due to falling into excavations				4 4 16 Proper instruction and warning signage; Ensure care with services and plan accordingly. Trench of 1m must be shored, Excavations strictly managed.	4	3	12	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.

1a. S/N		1b. Work activity			1c. Hazard			1d. Consequential Risk / Possible Accident / Ill health to persons, fire or property loss			2a. Severity			2b. Likelihood			2c. RPN			3a. Risk Control Measures			3b. Severity			3c. Likelihood			3d. RPN			3e. Responsible Party/ Person			3f. Remarks		
Hazard & Risk Identification										Raw Risk Evaluation						Risk Control Measures & Residual Risk Rating																					
		Excavation Work (Cont.)	People & vehicle / plant movement in close proximity to excavations. Servos is a serious hazard	Hazard	1d. Consequential Risk / Possible Accident / Ill health to persons, fire or property loss	2a. Severity	2b. Likelihood	2c. RPN	3a. Risk Control Measures	3b. Severity	3c. Likelihood	3d. RPN	3e. Responsible Party/ Person	3f. Remarks																							
		Excavation Work (Cont.)	People & vehicle / plant movement in close proximity to excavations. Servos is a serious hazard	Hazard	1d. Consequential Risk / Possible Accident / Ill health to persons, fire or property loss	2a. Severity	2b. Likelihood	2c. RPN	3a. Risk Control Measures	3b. Severity	3c. Likelihood	3d. RPN	3e. Responsible Party/ Person	3f. Remarks																							
8		Existing Services	Not being aware of existing services (i.e. Electrical and data cables; water and sewer lines)	Hazard	1d. Consequential Risk / Possible Accident / Ill health to persons, fire or property loss	2a. Severity	2b. Likelihood	2c. RPN	3a. Risk Control Measures	3b. Severity	3c. Likelihood	3d. RPN	3e. Responsible Party/ Person	3f. Remarks																							
9		Operating of Heavy Construction Vehicles and Mobile Plant on site	Failure to inspect vehicles and mobile plant; Faulty vehicles and plant; Lack of access and route planning	Hazard	1d. Consequential Risk / Possible Accident / Ill health to persons, fire or property loss	2a. Severity	2b. Likelihood	2c. RPN	3a. Risk Control Measures	3b. Severity	3c. Likelihood	3d. RPN	3e. Responsible Party/ Person	3f. Remarks																							
10		Temporary Works CR-12	Poor or no temporary works designs; Incomplete Erectors and / or Inspector; Poorly erected temporary works; incorrect supports	Hazard	1d. Consequential Risk / Possible Accident / Ill health to persons, fire or property loss	2a. Severity	2b. Likelihood	2c. RPN	3a. Risk Control Measures	3b. Severity	3c. Likelihood	3d. RPN	3e. Responsible Party/ Person	3f. Remarks																							
11		Demolition CR, 14, Minor demolition may be required on wrong construction methods used..	Lack of hoarding and access control, Noise, vibration and dust, Lack of competency, Lack of preventing collapse of structures, Flooding, Unplanned outage on hospital function, Asbestos or lead, Aspergillus, moulds and funguses, bird droppings	Hazard	1d. Consequential Risk / Possible Accident / Ill health to persons, fire or property loss	2a. Severity	2b. Likelihood	2c. RPN	3a. Risk Control Measures	3b. Severity	3c. Likelihood	3d. RPN	3e. Responsible Party/ Person	3f. Remarks																							
12		Steel Fixing	Lack of proper hazardous waste management on site; Incorrect disposal of hazardous waste products; Lack of proper hazardous-waste bins;	Hazard	1d. Consequential Risk / Possible Accident / Ill health to persons, fire or property loss	2a. Severity	2b. Likelihood	2c. RPN	3a. Risk Control Measures	3b. Severity	3c. Likelihood	3d. RPN	3e. Responsible Party/ Person	3f. Remarks																							

Hazard & Risk Identification			Raw Risk Evaluation			Risk Control Measures & Residual Risk Rating						
1a. S/N	1b. Work activity	1c. Hazard	1d. Consequential Risk / Possible Accident / Ill health to persons, fire or property loss	2a. Severity	2b. Likelihood	2c. RPN*	3a. Risk Control Measures	3b. Severity	3c. Likelihood	3d. RPN*	3e. Responsible Party/ Person	3f. Remarks
13	Concrete Work - Delivery of concrete by supplier (Ready Mixed)	Ready-mix trucks may collide with other vehicles on site, access for plant delivery. Environmental damage to ground water systems	loss of life, Loss of material, time, finance, reputation, Public liability risks, 4. 4-16 limit clear access route of other site vehicles as well as workers;	4	3	12	Ready mix to indicate prior to entering the site and be guided/directed to the offloading cone, ensure min speed of gloves; Ground to be free of obstacles;	4	3	12	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
	Concrete Work - Delivery of concrete by chute to Job	Manual handling of chute; Uneven terrain / obstacles on ground may cause slips / trips / falls; Restraint on access	Injuries to workers : hands, body, head etc, Damage to structures, 4. 4-16 Supervisor to ensure correct / specified Gloves are worn (PVC);	4	3	12	Training in correct handling methods / provision of gloves; Ground to be free of obstacles;	4	3	12	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
	Concrete Work (Cont.) - Delivery of concrete at height over 1.5m	Fall from height;	Serious injuries or fatality;	5	4	20	Provision of working platforms with access ladders and handrails; Supervisor to monitor and take control;	5	3	15	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
	Concrete Work - General (Placing concrete from bucket; hoisted by crane)	Concrete bucket hitting the worker; Opening and closing of bucket; Environmental damage	Injury to workers, time lost, and possible fatal incidents. Environmental pollution,	5	4	20	Only the Banksman / Spotter responsible for directing the crane during loading and discharging, workers to be advised to stand clear of the path of the bucket; Supervisor to ensure clear visual communication at all times; Ensure bucket is properly closed after each placing, use correct PPE issued on the "PPE Schedule"	5	3	15	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
	Concrete Work - General (Vibrating concrete)	Concrete splash from vibrating, operating the poker; Noise	Injury to workers, possible serious injuries; Health impacts: Noise, vibration and dermatitis	4	4	16	Use correct PPE issued on the "PPE Schedule" ; Operator self check for PPE; Supervisor to ensure and control;	4	3	12	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
	Brick Work and Mortar	Mixing of mortar - Faulty hand tools; Stacking or Placing bricks at work - Bricks falling over, brick could cut skin, Throwing bricks	Injury to workers Injury to parts of the body, Ergonomic hazards, Loss of materials	3	4	12	Use of correct PPE, tools in good condition; Supervisor to monitor; Regular tool box talks;	3	3	9	Principal Contractor	Remedial action is required
14	Supplying mortar to bricklayer; Brickwork to walls - faulty hand tool, poor standard of scaffolding or trestles. Not using correct plaster sand, Leaving finds on plaster, poor project quality	Placing window, door frames, and lintels - Falling frames and lintels;	Injury to workers, possible serious injuries; Injury to parts of the body	3	4	12	Proper and safe stacking of bricks; Use of correct PPE; Regular toolbox talks Adequate supervision, SWO for brick handling and Mixing plaster.	3	3	9	Principal Contractor	Remedial action is required
	Emergency planning and response CR. Requires emergency planning for high work.	Fire, collapse of structures, delay in patient care, theft, fatalities, Covid risk outbreak, Hospital emergencies, Outages, Public complaints and unrest, Loss of public property records	Injury to workers, possible serious injuries; Loss of life, Loss of material, time, finance, reputation, Public liability risks.	4	4	16	Checks to be done to confirm that windows and door frames are well stayed; Use of correct PPE; Supervisor to monitor and control;	4	3	12	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
15	Contractor Management	Unapproved contractors on site, No COIDA, Lack of competent oversight by PC, Failure to have SMME management and support, Appointing 1 SMME for to many roles,	Legal non-compliance; Risk to Client and project; Stoppages due to non-compliance;	5	4	20	Plan for when things go wrong: Appoint emergency coordinator, display route plan to assembly areas, Ensure access to these areas. Have emergency and relevant role players contact numbers. Co-ordinate with Client, Build relationships with Police and relevant service providers, Plan for project continuity, Plan to prevent incidence. Have Incident procedures.	5	3	15	Principle Contractor.	Fire prevention method statement
16	Contractor Management	Unapproved contractors on site, No COIDA, Lack of competent oversight by PC, Failure to have SMME management and support, Appointing 1 SMME for to many roles,	Legal non-compliance; Risk to Client and project; Stoppages due to non-compliance;	5	4	20	Plan for when things go wrong: Appoint emergency coordinator, display route plan to assembly areas, Ensure access to these areas. Have emergency and relevant role players contact numbers. Co-ordinate with Client, Build relationships with Police and relevant se	5	3	15	Principal Contractor	Remedial action is required

\*RPN - Risk Prioritization Number

Hazard & Risk Identification		Raw Risk Evaluation			Risk Control Measures & Residual Risk Rating					
1a. S/N	1b. Work Activity Responsible Party	1c. Hazard Remarks	1d. Consequential Risk / Possible Accident / Ill health	2a. Severity	2b. Likelihood	3a. RPN	3b. Risk Control Measures	3c. Severity	3d. Likelihood	3e. RPN
<b>COVID-19 GENERIC RISK ASSESSMENT - Read with COVID specific HIRA.</b>										
1	Preparation for works commencement on site	Lack of appropriate documentation required prior to commencing work; Commencing work on site without approved H&S documentation.	Failure to comply with legal requirements resulting in work stoppage, increased infection rates, and possibly legal action against the PC.	5	Principal Contractor	1	Approve work commencing to be obtained from client prior to commencing work. COVID-Ready Workplace Plan, risk assessments to principal contractor and communicated to employees once approved.	5	Principal Contractor	Proceed with care, Additional control is advised.
2	Site Preparation	Site not COVID-19 ready (Contaminated surfaces; Lack of PPE supplies; Lack of COVID-19 signage; etc.)	Staff not provided with suitable PPE resulting in increased risk of infection; Employees coming in contact with contaminated surfaces may be infected.	2	Principal Contractor	3	Decontamination / disinfection of work place and equipment before commencing work and at regular intervals; Disinfectant to be available and employees aware of COVID-19 suitable PPE prior to returning to site.	3	Principal Contractor	Proceed with care, Remedial actions to be taken at appropriate times.
3	Occupational Health / Symptom-Screening	Workers symptomatic but infected with COVID-19, older workers of 60+, workers with underlying auto-immune or chronic diseases, Non-screening of workers and visitors; Non-disclosure of underlying auto-immune or chronic disease by workers and visitors to site.	Increased risk of transmission to others, compromising the vulnerable groups Unscreened and asymptomatic workers or visitors to site resulting in increased exposure to others; Cross contamination amongst workers and contamination of surfaces	5	Principal Contractor	3	COVID-Ready Workplace Plan; Policy and method statement to be available relating to screening surveillance. All workers are to be symptom screened at the time that they report to work, to ascertain whether they have any of the observable symptoms associated with COVID 19, namely - fever, cough, sore throat, redness of eyes or shortness of breathing, PC to provide methodology to remove 5. 4. 20 staff from site safety to an identified test site; Workers to be made aware of risk of non-disclosure of COVID-19 symptoms; Staff in exposed age group and compromised health condition to be considered high risk and managed appropriately. Site security/fence to be maintained and all access points to be controlled / manned.	15	Principal Contractor	Stop before entry; If in contact with a + tested person, quarantine 10 days regardless of symptoms. Keep contact details.
4	Induction/Training	Failure to induct workers and lack of training; Lack of correct and updated information/awareness, Lack of induction warnings of hazards in access to site, Client needs of access and traffic.	Workers not adhering to prescribed controls due to lack of awareness resulting in increased exposure.	4	Principal Contractor	3	Copies of all the updated and relevant regulations and guidelines to be readily available on site and communicated to workers; Information / Awareness posters to be conspicuously displayed at strategic positions on site; Toolbox talks / DSTIs addressing COVID 19 related risks. Induction must address Client needs; access and traffic risks,	15	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
5	Demographics of labour	Vulnerability due to age, underlying auto-immune or chronic diseases, Transporting incorrectly	Health complications of vulnerable groups once infected with the virus; Possible death.	4	Principal Contractor	4	List of vulnerable employees to be maintained; The screening surveillance policy and method statement to be adhered to; Induction, DSTIs and toolbox talks to be done daily on topics relating to Covid-19, personal hygiene and PPE. Strict enforcement for use of PPE; Job substitution if possible for those who are affected. Staff in exposed age groups and compromised health conditions to be considered high risk and managed appropriately.	12	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
6	Origin of labour	Use of public transport to get to work and to move between towns and cities, districts, municipalities and rural villages; Workers who may have come into close contact with suspected COVID-19	Non-use of cloth or respiratory masks / face shields by public transport commuters; Employees / workers could be possibly exposed and get infected resulting in spreading of the virus during movement.	4	Principal Contractor	3	Selection and provision of transport services compliant with gazette requirements; Policy and procedures and rules for travel, where possible to limit the use of public transport, or to arrange selective methods of transport, ongoing toolbox talks and if possible supply of cloth masks to be worn when travelling. Limitation of border crossing unless specialised contractors. Staff in exposed age group and compromised health condition to be considered high risk and managed appropriately.	15	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.

Hazard & Risk Identification				Raw Risk Evaluation				Risk Control Measures & Residual Risk Rating				
1a. S/N	1b. Work activity	1c. Hazard	1d. Consequential Risk, Possible Accident, Ill health to persons, fire or property loss	2a. Severity	2b. Likelihood	2c. RPN	3a. Risk Control Measures	3b. Severity	3c. Likelihood	3d. RPN	3e. Responsible Party/ Person	3f. Remarks
7	Personal hygiene	Poor personal hygiene and improper cough / sneezing etiquette. Spread of Covid 19 and other HBA's.	Increased risk of spreading the virus amongst co-workers and contaminating surfaces and/or tools. Touching of surfaces, tools and items that may have been contaminated;	5	3	15	Workers to be trained on proper personal hygiene, which training must include the following: - Frequently clean hands by using provided alcohol-based hand rub or soap with water. - Covering of mouth and nose with a flexed elbow when coughing / sneezing - Maintaining safe social distancing by avoiding close contact with anyone that has fever and cough (2m social distancing) - Avoiding unnecessary touching of surfaces Covid plan.	5	2	10	Principal Contractor	Proceed with care. Remedial actions to be taken at appropriate times.
8	Hand Sanitizers, Disinfectants and paper towels	Lack of adequate stock of sanitizers, disinfectants, paper towels	Poor implementation of hygiene protocols due to lack of resources resulting in increased risk of exposure and cross-infection;				Principal Contractor to ensure availability of stock that should last for at least one month weekly as per the demand on site;	4	3	12	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
9	Use of chemicals / flammable substances	Inappropriate use and unsafe storage of chemicals due to lack of training (Sanitizers, disinfectants, detergents)	Sensitivity to some of these chemicals may cause unpleasant skin conditions such as mild irritation, skin bugging etc. Risk of fire due to incorrect usage and storage of alcohol based sanitizers;				Training on safe use and correct storage of chemicals must be provided to the workers; Relevant MSDSs to be made available on site; Report the matter to site management / CCO for investigation;	3	2	6	Principal Contractor	Proceed with care. Additional control is advised.
10	Transportation	Maximum allowed capacity exceeded, No facilities for sanitising vehicles and passengers, No additional protective measures available. e.g. face masks. Unlicensed drivers and operators. Incorrect transport of equipment and workers. Overloading. Speeding.	Increased risk of cross contamination during transportation; Workers older than 60 years and workers with compromised health/immune condition staff daily has a low chance to recover and are more susceptible to contract the virus.				Selection and provision of transport services compliant with gazetted requirements. Policy and procedures and rules for travel, where possible to limit the use of public transport, or to arrange selective methods of transport, ongoing toolbox talks and supply of cloth masks to be worn when travelling between trips. Hand sanitiser provided for passengers. Staff in exposed age group and compromised health condition to be considered high risk and managed appropriately.	5	3	15	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
11	Social distancing	Construction tasks requiring more than one worker; Congestion at site entrance during arrival and departure from site; Welfare facilities, meeting areas.	Inability to maintain social distancing resulting in increased risk of cross infection;				Policy and method statements for the provision of suitable and sufficient PPE. Demarcation and spacing of queuing areas. Segregation of queuing areas and public outside site perimeters. Meeting/eating areas large enough to maintain 2m distance at maximum occupancy, use of drones, 5 25 security cameras to limit the need to spend time on site. Only essential workers to spend time on site. Staggered meeting/eating times, use of Zoom, Skype, teams for meetings where necessary. Individual, segregated facilities for safe keeping. Induction training and a programme for information and training.	5	3	15	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
12	Alcohol and substance abuse	Workers, visitors arriving at site under the influence of substances; Use of Breathalyzer for alcohol testing;	Intoxicated workers and/or visitors not complying with procedures laid down to prevent the spread of the virus; Cross infection due to use of shared breathalysers;	5	4	20	Policy and method statement for substance abuse to be reviewed, management of visitors and workers under the influence of alcohol or other substances, Use of disposable individual testing units and appropriate disposal in hazardous waste bins.	5	3	15	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.

Hazard & Risk Identification			Raw Risk Evaluation			Risk Control Measures & Residual Risk Rating					
1a. S/N	1b. Work activity Responsible Party/	1c. Hazard Remarks	1d. Consequential Risk / Possible Accident / Ill health	2a. Severity	2b. Likelihood	3a. RPN	3b. Risk Control Measures	3c. Severity	3d. Likelihood	3e. RPN	
13	Waste management	Lack of proper hazardous waste management on site; Incorrect disposal of hazardous waste products; Lack of proper hazardous waste bins;	Spreading of virus and contact with virus causing infection from handwashing, paper towels, cleaning equipment and other related waste products, <b>to persons, me or property pass</b>	5	3	15	Prepare a policy, method statements, HIRA, Establish and follow protocols for disposal of hazardous waste (containers), Awareness through notices (posters) regarding correct procedures and classification of waste, Competent supervision and adequate awareness training required, Provide adequate supplies of material and consumables, provision of sealable disposal containers/bags through appropriate waste removal company, Provide adequate supply of paper towels, Ensure appropriate management.	2	10	Principal Contractor	Proceed with care, Remedial actions to be taken at appropriate times.
14	COVID-19 Awareness Signage / Posters	Lack of COVID-19 awareness signage and posters	Workers not adhering to prescribed controls due to lack of awareness resulting in increased exposure, <b>5 3 15 regarding correct protocols to be maintained. Discipline to be applied.</b>				A policy and method statement to be prepared, Display of posters and signage with the site rules and protocols that needs to be maintained at strategic points, Awareness through notices and posters, Competent supervision and adequate awareness training required, Policy and method statements, All persons entering site to sanitize hands, prior to entry to site, Access controller trained on correct procedure to follow and how to utilize no-contact hand-held thermometer, Back-up access controllers trained on same	2	10	Principal Contractor	Proceed with care, Remedial actions to be taken at appropriate times.
15	Access Control	Uncontrolled access points; Untrained access controller / security guard Poor maintenance of site security fence,	Unauthorised access to site resulting in increased risk of contamination of the workplace and cross infection; Access controller / security guard not following correct procedure, 20 procedure, All persons entering site screened by trained access controller, Periodic alcohol testing to continue however only when warranted through suspicion, Workers, visitors, site administration arriving on site via personal and public transportation,					3	15	Principal Contractor	High priority remedial action, Implement additional (secondary) controls immediately.
16	Construction Vehicles & Mobile Plant	Lack of awareness amongst operators; Failure to disinfect construction vehicles and mobile plant	Operators allowing others inside operator cabs that are designed for one person may increase the risk of contamination and infection; Contaminated surfaces due to failure to disinfect;				Updated policy, method statements and HIRA; Proper induction of operators, toolbox talks and relevant DSTs; Implementation and maintenance of <b>programme for construction vehicles and</b> wear prescribed PPE at all times, Supervision to monitor and control	3	15	Principal Contractor	High priority remedial action, Implement additional (secondary) controls immediately.

Hazard & Risk Identification			Raw Risk Evaluation			Risk Control Measures & Residual Risk Rating						
1a. S/N	1b. Work activity	1c. Hazard	1d. Consequential Risk (Possible Accident - Ill health to persons, fire or property loss)	2a. Severity	2b. Likelihood	2c. RPN	3a. Risk Control Measures	3b. Severity	3c. Likelihood	3d. RPN	3e. Responsible Party/Person	3f. Remarks
17	Welfare facilities	Inadequate space for maintaining social distancing; Failure to disinfect welfare facilities; Possible contaminated surfaces;	Inability to maintain social distancing resulting in possible cross contamination and increased risk of infection; Workers coming into close contact with contaminated surfaces resulting in virus infections;	5	4	20	Updating of policy, method statements and HIRA, limiting of personnel on site to minimum number required to maintain control and management. Implement and maintain cleaning and disinfecting programme. Site rules for social distancing to 1.5m. Stagger number of people attending induction and training sessions. Use technology to avoid close proximity between individuals where possible.	5	3	15	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
18	Emergency planning and response	Overcrowding of assembly points; Not following correct procedure for dealing with COVID-19 suspected cases; Emergency Co-ordinator not trained in COVID-19 emergency response procedure; Lack of isolation facility; Fire; traffic accidents, crushing incidents, collapsed structures	Assembly points may have more than the specified number of people; Limited space for social distancing when practicing or during actual emergencies resulting in cross infections;	5	2	10	Review emergency plan and method statements, DSTIs and toolbox talks, Competent supervision and arrangements to be trained on emergency arrangements. Updating of the emergency plan and communicated to all personnel. Emergency Number - 0800 029 999 and dedicated Isolation Hospital Details.	5	2	10	Principal Contractor	Proceed with care, Remedial actions to be taken at appropriate times.
19	First Aid	First Aid Attendant not trained in COVID-19 and proper procedure to be followed when rendering first aid; First Aid Attendant not provided with and not using suitable PPE. Lack of general competency and valid certification. No First aid box or signage.	First Aid Attendant not following proper procedure and not wearing suitable PPE when rendering first aid to injured employees;	5	2	10	The designated First Aid Attendant must be made aware of the hazards and risks related to COVID-19; Suitable PPE for the First Aid Attendant must be readily available on site at all times (N95, FFP1 / FFP2 masks, Goggles and Latex gloves); CCO to	5	2	10	Principal Contractor	Proceed with care, Remedial actions to be taken at appropriate times.
20	Personal protective equipment	Workers not provided with suitable PPE; Lack of PPE usage by the workers; Lack of training on correct and proper use of PPE provided; Lack of worker visibility.	Workers not having suitable PPE; Non-use and incorrect use of PPE increases the risk of contracting the virus; Incorrect disposal of used disposable PPE, putting those who may come into contact with such at risk of infection;	5	5	25	Update the policy, method statements and HIRA for PPE. No employee and no visitor will be allowed on site without a face mask, N95 masks only for medical or high risk workers. Adequate training must be provided in the correct use and disposal of these masks. Cloth masks must be washed and ironed daily. Face shields protect mouth, nose and eyes. Daily disinfection of face shields. No sharing of PPE will be permitted. Adequate supervision, inclusion induction, policy, method statements and HIRAs. Covid PPE does not replace conventional PPE as per Construction activity HIRA. Employees must wear marked reflector vests.	5	3	15	Principal Contractor	In some cases, during refurbishments, cloth masks do not prevent dust inhalation; Use correct PPE to protect against inhalation risk and revert to cloth masks as applicable.
21	Contractor Management	Non-compliant Contractors and lack of monitoring	Increased risk, exposure due to lack of monitoring and enforcement resulting in the spread of the virus;	5	4	20	Update the policy, method statements and HIRA. Ensure contractors have procedures in place to screen their workers and visitors prior to entering site; Frequent site visits by the designated COVID-19 Compliance Officer; Disciplinary action to be taken against non-compliant Contractors; Failure to address EIA requirements may lead to legal liability. Check all project data, resource adequately.	5	3	15	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.
22	Consequence management	Failure to appoint the COVID-19 Compliance Officer; Failure to report confirmed COVID-19 cases that are work related to the relevant authorities;	Non compliance issues not promptly addressed may result in work stoppage and possible legal action taken against the PC;	5	4	20	Revision of policy, method statements and HIRA, PC must ensure that a COVID-19 Compliance Officer is appointed in writing; Proper reporting procedures must be adhered to; PC must ensure that site is updated daily with all the relevant COVID-19 information; Workers should be updated with new information daily; PC must ensure that company disciplinary procedures are in place. All employees should have knowledge of the company disciplinary procedures and action must be taken against those who are deliberately non-compliant; Work stoppage/site closure where non compliance exists.	5	3	15	Principal Contractor	High priority remedial action. Implement additional (secondary) controls immediately.

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# **ADDENDUM A**

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## **Occupational Health and Safety Regulations**

GOVERNMENT NOTICE

DEPARTMENT OF LABOUR

No. R. ....

7 February 2014

**OCCUPATIONAL HEALTH AND SAFETY ACT, 1993**

### ***CONSTRUCTION REGULATIONS, 2014***

The Minister of Labour has under section 43 of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), after consultation with the Advisory Council for Occupational Health and Safety, made the regulations in the Schedule.

ADDENDUM A

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993  
Regulation 3 of the Construction Regulations, 2014

NOTIFICATION OF CONSTRUCTION WORK

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- 1.(a) Name and postal address of principal contractor:  
\_\_\_\_\_
- (b) Name and tel. no of principal contractor's contact person:  
\_\_\_\_\_
2. Principal contractor's compensation registration number: \_\_\_\_\_
- 3.(a) Name and postal address of client:  
\_\_\_\_\_
- (b) Name and tel no of client's contact person or agent:  
\_\_\_\_\_
- 4.(a) Name and postal address of designer(s) for the project:  
\_\_\_\_\_
- (b) Name and tel. no of designer(s) contact person:  
\_\_\_\_\_
5. Name and telephone number of principal contractor's construction supervisor on site appointed in terms of regulation 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.

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# ADDENDUM B

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## Occupational Health and Safety Specification

Construction of Dining Hall, Kitchen & Laundry, Construction of Dormitories (712 Learners), Dormitory Security Fence, pedestrian entrance, vehicular access gate & road (south east side of site), Dormitory furniture, cutlery, crockery, etc

**External work:** - Parking area and delivery area for dormitories, Stormwater management around buildings, Seating space around buildings.

**Bulk Infrastructure:** - Electrical upgrade (Construction of switch room (4 x 5m) with adjacent generator area).

**Sewerage Ponds:** (New sewer lines from dormitories; Connection points for proposed classroom upgrades for Team B)

**Water Harvesting:** (Water storage tanks to lowest part of site; Installation of water pumps; High level water tanks to high part of site).

Fire High level water tanks - highest part of the site, Fire Management System, Borehole and/or municipal supply upgrade, Landscaping, Fencing school site at Ntsonkotha SSS.

## INDEPENDENT DEVELOPMENT TRUST

(Hereinafter referred to as the Employer)

## OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

This specification shall be used in conjunction with all other applicable safety specifications, legislation and regulations in force at the time of the contract. Where unique site specifications are in force, those site specifications shall take precedence over this Specification.

### IDT East London Office

Silver Wood House  
Palm Square Business Park  
Beacon Bay  
East London  
5241

Contact:

Name: .....

Telephone: 043 711 6000

ADDENDUM "A"

PRO-FORMA AGREEMENT IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY ACT  
1993

**PRO-FORMA AGREEMENT IN TERMS OF**

**OCCUPATIONAL HEALTH AND SAFETY ACT 1993 – SECTION 37 (2)**

**NEW CONSTRUCTION SAFETY REGULATIONS**

The above- mentioned regulations were promulgated in the Govt. Gazette on Friday, 18 July 2014 under the Occupational Health & Safety Act (85 of 1993) and are now in force.

The Employer and the Contractor hereby agree, in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act 1993 (Act 85 of 1993, hereinafter referred to as the Act), that the following arrangements and procedures shall apply between them to ensure compliance by the Contractor with the provisions of the Act, namely:

- (a) The Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all the relevant provisions of the Act and the regulations promulgated in terms of the Act, and the Employer’s Health and Safety Specifications included in the contract documents.
- (b) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of the Act and Regulations and the Employer’s Health and Safety Specifications included in the contract documents will be complied with in all respects.
- (c) In relation to any work or activity performed by the Contractor, his workmen or any other person for whose acts or omissions the Contractor is responsible in terms of the Contract, the Contractor hereby accepts sole liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and Regulations and expressly absolves the Employer from itself being obliged to comply with any of the aforesaid duties, obligations and prohibitions.
- (d) The Contractor agrees that any duly authorised officials of the Employer shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the Contractor has complied with his undertakings as set out more fully in paragraphs (a) and (b) above, which steps may include, but will not be limited to, the right to inspect any appropriate site or premises occupied by the Contractor, or to inspect any appropriate records held by the Contractor.
- (e) The Contractor shall be obliged to report forthwith in writing to the Representative/Agent full details of any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and Regulations, pursuant to work performed in terms of this Contract.
- (f) Forward “safety meeting” minutes to the representative/Agent.

For the Employer: \_\_\_\_\_ Date: \_\_\_\_\_

Witnesses: 1) : \_\_\_\_\_ 2) \_\_\_\_\_

For the Contractor: \_\_\_\_\_ Date: \_\_\_\_\_

Witnesses: 1) : \_\_\_\_\_ 2) \_\_\_\_\_

**ADDENDUM "B"**

**NOTIFICATION OF CONSTRUCTION WORK**

**NOTIFICATION OF CONSTRUCTION WORK**

(Regulation 3 of the Construction Regulations, 2014)

**1. CONTRACTOR**

1.1 Name and postal address of Contractor :

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

1.2 Name and telephone number of Contractor's contact person :

\_\_\_\_\_

1.3 Contractor's compensation registration number :

\_\_\_\_\_

1.4 Name and telephone number of Contractor's Construction Supervisor :

\_\_\_\_\_

1.5 Physical address of the construction site or site office:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

1.5 Estimated number of persons on the construction site :

\_\_\_\_\_

1.6 Estimated number of Subcontractors on the construction site accountable to the Contractor :

\_\_\_\_\_

**2. EMPLOYER**

2.1 Name and postal address of Employer :

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2.2 Name and telephone number of Employer's Principal Agent:

\_\_\_\_\_

### **3. DESIGN CONSULTANTS**

#### 3.1 Name and postal address of design consultants:

##### 3.1.1 Construction project managers/ Principal Agents:

**ROELEVELD QUANTITY SURVEYORS CC**  
P O Box 13383  
Vincent  
East London  
5217  
Tel: 043 721 2232  
Fax: 043 721 2239

##### 3.1.2 Architects:

**NGONYAMA & ASSOCIATES (PTY) LTD**  
13 Lukin Street  
Selborne  
East London  
5247  
Tel: 043 743 3889  
Fax: 043 743 3892

##### 3.1.3 Structural Engineer:

**CSE CIVIL/STRUCTURAL ENGINEER**  
P O Box 15825  
Beacon Bay  
East London  
5205  
Tel: 043 726 3565  
Fax:

##### 3.1.4 Electrical engineer:

**MXN ELECTROCON PROJECTS**  
Postnet Suite 188  
Private Bag X3  
Beacon Bay  
East London  
5205  
Tel: 043 722 4875  
Fax: 043 722 5339

3.1.5 Mechanical Engineer:

**MXN ELECTROCON PROJECTS**

Postnet Suite 188  
Private Bag X3  
Beacon Bay  
East London  
5205  
Tel: 043 722 4875  
Fax: 043 722 5339

3.1.6 Civil Engineer:

**CSE CIVIL/STRUCTURAL ENGINEER**

P O Box 15825  
Beacon Bay  
East London  
5205  
Tel: 043 726 3565  
Fax:

3.1.7 Security Engineer:

**To be appointed at a later stage if necessary**

\_\_\_\_\_

3.1.8 Other (if any):

\_\_\_\_\_

3.2 Name and telephone number of design consultant's contact person:

3.2.1 Construction project managers/ Principal Agent:

**AS PER ABOVE 3.1**

3.2.2 Architects :

**AS PER ABOVE 3.1**

3.2.3 Structural engineer :

**AS PER ABOVE 3.1**

3.2.4 Electrical engineer :

**AS PER ABOVE 3.1**

3.2.5 Mechanical engineer :

**AS PER ABOVE 3.1**

---

3.2.6 Civil engineer :

**AS PER ABOVE 3.1**

---

3.2.7 Security engineer :

**To be appointed at a later stage if necessary**

---

3.2.8 Other (if any) :

---

**4. THE WORKS**

Nature of the works:

Construction of Dining Hall, Kitchen & Laundry, Construction of Dormitories (712 Learners), Dormitory Security Fence, pedestrian entrance, vehicular access gate & road (south east side of site), Dormitory furniture, cutlery, crockery, etc

**External work:** - Parking area and delivery area for dormitories, Stormwater management around buildings, Seating space around buildings.

**Bulk Infrastructure:** - Electrical upgrade (Construction of switch room (4 x 5m) with adjacent generator area).

**Sewerage Ponds:** (New sewer lines from dormitories; Connection points for proposed classroom upgrades for Team B)

**Water Harvesting:** (Water storage tanks to lowest part of site; Installation of water pumps; High level water tanks to high part of site).

Fire High level water tanks - highest part of the site, Fire Management System, Borehole and/ or municipal supply upgrade, Landscaping, Fencing school site at Ntsonkotha SSS.

Commencement date :

\_\_\_\_\_

Completion date :

\_\_\_\_\_

Contractor: \_\_\_\_\_ Date: \_\_\_\_\_

Employer: \_\_\_\_\_ Date: \_\_\_\_\_

THIS DOCUMENT IS TO BE FORWARDED TO THE OFFICE OF THE DEPARTMENT OF LABOUR **PRIOR TO COMMENCEMENT** OF WORK ON SITE.

ALL CONTRACTORS THAT QUALIFY TO NOTIFY MUST DO SO EVEN IF ANOTHER CONTRACTOR ON THE SITE HAD DONE SO PRIOR TO THE COMMENCEMENT OF WORK.

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# **ADDENDUM C**

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## **Environmental Management Plan**

TO BE PROVIDED BY THE SUCCESSFUL TENDERER

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# **ADDENDUM I**

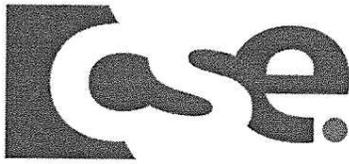
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## **Drawings**

**See attached**

## **C5.1 Specifications & Drawings**

- Fire booster pump specification
- Specification and Application of Fire Stops for penetrations in fire walls
- Specification for supply delivery, installation, testing, commissioning and defects liability period of the complete fire curtain installation
- Specification reinforced raft foundations
- Schedule of plants and outdoor furniture



CIVIL STRUCTURAL ENGINEERS

**CSE CONSULTING (Pty) Ltd**

Reg No. 2001/007451/07

7B Derby Road, Berea, East London, 5241  
PO Box 15825, Beacon Bay, East London, 5205

T : 043 726 3565 E : el@cse-consult.co.za

Queenstown | East London | Bloemfontein

Your ref:

Our ref: E838-02

Date: 2021-09-23

## MEMO 2

**To :** RQS  
**Attention :** Dallas Dreyer/ Leonard Roeleveld  
**Copy:** MXN (Mxolisi Nyikana)  
**From :** Clené van Wyk

### **SUBJECT: NTSONKOTHA HOSTELS: FIRE BOOSTER PUMP**

#### **SPECIFICATION: FIRE BOOSTER PUMP SET**

The modular fire booster pump unit that consists of an electrically driven main pump, diesel driven standby pump and an electrical jockey pump, complete with all pipework and fittings. The pump set must be compliant with UNI EN 12845 and of a brand that has a 10year track record in South Africa, with design and performance literature readily available for verification purposes. The pump set must be of modular construction, on pre-assembled skids with all controls, pipework, jockey pump and other appurtenances, to be mounted on concrete plinths.

The pump setup must be according to UNI10779, A1.2 with an automatic stop and timer for hose reels and hydrants.

The pumps must be suitable for the following:

- Medium: potable water
- Pump type: Centrifugal
- Pump set: Grundfos Hydro EN-S2 80-200/202 YJS ASD-U3-B
- NPSH<sub>A</sub>: 30kPa min available
- Electrical supply: Three phase 380V, 50Hz
- Motors: 2950 rpm IEC3
- Engine for standby pump: Diesel, normally aspirated, heat exchanger cooling
- Required pump duty point: 550kPa @ 42.0 lit/sec

#### **Pump operation:**

- When discharge pressure drops, pressure switches automatically start the jockey pump, the 1<sup>st</sup> main pump, and, if necessary, the standby pump in cascade fashion to maintain the required minimum pressure of 550kPa.
- The jockey pump eliminates unnecessary starting of the main pumps by automatically restoring the pressure in firefighting system in case of leakage, but not in case of opening of a hydrant or sprinkler.
- The jockey pump is the only one which stops automatically by its pressure switch when the discharge pressure reaches the cut off value.
- The main pumps can only be stopped manually by using the appropriate button on the panel or



Director: J P C van Wyk (Pr Eng)

CESA

automatic by a timer according to UNI 10779, A.1.2 for operation with hydrants and hose reels.

**Pump installation:**

The pump installation must include everything to comply with the stated specifications, including but not limited to:

- Pump bypass to prevent overheating when pumping against closed valve.
- Vacuum gauge on suction of each pump and pressure gauge on the delivery of each pump.
- All interconnecting pipework between jockey pump, duty and standby pump.
- Flow rate test loop with throttling valve
- Single combined PN 16 delivery flange
- One PN16 inlet flange per main pump
- Non-return valves, gate valves and compensation joints
- Diaphragm tank
- Control panels in IP 55 enclosures

Prior to ordering, the Contractor must submit to the Engineer the detailed information and specifications of the complete pump installation.

**Pump Building**

The booster pump will be housed in the pump building according to Drawing No 111. Please increase the building overall dimensions from 4.444x5.400 to 5.444x6.4.

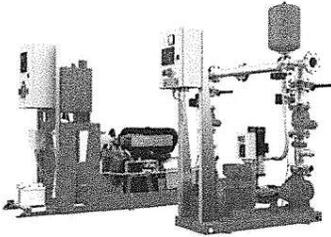
**Attachments**

- Suggested schedule of quantities for the booster pump set.
- Pump data sheet.



Qty.	Description
------	-------------

1	Hydro EN 80-200/202 YJS ASD-U3-B
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Note! Product picture may differ from actual product

Product No.: 99844412

Pressure booster pump sets are designed for automatic sprinkler systems, according to EN 12845, in addition to other relevant industry standards.

The pump sets are designed for fire extinguishing systems with clean water and for single, single superior and double or combined water supplies. It is a compact, robust and modular system supplied in pre-assembled macro blocks to make transport, handling and installation easy. Communication is guaranteed through ModBus module.

The main pumps have end-suction hydraulics. They are fitted with corrosion-resistant material and replaceable wearing parts, back pull-out design through spacer coupling, fitted with high grade mechanical seals and internally tested at the factory according to QCP protocols.

The drivers of the pumps deliver, in continuous operation, at least the power required at the flow corresponding to the NPSHr value equal to 16 m. The entire pump-engine assembly is factory-tested to meet the expected performance.

The hydraulic components are designed to minimize the pressure loss and the water speed to meet the requirements at the flow rate values stated on the performance curve.

The system contains the following components (unless otherwise specified):

- Two hydraulics coupled with driver
- Two microprocessor-based control panels
- One pressure-regulator pump and related independent control panel
- One modular discharge manifold
- Two concentric tapered adapters
- Two grooved joints
- Direct connection port for room sprinklers
- Two non-return valves
- Two isolating valves
- Two drain test valves
- Two pump starting assembly packs (two pressure switches, glycerin-filled pressure gauge, isolating valve, bypass line with non-return valve and a drain valve)
  
- Two pressure-sensing switches (pump running)
- Pressure vessel
- A set of Jockey pump fittings (connection for priming, non-return valve, two isolating valves and a pressure switch)
- Silencer
- A set of batteries
- Diesel fuel tank with leak containment.

For more components, contact Grundfos.

The two main pumps are configured in a duty / stand-by configuration, whereas the electric driven pump is factory pre-set to be the duty one.

Company name:

Created by:

Phone:

Date:

Qty.	Description
------	-------------

Each pumping unit is mounted on a separate baseplate to reduce stress from one unit to the other while assuring layout flexibility. It ensures easy access to narrow pump room entry and handling in case of extraordinary maintenance needs and keeps the system protected.

All the items are wired and fitted at the factory within the same skid, except for the main control panels that are supplied loose and prewired for the diesel set, whilst loose for larger electric driven sets.

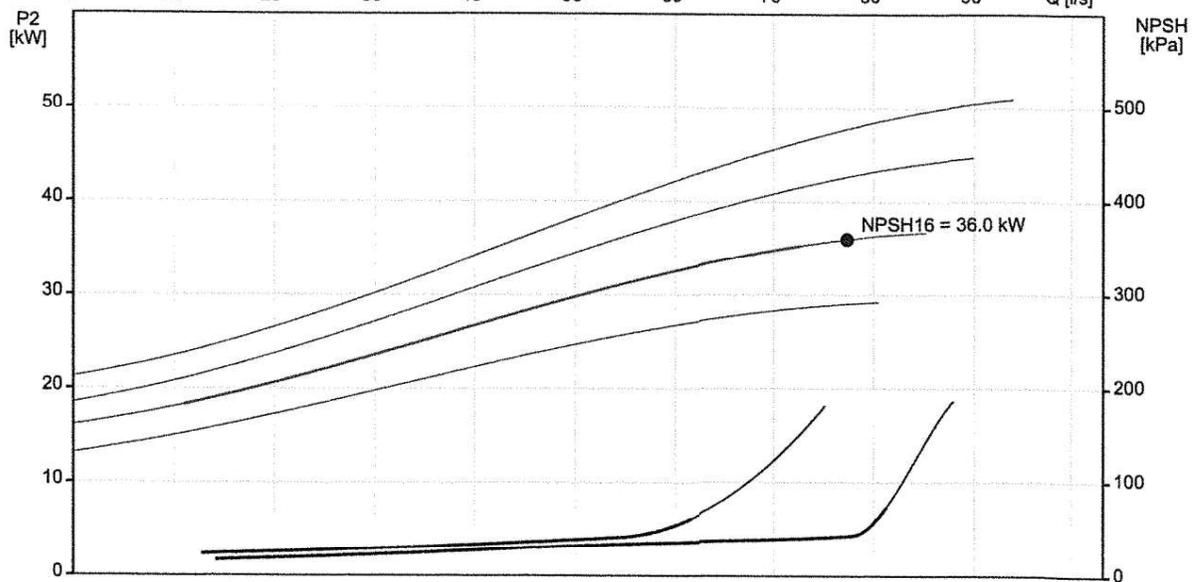
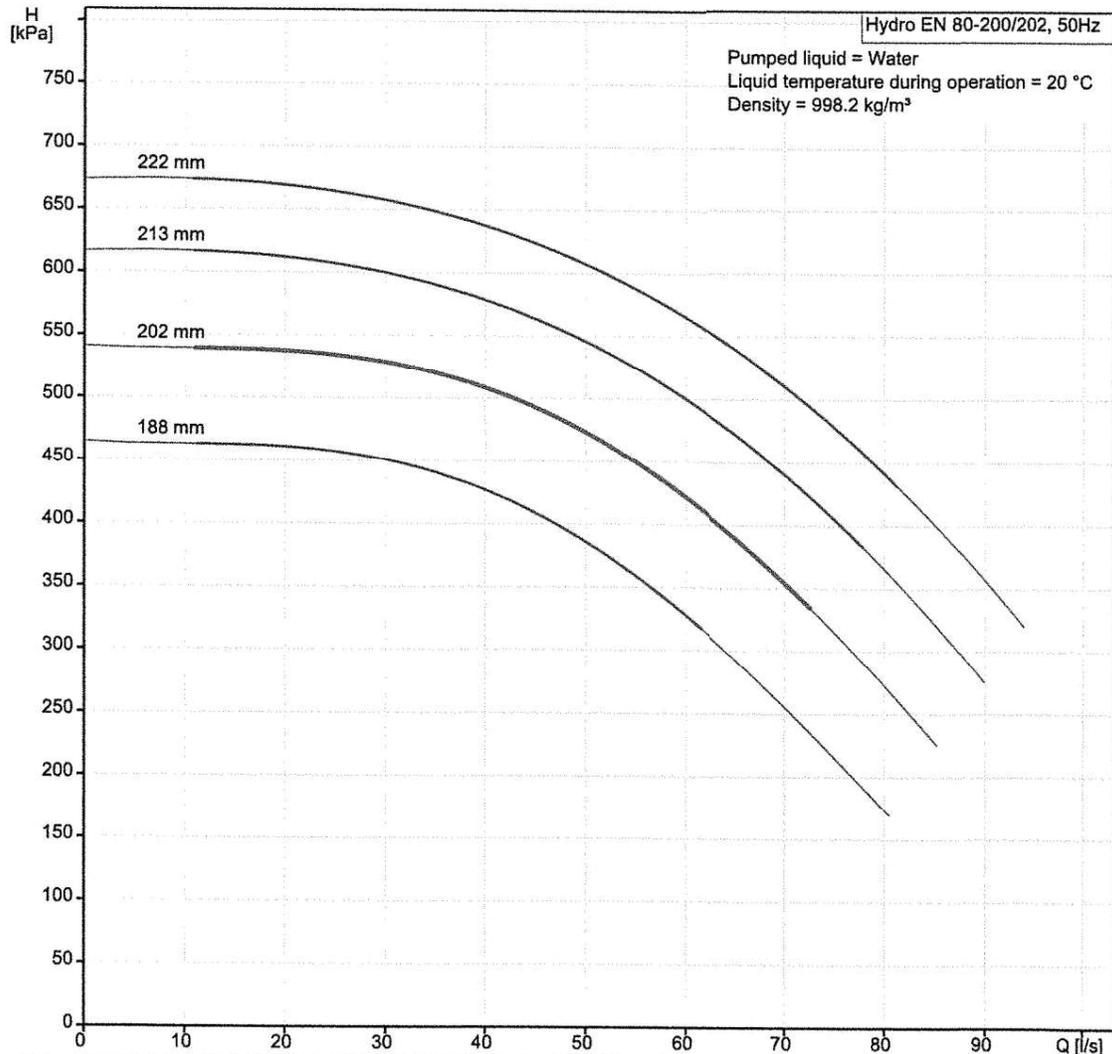
Pump, driver, jockey pump and controllers are anchored on a robust electro-welded baseplate.

They are painted RAL 3000 and designed to withstand all static and dynamic stress.

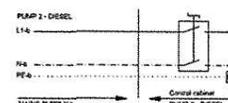
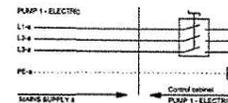
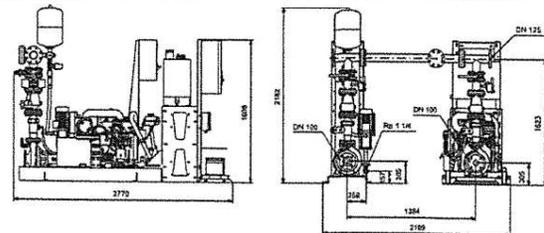
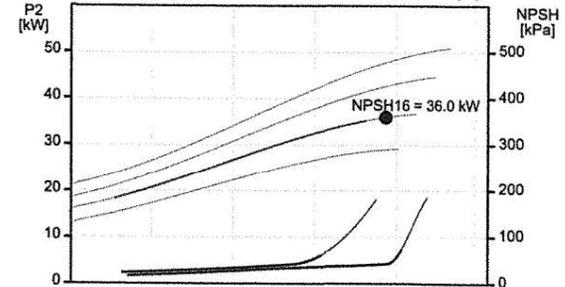
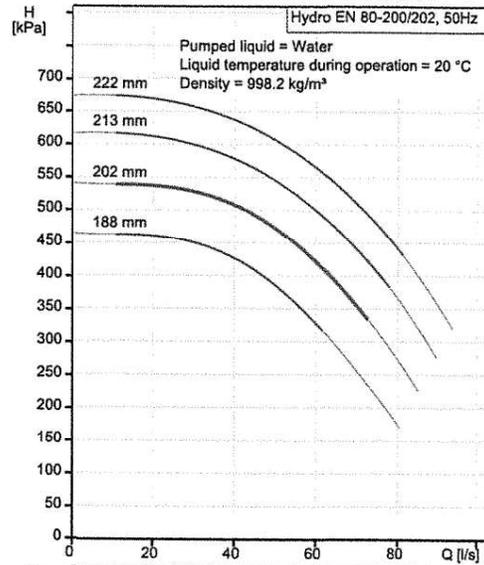
The baseplates are designed with holes and anchoring lugs for an easy and safe handling and optimal fastening to the plinth or concrete foundation.

For further product information, please tick off "Tender text" under "Print/PDF".

## 99844412 Hydro EN 80-200/202 YJS ASD-U3-B 50 Hz



Description	Value
<b>General information:</b>	
Product name:	Hydro EN 80-200/202 YJS ASD-U3-B
Product No:	99844412
EAN number:	5713835088680
<b>Technical:</b>	
Rated flow:	65.83 l/s
Rated head:	381.8 kPa
Electric cooling flow:	1.111 l/s
Diesel cooling flow:	1.111 l/s
Nominal impeller diameter:	200 mm
Approvals:	CE
Fire standard:	EN 12845
Maximum allowed back pressure:	12.00 kPa
Max power P2 along the curve:	36.76 kW
Number of pumps:	3
Main pump type:	NKF 80-200/202
Number of electrical driven pumps:	1
Number of diesel driven pumps:	1
Jockey pump type:	CM 3-8
Number of Jockey pumps:	1
<b>Materials:</b>	
Pump housing:	Cast iron
Pump housing:	EN-GJL-250
Impeller:	Bronze
Manifold:	Galvanized steel
<b>Installation:</b>	
Range of ambient temperature:	10 .. 40 °C
Relative humidity:	50 %
Maximum operating pressure:	16 bar
Type of inlet connection:	DIN
Type of outlet connection:	DIN
Size of inlet connection:	DN 100
Size of outlet connection:	DN 125
Type of inlet connection for Jockey pump:	Rp
Size of inlet connection for Jockey pump:	1 1/4 inch
Earth connection:	PE
Elevation above sea level:	300 m
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature range:	0 .. 40 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m <sup>3</sup>
<b>Electrical data:</b>	
Motor standard:	IEC
Driver type:	Electric Motor / Diesel engine
Mains supply for electrical motor:	3 x 400 V
Rated power - P2:	37 kW
Mains frequency:	50 Hz
Rated current:	66 A
Starting current:	670 %
Motor nominal speed (w/o slip):	2960 rpm
Number of poles:	2
Method of start:	Star-delta (YD)
Enclosure class (IEC 34-5):	IP54
Motor standard for Jockey pump:	IEC



Company name:

Created by:

Phone:

Date:

Description	Value
Mains supply for jockey motor:	3 x 400 V
Rated power - P2 for Jockey pump:	1.1 kW
Rated current for Jockey pump:	2.72 A
Number of poles for Jockey pump:	2
Method of start for Jockey pump:	Direct-on-line (DOL)
<b>Engine data:</b>	
Mains supply for diesel motor:	1 x 230 V
Engine gross power NB:	41 kW
Engine continuous power NA:	36.9 kW
Battery:	12 V
Engine cooling type:	Heat exchanger cooled
Exhaust flow:	220 t <sub>kg</sub> /h
Engine aspiration:	Natural aspirated
Heat radiation:	7800 kcal/h
Maximum allowed back pressure:	12.00 kPa
Maximum exhaust temperature:	560 °C
<b>Others:</b>	
Net weight:	1540 kg
Gross weight:	1770 kg



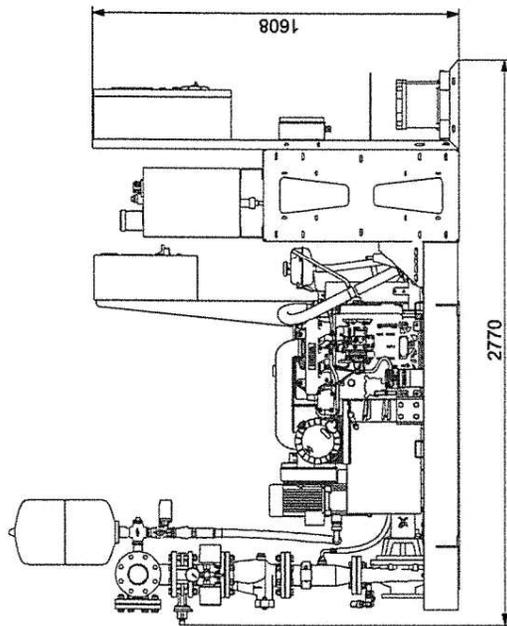
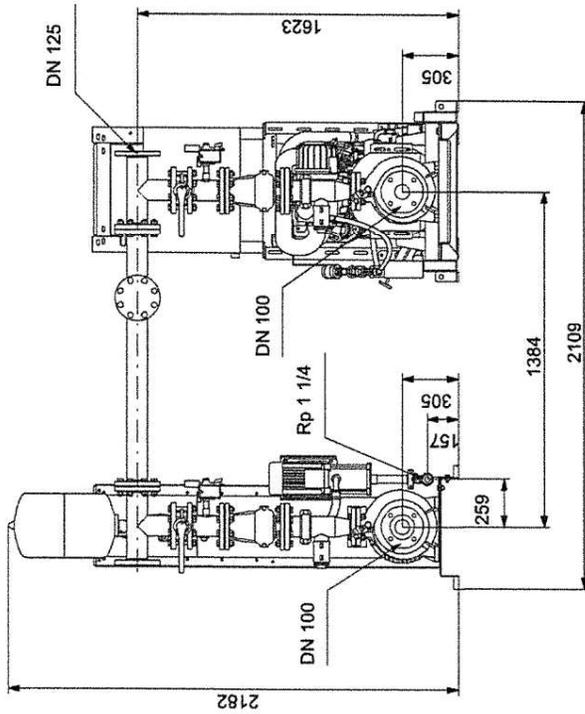
Company name:

Created by:

Phone:

Date:

## 99844412 Hydro EN 80-200/202 YJS ASD-U3-B 50 Hz



Note! All units are in [mm] unless others are stated.  
Disclaimer: This simplified dimensional drawing does not show all details.