



**DEPARTMENT OF WATER AND SANITATION
REPUBLIC OF SOUTH AFRICA**

DUE AT 11:00 ON

CLOSING DATE: 30 MAY 2024

BID DWS01 0424 WTE

**THE DESIGN, HIRE, SUPPLY AND DELIVERY OF FORMWORK, SCAFFOLDING AND
FALSEWORK FOR THE UPGRADE OF NOMLACU WATER TREATMENT WORKS AND LUDEKE
RAW WATER PUMP STATION IN MBIZANA IN THE EASTERN CAPE FOR A PERIOD OF 24
MONTHS**

SUBMIT COMPLETED BID DOCUMENTS TO:

POSTAL ADDRESS:
DIRECTOR-GENERAL
WATER AND SANITATION
PRIVATE BAG X313
PRETORIA, 0001

OR

TO BE DEPOSITED IN:
THE BID BOX AT THE ENTRANCE
OF ZWAMADAKA BUILDING
157 FRANCIS BAARD STREET
PRETORIA, 0001

Compulsory site briefing:

Date: 16 May 2024

Time: 10:00am

Venue: Nomlacu Water Treatment Works in Bizana, Eastern Cape

GPS Coordinates:

Nomlacu WTW: 30° 50' 16.36" S ; 29° 46' 20.42" E

The Nomlacu Water Treatment Plant is located within the rural development of Nomlacu, which is approximately 9.0 km West (along the R61 road) of the town of Bizana.

BIDDER: (Company address and stamp)

COMPILED BY: CONSTRUCTION

DEPARTMENT OF WATER AND SANITATION

BID DWS01 0424 WTE

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INVITATION TO BID (SBD 1)

SECTION 1: LEGALITIES

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PART A INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)					
BID NUMBER:	BID DWS01 0424 WTE	CLOSING DATE: 30 MAY 2024	CLOSING TIME:	11:00am	
DESCRIPTION	THE DESIGN, HIRE, SUPPLY AND DELIVERY OF FORMWORK, SCAFFOLDING AND FALSEWORK FOR THE UPGRADE OF NOMLACU WATER TREATMENT WORKS AND LUDEKE RAW WATER PUMP STATION IN MBIZANA IN THE EASTERN CAPE FOR A PERIOD OF 24 MONTHS				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
THE ENTRANCE OF ZWAMADAKA BUILDING					
157 FRANCIS BAARD STREET					
PRETORIA					
0001					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON	Bid Office		CONTACT PERSON	Mr. Z.D Cele / Mr S. Biyela	
TELEPHONE NUMBER	012 336 7780/ 6562/ 8151		TELEPHONE NUMBER	060 980 5392	
FACSIMILE NUMBER	N/A		FACSIMILE NUMBER	N/A	
E-MAIL ADDRESS	bidenquirieswte@dws.gov.za		E-MAIL ADDRESS	CeleZ2@dws.gov.za BiyelaS@dws.gov.za	
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN-BASED SUPPLIER OF THE GOODS /SERVICES OFFERED?		<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE A BRANCH IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.					

PART B

TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED (NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).
2. TAX COMPLIANCE REQUIREMENTS
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED; EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:
(Proof of authority must be submitted e.g. company resolution)

DATE:

NB:FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID

DEPARTMENT OF WATER AND SANITATION

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SECTION 1: LEGALITIES

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1. Instructions to Bidders
2. Declaration of Interest (SBD 4)
3. Preference Points Claim in terms of the Preferential Procurement Regulation, 2022 (SBD 6.1) and Annexure 1 (Percentage Ownership Affidavit), Annexure 2 (Location of Enterprise Affidavit)
4. National Treasury General Conditions of Contract

DEPARTMENT OF WATER AND SANITATION

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1. INSTRUCTIONS TO BIDDERS

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1. Issuing of documents
2. Queries with respect to this bid
3. Completion of Bids
4. Submission of Bids
5. Signature on Bids
6. General Conditions of Contract
7. Bids to comply with documents
8. Telegraphic bids
9. The Department's right to decline any bid
10. Department is not liable for bidder's expenses
11. Payments made under this contract
12. Evaluation Criteria
13. Rejection of bids
14. Results of bids

INSTRUCTIONS TO BIDDERS

1. ISSUING OF DOCUMENTS

- (a) A complete set of bid documents is issued to a list of prospective Bidders, sourced from National Treasury's Central Supplier Database.
- (b) Bidders must satisfy themselves that the document is complete and conform to the index of this document. Should any figures or writing be indistinct, or should any pages be missing from this document or should this document or the drawing(s) contain any obvious errors, the Bidders must immediately notify the Department in order to have any discrepancy rectified or clarified before submitting his bid. Such clarification will be valid only if made by the Department by means of formal amendment as described hereunder prior to the date of submission of bids. The Department may issue amendments to clarify or modify the Bid Documents. A copy of each amendment will be issued to each bidder and shall be acknowledged on the form issued with the amendments. No claim whatsoever will be entertained for faults in the bid price resulting from the above-mentioned discrepancies.
- (c) No alterations, omissions or additions shall be made to this document, but should it be deemed necessary to do so, the Bidder is at liberty to qualify his bid.
- (d) All Bidders shall be deemed to have waived, renounced and abandoned any conditions printed or written upon any stationery used by them for the purpose of or in connection with the submission of bids which are in conflict with the conditions laid down in this document.

2. QUERIES WITH RESPECT TO THIS BID

Queries of a specific technical nature should be directed to Mr. Z D Cele at CeleZ2@dws.gov.za or Mr. S Biyela at BiyelaS@dws.gov.za.

3. COMPLETION OF BIDS

- (a) The bid must be signed on the Invitation to Bid form (SBD 1) annexed hereto with all blanks in the bid and the appendix filled in.
- (b) All spaces in the bid forms and other annexures shall be completed in full.
- (c) **Section 3 in the bid document and the Pricing Schedule must be fully completed and priced out by the bidder. Failure to do so will deem your bid invalid.**
- (d) The bid documents shall not be separated in any way, nor must any pages be detached from the original documents.

4. SUBMISSION OF BIDS

The Bid Document shall be completed, signed and submitted as follows:

- a) The original Bid, together with a cover letter and supporting documents, shall be sealed in an envelope endorsed:

"THE DESIGN, HIRE, SUPPLY AND DELIVERY OF FORMWORK, SCAFFOLDING AND FALSEWORK FOR THE UPGRADE OF NOMLACU WATER TREATMENT WORKS AND LUDEKE RAW WATER PUMP STATION IN MBIZANA IN THE EASTERN CAPE FOR A PERIOD OF 24 MONTHS"

and the name of the Bidder shall be clearly shown.

- b) Bids sealed and endorsed as above, may be deposited in the bid box at the entrance of the ZwaMadaka Building, 157 Francis Baart Street, Pretoria and not later than 11:00 on the date stipulated on the front cover of this document.

5. SIGNATURE ON BIDS

A certificate signed by or on behalf of each participating person and/or company and/or firm authorising the person who signed the bid to do so.

6. GENERAL CONDITIONS OF THE CONTRACT

The General Conditions of Contract (National Treasury 2010), as attached shall be regarded as an integral part of the contract documents.

7. BIDDERS TO COMPLY WITH DOCUMENTS

- (a) Where applicable, Bidders must allow in their Bids for all labour, material, machinery, and everything necessary for the execution and completion of the Contract in accordance with the bid documents. No alterations may be made in the Invitation to Bid, Schedule of Quantities or other documents and the bid will be deemed to comply entirely with the terms of the documents.
- (b) The Bidder will be required to submit a letter from the manufacturer/supplier confirming supply arrangements (the letter should be on the letter head of the manufacturer/supplier addressed to the bidder and be signed by the manufacturer/supplier. The letter should include the contact details of the manufacturer/supplier) along with the bid document as part of the mandatory requirements. **Failure to do so will invalidate the bid.**
- (c) If the bid is submitted by a joint venture of more than one person and/or Companies and/or firms it shall be accompanied by the following:

The original or a notarially certified copy of the original document under which such joint venture was constituted which must define precisely inter alia the conditions under which the joint venture will function, its period of duration and the participation of the several constituent persons and/or companies and/or firms.

8. TELEGRAPHIC BIDS

No bid forwarded by telegram, telex, or facsimile will be considered.

9. THE DEPARTMENTS RIGHT TO DECLINE ANY BID

The Department does not bind itself to accept the lowest or any bid.

10. THE DEPARTMENT IS NOT LIABLE FOR THE BIDDER'S EXPENSES

The Department will not be held liable for any expenses incurred in preparing and submitting bids.

11. PAYMENTS UNDER THE CONTRACT

All payments due to the Bidder in terms of the contract will be done by means of Electronic Fund Transfer.

12. EVALUATION CRITERIA

Bids will be evaluated in four (4) phases as per PPPFA Act No.5 of 2000 (PPPFA). The bidder scoring the highest points in phase 4; Preference Points System, will be recommended for award. Four (4) evaluation phases are follows:

- **Phase 1: Mandatory Requirements**
- **Phase 2: Technical Evaluation and Specification Compliance**
- **Phase 3: Administrative Compliance**
- **Phase 4: Preference Points system**

Phase 1:**Mandatory Requirements**

Failure to submit any of the documents listed below will render your bid non-responsive and will be disqualified.

Yes - list the relevant documents required on the table below

Table 1

No	Criteria	Yes	No
1.	A letter from the manufacturer/supplier confirming supply arrangements (the letter should be on the letter head of the manufacturer/supplier addressed to the bidder and be signed by the manufacturer/supplier. The letter should include the contact details of the manufacturer).		
2.	Compulsory briefing session attendance		

Phase 2:**Technical Evaluation and Specification Compliance**

Compliance requirements:

- Indicate by marking the relevant column, if you mark on both columns, it will be considered as non-compliance. A bidder who fails to comply with the specification requirements will be disqualified and not considered for further evaluation.

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Item No	Quantity	Description	Comply	Not Comply
		<u>NEW PULSATOR</u> <u>(Refer Drawing 34905-CIV-2-1 to 34905-CIV-2-3)</u> Formwork, scaffolding and falsework design, hire, supply, and delivery including anchors and related accessories for:		
1.	Rate only	Outside perimeter walls		
2.	Rate only	Inside perimeter walls		
3.	Rate only	Roof support and decking		
		<u>NEW SAND FILTER</u> <u>(Refer Drawing 34905-CIV-3-1 to 34905-CIV-3-7)</u> Formwork, scaffolding and falsework design, hire, supply, and delivery including anchors and related accessories for:		
4.	Rate only	Outside perimeter walls		
5.	Rate only	Inside perimeter walls		

Item No	Quantity	Description	Comply	Not Comply
6.	Rate only	Roof support and decking		
		NEW 1000KL RESERVOIR (Refer Drawing 34905-CIV-4-1 to 34905-CIV-4-4) Formwork, scaffolding and falsework design, hire, supply, and delivery including anchors and related accessories for:		
7.	Rate only	Outside perimeter walls		
8.	Rate only	Inside perimeter walls		
9.	Rate only	Roof support and decking		

Phase 3:

Administrative Compliance

Bidders are required to comply with the following listed below:

No	Criteria	Yes	No
1.	Companies must be registered with National Treasury's Central Supplier Database must submit CSD report. Provide MAAA number on SBD1		
2.	Tax compliant with SARS (to be verified through CSD and SARS). Attach Tax Compliance status PIN page		
3.	Active registration with Company Intellectual Property Commission (to be verified through CSD and CIPC). Attach a copy of CIPC / CIPRO certificate.		
4.	A valid copy of B-BBEE Status Level Verification Certificate or a valid original sworn affidavit (failure to submit, the Bidder will forfeit the relevant points allocated for B-BBEE under specific goals)		
5.	A valid letter of Good Standing with the Compensation Commissioner in terms of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and or third parties' insurance registered with Financial Service Board		
6.	Initial and sign Section 2 Tender data (Specification)		
7.	Letter of appointment of duly authorized person to sign bid. Proof of such authority must be submitted with the bid. If by an individual, must be signed by that individual or by someone on his behalf duly authorised thereto and proof of such authority must be produced. If the bid is by a Company, it must be signed by a person duly authorised thereto by a Resolution of a Board of Directors a copy of which Resolution, duly certified by the Chairman of the Company is to be submitted with the bid.		
8.	Local Content and Production		

No	Criteria	Yes	No
	<p>A letter from the local manufacturer confirming local production and content outlining types and sizes of the items to be provided must be submitted with the bid.</p> <ul style="list-style-type: none"> In terms of section 2(1) (f) of the PPPFA, the state may award a contract to a tenderer that did not score the highest points. With the above provision, a tender may be awarded to a bidder offering goods that meet the local content requirements than the tenderer scoring the highest points. The stipulated minimum threshold percentage for local production and content of cement 100% as stipulated by the Department of Trade, Industry and Competition (the DTIC) is applicable. An exemption letter from the DTIC must be obtained as per the exemption process followed by the DTIC for items or materials that are imported and in cases whereby local content requirements cannot be met for various reasons (see exemption process followed by the DTIC). <p>Substantial supporting documents may be required at any point in time before and after award of the contract. Due diligence, which includes site visits, may be conducted in this regard.</p>		
9.	Complete, sign, and submit SBD 1, SBD 3.2 SBD 4, SBD 6.1		

Phase 4:

Preference Points system

The bid will be awarded in terms of Regulation 4: Preferential Procurement Regulations, 2022 pertaining to the Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000).

Bid proposals will be evaluated based on the 80/20 preference points where a maximum of 80 points will be awarded in respect of price and a maximum of 20 points will be awarded for goals.

Points claimed will be according to a bidder's specific goals claimed as indicated in Table 4 below.

Table 1: Specific goals for the tender and points claimed:

The specific goals allocated points in terms of this tender	Number of maximum points allocated (80/20 system)	Bidder's points claimed for specific goals (To be completed by Bidder)
Women	Up to 5	
People with disability	Up to 5	
Youth (35 and below)	Up to 5	
Location of enterprise Eastern Cape Province	2	
B-BBEE status level contribution from levels 1 to 2 which are QSE or EME	3	
Total points for SPECIFIC GOALS	Up to 20	

Specific goals” means specific goals as contemplated in section 2(1)(d) of the PPPFA Act which may include contracting with persons, or categories of persons, historically disadvantaged by unfair discrimination on the basis of race, gender and disability including the implementation of programmes of the Reconstruction of Development Programme as published in *Government Gazette* No. 16085 date 23 November 1994.

“Ownership” means the percentage of ownership and control, exercised by individuals within an enterprise.

"Disability" means, in respect of a person, a permanent impairment of a physical, intellectual, or sensory function, which results in restricted, or lack of, ability to perform an activity in the manner, or within the range, considered normal for a human being.

- i. A blind person (in terms of the Blind Persons Act, 1968 (Act no.26 of 1968);
- ii. A deaf person, whose hearing is impaired to such an extent that he/she cannot use it as a primary means of communication;
- iii. A person who, as a result of permanent disability, requires a wheelchair, caliper or crutch to assist him/her to move from one place or another;
- iv. A person who requires an artificial limb; or
- v. A person who suffers from a mental illness (in terms of the Mental Health Act, 1973 (Act no. 18 of 1973).

"Youth" means, in respect a person younger than 35 years of age.

"Location of enterprise" Local equals province. Where a project cuts across more than one province, the bidder may be located in any of the relevant provinces to claim and be allocated the points.

Women, disability, and youth will be measured by calculating the pro-rata percentage of ownership of the bidding company which meets the criterion. E.g., Company A has five shareholders each of whom owns 20% of the company. Three of the five shareholders meet the criterion, i.e., they are women/disability/youth. Therefore, this bidder will obtain 60% of the points allowable for this goal.

Table 2: Documents required for verification of Bidder's claimed points.

Table 2

Specific Goal	Requires Proof Documents
Ownership by Women	Completed Percentage Ownership Affidavit (Annexure 1)
Ownership by people with disabilities	
Ownership by Youth	
Location of enterprise – Eastern Cape	Completed Location of Enterprise Affidavit (Annexure 2) and proof of such premises
B-BBEE status level1 or level 2 contributor who are Exempted Mico Enterprise or Qualifying Small Enterprise	B-BBEE verification certificate issued by a verification agency accredited by South African National Accreditation Agency (SANAS0 or in the case of an EME or a QSE, if permitted in terms of the relevant cade, a duly completed sworn affidavit on the relevant and appropriate form.

Failure on the part of a bidder to submit proof of documentation required in terms of this tender to claim for specific goals with the bid, will be interpreted to mean that preference points for specific goals are not claimed and will not be allocated.

Only fair market prices will be accepted, and the Department reserves the right to not to award the bid to the lowest scoring bidder if it is determined that the prices quoted is not market related.

13. REJECTION OF BID

Bids not complying with the above-mentioned requirements and specifications may be regarded as incomplete and may not be considered.

14. RESULTS OF BIDS

Results of non-acceptance of bids will be sent to individual unsuccessful bidders in due course. Particulars of accepted bids are published weekly in the Government Tender Bulletin.



BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the Bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

- 2.1 Is the Bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise, employed by the state? **YES/NO**

- 2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

- 2.2 Do you, or any person connected with the Bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

- 2.2.1 If so, furnish particulars:

.....

.....

- 2.3 Does the Bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other

¹ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.



related enterprise whether or not they are bidding for this contract?

YES/NO

2.3.1 If so, furnish particulars:

.....

3 DECLARATION

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The Bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium² will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the Bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the Bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the Bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

² Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

SBD4



I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder



PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to invitations to tender:
- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
 - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).
- 1.2 **To be completed by the organ of state**
- a) The applicable preference point system for this tender is the **80/ 20** preference point system.
- 1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:
- (a) Price; and
 - (b) Specific Goals.

1.4 **To be completed by the organ of state:**

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes



- all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20	or	90/10
$P_s = 80 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$	or	$P_s = 90 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$

Where

- P_s = Points scored for price of tender under consideration
- P_t = Price of tender under consideration
- P_{min} = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20	or	90/10
$P_s = 80 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right)$	or	$P_s = 90 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right)$

Where

- P_s = Points scored for price of tender under consideration
- P_t = Price of tender under consideration
- P_{max} = Price of highest acceptable tender



4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system, then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Ownership by Women	5	
Ownership by people with disabilities	5	
Ownership by Youth	5	
Location of enterprise: Eastern Cape	2	
B-BBEE status level 1 or level 2 contributor who are a EME or QSE	3	
Total points for SPECIFIC GOALS	20	

DECLARATION WITH REGARD TO COMPANY/FIRM

- 4.3. Name of company/firm.....
- 4.4. Company registration number:
- 4.5. TYPE OF COMPANY/ FIRM



SBD 6.1

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company
- ☐ State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

.....
SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

PREFERENCING SCHEDULE IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

NB: BEFORE COMPLETING THIS FORMS, TENDERES MUST STUDY THE GENERAL CONDITIONS, BIDDERS MUST STUDY THE CONSITIONS: DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1 Preference

Preferences shall be granted in respect of the following:

1.1 Ownership by women, people with disabilities and youth

The percentage shareholding of an enterprise as at the closing time for submissions of natural persons who are women, people with disabilities or youth as evidenced by:

- a) voting rights that are not subject to any limitation; and
- b) economic interest.

where

people with disabilities are people who have a long-term or recurring physical or, mental, intellectual or sensory impairment which, in interaction with various barriers, may substantially limit their prospects of entry into, or advancement in, employment

youth are people aged between 14 and 35

1.2 Local enterprise

An enterprise which operates from a building together with its land and outbuildings located within the boundaries of the or Province as at the closing time for submissions

1.2 B-BBEE status level contributors from level 1 or level 2 who are Exempted Micro Enterprises or Qualifying Small Enterprises

The status of an enterprise as measured in accordance with the provisions of **an applicable code of good practice** issued in terms of Section 9(1) of the B-BBEE Act of 2003 as at the closing time for submissions.

Note: The Construction Sector Code applies to the B-BBEE compliance measurement of all entities that fall within the Construction Sector i.e. all enterprises who derive more than 50% of their annual Revenue from Construction Related Activities.

2 Conditions associated with the granting of preferences

Tenderers who claim a preference shall provide in support of their claim the following in relation to their claim, failing which their claims for preferences will be rejected:

Preference applied for	Verification document
Ownership by women	
Ownership by people with disabilities	Completed Percentage Ownership Affidavit (Annexure 1)
Ownership by youth	
Location of enterprise	Completed Location of enterprise affidavit (Annexure 2) and proof of ownership of premises or a valid rental agreement with the owner of such premises
B-BBEE status level of contributor	B-BBEE Verification Certificates issued by a verification agency accredited by the South African National Accreditation System (SANAS) (see www.sanas.co.za/Pages/index.aspx) or, in the case of an Exempted Micro Enterprise or a Qualifying Small Enterprise, if permitted in terms of the relevant code, a duly

	<p>completed sworn affidavit on the relevant and appropriate form obtained from one the following websites:</p> <ul style="list-style-type: none"> ○ www.thedtic.gov.za/wp-content/uploads/BEE_Affidavit-QSE-Gen.pdf ○ www.thedtic.gov.za/wp-content/uploads/BEE_Affidavit-EME-Gen.pdf ○ www.abp.org.za/wp-content/uploads/2018/03/Final-CSC-EME-Affidavit-March-2018-2.pdf
--	--

3 Preferences points offered and claimed

The preference points offered by the Employer in accordance with the provisions of the Preferential Procurement Policy Framework Act of 2022 and claimed by the tenderer are as follows:

Preference claimed		Number of preference points allocation		Preference claimed (tick relevant block)
		90/10 preference points system	80/20 preference points system	
Ownership	by women	Up to 2	Up to 5	
	by people with disabilities	Up to 2	Up to 5	
	by youth	Up to 2	Up to 5	
Location of enterprise	<i>[insert provinces where project is located]</i>	1	2	
B-BBEE status	Level 1 or level 2 contributors who are Exempted Micro Enterprises or Qualifying Small Enterprises	3	3	

where points claimed for ownership are calculated separately for each type of ownership in terms of the following formula:

90 / 10 preference points system: $NO = 2 \times PS / 100$

80 / 20 preference points system: $NO = 5 \times PS / 100$

where

NO = number of points awarded to tenderer claiming a preference for ownership by women, people with disabilities or youth

PS = percentage shareholding by women, people with disabilities or youth as declared in the Percentage Ownership Affidavit

4 Declaration

The undersigned, who warrants that he/she is duly authorised to do so on behalf of the tenderer, confirms that he/she understands the conditions under which such preferences are granted and confirms that the tenderer satisfies the conditions pertaining to the granting of tender preferences which are claimed.

Signature:.....

Name:.....

Duly authorised to sign on behalf of:.....

Telephone: Date:

Name of witness: Signature of witness:.....

Note: Failure to complete the declaration will lead to the rejection of a claim for a preference.

ANNEXURE 1: Percentage Ownership Affidavit

I, the undersigned,

full name and surname

identity number

hereby declare under oath that

1) I am a member / director / owner of the enterprise:

name :

trading name, if applicable

registration number:

physical address:

.....

in which the following natural persons who are women, people with disabilities or youth at the time of the tender submission have

a) voting rights that are not subject to any limitation; and

b) economic interest.

as indicated below

Name	Economic interest (%)			Identity number
	Women	People with disabilities	Youth	

Where:

people with disabilities are people who have a long-term or recurring physical or, mental, intellectual or sensory impairment which, in interaction with various barriers, may substantially limit their prospects of entry into, or advancement in, employment

Note: The Code of Good Practice on Employment of Persons with Disabilities (2015) considers "substantially limit" as *"if in its nature, duration or effects it substantially limits the person's ability to perform the essential functions of the job for which they are being considered"* and points out that *"some impairments"* are so easily controlled, corrected or lessened that they have no limiting effects.

youth are people aged between 14 and 35

- 2) the contents of this statement are to the best of my knowledge a true reflection of the facts;
- 3) I know and understand the contents of the affidavit and I have no objection to take the prescribed oath binding on my conscience and on the Owners of the Enterprise which I represent in this matter.

Deponent signature:

Date:

**Commissioner of oaths
Signature and stamp**

ANNEXURE 2: Location of enterprise affidavit

I, the undersigned, full name and surname

Identity number

hereby declare under oath that

- 1) I am a member / director / owner of the enterprise:

name :

trading name, if applicable

registration number:

physical address:

.....

which is an enterprise which operates from a building together with its land and outbuildings located within the boundaries of the (*name*) Province as at the closing time for submissions

- 2) the contents of this statement are to the best of my knowledge a true reflection of the facts;

- 3) I know and understand the contents of the affidavit and I have no objection to take the prescribed oath binding on my conscience and on the Owners of the Enterprise which I represent in this matter.

Attach proof of ownership of premises or a valid rental agreement with the owner of such premises

Deponent signature:

Date:

Commissioner of oaths

Signature and stamp

THE NATIONAL TREASURY

Republic of South Africa



GOVERNMENT PROCUREMENT: GENERAL CONDITIONS OF CONTRACT

July 2010

GOVERNMENT PROCUREMENT

GENERAL CONDITIONS OF CONTRACT

July 2010

NOTES

The purpose of this document is to:

- (i) Draw special attention to certain general conditions applicable to government bids, contracts and orders; and
- (ii) To ensure that clients be familiar with regard to the rights and obligations of all parties involved in doing business with government.

In this document words in the singular also mean in the plural and vice versa and words in the masculine also mean in the feminine and neuter.

- The General Conditions of Contract will form part of all bid documents and may not be amended.
- Special Conditions of Contract (SCC) relevant to a specific bid, should be compiled separately for every bid (if (applicable) and will supplement the General Conditions of Contract. Whenever there is a conflict, the provisions in the SCC shall prevail.

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General Conditions of Contract

1. Definitions

1. The following terms shall be interpreted as indicated:
 - 1.1. “Closing time” means the date and hour specified in the bidding documents for the receipt of bids.
 - 1.2. “Contract” means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
 - 1.3. “Contract price” means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
 - 1.4. “Corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.
 - 1.5. "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
 - 1.6. “Country of origin” means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
 - 1.7. “Day” means calendar day.
 - 1.8. “Delivery” means delivery in compliance of the conditions of the contract or order.
 - 1.9. “Delivery ex stock” means immediate delivery directly from stock actually on hand.
 - 1.10. “Delivery into consignees store or to his site” means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
 - 1.11. "Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.
 - 1.12. ”Force majeure” means an event beyond the control of the supplier and not involving the supplier’s fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
 - 1.13. “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
 - 1.14. “GCC” means the General Conditions of Contract.

- 1.15. “Goods” means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
- 1.16. “Imported content” means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.
- 1.17. “Local content” means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.
- 1.18. “Manufacture” means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.19. “Order” means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20. “Project site,” where applicable, means the place indicated in bidding documents.
- 1.21. “Purchaser” means the organization purchasing the goods.
- 1.22. “Republic” means the Republic of South Africa.
- 1.23. “SCC” means the Special Conditions of Contract.
- 1.24. “Services” means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.
- 1.25. “Written” or “in writing” means handwritten in ink or any form of electronic or mechanical writing.

2. Application

- 2.1. These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.
- 2.2. Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.
- 2.3. Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

3. General

- 3.1. Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
- 3.2. With certain exceptions, invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from www.treasury.gov.za

4. Standards

- 4.1. The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.

5. Use of contract documents and information; inspection.

- 5.1. The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.
- 5.2. The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
- 5.3. Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.
- 5.4. The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

6. Patent rights

- 6.1. The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.

7. Performance security

- 7.1. Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
- 7.2. The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- 7.3. The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
 - (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or
 - (b) a cashier's or certified cheque
- 7.4. The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.

8. Inspections, tests and analyses

- 8.1. All pre-bidding testing will be for the account of the bidder.

- 8.2. If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organization acting on behalf of the Department.
- 8.3. If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4. If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5. Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- 8.6. Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7. Any contract supplies may on or after delivery be inspected, tested or analyzed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract. Failing such removal the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.
- 8.8. The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.

9. Packing

- 9.1. The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.2. The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.

10. Delivery and documents

- 10.1. Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.
- 10.2. Documents to be submitted by the supplier are specified in SCC.

11. Insurance

- 11.1. The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.

12. Transportation

- 12.1. Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.

13. Incidental services

- 13.1. The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:

- (a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;
- (b) furnishing of tools required for assembly and/or maintenance of the supplied goods;
- (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;
- (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
- (e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.

- 13.2. Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

14. Spare parts

- 14.1. As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:

- (a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
- (b) in the event of termination of production of the spare parts:
 - (i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

- 15.1. The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any

act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.

- 15.2. This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.
- 15.3. The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.
- 15.4. Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.
- 15.5. If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

16. Payment

- 16.1. The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.
- 16.2. The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfilment of other obligations stipulated in the contract.
- 16.3. Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
- 16.4. Payment will be made in Rand unless otherwise stipulated in SCC.

17. Prices

- 17.1. Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.

18. Contract amendments

- 18.1. No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.

19. Assignment

- 19.1. The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.

20. Subcontracts

- 20.1. The supplier shall notify the purchaser in writing of all subcontracts awarded under these contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

21. Delays in the supplier's performance

- 21.1. Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.
- 21.2. If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.
- 21.3. No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.
- 21.4. The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.
- 21.5. Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.
- 21.6. Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without cancelling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

22. Penalties

- 22.1. Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination for default

- 23.1. The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:
 - (a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
 - (b) if the Supplier fails to perform any other obligation(s) under the contract; or
 - (c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.
- 23.2. In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.

- 23.3. Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.
- 23.4. If a purchaser intends imposing a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.
- 23.5. Any restriction imposed on any person by the Accounting Officer /Authority will, at the discretion of the Accounting Officer / Authority, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the Accounting Officer / Authority actively associated.
- 23.6. If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:
- (i) the name and address of the supplier and / or person restricted by the purchaser;
 - (ii) the date of commencement of the restriction
 - (iii) the period of restriction; and
 - (iv) the reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

- 23.7. If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.

24. Anti-dumping and countervailing duties and rights

- 24.1. When, after the date of bid, provisional payments are required, or antidumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him

25. Force Majeure

- 25.1. Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.
- 25.2. If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

26. Termination for insolvency

- 26.1. The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

27. Settlement of Disputes

- 27.1. If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 27.2. If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
- 27.3. Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
- 27.4. Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.
- 27.5. Notwithstanding any reference to mediation and/or court proceedings herein,
- (a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and
 - (b) the purchaser shall pay the supplier any monies due the supplier.

28. Limitation of liability

- 28.1. Except in cases of criminal negligence or wilful misconduct, and in the case of infringement pursuant to Clause 6;
- (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and
 - (b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

29. Governing language

29.1. The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.

30. Applicable law

30.1. The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.

31. Notices

31.1. Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice.

31.2. The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.

32. Taxes and duties

32.1. A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.

32.2. A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.

32.3. No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African Revenue Services.

33. National Industrial Participation (NIP) Programme

33.1. The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.

34. Prohibition of Restrictive practices

34.1. In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is / are or a contractor(s) was / were involved in collusive bidding (or bid rigging).

34.2. If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.

34.3. If a bidder(s) or contractor(s), has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.

General Conditions of Contract (revised July 2010)

DEPARTMENT OF WATER AND SANITATION

BID DWS01 0424 WTE

THE DESIGN, HIRE, SUPPLY AND DELIVERY OF FORMWORK, SCAFFOLDING AND FALSEWORK FOR THE UPGRADE OF NOMLACU WATER TREATMENT WORKS AND LUDEKE RAW WATER PUMP STATION IN MBIZANA IN THE EASTERN CAPE FOR A PERIOD OF 24 MONTHS

SECTION 2: TENDER DATA

CONTENTS

1. STIPULATIONS

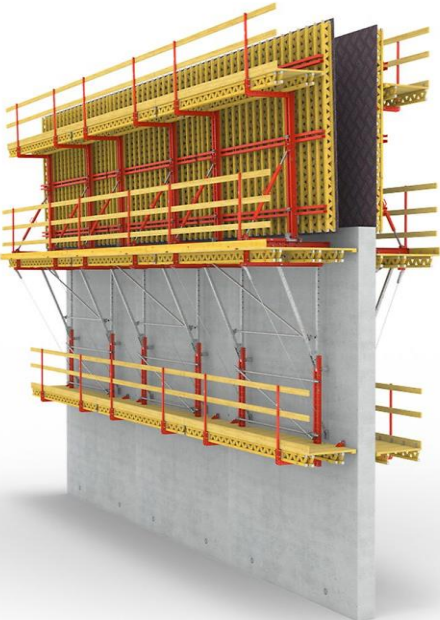
TENDER DATA

Initial next to each clause in this section

Bidders are required to sign at the end of this Section

	STIPULATIONS	INITIAL
1.	SUPPLIER OF THE PRODUCT	
	The successful bidder will be required to submit a "Letter from the manufacturer" confirming the supply arrangement at the closing time of the bid. Failure to comply with this requirement shall result in the bid being disqualified.	
2.	SERVICE	
	<p>The service to be rendered is:</p> <p>THE DESIGN, HIRE, SUPPLY AND DELIVERY OF FORMWORK, SCAFFOLDING AND FALSEWORK FOR THE UPGRADE OF NOMLACU WATER TREATMENT WORKS AND LUDEKE RAW WATER PUMP STATION IN MBIZANA IN THE EASTERN CAPE FOR A PERIOD OF 24 MONTHS</p> <p>Note: The Department reserves the right to purchase only one or more items as required</p>	
3.	SITE	
	<p>Nomlacu Water Treatment Works in Mbizana, Eastern Cape</p> <p>GPS Coordinates:</p> <p>Nomlacu WTW: 30° 50' 16.36" S ; 29° 46' 20.42" E</p> <p>The Nomlacu WTW is located within the rural development of Nomlacu, which is approximately 9.0 km west (along the R61 road) of the town of Mbizana. The site is located within the Winnie Madikizela Mandela Local Municipality, which forms part of the greater Alfred Nzo District Municipality within the Eastern Cape Province.</p>	
4.	LOCAL CONTENT AND PRODUCTION	
	<p>Local Content and Production</p> <p>A letter from the local manufacturer confirming local production and content outlining types and sizes of the items to be provided must be submitted with the bid. NB</p> <ul style="list-style-type: none"> In terms of section 2(1) (f) of the PPPFA, the state may award a contract to a tenderer that did not score the highest points. With the above provision, a tender may be awarded to a bidder offering goods that meet the local content requirements than the tenderer scoring the highest points. The stipulated minimum threshold percentage for local production and content of cement 100% as stipulated by the Department of Trade, Industry and Competition (the DTIC) is applicable. An exemption letter from the DTIC must be obtained as per the exemption process followed by the DTIC for items or materials that are imported and in cases whereby local content requirements cannot be met for various reasons (see exemption process followed by the DTIC). <p>Substantial supporting documents may be required at any point in time before and after award of the contract. Due diligence, which includes site visits, may be conducted in this regard.</p>	
5.	STANDARDS, SPECIFICATIONS	
5.1.	APPLICABLE STANDARD SPECIFICATIONS	
	<p>The applicable standard specifications are:</p> <ul style="list-style-type: none"> SANS 2001-CC1: 2007 Edition 1: Construction Works Part CC1: Concrete works (Structural). Section 4.3 FORMWORK. 	

	STIPULATIONS	INITIAL
	<ul style="list-style-type: none"> • SABS 085: Code of Practice entitled “The Design, Erection, Use and Inspection of Access Scaffolding”; • SABS 1808: Standard Specification entitled: “Safety requirements on suspended access equipment – Design calculations, stability criteria, construction-tests”. • SABS 1903: Standard Front-end Specification entitled: “Safety requirements on suspended access equipment – Design calculations, stability criteria, construction-tests”. • The design calculation(s) and drawing(s) for the applicable formwork will be prepared and signed off by a registered professional engineer. • It is a requirement that the formwork shall be so designed and constructed that the concrete can be properly placed and compacted to the required shapes, finishes, positions, levels, and dimensions as shown on the Drawings. • The formwork and joints shall be capable of resisting the dead load, including the pressure exerted by the wet concrete, wind forces and all other superimposed loads and forces. • The quality of the formwork shall be such that the finished surface shown on the drawings is consistently produced. • The formwork proposed must consist of sections and adhere to the following standards: • The section must consist of standard formwork items and the number of items must be kept to the minimum. • The standard width and length of the section will be according to the Engineers Design unless otherwise indicated. • The formwork must be easy to erect, to join and adjustable in height as well as verticality. • The formwork must be able to tilt backwards in order to install climbing cone/brackets. • The formwork must be supported on two support brackets with a hanging platform with railings and flooring with stiffeners as required for retrieving climbing cone/bracket and making concrete repairs as required. • The formwork section must be able to be lifted as a whole by crane. • The formwork section must have a top access platform with railings and flooring. • The formwork must be able to join effectively and efficiently on all corners. • The formwork must be able to produce a smooth concrete finish 	
5.2.	TECHNICAL SPECIFICATIONS	

	STIPULATIONS	INITIAL
	<div>Single sided crane-handled climbing formwork system</div> <div></div> <div>For illustration purposes only</div>	
5.3.	TECHNICAL CRITERIA	

Formwork Related Load, Pressure and Force Types

1. Load Types related to Formwork designs:

- 1.1. Dead Load from reinforced concrete density (DIN 1055):
 - 1.1.1. For slab thickness less than 1m = 25 kN/m³
 - 1.1.2. For slab thickness greater than 1m and beams = 26 kN/m³
 - 1.1.3. Allowance for fresh concrete (heaping) = 1 kN/m³
- 1.2. Live Loads:
 - 1.2.1. Construction Live Loads assumed as 20% of fresh concrete dead load, but not less than 1.5 kN/m² and not more than 5 kN/m². Self Weight of formwork is included in allowable Construction Live Load (DIN4421).
 - 1.2.2. Access Live Loads for heavy human traffic and tools assumed as 1,6 kN/m².
 - 1.2.3. Platform Live Loads assumed as 1 kN/m² where work is done without heavy tools and equipment.
- 1.3. Dynamic Live Loads:
 - 1.3.1. Imposed Plant Loads, if such loads are expected load values must be supplied by manufacturer,
 - 1.3.2. Concrete Skip impact Loads,
 - 1.3.3. Concrete pipe dynamic movement during pumping,
 - 1.3.4. Excessive heaping of concrete during concrete placement.
- 1.4. Horizontal Loads:
 - 1.4.1. Minimum horizontal stability force (containment force), for example 15% for Sta-Flex.
- 1.5. Environmental Loads:
 - 1.5.1. Snow and Ice loads (not applicable in South Africa),
 - 1.5.2. Wind Loads;
 - 1.5.2.1. Generally 0.5kN/m² for h<8m and 0.8kN/m² for 8<h<20m,
 - 1.5.2.2. If more accurate of greater heights formwork wind loads are required, refer to the Wind Pressure Section of this manual.
 - 1.5.2.3. The aerodynamic coefficient, C_p, for formwork will be simplified to 1.3 due to the geometry.
- 1.6. Hydrostatic Concrete Pressure:
 - 1.6.1. 3 international methods are used for determining concrete pressure in vertical formwork;
 - 1.6.1.1. CIRIA report 108 (United Kingdom), (used by Pre-Form),
 - 1.6.1.2. ACI 347R (USA),
 - 1.6.1.3. DIN 18218 (Germany).
- 1.7. Formwork Self Weight:
 - 1.7.1. Under normal construction conditions Formwork Weight Loads are included in the construction live loads, but special conditions require additional load consideration;
 - 1.7.1.1. where large imposed loads have to be supported, resulting in above average amount of support,
 - 1.7.1.2. great heights of support or access scaffolding,
 - 1.7.1.3. climbers on walls and cores,
 - 1.7.1.4. loading platforms,
 - 1.7.1.5. specialized formwork, etc.

2. Back Propping Loads

- 2.1. Two common types of loads are normally given, refer to the Back Propping section of this manual for more information and calculations:
 - 2.1.1. Slab resistance as a percentage of initial dead and live loads, imposed by the fresh concrete pour,
 - 2.1.2. Design Live Loads for what the slab was designed for.

Vertical Formwork Related Slab and Beam Loads

1. Units and symbols:

- 1.1. F = total vertical load for an area due to the combined dead and live loads in kN;
- 1.2. F_d = dead load of the concrete and reinforcing for an area in kN;
- 1.3. F_l = live loads imposed by construction activities and form work for an area in kN;
- 1.4. ω = total load per unit length in kN/m;
- 1.5. P = total area load that the concrete will impose in kN/m²;
- 1.6. P_d = dead area load of concrete in kN/m²;
- 1.7. P_L = construction live area load in kN/m²;
- 1.8. ρ = density in kN/m³;
- 1.9. A = area of interest in kN/m²;
- 1.10. d = thickness or depth of slab in m;

2. Vertical loads imposed by fresh slab on support formwork during normal construction conditions casting:

2.1. Formulas:

- 2.1.1. $F = \text{dead load} + \text{live load} = \rho \cdot d \cdot A + P_L \cdot A$ (kN) - Load in kN for $d < 250\text{mm}$ and $d > 1000$
- 2.1.2. or $F = \text{dead load} \times 20\% = \rho \cdot d \cdot A \times 1.2$ (kN) - Load in kN for $250 < d < 1000\text{mm}$
- 2.1.3. $P = \rho \cdot d + P_L$ (kN/m²) - Pressure in kN/m²

2.2. Dead Load:

- 2.2.1. $F_d = \rho \cdot d \cdot A$ (kN)
- 2.2.2. $P_d = \rho \cdot d$ (kN/m²)
- 2.2.3. $\rho = 26\text{kN/m}^3$, (25kN/m³ + 1kN/m³) if $d < 1\text{m}$...1kN/m³ for heaping
- 2.2.4. $\rho = 27\text{kN/m}^3$, (26kN/m³ + 1kN/m³) if $d > 1\text{m}$...1kN/m³ for heaping

2.3. Live Load:

- 2.3.1. $P_L = 1.2 \cdot P_d$ but $1.5 < P_L < 5\text{ kN/m}^2$
- 2.3.2. Refer to "Construction Live Loads vs. slab thickness graph" at bottom right side of page.

2.4. Other Loads:

- 2.4.1. The formulas stated and table is for normal construction conditions without excessive heaping during concrete placement. If dynamic or other type of loads are expected, it must be added.

3. Tabulated concrete loads for slab thickness:

Vertical Wet Concrete Loads (kN/m ²)			
Slab Thickness (m)	Dead Load (kN/m ²)	Live Load (kN/m ²)	Total Load (kN/m ²)
0.17	4.4	1.5	5.9
0.2	5.2	1.5	6.7
0.25	6.5	1.5	8
0.3	7.8	1.6	9.4
0.35	9.1	1.8	10.9
0.4	10.4	2.1	12.5
0.45	11.7	2.3	14
0.5	13	2.6	15.6
0.55	14.3	2.9	17.2
0.6	15.6	3.1	18.7
0.65	16.9	3.4	20.3
0.7	18.2	3.6	21.8
0.75	19.5	3.9	23.4
0.8	20.8	4.2	25
0.85	22.1	4.4	26.5
0.9	23.4	4.7	28.1
0.95	24.7	4.9	29.6
1	26	5	31
DIN 1055 and DIN 4421			

Concrete weight alternative formula:

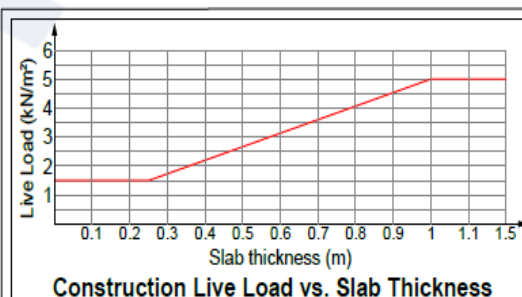
To calculate the force or weight of an area wet concrete, use the table to determine Total Load for a corresponding slab thickness.

1. Formula

- 1.1. $F = P \cdot A$ (kN)
- 1.2. eg. the weight of a 2 x 2m, and 400mm slab will be : $F = 12.5 \times (2 \times 2) = 50\text{ kN}$

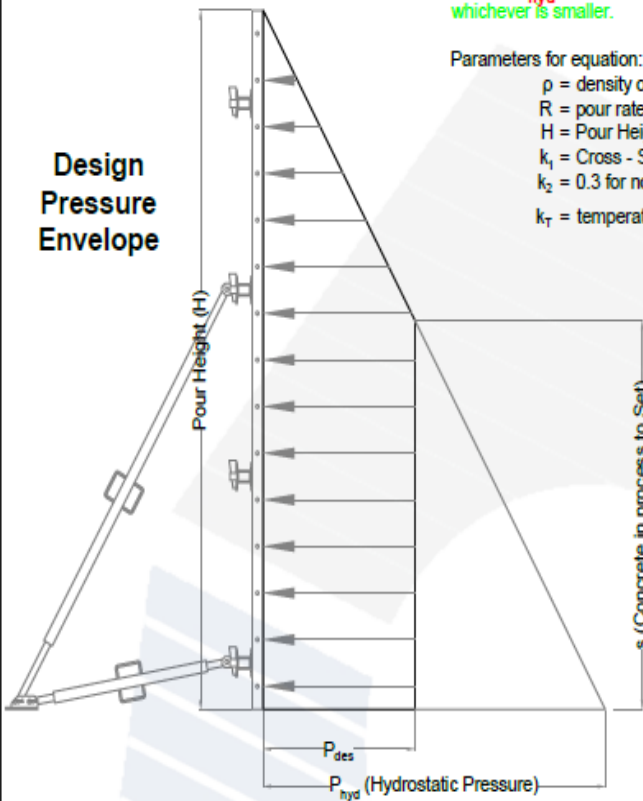
2. Uses:

- 2.1. Leg load,
- 2.2. Prop Load,
- 2.3. Total weight to be back propped,
- 2.4. Counter balance block weight, etc.



Hydrostatic Formwork Concrete Pressures

CIRIA Report 108



$$P_{des} = \rho(k_1\sqrt{R} + k_2k_T\sqrt{H-k_1\sqrt{R}}) \dots \text{lateral design pressure}$$

or

$$P_{hyd} = \rho H \dots \text{full hydrostatic pressure}$$

whichever is smaller.

Parameters for equation:

ρ = density of concrete (kN/m^3);

R = pour rate (m/h);

H = Pour Height (m);

k_1 = Cross - Section Coefficient*, (1 for walls and 1.5 for columns);

k_2 = 0.3 for normal concrete, and 0.45 for concrete with setting retarders;

k_T = temperature coefficient where: $k_T = \left(\frac{36}{T+16}\right)^2$ °C.

*Note:

k_1 = Cross-Section Coefficient.

k_1 in the CIRIA Report 108 is 1 for walls and 1.5 for columns.

If both edge lengths in plan are smaller than 2m, the cross-section are designated as a column.

Example:

Assume normal concrete of density 25kN/m^3 , wall section, 3m shutters, with a pour rate of 2m/h at 10°C .

$$P_{des} = 25(1/\sqrt{2} + 0.3 \times 1.349/\sqrt{3-1/\sqrt{2}}) = 48 \text{ kPa}$$

or

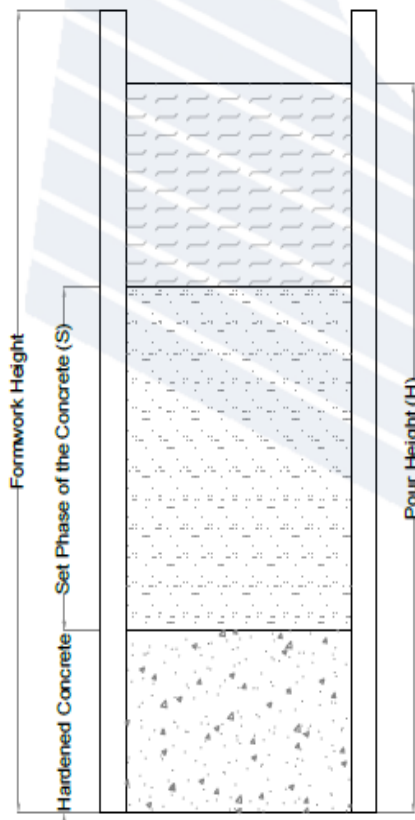
$$P_{hyd} = \rho H = 25 \times 3 = 75 \text{ kPa}$$

Pressure will be approximate 48 kPa.

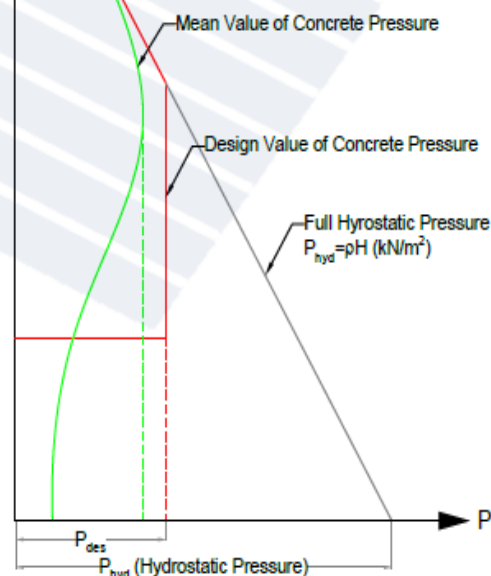
How to determine s:

$$\text{Formula: } s = (\rho H - P_{des})/\rho$$

$$\text{Example: } s = ((25 \times 3) - 48)/25 = 1.08 \text{ m}$$

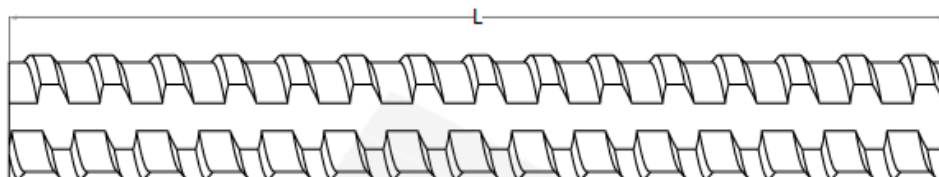


Distribution of Mean Lateral Pressure Imposed by Fresh Concrete on Formwork compared to Design Pressure with Low Pour Rates.



Tie Rods

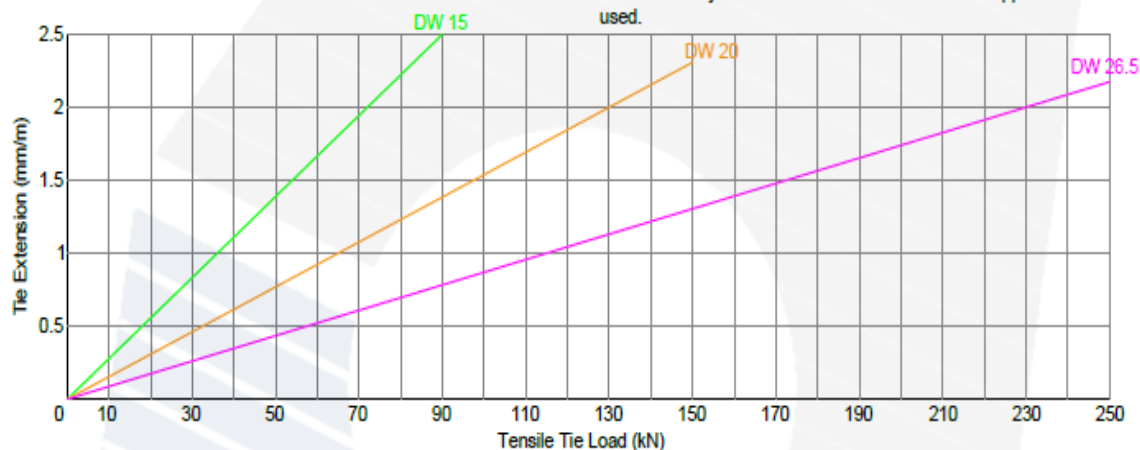
Diwidag tie rods (DW 15; DW 20; DW 26.5)



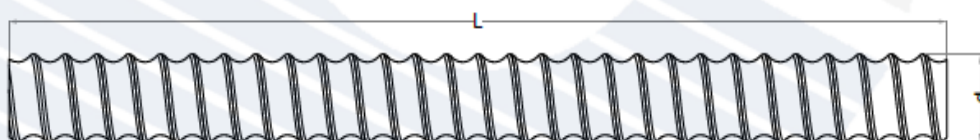
	DW 15	DW 20	DW 26.5
Nominal cross-section area (mm ²)	177	314	551
Weight (kg/m)	1.5	2.6	4.5
Safe working load (kN)	90	150	250
Maximum diameter (mm)	18	23	31
Maximum shear (kN)	5	10	15

Note:

1. Shear force to a small extent allowed on Diwidag Bars.
2. Concrete strength must be at a minimum of 10MPa for the shear values.
3. If Diwidag rod is in shear, no large tensile forces are allowed.
4. If larger shear force are required use climbing anchor.
5. No welding or heat allowed.
6. Weldable Diwidag bar can be supplied on request.
7. If weakened by corrosion the Form Tie must be scrapped and not used.



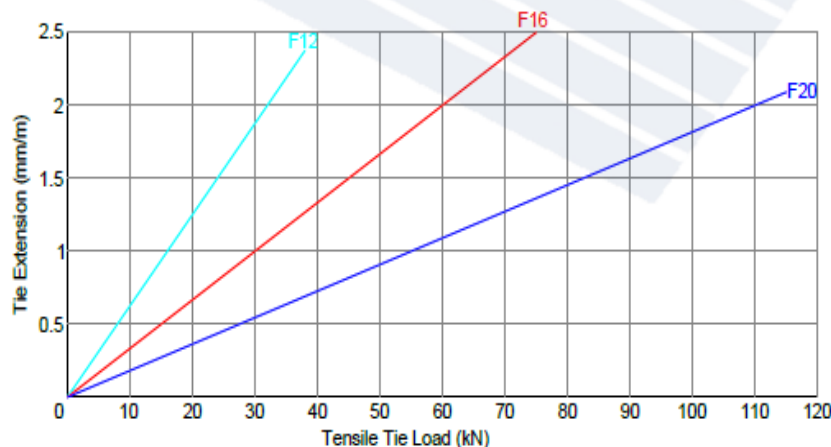
Form tie rods (F12; F16; F20)



	F12	F16	F20
Actual diameter (mm)	12.2	16.1	21.1
Weight (kg/m)	0.8	1.6	2.5
Safe working load (kN)	38	80	114
Nominal cross-section area (mm ²)	78.5	145	269

Note:

1. No shear force permitted on Form Ties.
2. No welding or heat allowed.
3. If weakened by corrosion the Form Tie must be scrapped and not used.



Wind pressure in South Africa

1. Regions:

Wind pressure calculations according to SANS 10160 section 5.5.

Values in the Wind Pressure Table were calculated for Zone 1 on the map.

Pressures for sites in Zone 2, and other regions, can be supplied by Preform Design Office.

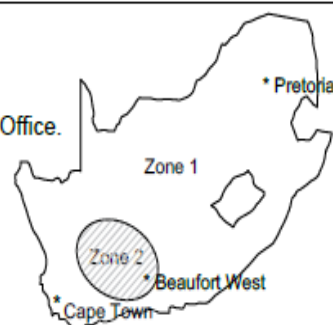
Refer to Wind Classifications and values for more information.

2. Design requirements:

The simplified wind forces set out below may be adapted for design purposes, provided that the shutter complies with the following requirements:

- 2.1. it is rectangular in shape, and
- 2.2. its overall height does not exceed 200m above ground level, and
- 2.3. the ratio of its overall height to its lesser plan dimension does not exceed

If all 3 requirements are not met, refer to the Wind Pressure in South Africa Table.



Pressure and wind speed for a 10 year return period on wall formwork

Site Altitude (m)	Height above ground, z (m)	Terrain Category 1			Terrain Category 2			Terrain Category 3			Terrain Category 4		
		V _z (km/h)	Q _z (kN/m ²)	P _w (kN/m ²)	V _z (km/h)	Q _z (kN/m ²)	P _w (kN/m ²)	V _z (km/h)	Q _z (kN/m ²)	P _w (kN/m ²)	V _z (km/h)	Q _z (kN/m ²)	P _w (kN/m ²)
0	5	133.49	0.82	1.07	121.82	0.69	0.89	86.83	0.35	0.45	84.24	0.33	0.43
	10	141.26	0.92	1.20	129.60	0.78	1.01	95.90	0.43	0.55	84.24	0.33	0.43
	15	145.15	0.98	1.27	134.78	0.84	1.09	104.98	0.51	0.66	84.24	0.33	0.43
	20	147.74	1.01	1.31	138.67	0.89	1.16	111.46	0.58	0.75	84.24	0.33	0.43
	50	158.11	1.16	1.50	150.34	1.05	1.36	129.60	0.78	1.01	111.46	0.58	0.75
	100	165.89	1.27	1.66	159.41	1.18	1.53	143.86	0.96	1.25	129.60	0.78	1.01
	150	169.78	1.33	1.73	165.89	1.27	1.66	152.93	1.08	1.41	139.97	0.91	1.18
	200	173.66	1.40	1.82	169.78	1.33	1.73	159.41	1.18	1.53	158.11	1.16	1.50
500	5	133.49	0.77	1.00	121.82	0.64	0.83	86.83	0.33	0.42	84.24	0.31	0.40
	10	141.26	0.86	1.12	129.60	0.73	0.94	95.90	0.40	0.52	84.24	0.31	0.40
	15	145.15	0.91	1.18	134.78	0.78	1.02	104.98	0.48	0.62	84.24	0.31	0.40
	20	147.74	0.94	1.23	138.67	0.83	1.08	111.46	0.54	0.70	84.24	0.31	0.40
	50	158.11	1.08	1.40	150.34	0.98	1.27	129.60	0.73	0.94	111.46	0.54	0.70
	100	165.89	1.19	1.55	159.41	1.10	1.43	143.86	0.89	1.16	129.60	0.73	0.94
	150	169.78	1.25	1.62	165.89	1.19	1.55	152.93	1.01	1.31	139.97	0.85	1.10
	200	173.66	1.30	1.69	169.78	1.25	1.62	159.41	1.10	1.43	158.11	1.08	1.40
1000	5	133.49	0.73	0.95	121.82	0.61	0.79	86.83	0.31	0.40	84.24	0.29	0.38
	10	141.26	0.82	1.06	129.60	0.69	0.89	95.90	0.38	0.49	84.24	0.29	0.38
	15	145.15	0.86	1.12	134.78	0.74	0.97	104.98	0.45	0.59	84.24	0.29	0.38
	20	147.74	0.89	1.16	138.67	0.79	1.02	111.46	0.51	0.66	84.24	0.29	0.38
	50	158.11	1.02	1.33	150.34	0.92	1.20	129.60	0.69	0.89	111.46	0.51	0.66
	100	165.89	1.13	1.46	159.41	1.04	1.35	143.86	0.85	1.10	129.60	0.69	0.89
	150	169.78	1.18	1.53	165.89	1.13	1.46	152.93	0.96	1.24	139.97	0.80	1.04
	200	173.66	1.23	1.60	169.78	1.18	1.53	159.41	1.04	1.35	158.11	1.02	1.33
1500	5	133.49	0.69	0.89	121.82	0.57	0.74	86.83	0.29	0.38	84.24	0.27	0.36
	10	141.26	0.77	1.00	129.60	0.65	0.84	95.90	0.35	0.46	84.24	0.27	0.36
	15	145.15	0.81	1.06	134.78	0.70	0.91	104.98	0.43	0.55	84.24	0.27	0.36
	20	147.74	0.84	1.09	138.67	0.74	0.96	111.46	0.48	0.62	84.24	0.27	0.36
	50	158.11	0.96	1.25	150.34	0.87	1.13	129.60	0.65	0.84	111.46	0.48	0.62
	100	165.89	1.06	1.38	159.41	0.98	1.27	143.86	0.80	1.04	129.60	0.65	0.84
	150	169.78	1.11	1.45	165.89	1.06	1.38	152.93	0.90	1.17	139.97	0.76	0.98
	200	173.66	1.16	1.51	169.78	1.11	1.45	159.41	0.98	1.27	158.11	0.96	1.25
2000	5	133.49	0.65	0.84	121.82	0.54	0.70	86.83	0.27	0.36	84.24	0.26	0.33
	10	141.26	0.72	0.94	129.60	0.61	0.79	95.90	0.33	0.43	84.24	0.26	0.33
	15	145.15	0.76	0.99	134.78	0.66	0.86	104.98	0.40	0.52	84.24	0.26	0.33
	20	147.74	0.79	1.03	138.67	0.70	0.91	111.46	0.45	0.59	84.24	0.26	0.33
	50	158.11	0.91	1.18	150.34	0.82	1.07	129.60	0.61	0.79	111.46	0.45	0.59
	100	165.89	1.00	1.30	159.41	0.91	1.20	143.86	0.75	0.89	129.60	0.61	0.79
	150	169.78	1.05	1.36	165.89	1.00	1.30	152.93	0.85	1.10	139.97	0.71	0.92
	200	173.66	1.09	1.42	169.78	1.05	1.36	159.41	0.92	1.20	158.11	0.91	1.18

Wind Terrain Classification

3. Terrain Categories:

3.1. Terrain Category 1:

Exposed smooth terrain with no obstructions and in which the height of any obstruction is less than 1,5m. This category includes open sea coasts, lake shores, treeless plains with little vegetation other than short grass.

3.2. Terrain Category 2:

Open terrain with widely spaced obstructions (more than 100m apart) having heights and plan dimensions generally between 1,5m and 10m. This category includes large airfields, open parklands, farmlands and undeveloped outskirts of towns and suburbs, with trees. This is the category on which the regional basic wind speed V is based.

3.3. Terrain Category 3:

Terrain having numerous closely spaced obstructions generally having the size of domestic houses. This category includes suburbs, towns and industrial areas, fully or substantially developed.

3.4. Terrain Category 4:

Terrain with numerous large, tall, closely-spaced obstructions. This category includes large city centres.

4. Local topography:

Where the local topography, and large buildings, is such that increases in wind speeds may occur as a result of funneling or other effects, adjust the design wind speed accordingly, on the basis of appropriate metrological advice or tests.

Values:

V_z	from SABS 0160 Drg. 11701-EC/00-07
K_r	from SABS 0160 Drg. 11703-EC/00-07
k_z	from SANS10160 Table 5
k_p	from SANS 10160 section 5.5.3.1
C_p	generally 1,3 for wall formwork

Formulae:

- $V_z = k_z K_r V$...m/s
- $q_z = k_p V_z^2$...kN/m²
- $P_w = q_z C_p$...kN/m²

Note:

1 m/s = 3.6 km/h

Timber Platforms, Handrail Holders and Railing Posts

Timber Scaffold Plank/Board Span Spacing

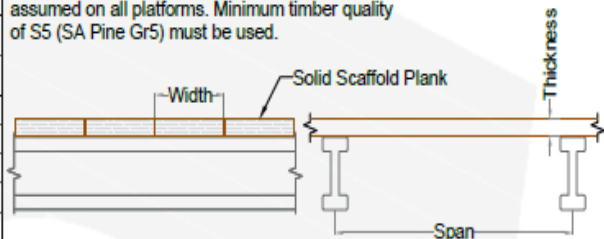
Scaffold Groups as per DIN 4420-1:2006

Scaffold Group	Min. platform width (m)	Live load (kN/m ²)	Description and areas of application
1	0.5	0.75	Inspection activities with light weight tools. No storage of materials. Walkways with light traffic. Retrieve platforms.
2	0.6	1.5	Work activities that do not require storage of material or heavy tools. Access platforms.
3	0.6	2	Platforms for persons and tools. Tools and materials must not be put on platform with lifting device. Climber platforms.
4	0.9	3	Platforms for persons and materials loaded with lifting device. Klik-Klak platforms.
5	0.9	4.5	Same use as Scaffold Group 4 but with higher load permitted.
6	0.9	6	Same use as Scaffold Group 4 but with higher load permitted.

Max spans for scaffold plank as platforms (m) - DIN 4420-3:2006-01

Scaffold Group	Plank Width (mm)	Plank Thickness (mm)				
		30	35	40	45	50
1, 2, 3	200	1.25	1.5	1.75	2.25	2.5
	240, 280	1.25	1.75	2.25	2.5	2.75
4	200	1.25	1.5	1.75	2.25	2.5
	240, 280	1.25	1.75	2	2.25	2.5
5	200, 240, 280	1.25	1.25	1.5	1.75	2
6	200, 240, 280	1	1.25	1.25	1.5	1.75

A minimum service load of 0.75kN/m² should be assumed on all platforms. Minimum timber quality of S5 (SA Pine Gr5) must be used.



Upright Post Support Spacing

1. Timber railing design as per SABS 0136-2001.
2. Minimum timber quality of S5 (SA Pine Gr5) must be used.
3. Ø48.3mm Scaffold tube design as per SANS 10162-2005.
4. C_p of 1.3 will be used in wind pressure.
5. Wind pressure, P_w , will be assumed 1.7kPa.
6. A horizontal load of $F = 0.3kN$ will be used in calculations.
7. For other railing material not shown in table, the allowable spans and cantilever must be calculated.

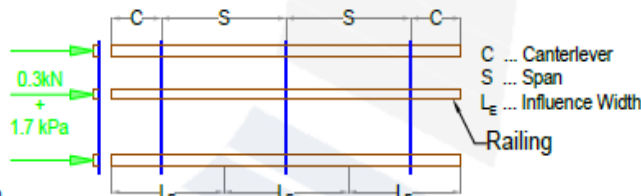
Railing material	Maximum Span (m)	Maximum Cantilever (m)	Influence Width (m)
114 x 38mm S5 Structural Grade SA Timber	3.6	1.2	3.6
280 x 32mm Scaffold Board	2.7	0.9	2.7
280 x 50mm Scaffold Board	4.7	1.7	4.7
Ø48.3 x 2.5mm S355 Scaffold Tube	5	1.3	5

Railing

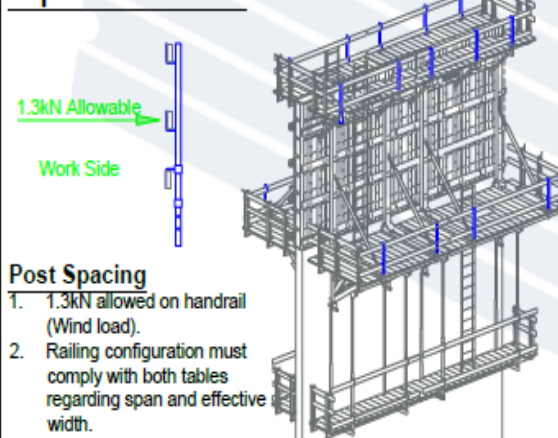
This table is not for closed up (no-gap) configurations. Where the railings are closed up with plywood, sheeting or mesh that will increase the wind loadings on the railings.

Influence Width and Span

It is important to distinguish between Span and Influence Width. The table show the maximum Influence Width and Maximum Span.



Rapid Handrail Post



Post Spacing

1. 1.3kN allowed on handrail (Wind load).
2. Railing configuration must comply with both tables regarding span and effective width.

Maximum Effective Widths L_E (m) of Handrail Post

Railing material	0-50m above ground ($q_s=1kN/m^2$)	50-100m above ground ($q_s=1.3kN/m^2$)
114 x 38mm S5 Structural Grade SA Timber	3.6	2.9
280 x 32/50mm Scaffold Board	1.6	1.2
Closed up (no gap) configuration	1	0.8
Ø48.3 x 2.5mm S355 Scaffold Tube	5	5

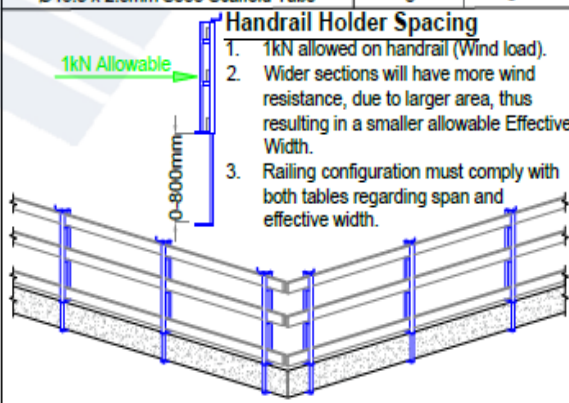
Adjustable Handrail Holder

Maximum Effective Widths L_E (m) of Handrail Holders

Railing material	0-50m above ground ($q_s=1kN/m^2$)	50-100m above ground ($q_s=1.3kN/m^2$)
114 x 38mm S5 Structural Grade SA Timber	2.9	2.3
280 x 32/50mm Scaffold Board	1.2	0.9
Closed up (no gap) configuration	1	0.8
Ø48.3 x 2.5mm S355 Scaffold Tube	5	5

Handrail Holder Spacing

1. 1kN allowed on handrail (Wind load).
2. Wider sections will have more wind resistance, due to larger area, thus resulting in a smaller allowable Effective Width.
3. Railing configuration must comply with both tables regarding span and effective width.



2.5m x 3.75m High Gangform setup

The diagram illustrates a gangform assembly for a concrete wall. The main assembly is a rectangular frame with dimensions 3000mm in height and 2500mm in length. It consists of several components labeled as follows:

- 3m high Shutters**: The main vertical panels, shown in a 4x2 grid.
- 0.75m high Shutters**: Smaller vertical panels, shown in a 4x1 grid.
- M20x35 XOX at horizontal panel join**: A horizontal connector bar used to join the shutters.
- Walers**: Horizontal bars used to support the shutters.
- Access Platform**: A platform with a railing, used for accessing the formwork.
- Access Bracket**: A bracket used to support the access platform.
- Trapdoor set**: A set of stairs and a platform, used for accessing the formwork.
- Push-Pull Prop Set**: A set of props used to support the formwork.

Example for mass calculation as per illustration:

- Panels are 3000mm and 750mm.
- Gangform length is 2500mm.
- 4 rows of walers.
- Access Platform is also 2500mm.
- There is 2 sets of Push-Pull Prop sets.
- 1 Panel Join between the 3000mm high and 750mm high panels.

From Table:

750mm high panels at 2500mm length:	= 129 kg
3000mm high panels at 2500mm length:	= 510 kg
4 levels walers at 2500mm length:	= 240 kg
Access Platform at 2500mm length:	= 194 kg
A Trapdoor set is included:	= 60 kg
No side safety is included on Platform:	= 0 kg
2 Push-Pull Prop Sets at 3 rd waler:	= 90 kg (45 x 2)
1 Panel Join at 2500mm length:	= 2 kg
Total mass	= 1225 kg

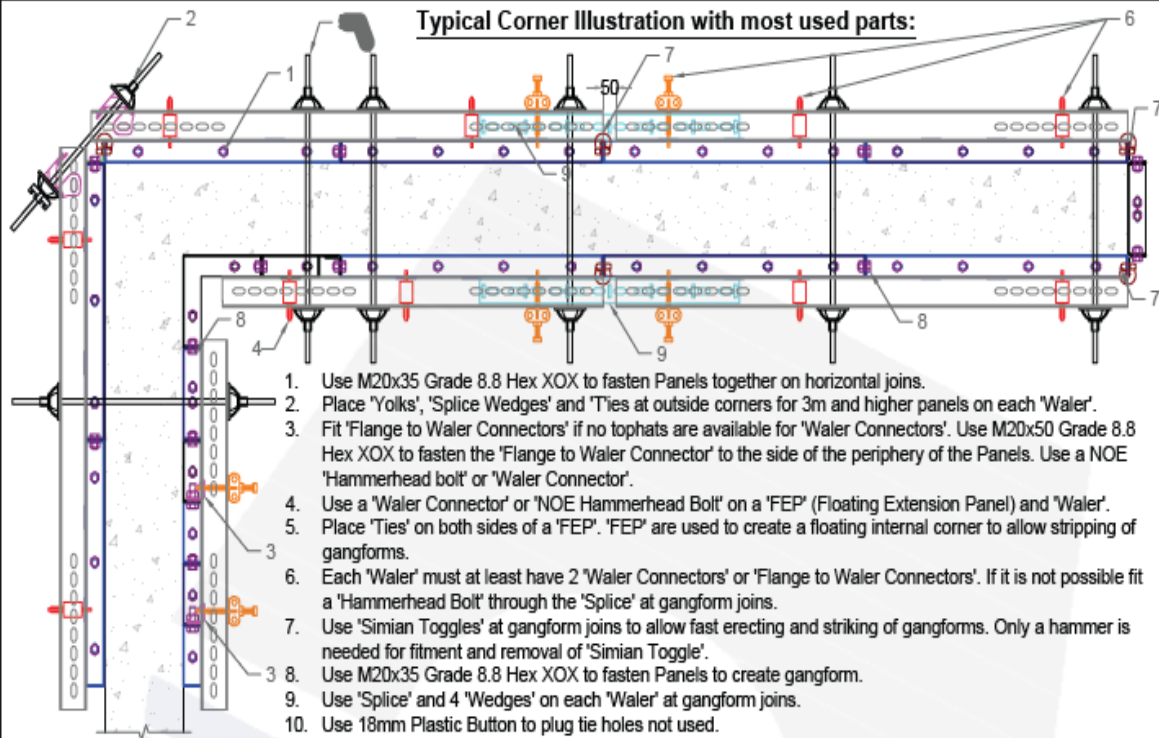
Note:

Ninter

4-5% of Mass on Panels can be reduced if large panels are being used in Gangform.

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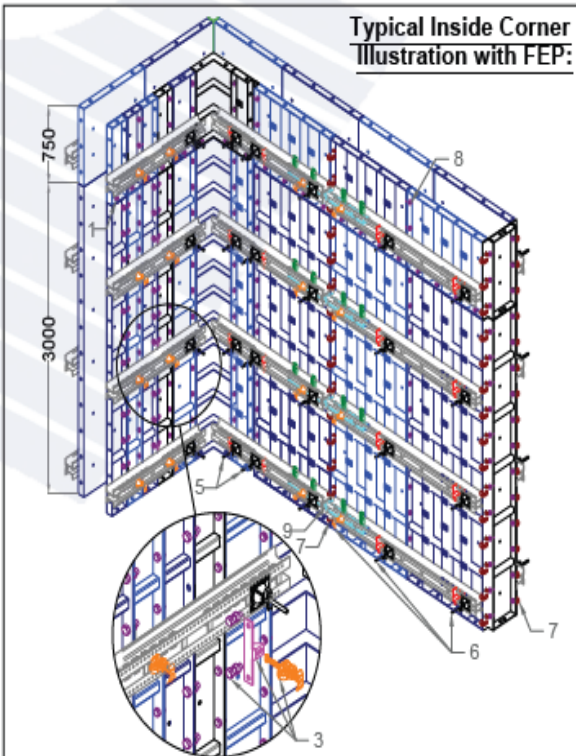
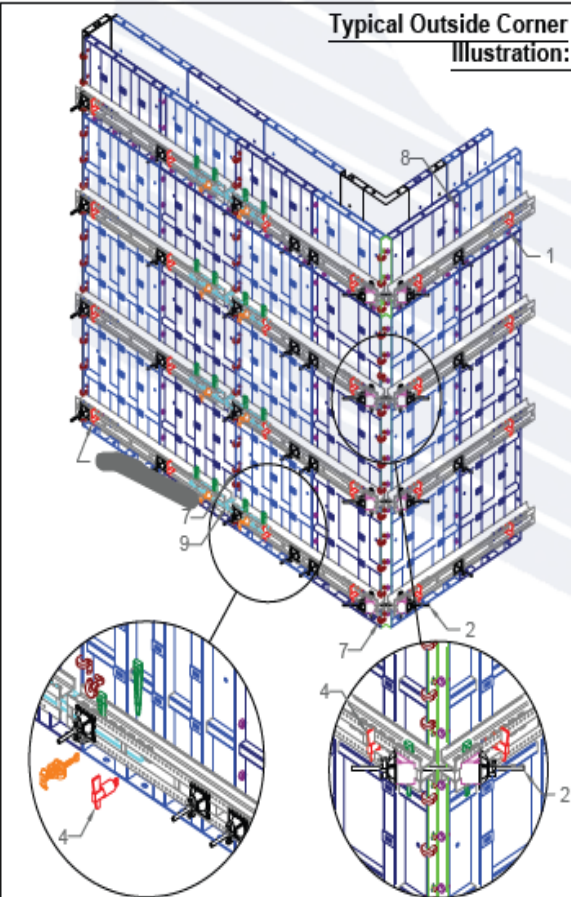
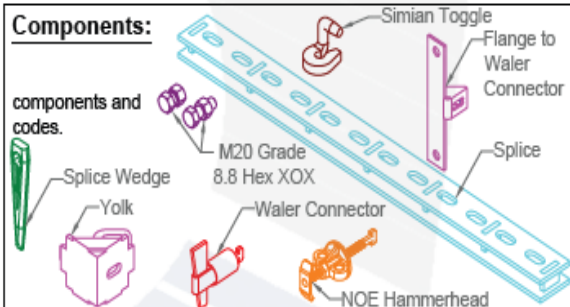
HD Wall Recommended Design Parameters

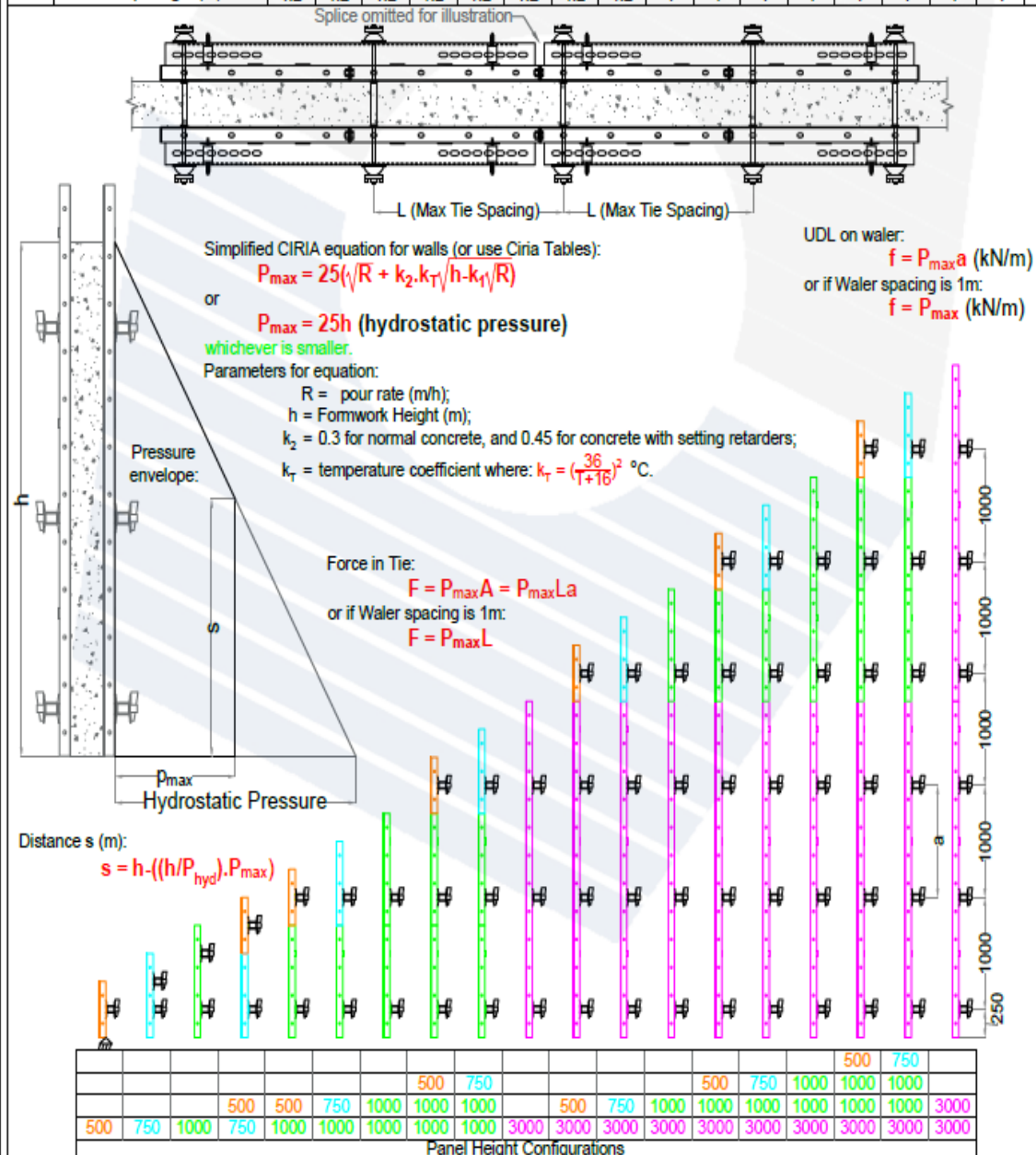


HD (Heavy Duty) System:

A crane handled, all steel system with 4mm faceplate, enforced with tophats in both the vertical and horizontal direction. Ideal for off-shutter finish and repetitive elements, eg. cores and retaining walls. The system is designed for 100 kN/m².

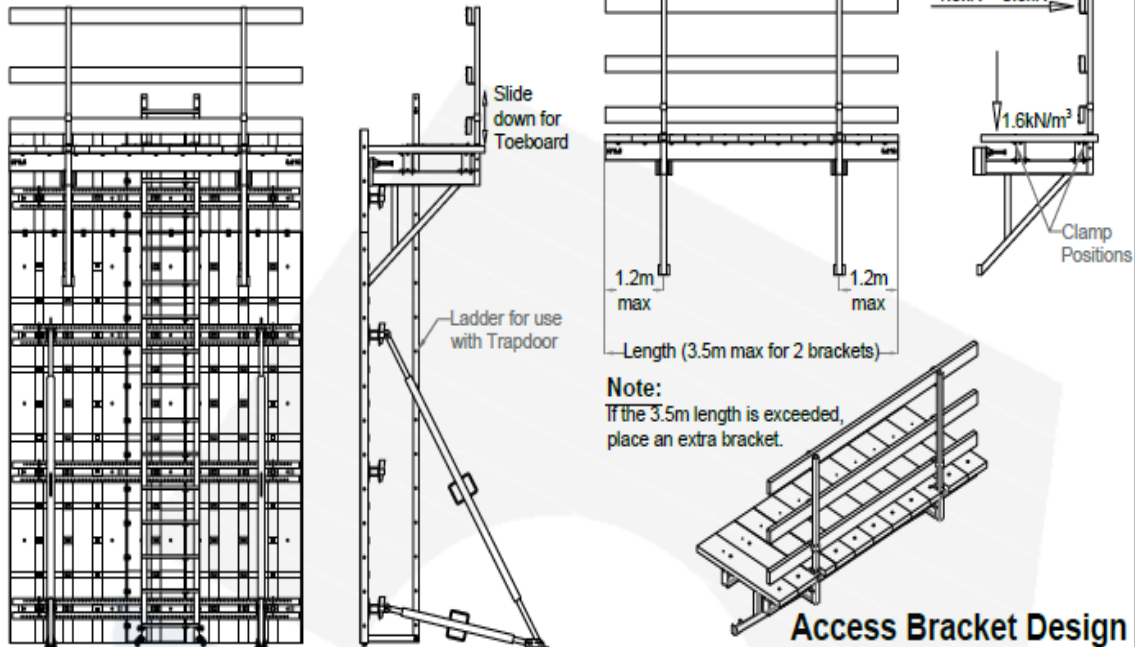
Components:



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HD Access Platforms

114 x 38mm S5 Structural Grade SA Timber shown for handrail.

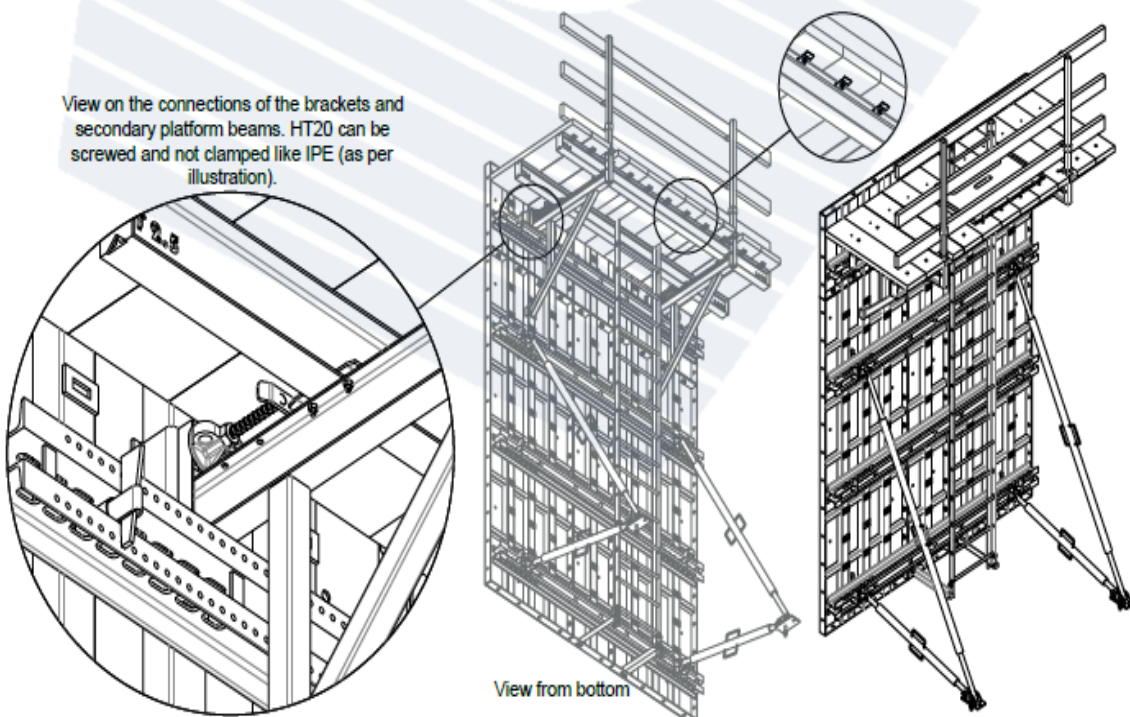


Access Bracket Design

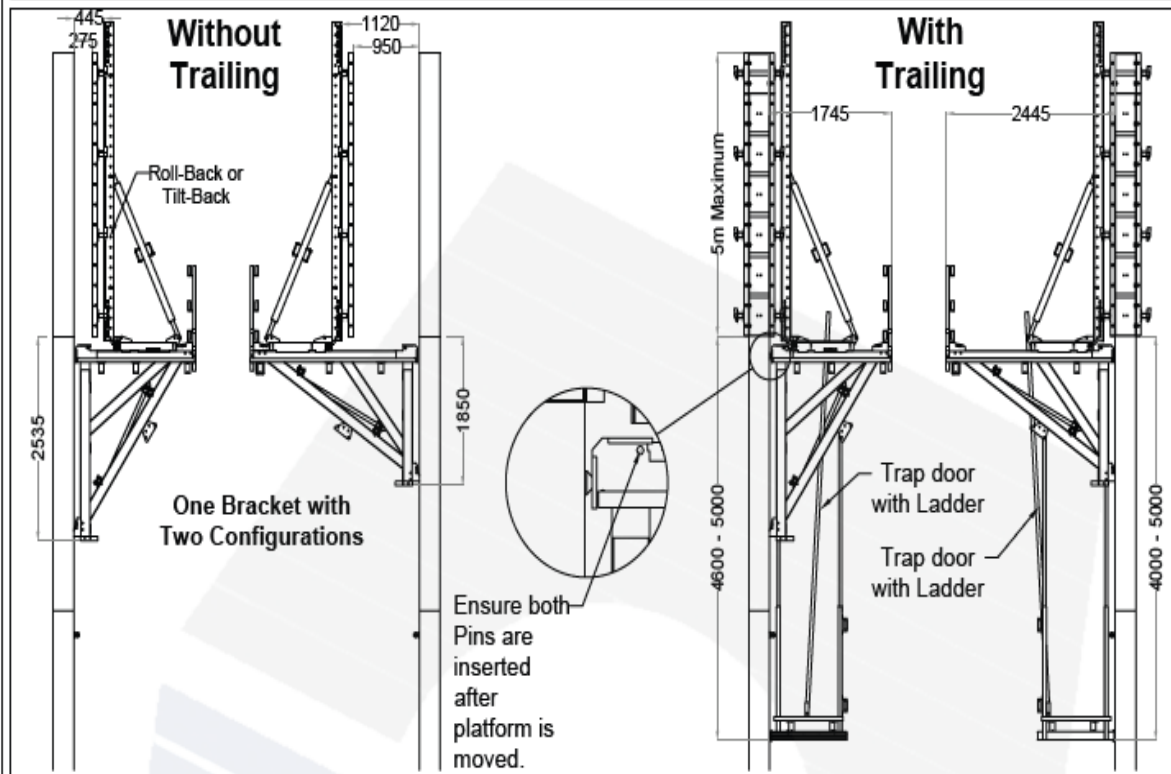
1. Timber railing design as per SABS 0136-2001.
2. Minimum timber quality of S5 (SA Pine Gr5) must be used.
3. Ø48.3mm Scaffold tube and bracket design as per SANS 10162-2005.
4. C_p of 1.3 will be used in wind pressure.
5. Wind pressure, P_w , will be assumed 1.7kN/m².
6. A horizontal load of $F = 0.3kN$ will be used in calculations.

Estimated mass calculator per Access platform (5% factored) kg		Length of Access Platform (mm)											
Access Platform (3 brackets from 3,5m wide)	Access Platform	-	104	134	164	194	224	276	328	380	432	484	536
	Trapdoor set	-	60	60	60	60	60	60	60	60	60	60	60
	One end safety	-	44	44	44	44	44	44	44	44	44	44	44
	Both ends safety	-	88	88	88	88	88	88	88	88	88	88	88

View on the connections of the brackets and secondary platform beams. HT20 can be screwed and not clamped like IPE (as per illustration).



Climber Configurations

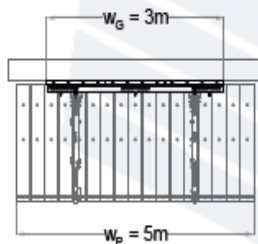


Climber Mass Estimation

Example:

- $w_g = 3m$ Gangform
- $h_s = 4m$ Gangform (Shutter) Height
- $w_p = 5m$ Platform Width
- Climber in 2400mm Configuration with Trailing
- 4m Soldier

* Mass of slings or spreaders must be added.



Crane Requirement:

Table 1 =	= 0 kg
Table 2 = 5m Wide and 4m Soldier	= 1200kg
Table 3 = 5m Wide Trailing	= 343 kg
Table 4 = 3m Wide and 4m High	= 1556 kg
Total = 0 + 1200 + 343 + 1556	= 3100kg

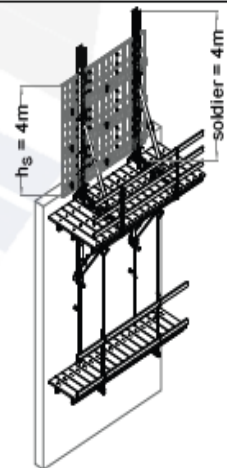
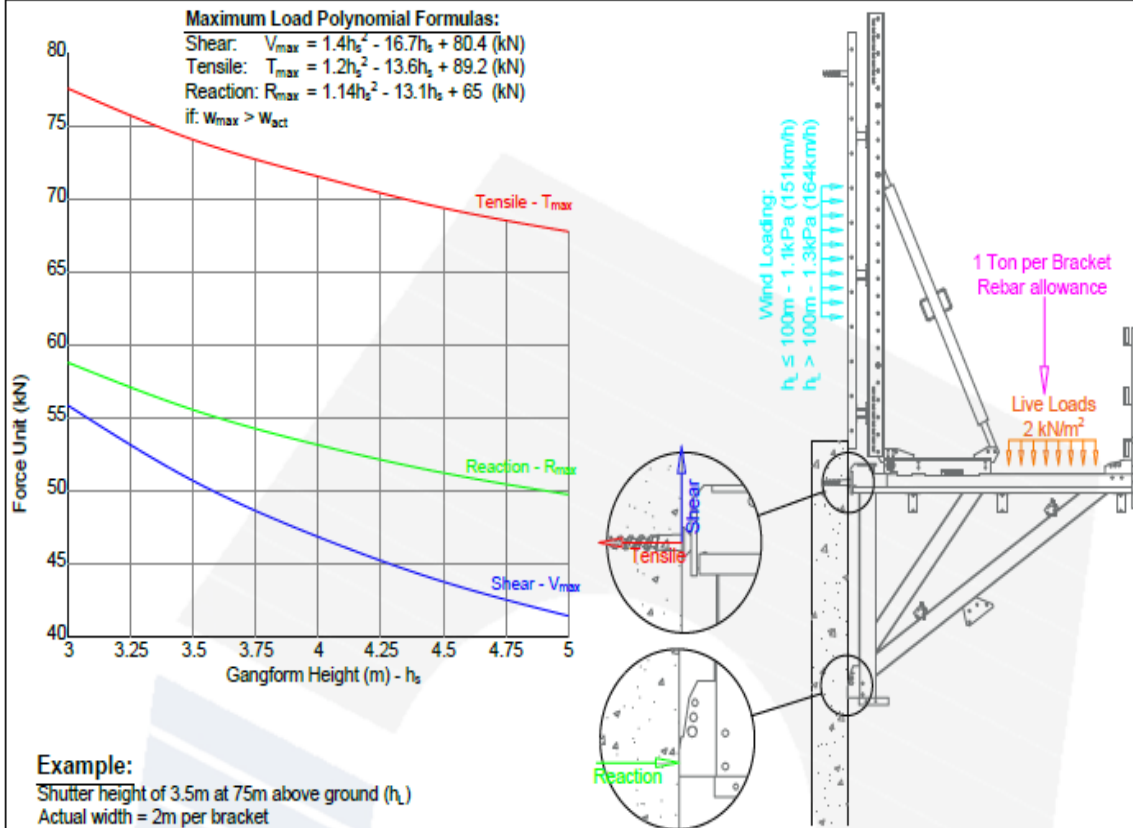


Table 1 1600mm Configuration				Table 2 2400mm Configuration				Table 3 Trailing System		Table 4 Estimated HD Gangform Mass						Add to Estimate Total Mass (kg)
Platform Width (m)	No Soldier	3m Soldier	4m Soldier	Platform Width (m)	No Soldier	3m Soldier	4m Soldier	Platform Width (m)	Mass (kg)	Gangform Width (m)	3m High	3.5m High	4m High	4.5m High	5m High	
	Mass (kg)				Mass (kg)						Mass (kg)					
1	352	691	763	1	365	704	776	1	136	1	526	587	644	704	762	
1.5	395	734	806	1.5	417	456	828	1.5	163	1.5	695	786	872	963	1049	
2	440	779	851	2	471	810	882	2	188	2	864	985	1100	1221	1336	
2.5	483	822	894	2.5	524	863	935	2.5	215	2.5	1032	1184	1328	1479	1623	
3	527	866	938	3	577	916	988	3	240	3	1201	1383	1556	1738	1911	
3.5	571	910	982	3.5	630	969	1041	3.5	266	3.5	1392	1604	1806	2018	2220	
4	616	955	1027	4	684	1023	1095	4	290	4	1582	1825	2056	2298	2529	
4.5	659	998	1070	4.5	736	1075	1147	4.5	317	4.5	1773	2046	2306	2579	2838	
5	703	1042	1114	5	789	1128	1200	5	343	5	1964	2267	2555	2859	3147	
5.5	748	1087	1159	5.5	843	1182	1254	5.5	368	5.5	2145	2488	2805	3139	3457	
6	793	1132	1204	6	897	1236	1308	6	394	6	2345	2709	3055	3420	3776	
Add 70kg for platforms with Trapdoor and 5m Ladder.										Access included. For Large panels reduce with 6%						

Climber Anchor Loads and Reactions



Example:

Shutter height of 3.5m at 75m above ground (h_s)
 Actual width = 2m per bracket
 Allowable width = 4.3m per bracket
 M24x200 Anchor wit Grade 8.8 to be used

$$\text{Actual } V = (w_{act}/w_{max}) \cdot V_{max} + 2.4 = (2/4.3) \times 51 + 2.4 \approx 26.5 \text{ kN}$$

$$\text{Actual } T = (w_{act}/w_{max}) \cdot T_{max} + 2.4 = (2/4.3) \times 74 + 2.4 \approx 37.5 \text{ kN}$$

$$\text{Actual } R = (w_{act}/w_{max}) \cdot R_{max} + 2.4 = (2/4.3) \times 56 + 2.4 \approx 28.5 \text{ kN}$$

Anchor bolt check:

$$V_u/V_r + T_u/T_r \leq 1.4$$

$$26.5/131.5 + 37.5/148.6 = 0.45 \dots < 1.4 \dots \text{OK}$$

Actual Loads vs. Maximum Loads:

$$\text{Actual } V = (w_{act}/w_{max}) \cdot V_{max} + 2.4$$

$$\text{Actual } T = (w_{act}/w_{max}) \cdot T_{max} + 2.4$$

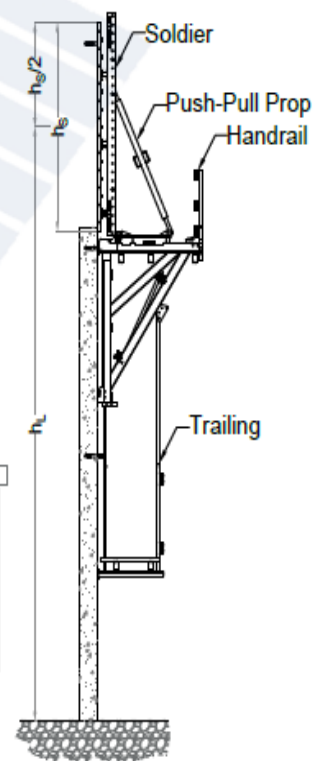
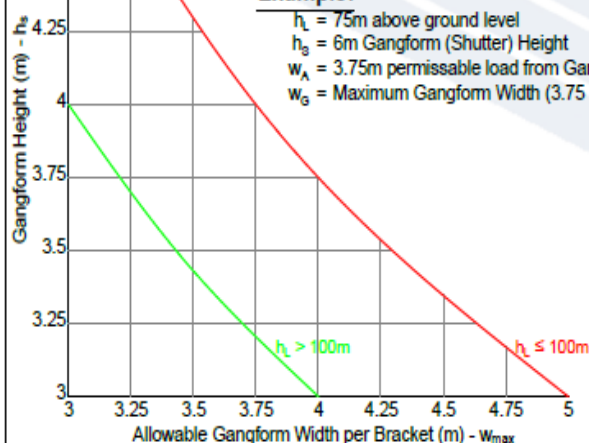
$$\text{Actual } R = (w_{act}/w_{max}) \cdot R_{max} + 2.4$$

Allowable Gangform Widths

h_s = Center Height of Gangform above ground level (m);
 h_b = Gangform Height (m);
 w_{max} = Allowable Gangform Width per bracket (m).
 w_g = Maximum Gangform Width (m)
 w_p = Platform Width (m)
 cc = Maximum Distance between Brackets (beams must be designed for more than 4m span wit IPE140_{AA})

Example:

h_s = 75m above ground level
 h_b = 6m Gangform (Shutter) Height
 w_a = 3.75m permissible load from Gangform per bracket
 w_g = Maximum Gangform Width (3.75 x 2 = 7.5m)



Retrievable Anchor Screws Limits

Recommended Nominal Embedment Clearance (mm)	
M20x120	136
M20x200	163
M24x140	188
M24x200	215
M24x280	240
M30x360	290
M36x430	290

T_a = Ultimate Tensile of Anchor (kN), T_r taken into account
 T_u = Ultimate Tensile Capacity of the internal bolt (ISO 6g)
 T_d = Ultimate Tensile Design Load
 V_r = Ultimate Shear Capacity of the internal bolt (ISO 6g)
 V_d = Ultimate Shear Design Load
 f_{cu} = Compressive Concrete Strength (MPa)
 ϕ_s = Safety Factor of the Anchor in Tension, taken as 0.67

Anchor Maximum Limitations			
Anchor	Force	Bolt Grade	
		4.8	8.8
M20x120	T_r (kN)	53	81.4
	V_r (kN)	45.9	90.8
M20x200	T_r (kN)	53	104.8
	V_r (kN)	45.9	90.8
M24x140	T_r (kN)	76.8	84.6
	V_r (kN)	66.5	131.5
M24x200	T_r (kN)	76.8	148.6
	V_r (kN)	66.5	131.5
M24x280	T_r (kN)	76.8	151.9
	V_r (kN)	66.5	131.5
M24x280 H/D	T_r (kN)	76.8	151.9
	V_r (kN)	66.5	131.5
M30x361	T_r (kN)	123	243.2
	V_r (kN)	104.5	206.6
M36x431	T_r (kN)	180.1	355.9
	V_r (kN)	151.1	298.6

Load Reduction Factors for Spacing and Edge Distance on Anchors

Anchor Designation	Tension Only Loads				Shear Loads			
	Anchor Spacing (mm)	Load Reduction Factor	Edge Distance (mm)	Load Reduction Factor	Anchor Spacing (mm)	Load Reduction Factor	Edge Distance (mm)	Load Reduction Factor
M20x120	240	0.7	107	0.7	286	0.6	53	0.5
	480	1	120	1	480	1	45.9	1
M20x200	275	0.7	100	0.7	300	0.6	53	0.5
	550	1	200	1	550	1	45.9	1
M24x140	245	0.7	106	0.7	283	0.6	76.8	0.5
	490	1	140	1	525	1	66.5	1
M24x200	275	0.7	100	0.7	300	0.6	76.8	0.5
	550	1	200	1	550	1	66.5	1
M24x280	231	0.7	107	0.7	280	0.6	76.8	0.5
	462	1	213	1	493	1	66.5	1
M30x361	263	0.7	116	0.7	360	0.6	123	0.5
	526	1	210	1	587	1	104.5	1
M36x431	322	0.7	140	0.7	430	0.6	180.1	0.5
	643	1	257	1	712	1	151.1	1

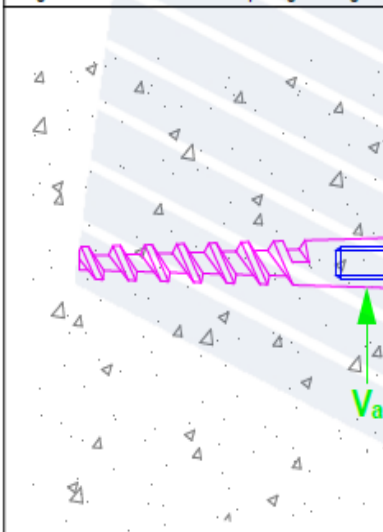
Linear interpolation can conservatively be applied to the above values as per the discretion of the designer. Recommended to use spacing and edge distances greater or equal to a reduction of 1.

Anchor Tensile Load Capacity Polynomial Formulas:

$M20x120: T_a = \phi_s[-1.57 \times 10^{-2} \cdot (f_{cu})^2 + 3.296 \cdot f_{cu} - 14.619]$
 $M20x200: T_a = \phi_s[-7.34 \times 10^{-2} \cdot (f_{cu})^2 + 8.9426 \cdot f_{cu} - 61.192]$
 $M24x140: T_a = \phi_s[-1.52 \times 10^{-2} \cdot (f_{cu})^2 + 3.2896 \cdot f_{cu} - 10.564]$
 $M24x200: T_a = \phi_s[-6.27 \times 10^{-2} \cdot (f_{cu})^2 + 8.3748 \cdot f_{cu} - 53.447]$
 $M24x280: T_a = \phi_s[-7.95 \times 10^{-2} \cdot (f_{cu})^2 + 10.611 \cdot f_{cu} - 55.269]$
 $M30x360: T_a = \phi_s[-7.54 \times 10^{-2} \cdot (f_{cu})^2 + 12.711 \cdot f_{cu} - 11.101]$
 $M36x430: T_a = \phi_s[-1.171 \times 10^{-1} \cdot (f_{cu})^2 + 18.491 \cdot f_{cu} - 15.932]$

This formulas can be used to design the tensile load application for anchors as long as the shear- and tensile steel failure load limitations presented in above table is not exceeded.

The maximum concrete value to substitute f_{cu} in the polynomial formulas should not exceed 56.7MPa.



Formula for Combined Tension and Shear:
As per SANS 0162-1:Part 13.11.4

$$V_d/V_r + T_d/T_r \leq 1.4$$

Notes on Maximum Tensile Load Vs Concrete Strength Tables and Limit Graphs:

The Tabulated values presented herein include the material safety factors.
 These factors are applied to the Anchors tested or calculated failure values and not the maximum elastic limit of the Anchor itself, the designer should apply the necessary load factors to the ULS (ultimate design loads).
 The ULS calculated by designer should be below values presented herein.

Maximum Tensile Load vs Concrete Cube Strength for Grade 4.8 Bolts (kN)								
Concrete Cube Strength (MPa)	M20x120	M20x200	M24x140	M24x200	M24x280	M24x280 H/D	M30x361	M36x431
5	1	1	1	1	1	1	51	74
10	17	21	21	21	43	58	108	157
15	31	56	35	56	86	106	163	235
20	45	88	49	89	125	149	213	307
25	58	116	62	117	160	189	260	373
30	70	131	74	141	164	190	302	433
35	81	131	85	149	164	190	305	446

Maximum Tensile Load vs Concrete Cube Strength for Grade 8.8 Bolts (kN)								
Concrete Cube Strength (MPa)	M20x120	M20x200	M24x140	M24x200	M24x280	M24x280 H/D	M30x361	M36x431
5	1	1	1	1	1	1	51	74
10	17	21	21	21	43	58	108	157
15	31	56	35	56	86	106	163	235
20	45	88	49	89	125	149	213	307
25	58	116	62	117	160	189	260	373
30	70	131	74	141	164	190	302	433
35	81	131	85	149	164	190	305	446

	STIPULATIONS	INITIAL																																				
	<p><u>RECESSES (BOX OUTS)</u></p> <p>Different size recesses will be required for the different lifts. The recesses (box outs) will be manufactured from wood. The vertical recesses will be provided with a lifting-hook on top, in order to be pulled up by crane. The horizontal recesses will be of such lengths, that it could be manhandled and supplied with a screw in eye bolt to enable the attachment of a chain block to assist with removal if required. The recess box outs will be screwed to the formwork in such a way that after the screws are removed there will be no protruding elements preventing the formwork to be lifted upwards. The recesses (box outs) will be of such a nature that they will prevent ingress of mortar into the recess (box outs) by filling each box with a hard industrial foam or similar.</p>																																					
	<table><tr><th>DRAWING NO.</th><th>DESCRIPTION OF DRAWINGS</th></tr><tr><td colspan="2"><u>PULSATOR DRAWINGS</u></td></tr><tr><td>34905-CIV-2-1</td><td>NEW OUTLET STRUCTURE & PULSATOR LAYOUT</td></tr><tr><td>34905-CIV-2-2</td><td>PULSATOR GENERAL LAYOUT & SECTIONS</td></tr><tr><td>34905-CIV-2-3</td><td>PULSATOR PIPEWORK</td></tr><tr><td colspan="2"><u>SAND FILTER DRAWINGS</u></td></tr><tr><td>34905-CIV-3-1</td><td>NEW SAND FILTER LAYOUT</td></tr><tr><td>34905-CIV-3-2</td><td>SAND FILTER GENERAL LAYOUT AND SECTIONS</td></tr><tr><td>34905-CIV-3-3</td><td>SAND FILTER AIR PIPEWORK</td></tr><tr><td>34905-CIV-3-4</td><td>SAND FILTER SETTLED WATER INLET PIPEWORK</td></tr><tr><td>34905-CIV-3-5</td><td>SAND FILTER BACKWASH WATER INLET PIPEWORK</td></tr><tr><td>34905-CIV-3-6</td><td>SAND FILTER FILTERED WATER OUT PIPEWORK</td></tr><tr><td>34905-CIV-3-7</td><td>SAND FILTER ACCESS MANHOLE PIPEWORK</td></tr><tr><td colspan="2"><u>1000KL RESERVOIR DRAWINGS</u></td></tr><tr><td>34905-CIV-4-1</td><td>NEW 1000KL RESERVOIR PIPEWORK LAYOUT</td></tr><tr><td>34905-CIV-4-2</td><td>1000KL RESERVOIR GENERAL LAYOUT & SECTIONS</td></tr><tr><td>34905-CIV-4-3</td><td>1000KL RESERVOIR OUTLET & SCOUR DETAIL</td></tr><tr><td>34905-CIV-4-4</td><td>1000KL RESERVOIR INLET DETAIL</td></tr></table>	DRAWING NO.	DESCRIPTION OF DRAWINGS	<u>PULSATOR DRAWINGS</u>		34905-CIV-2-1	NEW OUTLET STRUCTURE & PULSATOR LAYOUT	34905-CIV-2-2	PULSATOR GENERAL LAYOUT & SECTIONS	34905-CIV-2-3	PULSATOR PIPEWORK	<u>SAND FILTER DRAWINGS</u>		34905-CIV-3-1	NEW SAND FILTER LAYOUT	34905-CIV-3-2	SAND FILTER GENERAL LAYOUT AND SECTIONS	34905-CIV-3-3	SAND FILTER AIR PIPEWORK	34905-CIV-3-4	SAND FILTER SETTLED WATER INLET PIPEWORK	34905-CIV-3-5	SAND FILTER BACKWASH WATER INLET PIPEWORK	34905-CIV-3-6	SAND FILTER FILTERED WATER OUT PIPEWORK	34905-CIV-3-7	SAND FILTER ACCESS MANHOLE PIPEWORK	<u>1000KL RESERVOIR DRAWINGS</u>		34905-CIV-4-1	NEW 1000KL RESERVOIR PIPEWORK LAYOUT	34905-CIV-4-2	1000KL RESERVOIR GENERAL LAYOUT & SECTIONS	34905-CIV-4-3	1000KL RESERVOIR OUTLET & SCOUR DETAIL	34905-CIV-4-4	1000KL RESERVOIR INLET DETAIL	
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5.4.	<p>SPECIAL NOTICE</p> <p>The following documents must be submitted when material is delivered on site:</p> <ul style="list-style-type: none">• A drawing for each type of formwork with full details and design• A table listing all the components of the proposed formwork• Clear indication on what is a standard item; special items and what must be supplied by the contractor.• The required delivery period for each type/section from receipt of official order to delivery to site.																																					

	STIPULATIONS	INITIAL
	<ul style="list-style-type: none"> The types will be priced as a whole per unit as per the Bill of Quantities for a purchase price and a rental rate. It must be noted that the supplier must include any delivery and or collection cost with the price. It is a requirement of this bid that the successful bidder/supplier shall submit a detail list of items with prices of each type/section that will be used in the case of replacement or augmentation. 	
6.	SCOPE OF CONTRACT	
	<p>The Bidder will be required to perform the following service as part of this contract:</p> <ul style="list-style-type: none"> The service to be rendered is THE DESIGN, HIRE, SUPPLY AND DELIVERY OF FORMWORK, SCAFFOLDING AND FALSEWORK FOR THE UPGRADE OF NOMLACU WATER TREATMENT WORKS AND LUDEKE RAW WATER PUMP STATION IN MBIZANA IN THE EASTERN CAPE FOR A PERIOD OF 24 MONTHS All sourcing, loading and transportation costs shall be included in the bid rates. 	
7.	DELIVERY	
	<p>The contractor will contact the supplier in advance to arrange a date and time on which the services must be rendered on-site.</p> <p>The delivery address is:</p> <p>Nomlacu Water Treatment Works in Bizana, Eastern Cape:</p> <p>Nomlacu WTW: 30° 50' 16.36" S ; 29° 46' 20.42" E</p> <p>Deliveries may be made during the following working hour 7h30 to 14h00 from Monday to Friday but not on the following days or periods:</p> <ol style="list-style-type: none"> Fridays 14h00 to Mondays 06h30 All public holidays The period 11 December to 7 January The last Thursday and Friday of the month <ul style="list-style-type: none"> The Bidder shall nominate a contact person with whom the Department will arrange and schedule delivery. DWS will decline products that do not comply with the specification when it is delivered. The declined items will be collected by the supplier/bidder within 48 hours. The ownership of and risk for the product purchased will pass to the Department at the point of delivery i.e. where a signed acceptance take place. Materials will be rejected if not according to specification 	
8.	TECHNICAL SUPPORT	
	<p>Should any problem be reported to the supplier concerning the services, the following response times are expected:</p> <ul style="list-style-type: none"> Within 24 hours a representative of the supplier should be on site to resolve the problem. Within 24 hours there should be a solution to the problem or if not possible, replacement products should be on site within 48 hours at the supplier's expense. <p>ANY DEFECTIVE PRODUCT WILL BE REPLACED AT THE SUPPLIER'S EXPENSE.</p>	
9.	QUANTITIES	
	<p>The total quantity as per SBD 3.2</p> <ul style="list-style-type: none"> The quantity required cannot be guaranteed. The contract period will be for 24 months. The attached schedule provides a unit price only. However, the requirements can be as per the demand specified in the orders. 	

	STIPULATIONS	INITIAL
	<ul style="list-style-type: none"> The Bidder will not be entitled to claim any form of compensation for any requirement variations in the total quantities or specific quantities whatsoever. The delivered material will be accepted and regarded as being in accordance with the specification if it fulfils the requirements given in hereunder. <p>NOTE: THE DEPARTMENT RESERVES THE RIGHT TO CHANGE THE QUANTITY/ QUANTITIES TO BE ORDERED FROM THE SUCCESSFUL BIDDER</p>	
10.	PROGRAMME OF WORKS	
	<ul style="list-style-type: none"> Supply shall commence within 7 days after receipt of the official DWS order and as per notification by the end-user for a period of 24 months. 	
11.	TRANSPORTATION	
	<ul style="list-style-type: none"> All transport costs to be included. 	
12.	PAYMENT	
	<ul style="list-style-type: none"> Payment will be made per ton of reinforcing steel supplied and delivered to the site. The Department reserves the right to check the quantities collected at any time. Payment will be made monthly on receipt of specified tax invoices. Payment will not be made for consignment unless supported by delivery notes and weight-bridge slips duly signed by the official checking the material. Payment will be done within 30 days of receipt and approval of the original invoice by depositing the payment directly into the bank account of the successful bidder. No cash or cheque payment will be made. No upfront payment is to be made. Payment for standing time exceeding three hours will only be made if such standing time is a result of the action of the Department. Bidders shall provide in their bid for all labour, plant, material, implements and vehicles necessary for the execution of the contract and all operating and maintenance costs in accordance with the bid documents. 	
13.	DELIVERY PERIOD AND BID PRICE	
	<ul style="list-style-type: none"> All-inclusive bid prices are required, meaning delivery and any other cost mentioned in the specification for the Bidders account must be included in the unit price. No price adjustments will be allowed for non-firm prices if that section in the SBD3.2 is not fully completed. 	
14.	PENALTIES AND DELAY DAMAGES	
14.1.	The penalties referred to in clause 22 of the General Conditions of Contract state if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the price as a penalty, a sum services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider the termination of the contract pursuant to GCC clause 23.	
15.	ACCEPTANCE CRITERIA FOR DELIVERED MATERIAL	
	The delivered material will be accepted and regarded as being like the specification if it fulfils the requirements given in Clause 5.	
16.	SAFETY AND ENVIRONMENTAL	
	<ul style="list-style-type: none"> Bidders are required to adhere to the department's Safety and Environmental policies. 	

Therewith I, _____ (Bidder's Name) declare that I have read, completed and understood the above specifications.

BIDDER'S SIGNATURE

DEPARTMENT OF WATER AND SANITATION

BID DWS01 0424 WTE

THE DESIGN, HIRE, SUPPLY AND DELIVERY OF FORMWORK, SCAFFOLDING AND FALSEWORK FOR THE UPGRADE OF NOMLACU WATER TREATMENT WORKS AND LUDEKE RAW WATER PUMP STATION IN MBIZANA IN THE EASTERN CAPE FOR A PERIOD OF 24 MONTHS

SECTION 3: SBD 3.2 – PRICING SCHEDULE

CONTENTS

PREAMBLE TO THE SBD 3.2 – PRICING SCHEDULE

SBD 3.2 – PRICING SCHEDULE

PREAMBLE TO THE SBD 3.2 – PRICING SCHEDULE

1. GENERAL

The SBD 3.2 forms part of the Contract Documents and must be read and priced in conjunction with all the other documents which include the Conditions of Contract and all other Specifications in the bid document.

2. QUANTITIES REFLECTED IN THE PRICING SCHEDULE

No quantity is given in the pricing schedule as this is a fixed term contract for a period of 24 months. This is a rate base pricing schedule. The Department reserves the right to purchase any quantity from the service provider.

The contract period will be 24 months.

The quantities given in the SBD 3.2 can be subject to change. **The Department reserves the right to only purchase one product per item or one item or none of the items in the pricing schedule.**

The validity of the contract will in no way be affected by differences between the quantities in SBD 3.2 and the quantities finally certified for payment.

The total tender price will **only** be used for evaluation purposes as this is a rate-based term tender for a period of 24 months.

Only fair market prices will be accepted, and the Department reserves the right to not to award the bid to the lowest scoring bidder if it is determined that the prices quoted is not market related.

3. PRICING OF THE SCHEDULE

The rates to be filled in the SBD 3.2 should include all costs. All rates and amounts quoted in the SBD 3.2 shall be in Rand and shall include applicable taxes.

4. CORRECTION OF ENTRIES

Incorrect entries shall not be erased or obliterated with correction fluid, use of correction fluid will invalidate your bid, but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry, and the alteration must be initiated by the Bidder, failure to initial where the correction was done will invalidate your bid.

PRICING SCHEDULE

(Non - Firm Prices)
 BID DWS01 0424 WTE

THE DESIGN, HIRE, SUPPLY AND DELIVERY OF FORMWORK, SCAFFOLDING AND FALSEWORK FOR THE UPGRADE OF NOMLACU WATER TREATMENT WORKS AND LUDEKE RAW WATER PUMP STATION IN MBIZANA IN THE EASTERN CAPE FOR A PERIOD OF 24 MONTHS

THIS PRICING SCHEDULE **MUST** BE COMPLETED IN FULL – FAILURE TO COMPLY WILL INVALIDATE YOUR BID

CLOSING TIME 11:00	ON: 30 May 2024	BID NO.: DWS01 0424 WTE
NAME OF BIDDER:.....		

OFFER TO BE VALID FOR 120 DAYS FROM THE CLOSING DATE OF THE BID

NOMLACU WATER TREATMENT WORKS

ITEM NO.	DESCRIPTION	BID PRICE (Excluding VAT)
NEW PULSATOR (Refer Drawing 34905-CIV-2-1 TO 34905-CIV-2-3)		
Formwork, falsework and scaffolding design, hire, supply and delivery including anchors and accessories for:		
1.	Outside perimeter walls of New Pulsator	R.....
2.	Inside perimeter walls of New Pulsator	R.....
3.	Roof support and decking for New Pulsator	R.....
Total Carried Forward to Summary		R.....
NEW SAND FILTER (Refer Drawing 34905-CIV-3-1 TO 34905-CIV-3-7)		
Formwork, falsework and scaffolding design, hire, supply and delivery including anchors and accessories for:		
4.	Outside perimeter walls of New Sand Filter	R.....
5.	Inside perimeter walls of New Sand Filter	R.....
6.	Roof support and decking for New Sand Filter	R.....
Total Carried Forward to Summary		R.....
NEW 1000KL RESERVOIR (Refer Drawing 34905-CIV-4-1 TO 34905-CIV-4-4)		
Formwork, falsework and scaffolding design, hire, supply and delivery including anchors and accessories for:		
7.	Outside perimeter walls of New Reservoir	R.....
8.	Inside perimeter walls of New Reservoir	R.....
9.	Roof support and decking for New Reservoir	R.....

SUMMARY OF BILL OF QUANTITIES	
SECTION DESCRIPTION	BID AMOUNT (Excluding VAT)
NEW PULSATOR FORMWORK, FALSEWORK AND SCAFFOLDING	R.....
NEW SAND FILTER FORMWORK, FALSEWORK AND SCAFFOLDING	R.....
NEW 1000KL RESERVOIR FORMWORK, FALSEWORK AND SCAFFOLDING	R.....
	TOTAL BID AMOUNT (Excluding VAT) R.....
	15 % VAT R.....
	TOTAL BID AMOUNT (Including VAT) R.....

- Site Nomlacu is approximately 9.0 km West (along the R61 road) of the town of Mbizana.

- The period required for delivery after receipt of order: 7 days after receipt of Purchase Order on request from end-user

-

- Delivery period: *FIRM / NOT FIRM

- Is the price firm? *FIRM / NOT FIRM

- Are you registered in terms of section 23(1) or 23(3) of the Value added Tax Act, 1991 (Act no89 of 1991?) *YES/NO

If so, state your VAT registration number

- Is the offer strictly to specification? *YES / NO

- If not to specification, state deviation

NOTE:

- All delivery and transport costs must be included in the bid price.
- Failure to complete all the relevant information in SBD 3.2 will render your bid non-responsive.
- Failure to initial each page of the bid document at the bottom will render the bid non-responsive.

Any enquiries regarding bidding procedures may be directed to the –

Department of Water and Sanitation
Supply Chain Management Office
Private BagX313, Pretoria,0001
Administrative information:

Bid office- Contact details
E-mail: bidenquirieswte@dws.gov.za
Tel: (012) 336-6562/7780/8151

Or

For technical or site information –

Mr. Z.D Cele – CeleZ2@dws.gov.za. 060 980 5392 OR Mr. S. Biyela – BiyelaS@dws.gov.za.

PRICE ADJUSTMENTS

A. NON-FIRM PRICES SUBJECT TO ESCALATION

1. IN CASES OF PERIOD CONTRACTS, NON-FIRM PRICES WILL BE ADJUSTED (LOADED) WITH THE ASSESSED CONTRACT PRICE ADJUSTMENTS IMPLICIT IN NON-FIRM PRICES WHEN CALCULATING THE COMPARATIVE PRICES
2. IN THIS CATEGORY PRICE ESCALATIONS WILL ONLY BE CONSIDERED IN TERMS OF THE FOLLOWING FORMULA:

$$Pa = (1 - V)Pt \left(D1 \frac{R1t}{R1o} + D2 \frac{R2t}{R2o} + D3 \frac{R3t}{R3o} + D4 \frac{D4t}{D4o} \right) + VPt$$

Where:

Pa = The new escalated price to be calculated.

(1-V)Pt = 85% of the original bid price.

Note that Pt must always be the original bid price and not an escalated price.

D1, D2.. = Each factor of the bid price e.g., labour, transport, clothing, footwear, etc.

The total of the various factors D1, D2...etc. must add up to 100%.

R1t, R2t..... = Index figure obtained from new index (depends on the number of factors used).

R1o, R2o = Index figure at time of bidding.

VPt = 15% of the original bid price.

This portion of the bid price remains firm i.e., it is not subject to any price escalations.

3. The following index/indices must be used to calculate your bid price:

Index..... Dated..... Index..... Dated..... Index..... Dated.....

Index..... Dated..... Index..... Dated..... Index..... Dated.....

4. FURNISH A BREAKDOWN OF YOUR PRICE IN TERMS OF ABOVE-MENTIONED FORMULA. THE TOTAL OF THE VARIOUS FACTORS MUST ADD UP TO 100%.

FACTOR (D1, D2 etc. e.g. Labour, Transport, Materials, etc.)	PERCENTAGE OF BID PRICE

FAILURE TO COMPLETE THE ABOVE WILL RESULT IN NO PRICE INCREASE ON A NON-FIRM PRICE

WHERE PRICES ARE INDICATED AS FIRM NO PRICE INCREASE CLAIM WILL BE ENTERTAINED DURING THE CONTRACT PERIOD