



REQUEST FOR TENDERS

Tender No.: SCMU10–25/26–0003

FOR

**PROVISION OF PROFESSIONAL CONSULTING ENGINEERING
SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND
MAJOR CULVERTS ON PROVINCIAL ROADS IN THE EASTERN
CAPE PROVINCE**

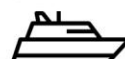
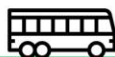
Issued by:

Province of the Eastern Cape
Department of Transport

Private Bag X0023
BHISHO
5605

c/o Fleming Street & Cowan Close
KING WILLIAM'S TOWN
5601

NAME OF TENDERER:



PROVINCE OF THE EASTERN CAPE: DEPARTMENT OF TRANSPORT

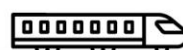
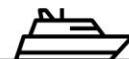
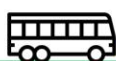
TENDER NO.: SCMU10-25/26-0003

PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON PROVINCIAL ROADS: EASTERN CAPE PROVINCE

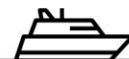
CONTENTS		PAGE
Number	Heading	
THE REQUEST FOR TENDERS		2
Part T1: TENDER PROCEDURES		3
T1.1	Tender Notice and Invitation	4
T1.2	Tender Data	6
Part T2: RETURNABLE DOCUMENTS		11
T2.1	Returnable Schedules Required for Tender Evaluation Purposes	13
T2.2	Returnable Schedules to be Incorporated into Contract	35
T2.3	Pro Forma Forms to be Completed by Successful Tenderer	52
THE CONTRACT		56
Part C1: AGREEMENT AND CONTRACT DATA		57
C1.1	Form of Offer and Acceptance	58
C1.2	Contract Data	70
C1.3	Adjudicator's Agreement	75
C1.4	Agreement in Terms of Occupational Health & Safety Act	78
PART C2: PRICING DATA		82
C2.1	Pricing Instructions	83
C2.2	Pricing Schedules	85
PART C3: SCOPE OF WORK		89
C3.1	Employers Objectives	90
C3.2	Site Location	90
C3.3	Description of the Works	93
C3.4	Use of Specialised Equipment for Inventory and/or Inspections	94
C3.5	Quality Control	95
C3.6	Works Programme	95
C3.7	Deliverables	96
C3.8	Occupational Health and Safety Specifications	97
C3.9	Measurement and Payment	102
PART C4: APPENDICES		104
C4.1	Appendix C4.1 – Assessment Forms (Pro-Forma)	105
C4.2	Appendix C4.2 – Locality Plan/Drawings	130
C4.3	Appendix C4.3 – Schedule of Bridges	132



THE TENDER



PART T1: TENDER PROCEDURES



T 1.1 NOTICE AND INVITATION TO TENDER

The Department of Transport hereby invites Tenders from suitably qualified and experienced professional service providers (PSPs) to provide:

**PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO
CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON
PROVINCIAL ROADS: EASTERN CAPE**

The PSP will need to have extensive experience in the inspection and inventory of bridges and major culverts, as well as in the coordination of bridge and major culvert inspection projects, consultation and liaison.

In terms of the Preferential Procurement Policy Framework Act (Act 5 of 2000) as amended and 2022 Regulations thereto and Preferential Specific Goal Points, tenders shall be evaluated on price based on the 80/20 preference point system and 2022 Regulations thereto and Preferential Specific Goal Points.

Professional Services Providers to provide bids for:

TENDER NO.: SCMU10-25/26-0003	
Description	Tender Closing Date and Time
Provision of Professional Consulting Engineering Services to Conduct Inspection Surveys on Bridges and Major Culverts on Provincial Roads: EC	Friday, 25 April 2025 at 11:00



Tenders are invited for Provision of Professional Consulting Engineering Services to Conduct Inspection Surveys on Bridges and Major Culverts on Provincial Roads in Eastern Cape Province.

The Province of the Eastern Cape Department of Transport, as the Employer, hereby invites tenders from Professional Consulting Engineering Services to conduct inspection surveys on bridges and major culverts on Provincial Roads in the Eastern Cape.

Inspection surveys shall be executed according to the latest draft TMH19 document (Manual for the Visual Assessment of Road Structures) and the standard procedures associated with the CSIR STRUMAN Bridge Management System, as adopted by the Employer. Only tenderers complying with the requirements as specified in the Conditions of Tender will be considered.

Only tenderers offering Key Persons and personnel with extensive bridge and culvert design and inspection experience are eligible to submit tenders. The pre-evaluation criteria applicable to experience and qualifications are specified in the Tender Data. It is therefore a specific requirement that tenderers provide proof of proposed Key Persons' experience and that the approved Key Persons successfully complete the Employer's Compulsory Testing and Calibration Session.

The 80:20 preferential points system will be applicable with 80 points for price and preference participation goals scoring a maximum of 20 points.

Tender documents are obtainable from www.etender.gov.za or www.ectransport.gov.za from 28 March 2025.

Queries relating to the issue of these documents may be addressed to Mr Drikus Bester, Tel No. 041 581 2421, e mail: drikusb@easpe.co.za

A compulsory clarification meeting with representatives of the Department will take place at the offices of the East Golf Club, East London, **on 09 April 2025 at 10:00.**

The closing time for receipt of tenders is **25 April 2025 at 11:00.** Tenders shall be deposited at the tender at the Department of Transport, Entrance Foyer C, Stellenbosch Park Building, c/o Fleming Street & Cowan Close, King William's Town. Telegraphic, telephonic, telex, facsimile, e-mail and late tenders will not be accepted.

Tenders may only be submitted on the tender documentation that is issued.

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.



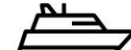
T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the Construction Industry Development Board's Board Notice 136 of 2015 (contained in Government Gazette No. 38960 of 10 July 2015).

The Standard Conditions of Tender makes several references to the Tender Data. The Tender Data also contains project specific amendments to the Standard Conditions of Tender applicable to this document. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

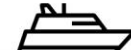
Clause number	Description / Comment
F1.1	The Employer is the Department of Transport, Province of the Eastern Cape
F1.2	<p>The Project Document issued by the Employer comprises the following:</p> <p>THE TENDER</p> <p>Part T1: Tendering procedures: T1.1 Tender notice and invitation to tender T1.2 Tender data</p> <p>Part T2: Returnable documents: T2.1 Returnable schedules for tender evaluation T2.2 Other documents required for tender evaluation T2.3 Returnable schedules that will be incorporated into the contract</p> <p>THE CONTRACT</p> <p>Part C1: Agreements and contract data C1.1a to C1.1d Form of Offer and Acceptance C1.2 Contract data C1.3 Adjudicator's appointment C1.4 Agreement in terms of Occupational Health and Safety Act</p> <p>Part C2: Pricing data C2.1. Pricing instructions C2.2.1 to C2.2.4 Schedules of Quantities</p> <p>Part C3: Scope of work</p> <p>Part C4: Appendices</p>



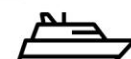
F1.4	<p>The name and contact details of the employer's agent are as follows:</p> <p>Mr. S. Cibi Department of Transport Private Bag X0023 BHISHO 5605 Cell. 083 357 7887 E-mail: sonwabo.cibi@ectransport.gov.za</p>
F2.1	<p>Only tenderers who provide key persons <u>for each Contract(s) tendered for</u>, as listed below as well as in the contract data, will be considered responsive.</p> <p>The Structures Project Manager shall:</p> <ul style="list-style-type: none"> • be accredited with the Committee of Transport Officials (COTO) as a Bridge Inspector or as a Senior Bridge Inspector, having at least 10 years COTO/SANRAL accreditation experience in TMH19 visual inspection of bridges and major culverts. • be registered as a Professional Engineer under the Engineering Profession Act (Act 46 of 2000), or be registered as a Professional Technologist under the Engineering Profession Act (Act 46 of 2000), • be allowed to be proposed as a Bridge Inspector, having completed at least 50 TMH19 bridge inspections since COTO accreditation, with this experience being gained over the past 5 years, • be in the permanent employ of the tenderer and, • be available to execute the required duties and responsibilities on the Contract tendered for should the tenderer's offer be accepted. <p>Only tenderers who have a <u>minimum</u> of at least <u>four</u> suitably experienced and qualified Bridge and Major Culvert Inspectors and who will be available for the execution and completion of the Contract tendered for are eligible to submit tenders. The Bridge and Major Culvert Inspectors shall consist of at least <u>two Major Culvert Inspectors</u> and <u>two Bridge Inspectors</u>.</p> <p>Each Bridge Inspector and Major Culvert Inspector so proposed and ultimately utilised shall be required to comply with and meet all of the following criteria and specific conditions.</p> <p>The Major Culvert Inspectors shall:</p> <ul style="list-style-type: none"> • be a COTO accredited Major Culvert Inspector, having completed at least 50 TMH19 major culvert inspections since COTO accreditation, with this experience being gained over the past 5 years, • be a qualified as Professional civil engineering technician, technologist or engineer, • be required to successfully complete and pass the employer's Compulsory "Testing and Calibration Session" with a minimum score of 85%, • be allowed to conduct inspection surveys on major culverts <u>only</u>, • be in the permanent employ of the tenderer or contractually committed to the tenderer should the tenderer win the tender and be available for the execution of the Contract tendered for and, • be available to execute the required duties and responsibilities on the Contract tendered for, should the tenderer's offer be accepted.



	<p>The Bridge Inspectors shall:</p> <ul style="list-style-type: none"> • be a COTO accredited Bridge Inspector, having completed at least 50 TMH19 bridge inspections since COTO accreditation, with this experience being gained over the past 5 years, or be a COTO accredited Senior Bridge Inspector, • be registered as a Professional Engineer under the Engineering Profession Act (Act 46 of 2000), or be registered as a Professional Technologist under the Engineering Profession Act (Act 46 of 2000), • be required to successfully complete and pass the employer's Compulsory "Testing and Calibration Session" with a minimum score of 85%, • be allowed to conduct inspection surveys on bridges and major culverts, • be in the permanent employ of the tenderer or contractually committed to the tenderer should the tenderer win the tender and be available for the execution of the Contract tendered for and, • be available to execute the required duties and responsibilities on the Contract tendered for should the tenderer's offer be accepted. <p>Tenderers shall provide proof of the Key Persons' experience in a <u>detailed and project specific</u> Curricula Vitae, supported by the required certified copies of professional registration, COTO accreditation and qualifications.</p>
F2.7	The arrangements for a compulsory clarification meeting are as stated in the Tender Notice and Invitation to Tender.
F2.12	No alternative tender offers will be accepted by the Employer.
F2.13.3	Parts of each tender offer communicated on paper shall be submitted as an original, plus one (1) copy.
F2.13.5	<p>The Employer's address for delivery of tender offers is: Tender Box Department of Transport Entrance Foyer C Stellenbosch Park Building c/o Fleming Street & Cowan Close, KING WILLIAM'S TOWN and identification details to be shown on the tender offers are: TENDER NO.: SCMU10-25/26-0003: PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON PROVINCIAL ROADS: EC</p>
F2.13 & 3.5	A two-envelope procedure will not be followed.
F2.15	The closing time for submission of tender offers is the 25 April 2025 at 11:00am.
F2.15	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.
F2.16	The tender offer validity period is ninety (90) days.



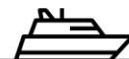
F2.23	The tenderer is required to submit with his/her tender all the documents, schedules and certificates as listed under Part 2 of the Tender Portion.
F3.4	The time and location for opening of the tender offers are: Time: 11:00 on 25 April 2025 Location: Entrance Foyer C, Stellenbosch Park Building, c/o Fleming Street & Cowan Close
F3.8.1	Add the following to the clause: Failure on the part of the Tenderer to submit a tender offer as stipulated prior to the closing time including any one of the returnable documents or certificates in clause 2.15 shall be just cause for the Employer to consider the tender offer as being non-responsive
F3.8.2	A responsive tender is one that conforms to all terms, conditions, and specifications of the tender documents without material deviations or qualification. A material deviation or qualification is one which, in the employer's opinion, would: <ul style="list-style-type: none"> a) Detrimentially affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work. b) Significantly change the employer's or the tenderer's risk and responsibilities under the contract. c) Affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified, or d) Indicate that the tenderer or tender does not comply with all the legal and statutory requirements. <p>In addition to the above and in compliance with requirements of Clause F2.1, should the tenderer fail to offer the specified Key Persons or should the Key Persons so offered fail to comply with the minimum requirements regarding experience and qualifications, the tender shall be regarded as non-responsive.</p> <p>Reject a non-responsive tender offer and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.</p>
F3.9	Replace the contents of the clause with the following: Check responsive tender offers for arithmetical errors, correcting them in the following manner: <ul style="list-style-type: none"> a) If a bill of quantities (or schedule of quantities or schedule of rates) applies and there is an error in the line item total resulting from the product of the unit rate and the quantity, the unit rate shall govern and the line item total shall be corrected. b) Where there is an error in the total of the prices, either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the corrected total of the prices shall govern. c) Where there is a discrepancy between the amount indicated in the Tenderer's tender offer and the corrected amount obtained after completing the above steps, the corrected amount shall govern. d) Notify a tenderer upon written request received after the closing date of tenders of all arithmetical errors made by that tenderer.



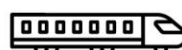
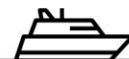
F3.11.5 and F3.11.7 to F3.11.8	Method 2 (as described in Clause 3.11.3 of the Standard Conditions of Tender) will be used to evaluate all responsive tender offers. The financial offer will be scored in terms of formula 2 option 1.
F3.13.1	In addition, tender offers will only be accepted if: a) The tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; and b) The tenderer has not: Abused the Employer's Supply Chain Management System; or Failed to perform any previous contract and has been given a written notice to this effect. It is considered that the performance of the services will not be compromised through any conflict of interest.

Additional conditions of tender

Clause number	Description / Comment
F1.6 additional	<p>Add the following:</p> <p>"Tenderers should note that this tender includes three (3) contracts of similar nature. Tenderers may tender for one or more of the contracts. All contracts will be scored separately. However, if the tenderer provides the same Key Person/s for two or more of the contracts, the tenderer will be able to be awarded a maximum of two with different key personnel or one contract utilized the same key personnel. Where it is found that a specific tenderer is eligible for award of more than one contract, the employer reserves the right not to award more than one contract (of the three contracts) to such a tendering entity.</p> <p>Awards will be made based on the most economically favourable outcome for the Employer, and tenderers will not be afforded the opportunity to select preferred contracts, should they score the highest points on more than one contract. The Employer further reserves the right not to award a contract to any tenderer found to be at a high risk of non/under-performance based on a risk assessment of the current workload or past performance of that tenderer."</p> <p>Tenderers must note that the Schedule of Quantities will not be made available in electronic format.</p>
F2.13 additional	<p>In addition to Clause F2.13, it is a specific requirement that:</p> <p>a) Tenderers shall <u>not</u> take this tender document apart. Additional documentation to be submitted by tenderers shall be submitted in a separate properly bound document, unless specifically required in this document that such documentation be attached to specific pages of this document.</p> <p>b) Tenderers shall initial every page of this tender document in the bottom right-hand corner.</p>



PART T2: RETURNABLE DOCUMENTS



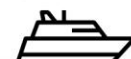
Tender Qualification Criteria:**T2.1 RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES**

- A- Certificate of Attendance at site visit and clarification meeting
- B- Certificate of Authority
- C- Joint Venture / Consortium Disclosure Form
- D- Bidder's Disclosure Form
- E- Compulsory Enterprise Questionnaire
- F- Certificate Of Compliance with Occupational Health and Safety Act, 1993 and Construction Regulations, 2014
- G- Tax Clearance Certificate
- H- Tenderer's Financial Standing
- I- Central Supplier Database
- J- Special Conditions

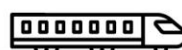
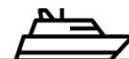
Failure to meet the above compliance requirements will render the tender[s] non-responsive and disqualified.

T2.2 RETURNABLE SCHEDULES THAT WILL BE INCORPORATED INTO THE CONTRACT

- K- Preferential Procurement Regulation 2022
- L- Record of Addenda to Tender Documents
- M- Plant and Equipment
- N- Schedule of Specialist Sub-Consultants
- O- Indicative Programme
- P- Estimated Monthly Expenditure
- Q- Amendments, Qualifications and Alternatives
- R- Company Experience
- S- Personnel Schedule
- T- Total Contract Quality Plan (Incl. Draft Safety Plan)

T2.3 PRO FORMA FORMS TO BE COMPLETED BY SUCCESSFUL TENDERER**C1.1 FORM OF OFFER AND ACCEPTANCE****C1.2 CONTRACT DATA****C1.3 ADJUDICATOR'S AGREEMENT****C1.4 AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)****C2.1 PRICING INSTRUCTIONS****C2.2 PRICING SCHEDULES****C3.1 SCOPE OF WORK****C4 APPENDICES**

T2.1 RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES



T2.1.A CERTIFICATE OF ATTENDANCE AT SITE VISIT AND CLARIFICATION MEETING

This is to certify that I,
(*tenderer*)

of (*address*) was represented by

the person(s) named below at the compulsory meeting held for all tenderers at (*location*)

..... on (*date*)..... starting at (*time*).

I / We acknowledge that the purpose of the meeting was to acquaint myself / ourselves with the site of the works and / or matters incidental to doing the work specified in the tender documents in order for me / us to take account of everything necessary when compiling our rates and prices included in the tender.

Particulars of person(s) attending the meeting:

Name: Signature:

Capacity:

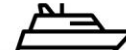
Name: Signature:

Capacity:

Attendance of the above person(s) at the meeting is confirmed by the Employer's representative, namely:

Name: Signature:

Capacity: Date:



T2.1.B CERTIFICATE OF AUTHORITY

Indicate the status of the tenderer by ticking the appropriate box hereunder. The tenderer must complete the certificate set out below for the relevant category.

(I) COMPANY	(II) CLOSE CORPORATION	(III) PARTNERSHIP	(IV) JOINT VENTURE	(V) SOLE PROPRIETOR

(I) CERTIFICATE FOR COMPANY

I,, Managing Director of the Board of Directors of, hereby confirm that by resolution of the Board (copy attached) taken on 20....., Mr/Ms, acting in the capacity of, was authorised to sign all documents in connection with this tender and any contract resulting from it, on behalf of the company.

Managing Director:

As Witnesses: 1.....

2.....

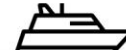
Date:

(II) CERTIFICATE FOR CLOSE CORPORATION

We, the undersigned, being the key members in the business trading as hereby authorise Mr/Ms, acting in the capacity of, to sign all documents in connection with this tender and any contract resulting from it, on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

Note : *This certificate is to be completed and signed by all of the key members upon whom rests the direction of the affairs of the Close Corporation as a whole.*



(III) CERTIFICATE FOR PARTNERSHIP

We, the undersigned, being the key partners in the business trading as,
 hereby authorize Mr/Ms
 acting in the capacity of , to sign all documents in
 connection with this tender and any contract resulting from it, on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

Note : This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Partnership as a whole.

(IV) CERTIFICATE FOR JOINT VENTURE**RESOLUTION OF BOARD OF DIRECTORS TO ENTER INTO CONSORTIA OR JOINT VENTURE**

RESOLUTION of a meeting of the Board of *Directors / Members / Partners of:

(Legally correct full name and registration number, if applicable, of the Enterprise)

Held at _____ (place)

On _____ (date)

RESOLVED that:

1. The Enterprise submits a Bid/Tender, in Consortium/Joint Venture with the following Enterprises:

(List all the legally correct full names and registration numbers, if applicable, of the Enterprises forming the Consortium/Joint Venture)



to the DEPARTMENT OF TRANSPORT in respect of the following project:

(Project description as per Bid /Tender Document)

Bid / Tender Number: _____ (Bid / Tender Number as per Bid /Tender Document)

2. *Mr/Mrs/Ms:

in *his/her Capacity as: _____ (Position in the Enterprise)

and who will sign as follows:

be, and is hereby, authorised to sign a consortium/joint venture agreement with the parties listed under item 1 above, and any and all other documents and/or correspondence in connection with and relating to the consortium/joint venture, in respect of the project described under item 1 above.

3. The Enterprise accepts joint and several liability with the parties listed under item 1 above for the due fulfilment of the obligations of the joint venture deriving from, and in any way connected with, the Contract to be entered into with the Department in respect of the project described under item 1 above.
4. The Enterprise chooses as its *domicilium citandi et executandi* for all purposes arising from this joint venture agreement and the Contract with the Department in respect of the project under item 1 above:

Physical address: _____

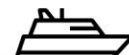
_____ (code)

Postal Address: _____

_____ (code)

Telephone number: _____ (code)

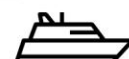
Fax number: _____ (code)



	Name	Capacity	Signature
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Note:

1. * Delete which is not applicable
2. **NB.** This resolution must be signed by all the Directors / Members / Partners of the Bidding Enterprise
3. Should the number of Directors / Members/Partners exceed the space available above, additional names and signatures must be supplied on a separate page

ENTERPRISE STAMP

SPECIAL RESOLUTION OF CONSORTIA OR JOINT VENTURES

RESOLUTION of a meeting of the duly authorised representatives of the following legal entities who have entered into a consortium/joint venture to jointly bid for the project mentioned below: *(legally correct full names and registration numbers, if applicable, of the Enterprises forming a Consortium/Joint Venture)*

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

Held at _____ (place)

On _____ (date)

RESOLVED that:

- A. The above-mentioned Enterprises submits a Bid in Consortium/Joint Venture to the DEPARTMENT OF TRANSPORT in respect of the following project:

_____ (project description as per Bid / Tender Document)

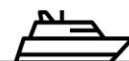
- B. Mr/Mrs/Ms: _____

in *his/her Capacity as: : _____ (Position in the Enterprise)

and who will sign as follows: : _____

be, and is hereby, authorised to sign the Bid, and any and all other documents and/or correspondence in connection with and relating to the Bid, as well as to sign any Contract, and any and all documentation, resulting from the award of the Bid to the Enterprises in Consortium/Joint Venture mentioned above.

- C. The Enterprises constituting the Consortium/Joint Venture, notwithstanding its composition, shall conduct all business under the name and style of: _____



- D. The Enterprises to the Consortium/Joint Venture accepts joint and several liability for the due fulfilment of the obligations of the Consortium/Joint Venture deriving from, and in any way connected with, the Contract entered into with the Department in respect of the project described under item A above.
- E. Any of the Enterprises to the Consortium/Joint Venture intending to terminate the consortium/joint venture agreement, for whatever reason, shall give the Department 30 days written notice of such intention. Notwithstanding such decision to terminate, the Enterprises shall remain jointly and severally liable to the Department for the due fulfilment of the obligations of the Consortium/Joint Venture as mentioned under item D above.
- F. No Enterprise to the Consortium/Joint Venture shall, without the prior written consent of the other Enterprises to the Consortium/Joint Venture and of the Department, cede any of its rights or assign any of its obligation under the consortium/joint venture agreement in relation to the Contract with the Department referred to herein.
- G. The Enterprises choose as the *domicilium citandi et executandi* of the Consortium/Joint Venture for all purposes arising from the consortium/joint venture agreement and the Contract with the Department in respect of the project under item A above:

Physical address: _____

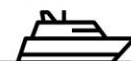
_____ (code)

Postal Address: _____

_____ (code)

Telephone number: _____ (code)

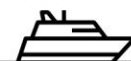
Fax number: _____ (code)



	Name	Capacity	Signature
1			
2			
3			
4			
5			
6			
7			

Note:

1. * Delete which is not applicable.
2. NB. This resolution must be signed by all the Duly Authorised Representatives of the Legal Entities to the Consortium/Joint Venture submitting this Bid.
3. Should the number of Duly Authorised Representatives of the Legal Entities joining forces in this Bid exceed the space available above, additional names and signatures must be supplied on a separate page.
4. Resolutions, duly completed and signed, from the separate Enterprises who participate in this Consortium/Joint Venture must be attached to the Special Resolution.
5. Joint Venture Agreement must be attached must be attached to this Bid.



(V) CERTIFICATE FOR SOLE PROPRIETOR

I,, hereby confirm that I am the sole owner of the
business trading as

Signature of Sole owner:

As Witnesses:

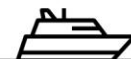
1.

2.

Date:

REGISTRATION CERTIFICATE / AGREEMENT / ID DOCUMENT**Important note to tenderer:**

Registration Certificates for Companies, Close Corporations and Partnerships, or Agreements and Powers of Attorney for Joint Ventures, or ID documents for Sole Proprietors, all as referred to in the foregoing forms and in T2.1, must be inserted here.



T2.1.C JOINT VENTURE / CONSORTIUM DISCLOSURE FORM

Tenderers submitting tenders as a joint venture or consortium are to attach a signed copy of the Joint Venture / Consortium Agreement **duly signed by all parties**.

Where a Joint Venture / Consortium Agreement has not yet been formalized, the tenderer is to attach a Letter of Intent of a Joint Venture / Consortium, **duly signed by all parties**.

The percentage (%) shareholding as well as the participation details of each member shall be clearly stated.

Please note Form SBD6.1:

- 5.4 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that **the entity submits their B-BBEE status level certificate**.
- 5.5 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that **the entity submits their consolidated B-BBEE scorecard** as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate tender

NOTE: The bidder of each company to a consortium /joint venture must be registered on the Central Supplier Database (CSD) prior to award.



T2.1.D Bidder's Disclosure**SBD 4: BIDDER'S DISCLOSURE FORM****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

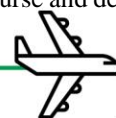
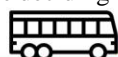
- 2.1. Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise, employed by the state?

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 interest¹ in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

¹the 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.



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

YES/NO

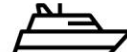
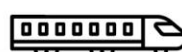
- 2.3.1 If so, furnish particulars:

.....

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.
- 3.5 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.
- 3.6 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.



- 3.7 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.

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.

I, THE UNDERSIGNED

(NAME).....

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 and 3 ABOVE IS CORRECT.
I ACCEPT THAT THE STATE MAY REJECT THE TENDER OR ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder



T2.1.E COMPULSORY ENTERPRISE QUESTIONNAIRE

The following particulars must be furnished. In the case of a joint venture, separate enterprise questionnaires in respect of each partner must be completed and submitted.

Attach to this form the most recent financial statements of the tendering entity.

Section 1: Name of enterprise:

Section 2: VAT registration number, if any:

Section 3: cidb registration number, if any:

Section 4: Particulars of sole proprietors and partners in partnerships

Name*	Identity number*	Personal income tax number*

* Complete only if sole proprietor or partnership and attach separate page if more than 3 partners

Section 5: Particulars of companies and close corporations

Company registration number

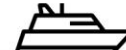
Close corporation number

Tax reference number

Section 6: Record in the service of the state

Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following:

- | | |
|--|---|
| <input type="checkbox"/> a member of any municipal council | <input type="checkbox"/> an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) |
| <input type="checkbox"/> a member of any provincial legislature | <input type="checkbox"/> a member of an accounting authority of any national or provincial public entity |
| <input type="checkbox"/> a member of the National Assembly or the National Council of Province | <input type="checkbox"/> an employee of Parliament or a provincial legislature |
| <input type="checkbox"/> a member of the board of directors of any municipal entity | <input type="checkbox"/> an employee or a member of board of directors of cidb |
| <input type="checkbox"/> an official of any municipality or municipal entity | |



If any of the above boxes are marked, disclose the following:

Name of sole proprietor, partner, director, manager, principal shareholder or stakeholder	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

*insert separate page if necessary

Section 7: Record of spouses, children and parents in the service of the state

Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months been in the service of any of the following:

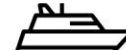
- | | |
|--|---|
| <input type="checkbox"/> a member of any municipal council | <input type="checkbox"/> an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) |
| <input type="checkbox"/> a member of any provincial legislature | <input type="checkbox"/> a member of an accounting authority of any national or provincial public entity |
| <input type="checkbox"/> a member of the National Assembly or the National Council of Province | <input type="checkbox"/> an employee of Parliament or a provincial legislature |
| <input type="checkbox"/> a member of the board of directors of any municipal entity | <input type="checkbox"/> an employee or a member of board of directors of CIDB |
| <input type="checkbox"/> an official of any municipality or municipal entity | |

Name of spouse, child or parent	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

*insert separate page if necessary

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise:

- authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;



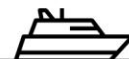
iv) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and

v) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed Date

Name Position

Enterprise Name



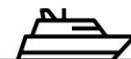
T2.1.F CERTIFICATE OF COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND CONSTRUCTION REGULATIONS, 2014***Note to tenderer:***

Discovery that the tenderer has failed to make proper disclosure may result in terminating a contract that flows from this tender on the ground that it has been rendered invalid by the tenderer's misrepresentation.

The tenderer shall attach to this Form evidence that he is registered and in good standing with a compensation insurer who is approved by Department of Labour in terms of section 80 of the Compensation for Injury and Disease Act (COID) (Act 130 of 1993).

The tenderer is required to disclose, by also attaching documentary evidence to this form, all inspections, investigations and their outcomes conducted by the Department of Labour into the conduct of the tenderer at any time during the 36 months preceding the date of this tender.

SIGNATURE ON BEHALF OF TENDERER:

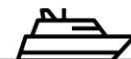


T2.1.G TAX CLEARANCE CERTIFICATE

IT IS A CONDITION OF BIDDING THAT:

1. The taxes of a successful bidder must be in order, or that satisfactory arrangements have been made with the Receiver of Revenue to meet his/her tax obligations.
2. The "Application for Tax Clearance Certificate (in respect of bidders), must be completed in all respects and submitted to the Receiver of Revenue where the bidders register for tax purposes. The Receiver of Revenue will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of twelve (12) months from date of issue. This Tax Clearance Certificate must be submitted in the original together with the bid. Failure to submit the original and valid Tax Clearance Certificate **WILL** invalidate the bid.
3. In the bids where Consortia/Joint Ventures/Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate. Copies of the Application for Tax Clearance Certificates are available at any Receiver's Office.

SIGNATURE ON BEHALF OF TENDERER:



T2.1.H TENDERER'S FINANCIAL STANDING**Note to tenderer:**

1. In terms of the Conditions of Tender the Employer may make inquiries to obtain a bank rating from the tenderer's bank.
2. To that end the tenderer must provide with his tender a bank rating, certified by his banker, to the effect that he will be able to successfully complete the contract at the tendered amount within the specified time for completion.
3. However, should the tenderer be unable to provide a bank rating with his tender, he shall state the reasons as to why he is unable to do so, and in addition provide the following details of his banker and bank account that he intends to use for project:

Name of account holder:

Name of Bank: Branch:

Account number: Type of account:

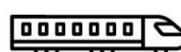
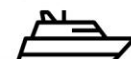
Telephone number: Facsimile number:.....

Name of contact person (at bank):

Failure to provide either the required bank details or a certified bank rating with his tender, will lead to the conclusion that the tenderer does not have the necessary financial resources at his disposal to complete the contract successfully within the specified time for completion.

The Employer undertakes to treat the information thus obtained as confidential, strictly for the use of evaluation of the tender submitted by the tenderer.

SIGNATURE ON BEHALF OF TENDERER:



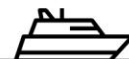
T2.1.I CENTRAL SUPPLIER DATABASE

Tenderers must attach to this page, proof of registration with the Centralised Supplier Database of National Treasury (In the case of **Joint Ventures**, **proof must be provided for each partner**).

I, the undersigned, confirm the following details of the firm/company's registration on the National Treasury Central Supplier Database:

Supplier Name:

Supplier Number:



T2.1.J SPECIAL CONDITIONS

1. Joint Venture or Consortium Agreement

An acceptable Joint Venture or Consortium Agreement

- Should clearly and comprehensibly set out the contribution to be made by each member towards the activities of the Joint Venture or Consortium in securing and executing the contract and should allocate monetary values to such contributions.
- Should record the percentage participation by each member in all aspects of the fortunes of the Joint Venture or Consortium, including risks, losses and liabilities.
- Should provide for meaningful input by all members to the policy making and management activities of the Joint Venture or Consortium.
- Should provide for the establishment of a management body for the Joint Venture or Consortium.
- Should provide measures to limit, as far as possible, losses to the Joint Venture or Consortium by the default of a member.
- Should promote consensus between the members whilst ensuring that the activities of the Joint Venture or Consortium will not be unduly hindered by failure to achieve it.
- Should have all the partner's physical addresses.

2. Penalties

In the event that the Tenderer fails to substantiate that any failure to achieve the contract participation goal was due to quantitative under-runs, the elimination of items contracted to targeted enterprises, or any other reason beyond the Tenderer's control which may be acceptable to the employer, the penalties provided for below shall apply:

2.1 The Tenderer may be required to pay to the employer penalties (P) in the amount Determined in accordance with the following formulae:

- (a) For specified minimum and maximum contract participation goal percentages, the formula shall be as follows:

$$P = F \times (D - D_o)$$

Where: D	=	the tendered contract participation goal
amount		
D _o	=	the contract participation goal amount which the employer's representative certifies as being achieved upon completion of the contract
P	=	the Rand value of penalty payable
F	=	1/30

2.2 The Tenderer's claims for payment may be rejected as being incomplete should the appropriate supporting documentation not be provided.

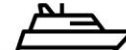
Signed

Date

Name

Position

Tenderer



T2.2 RETURNABLE SCHEDULES THAT WILL BE INCORPORATED INTO THE CONTRACT



T2.2K.**SBD 6.1**

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 all tenders:

- 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

(delete whichever is not applicable for this tender)

- (a) The applicable preference point system for this tender is the 80/20 preference point system.

1.3 Points for this tender shall be awarded for:

- (a) Price; and
(b) Specific goals.

1.4 To be completed by the organ of the 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 the 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:

$$P_s = 80 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right) \quad \text{or} \quad P_s = 90 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$$

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

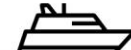
3.2.1 POINTS AWARDED FOR PRICE

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

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

Where:

- P_s = Points scored for price of tender under consideration
- P_t = Price of tender under consideration
- P_{max} = Price of lowest 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:
- (a) 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
 - (b) 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.
 - (c) Calculation of the specific goals points for a Joint venture will be based as per the Joint Venture agreement, that must be submitted by the tenderers.

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.)

PREFERENTIAL SPECIFIC GOALS POINTS TABLE		
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)
Historically Disadvantaged Individuals		
Black ownership	10	
Woman ownership	5	
Locality:-		
(a) Preferred address in the Eastern Cape on CSD not changed in the last 3 years	5	
b) Alternative address on CSD in the Eastern Cape in the last 3 years	3	
(c) Outside Eastern Cape no satellite office in Eastern Cape		
(i) including preferred address less than 3 years	1	
(ii) Alternative address less than 3 years		



DECLARATION WITH REGARD TO COMPANY/FIRM

4.3 Name of company/firm:

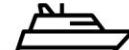
4.4 Company registration number:

4.5 Type of company/firm:

- ☐ 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 the 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.

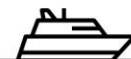
SIGNATURE(S) OF TENDERER(S)**SURNAME AND NAME:****DATE:**

T2.2L. RECORD OF ADDENDA TO TENDER DOCUMENTS

I / We confirm that the following communications amending the tender documents, received from the Employer or his representative before the closing date for submission of this tender offer, have been taken into account in this tender offer.

No	DATE	TITLE OR DETAILS
1		
2		
3		
4		
5		
6		
7		
8		

SIGNATURE ON BEHALF OF TENDERER:



T2.2M. PLANT AND EQUIPMENT

The following are lists of major items of relevant equipment that I / we presently own or lease and will have available for this contract if my / our tender is accepted.

- (a) Details of major equipment that is owned by me / us and immediately available for this contract.

DESCRIPTION (<i>Type, Size, Capacity etc</i>)	QUANTITY	YEAR OF MANUFACTURE

Attach additional pages if more space is required

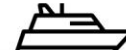
- (b) Details of major equipment that will be hired, or acquired for this contract if my / our tender is accepted

DESCRIPTION (<i>Type, Size, Capacity etc</i>)	QUANTITY	HOW ACQUIRED	
		HIRE / BUY	SOURCE

Attach additional pages if more space is required

The Tenderer undertakes to bring onto site without additional cost to the Employer any additional plant not listed but which may be necessary to complete the contract within the specified contract period.

SIGNATURE ON BEHALF OF TENDERER:



T2.2N. SCHEDULE OF SPECIALIST SUB-CONSULTANTS

The tenderer shall list below the specialist items of work on this contract. Alternatives may be mentioned.

The tenderer shall state whether he intends to carry out any specialized work himself.

Acceptance of this tender shall not be construed as approval of all or any of the listed specialist sub-consultants. Should any or all of the specialist sub-consultants not be approved subsequent to the acceptance of the tender, it shall in no way invalidate this tender, and the tendered unit rates for the various items of work shall remain final and binding, even in the event of a sub-consultant not listed below being approved by the engineer.

Specialized item**Name of Specialist Sub-consultant**

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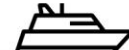
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SIGNATURE ON BEHALF OF TENDERER:



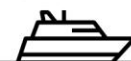
T2.20. INDICATIVE PROGRAMME

Note to tenderer:

If a tenderer wishes to submit an alternative tender then this form, appropriately completed, shall be attached to the Pricing Schedule for the alternative proposal.

The tenderer shall attach a preliminary programme, reflecting the proposed sequence and tempo of execution of the various activities comprising the work for this contract. The programme shall be in accordance with the information provided in T2.2P: Schedule of Estimated Monthly Expenditure and with all other aspects of the tender.

SIGNATURE ON BEHALF OF TENDERER:



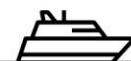
T2.2P. ESTIMATED MONTHLY EXPENDITURE**Note to Tenderer:**

If a tenderer wishes to submit an alternative tender then this form, appropriately complete, shall be attached to the Pricing Schedule for the alternative proposal.

The tenderer shall state his estimated value of the work to be completed every month, based on his preliminary programme and his tendered unit rates, in the table below:

Month	Value
1	
2	
3	
4	
5	
6	
Total	

SIGNATURE ON BEHALF OF TENDERER:



T2.2Q. AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES

(This is not an invitation for amendments, deviations or alternatives but should the tenderer, desire to make any departures from the provisions of this contract he shall set out his proposals clearly hereunder. The Employer will not consider any amendment or alternative offers unless form (a) and (b) has been completed to the satisfaction of the Employer).

I / We herewith propose the amendments and alternatives as set out in the tables below:

(a) AMENDMENTS

PAGE, CLAUSE OR ITEM NO	PROPOSED AMENDMENT

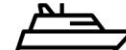
Notes: (1) Amendments to the General and Special Conditions of Contract are not acceptable;
 (2) The Tenderer must give full details of all the financial implications of the amendments and qualifications in a covering letter attached to his tender.

(b) ALTERNATIVES

PROPOSED ALTERNATIVE	DESCRIPTION OF ALTERNATIVE

Notes: (1) Individual alternative items that do not justify an alternative tender, and an alternative offer for time for completion should be listed here.
 (2) In the case of a major alternative to any part of the work, a separate Bill of Quantities, programme, etc, and a detailed statement setting out the salient features of the proposed alternatives must accompany the tender.
 (3) Alternative tenders involving technical modifications to the design of the works and methods of construction shall be treated separately from the main tender offer.

SIGNATURE ON BEHALF OF TENDERER:



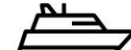
T2.2R. COMPANY EXPERIENCE

Tenderers are required to demonstrate their ability to undertake the work and provide proof of previous experience and expertise to undertake a project of this nature. Bidders shall provide details (including traceable references) of similar projects currently in progress or carried out in the past five years, as per the schedule below:

BRIDGE AND MAJOR CULVERT INSPECTIONS ON PROVINCIAL ROADS IN THE EASTERN CAPE PROVINCE			
PROJECT DESCRIPTION	YEAR COMPLETED	FEE VALUE	EMPLOYER REFERENCE Include Contact Tel. No.

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

SIGNATURE ON BEHALF OF TENDERER:



T2.2S. PERSONNEL SCHEDULE

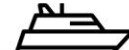
Only tenderers who have suitably experienced and qualified Key Persons and other Personnel available that satisfy the criteria and specific conditions stated under the Conditions of Tender as well as the Conditions of Contract are eligible to submit tenders.

Only personnel approved by the Employer and, in the case of bridge inspectors and major culvert inspectors, those who have attended and successfully completed the Testing and Calibration Session shall be allowed to carry out the required Deliverables / Inspection Surveys. The tenderer's attention is specifically directed to Clauses 2.1 and 3.8.2 of the Conditions of Tender regarding eligibility and responsiveness.

The names of the proposed Key Persons and other Personnel shall be provided in the table below.

CONTRACT B:

<u>Structures Project Manager/s</u> Name of Key Person Offered:	1.
<u>Bridge Inspector/s</u> Name/s of Key Person/s Offered:	1. 2. 3. 4.
<u>Major Culvert Inspector/s</u> Name/s of Key Person/s Offered:	1. 2. 3. 4.



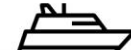
CONTRACT C:

<u>Structures Project Manager/s</u> Name of Key Person Offered:	1.
<u>Bridge Inspector/s</u> Name/s of Key Person/s Offered:	1. 2. 3. 4.
<u>Major Culvert Inspector/s</u> Name/s of Key Person/s Offered:	1. 2. 3. 4.

CONTRACT D:

<u>Structures Project Manager/s</u> Name of Key Person Offered:	1.
<u>Bridge Inspector/s</u> Name/s of Key Person/s Offered:	1. 2. 3. 4.
<u>Major Culvert Inspector/s</u> Name/s of Key Person/s Offered:	1. 2. 3. 4.

Detailed and project specific Curricula Vitae for all proposed Personnel shall accompany and be attached to this tender, demonstrating that the individuals comply with the various criteria and specific conditions, as applicable.



The credentials of more than the minimum specified Key Persons may be presented for approval.

With regard to the detail and contents of the Curricula Vitae applicable to **Key Persons**, it should be noted that the following items will be regarded as critical and of particular importance. The Curricula Vitae shall be so structured as to, inter alia, incorporate the following:

- a) Personnel's date of birth.
- b) Personnel's full qualifications (educational).
- c) Name of current employer and position within the enterprise.
- d) A list of previous employers, clearly stating periods of service and providing a person as reference with these employers, complete with contact telephone numbers.

e) For Structures Project Managers:

- Proof of registration as a Professional Engineer or Professional Technologist under the Engineering Profession Act (Act 46 of 2000),
- Proof of COTO/SANRAL accreditation as a Bridge Inspector or Senior Bridge Inspector,
- Detailed and project specific experience related bridge and major culvert inspections (TMH19), experience must also be expressed in terms of the number of bridges and major culverts inspected since COTO accreditation, the number of assignments as well as the total number inspected during the past ten years, complete with dates and references.

f) For Bridge Inspectors:

- Proof of registration as a Professional Engineer or Professional Technologist under the Engineering Profession Act (Act 46 of 2000),
- Proof of COTO accreditation as a Bridge Inspector or Senior Bridge Inspector,
- Detailed and project specific experience related to bridge and major culvert inspections (TMH19), experience must also be expressed in terms of the number of bridges and major culverts inspected since COTO accreditation, the number of assignments as well as the total number inspected during the past five years, complete with dates and references.

g) For Major Culvert Inspectors:

- Proof of COTO's accreditation as a Major Culvert Inspector,
- Detailed and project specific experience related to major culvert inspections (TMH19). Experience must also be expressed in terms of the number of major culverts inspected since COTO accreditation, the number of assignments as well as the total number inspected during the past five years, complete with dates and references.

Failure to comply with all of the above requirements shall be regarded as a material deviation or qualification and the tender shall be declared non-responsive.

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

SIGNATURE ON BEHALF OF TENDERER:

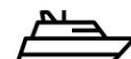


T2.2T. TOTAL CONTRACT QUALITY PLAN

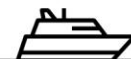
Quality is intrinsic to the survey's success. Tenderers shall submit a Total Contract Quality Plan with their tender submissions. The Total Contract Quality Plan shall at least include the following:

- Project Plan that describes all processes and time framework in which the survey will be completed. No exact dates need to be stated in the project plan but rather a relative timeframe including measurements of Reference Sections before and after the network measurements (e.g. 2 months after the date of appointment).
- Calibration procedures and certificates for all equipment to be used by the Tenderer shall be part of the Total Contract Quality Plan.
- Contingency Plan including backup equipment, a second trained operator, planning for inclement weather, etc.
- The Tenderer shall specify a system whereby he will complete a form or a logbook to note the outcome of the daily checks, which is to be performed on the profilers.
- The Tenderer shall describe the format and contents of the raw data files collected by the profilers.
- The Tenderer shall discuss general quality issues like:
 - assuring integrity of the data,
 - how to ensure consistency of data if the appointed operator cannot proceed with the survey, etc.
- The Total Contract Quality Plan shall include a draft Safety Plan.
- The draft Safety Plan shall provide evidence of the Tenderer's planning regarding the following aspects of safety and include at least the following headings:
 - Safety precautions for surveys
 - Safety procedures during execution of the surveys
 - Emergency procedures in cases of incidents
 - Compliance with OHSA as relevant

The Employer and/or Employer's agent will assess the Total Contract Quality Plan (including draft Safety Plan) and comment to the successful tenderers on the acceptability of the plan and any shortcomings. The draft plan must then be updated to the satisfaction of the Employer before the Service Provider commences any surveys.



T2.3 PRO FORMA FORMS TO BE COMPLETED BY SUCCESSFUL TENDERER



T2.3U. FORM OF GUARANTEE

Contract No:

WHEREAS **The Province of the Eastern Cape Department of Transport** (hereinafter referred to as the Employer") entered into, a Contract with:

.....
 (hereinafter called "the Contactor") on the day of20,
 for**(Give detailed project name)**

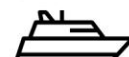
AND WHEREAS it is provided by such Contract that the Tenderer shall provide the Employer with security by way of a guarantee for the due and faithful fulfillment of such Contract by the Tenderer;

AND WHEREAS has / have at the
 request of the Tenderer, agreed to give such guarantee;

NOW THEREFORE WE do hereby guarantee and bind ourselves jointly and severally as Guarantor and Co-principal Debtors to the Employer under renunciation of the benefits of division and excussion for the due and faithful performance by the Tenderer of all the terms and conditions of the said Contract, subject to the following conditions:

1. The Employer shall, without reference and / or notice to us, have complete liberty of action to act in any manner authorized and/or contemplated by the terms of the said Contract, and/or to agree to any modifications, variations, alterations, omissions or extensions of the completion date of the works under the said Contract, and that our rights under this guarantee shall in no way be prejudiced nor our liability hereunder be affected by reason of any steps which the Employer may take under such Contract, or of any modification, variation, alterations of the completion date which the Employer may make, give, concede or agree to under the said Contract.
2. This guarantee shall be limited to the payment of a sum of money.
3. The Employer shall be entitled, without reference to us, to release any guarantee held by it, and to give time to or compound or make any other arrangement with the Tenderer.
4. This guarantee shall remain in full force and effect until the issue of the Certificate of Completion in terms of the Contract, unless we are advised in writing by the Employer before the issue of the said Certificate of his intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid or liquidated.
5. Our total liability hereunder shall not exceed the Guaranteed Sum of

Rand (in words);
 R.....(in figures)
6. The Guarantor reserves the right to withdraw from this guarantee by depositing the Guaranteed Sum with the beneficiary, whereupon our liability hereunder shall cease.



7. We hereby choose our address for the serving of all notices for all purposes arising here from as

.....
.....

IN WITNESS WHEREOF this guarantee has been executed by us at
on this day of 20

Signature

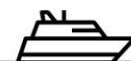
Duly authorized to sign on behalf of

Address
.....
.....

As witnesses:

1

2



T2.3V. PRO FORMA: NOTIFICATION FORM IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT 1993, CONSTRUCTION REGULATIONS 2014

[This form must be completed and forwarded, prior to commencement of work on site, by all Contractors that qualify in terms of Regulation 3 of the Construction Regulations 2014, to the office of the Department of Labour]

1. (a) Name and postal address of Tenderer:
-
- (b) Name of Tenderer's contact person:
- Telephone number:
2. Tenderer's compensation registration number:
3. (a) Name and postal address of client:
-
- (b) Name of client's contact person or agent:
- Telephone number:
4. (a) Name and postal address of designer(s) for the project:
-
- (b) Name of designer's contact person:
- Telephone number:
5. Name of Tenderer's construction supervisor on site appointed in terms of Regulation 6(1): Telephone number:
6. Name/s of Tenderer's subordinate supervisors on site appointed in terms of regulation 6(2).
.....
7. Exact physical address of the construction site or site office:
-
8. Nature of the construction work:
-
9. Expected commencement date:
10. Expected completion date:
11. Estimated maximum number of persons on the construction site:
12. Planned number of sub-consultants on the construction site accountable to Tenderer:
13. Name(s) of sub-consultants already chosen:
-
-

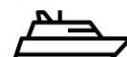
SIGNED BY:

TENDERER:

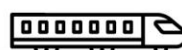
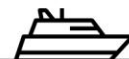
DATE:

CLIENT:

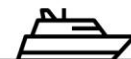
DATE:



THE CONTRACT



PART C1: AGREEMENTS & CONTRACT DATA



C1.1A FORM OF OFFER AND ACCEPTANCE: CONTRACT B**OFFER – AMATHOLE DISTRICT AND BUFFALO CITY METROPOLITAN**

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of: **PROFESSIONAL PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON PROVINCIAL ROADS: EASTERN CAPE**

The tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the tenderer offers to perform all of the obligations and liabilities of the service provider under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS (Contract Price)

.....

**Rand (In words);**

R.....(In figures)

This offer may be accepted by the Employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the tender data, whereupon the tenderer becomes the party named as the service provider in the conditions of contract identified in the contract data.

For the Tenderer:

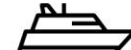
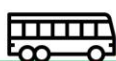
Signature

Name

Capacity

(Name and address of organization)

Name and signature of witness Date



ACCEPTANCE

By signing this part of this form of offer and acceptance, the employer identified below accepts the tenderer's offer. In consideration thereof, the employer shall pay the service provider the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the tenderer's offer shall form an agreement between the employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

- Part C1 Agreements and contract data, (which includes this agreement)
- Part C2 Pricing data
- Part C3 Scope of work

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C3 above.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the tender schedules as well as any changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule, which must be signed by the authorised representative(s) of both parties.

The tenderer shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the employer's agent (whose details are given in the contract data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document including the schedule of deviations (if any). Unless the tenderer (now service provider) within five working days of the date of such receipt notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

For the Employer:

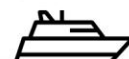
Signature

Name

Capacity

(Name and address of organization)

Name and signature of witness Date



SCHEDULE OF DEVIATIONS

Item	Deviation Details

By the duly authorised representatives signing this schedule of deviations, the employer and the tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the tender schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

For the Tenderer:

Signature

Name

Capacity

(Name and address of organization)

Name and signature of witness Date

For the Employer:

Signature

Name

Capacity

(Name and address of organization)

Name and signature of witness Date



C1.1C FORM OF OFFER AND ACCEPTANCE: CONTRACT C**OFFER – CHRIS HANI AND JOE GQABI DISTRICTS**

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of: **PROFESSIONAL PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON PROVINCIAL ROADS: EASTERN CAPE**

The tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the tenderer offers to perform all of the obligations and liabilities of the service provider under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS (Contract Price)

.....

**Rand (In words);**

R.....(In figures)

This offer may be accepted by the Employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the tender data, whereupon the tenderer becomes the party named as the service provider in the conditions of contract identified in the contract data.

For the Tenderer:

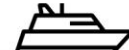
Signature

Name

Capacity

(Name and address of organization)

Name and signature of witness Date



ACCEPTANCE

By signing this part of this form of offer and acceptance, the employer identified below accepts the tenderer's offer. In consideration thereof, the employer shall pay the service provider the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the tenderer's offer shall form an agreement between the employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

- Part C1 Agreements and contract data, (which includes this agreement)
- Part C2 Pricing data
- Part C3 Scope of work

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C3 above.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the tender schedules as well as any changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule, which must be signed by the authorised representative(s) of both parties.

The tenderer shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the employer's agent (whose details are given in the contract data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document including the schedule of deviations (if any). Unless the tenderer (now service provider) within five working days of the date of such receipt notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

For the Employer:

Signature

Name

Capacity

(Name and address of organization)

Name and signature of witness Date



SCHEDULE OF DEVIATIONS

Item	Deviation Details

By the duly authorised representatives signing this schedule of deviations, the employer and the tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the tender schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

For the Tenderer:

Signature

Name

Capacity

(Name and address of organization)

Name and signature of witness Date

For the Employer:

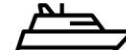
Signature

Name

Capacity

(Name and address of organization)

Name and signature of witness Date



C1.1D. FORM OF OFFER AND ACCEPTANCE: CONTRACT D**OFFER – SARAH BAARTMAN DISTRICT AND NELSON MANDELA BAY METROPOLITAN**

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of: **PROFESSIONAL PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON PROVINCIAL ROADS: EASTERN CAPE**

The tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the tenderer offers to perform all of the obligations and liabilities of the service provider under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS (Contract Price)

.....

.....

.....**Rand (In words);**

R.....(In figures)

This offer may be accepted by the Employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the tender data, whereupon the tenderer becomes the party named as the service provider in the conditions of contract identified in the contract data.

For the Tenderer:

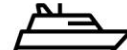
Signature

Name

Capacity

(Name and address of organization)

Name and signature of witness Date



ACCEPTANCE

By signing this part of this form of offer and acceptance, the employer identified below accepts the tenderer's offer. In consideration thereof, the employer shall pay the service provider the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the tenderer's offer shall form an agreement between the employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

- Part C1 Agreements and contract data, (which includes this agreement)
- Part C2 Pricing data
- Part C3 Scope of work

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C3 above.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the tender schedules as well as any changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule, which must be signed by the authorised representative(s) of both parties.

The tenderer shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the employer's agent (whose details are given in the contract data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document including the schedule of deviations (if any). Unless the tenderer (now service provider) within five working days of the date of such receipt notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

For the Employer:

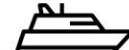
Signature

Name

Capacity

(Name and address of organization)

Name and signature of witness Date



SCHEDULE OF DEVIATIONS

Item	Deviation Details

By the duly authorised representatives signing this schedule of deviations, the employer and the tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the tender schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

For the Tenderer:

Signature

Name

Capacity

(Name and address of organization)

Name and signature of witness Date

For the Employer:

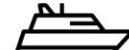
Signature

Name

Capacity

(Name and address of organization)

Name and signature of witness Date



C1.2. CONTRACT DATA

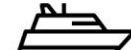
The Conditions of Contract are the *Standard Professional Services Contract (July 2009)* published by the Construction Industry Development Board.

Each item of data given below is cross referenced to the clause in the Conditions of Contract to which it mainly applies.

PART 1: DATA PROVIDED BY THE EMPLOYER

Part 1: Data provided by the Employer

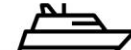
Clause	Description/Wording								
1.	<p><u>Deliverable</u></p> <p>Delete the heading "Deliverable" within this Clause and replace with: <u>"Deliverable / Assessment"</u></p>								
1.	<p><u>Employer</u></p> <p>The Employer is the Eastern Cape Department of Transport (ECDOT).</p>								
1.	<p><u>Key Persons</u></p> <p>Refer also to Clause 7 of the Conditions of Contract.</p>								
1.	<p><u>Period of Performance</u></p> <p>The Period of Performance is six (6) months.</p> <p>The Service Provider will be required to provide data to the employer on a monthly basis.</p>								
1.	<p><u>Contract(s)</u></p> <p>The three contracts(s) are for the PROFESSIONAL PROVISION OF PROFESSIONAL CONSULTING ENGINEERING SERVICES TO CONDUCT INSPECTION SURVEYS ON BRIDGES AND MAJOR CULVERTS ON PROVINCIAL ROADS: EASTERN CAPE, as follows:</p> <table border="1"> <thead> <tr> <th>Contract</th><th>District</th></tr> </thead> <tbody> <tr> <td>B</td><td>Amathole District and Buffalo City Metropolitan</td></tr> <tr> <td>C</td><td>Chris Hani and Joe Gqabi Districts</td></tr> <tr> <td>D</td><td>Sarah Baartman District and Nelson Mandela Bay Metropolitan</td></tr> </tbody> </table>	Contract	District	B	Amathole District and Buffalo City Metropolitan	C	Chris Hani and Joe Gqabi Districts	D	Sarah Baartman District and Nelson Mandela Bay Metropolitan
Contract	District								
B	Amathole District and Buffalo City Metropolitan								
C	Chris Hani and Joe Gqabi Districts								
D	Sarah Baartman District and Nelson Mandela Bay Metropolitan								



1.	<p><u>Start Date</u></p> <p>The Start Date is when the Agreement comes into effect (Refer Form of Offer and Acceptance).</p>
1.	<p><u>Services</u></p> <p>Add the following to this Clause.</p> <p>“Services shall be deemed to include each and every separate Deliverable / Assessment.”</p>
1.	<p>Add the following new definition to Clause 1:</p> <p><u>“Conditions of Contract</u></p> <p>The General Conditions of Contract as amended in the Contract Data.”</p>
3.4.1	<p>The authorised and designated representative of the Employer is:</p> <p>Engineering Advice and Services (Pty) Ltd Physical Address: 73 Heugh Road Walmer Gqeberha (port Elizabeth)</p> <p>Postal Address: PO Box 13867 Humewood 6013</p> <p>Contact Person: Mr Drikus Bester Tel: +27 041 581 2421 Fax: +27 086 6839899 Electronic mail: drikusb@easpe.co.za</p>
3.5	The location for performance of the Project is the Eastern Cape Province.
3.6	The Service Provider may not release public or media statements or publish material related to the Services or Project under any circumstances.
3.12	The penalty payable is R500.00 per day subject to a maximum amount of R25 000.00 for late submission of key reports.
3.15	The Programme shall be submitted within 14 calendar days of the award of the Contract.
4.3.1 (a)	The Employer will provide letters of introduction for approved staff of the Service Provider.



5.4.1	<p>The Service Provider is required to provide the Service with all reasonable care, diligence and skill in accordance with generally accepted professional techniques and standards.</p> <p>The Service Provider is required to provided the following insurances:</p> <ul style="list-style-type: none"> a) Insurance against Professional Indemnity Cover is: R 5 million (minimum) Period of cover: From the Start Date up to one (1) year after the completion of the Contract b) Insurance against General Public Liability Cover is: R 10 million Period of cover: From the Start Date up to the completion of the Contract c) Third Party Liability Cover is: R10 million Period of cover: From the Start Date up to the completion of the Contract
5.5	<p>The Service Provider is required to obtain the Employer's prior approval in writing before taking / effecting any of the following actions:</p> <ul style="list-style-type: none"> a) Appointing / utilising any other authorised and designated representative not listed and approved of by name in the Contract (Refer also Clause 5.3). b) Appointing / utilising any other Key Persons not listed and approved of by name in terms of the Contract. (Refer also T2.2.S: Personnel Schedule). c) Appointing / utilising any person on this Contract as a Bridge Inspector or a Major Culvert Inspector who has not attended and successfully completed the Testing and Calibration Session. d) Appointing / utilising Sub-consultants for the performance of any part of the Service. e) Expending any Provisional Sum stated in the Contract. f) Over-expenditure on the Contract. g) Changing / amending the Scope of Work. h) Making statements to the media regarding the Project. i) Using any of the Employer's or his representative's data capture software on other projects not related to this Contract. j) Selling the Employer's or his representative's data capture software.
7.1.2	<p>Only tenderers who have Key Persons, as listed below, as well as in the Tender Data are required to perform submit tenders.</p> <p>The Structures Project Manager shall:</p>



- be accredited with the Committee of Transport Officials (COTO) as a Bridge Inspector or as a Senior Bridge Inspector, having at least 10 years COTO/SANRAL accreditation experience in TMH19 visual inspection of bridges and major culverts.
- be registered as a Professional Engineer under the Engineering Profession Act (Act 46 of 2000), or be registered as a Professional Technologist under the Engineering Profession Act (Act 46 of 2000),
- be allowed to be proposed as a Bridge Inspector, having completed at least 50 TMH19 bridge inspections since COTO accreditation, with this experience being gained over the past 5 years,
- be in the permanent employ of the tenderer and,
- be available to execute the required duties and responsibilities on the Contract tendered for should the tenderer's offer be accepted.

A **minimum** of at least **four** suitably experienced and qualified Bridge and Major Culvert Inspectors and who will be available for the execution and completion of the contract tendered for, are eligible to submit tenders. The Bridge and Major Culvert Inspectors shall consist of at least **two Major Culvert Inspectors** and **two Bridge Inspectors**.

Each Bridge Inspector and Major Culvert Inspector so proposed shall be required to comply with and meet the following criteria and specific conditions.

The Major Culvert Inspectors shall:

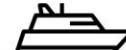
- be a COTO accredited Major Culvert Inspector, having completed at least 50 TMH19 major culvert inspections since COTO accreditation, with this experience being gained over the past 5 years,
- be a qualified civil engineering technician, technologist or engineer,
- be required to successfully complete and pass the employer's Compulsory "Testing and Calibration Session" with a minimum score of 85%,
- be allowed to conduct inspection surveys on major culverts **only**,
- be in the permanent employ of the tenderer or contractually committed to the tenderer should the tenderer win the tender and be available for the execution of the Contract tendered for and,
- be available to execute the required duties and responsibilities on the Contract tendered for, should the tenderer's offer be accepted.

The Bridge Inspectors shall:

- be a COTO accredited Bridge Inspector, having completed at least 50 TMH19 bridge inspections since COTO accreditation, with this experience being gained over the past 5 years, or be a COTO accredited Senior Bridge Inspector,
- be registered as a Professional Engineer under the Engineering Profession Act (Act 46 of 2000), or be registered as a Professional Technologist under the Engineering Profession Act (Act 46 of 2000),
- be required to successfully complete and pass the employer's Compulsory "Testing and Calibration Session" with a minimum score of 85%,
- be allowed to conduct inspection surveys on bridges **and** major culverts,
- be in the permanent employ of the tenderer or contractually committed to the tenderer should the tenderer win the tender and be available for the execution of the Contract tendered for and,
- be available to execute the required duties and responsibilities on the Contract tendered for should the tenderer's offer be accepted.



	Tenderers shall provide proof of the Key Persons' experience in a <u>detailed and project specific</u> Curricula Vitae, supported by the required certified copies of professional registration, COTO accreditation and qualifications for each contract tendered for.
8.1	The Service Provider is to commence the performance of the Services within 7 days of date that the Contract becomes effective.
8.2.1	The Contract shall be considered to be concluded annually when the Service Provider has completed all Deliverables in accordance with the Scope of Work annually.
8.4.3 (c)	The period of suspension is not to exceed 12 months.
9.1	Copyright of documents prepared for the Project shall be vested with the Employer.
12.1	Interim settlement of disputes is to be by mediation.
12.4	Final settlement is by arbitration.
12.2.1	In the event that the parties fail to agree on a mediator, the mediator is nominated by Consulting Engineers South Africa.
12.4.2	In the event that the parties fail to agree on an arbitrator, the arbitrator is nominated by Consulting Engineers South Africa.
14	Remuneration and reimbursement of the Service Provider will be on the following basis: Monthly submission of fee claims, with supporting documentation for time spent and disbursements.



C1.3. ADJUDICATOR'S AGREEMENT

This agreement is made on the day ofbetween:

..... (name of company / organisation)

of

..... (address)

and (name of company / organisation)

of

..... (address)

(the Parties)

and (name)

of

..... (address)

(the Adjudicator).

Disputes or differences may arise/have arisen* between the Parties under a Contract dated

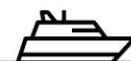
..... and known as

and these disputes or differences shall be / have been* referred to adjudication in accordance with the CIDB Adjudication Procedure, (hereinafter called "the Procedure") and the Adjudicator may be or has been requested to act.

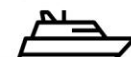
* Delete as necessary

IT IS NOW AGREED as follows:

- 1 The rights and obligations of the Adjudicator and the Parties shall be as set out in the Procedure.
- 2 The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance with the Procedure.
- 3 The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses in accordance with the Procedure as set out in the Contract Data.
- 4 The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and shall endeavour to ensure that anyone acting on their behalf or through them will do likewise, save with the consent of the other Parties which consent shall not be unreasonably refused.
- 5 The Adjudicator shall inform the Parties if he intends to destroy the documents which have been sent to him in relation to the adjudication and he shall retain documents for a further period at the request of either Party.



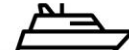
SIGNED by:	SIGNED by:	SIGNED by:
Name:	Name:	Name:
who warrants that he / she is duly authorised to sign for and on behalf of the first Party in the presence of	who warrants that he / she is duly authorised to sign for and behalf of the second Party in the presence of	the Adjudicator in the presence of
Witness:		
Name:		
Address:		
Date:		



Contract Data

1	The Adjudicator shall be paid at the hourly rate of R..... in respect of all time spent upon, or in connection with, the adjudication including time spent travelling.
2	The Adjudicator shall be reimbursed in respect of all disbursements properly made including, but not restricted to: (a) Printing, reproduction and purchase of documents, drawings, maps, records and photographs. (b) Telegrams, telex, faxes, and telephone calls. (c) Postage and similar delivery charges. (d) Travelling, hotel expenses and other similar disbursements. (e) Room charges. (f) Charges for legal or technical advice obtained in accordance with the Procedure.
3	The Adjudicator shall be paid an appointment fee of R..... This fee shall become payable in equal amounts by each Party within 14 days of the appointment of the Adjudicator, subject to an Invoice being provided. This fee will be deducted from the final statement of any sums which shall become payable under item 1 and/or item 2 of the Contract Data. If the final statement is less than the appointment fee the balance shall be refunded to the Parties.
4	The Adjudicator is/is not* currently registered for VAT.
5	Where the Adjudicator is registered for VAT it shall be charged additionally in accordance with the rates current at the date of invoice.
6	All payments, other than the appointment fee (item 3) shall become due 7 days after receipt of invoice, thereafter interest shall be payable at 5% per annum above the Reserve Bank base rate for every day the amount remains outstanding.

* Delete as necessary



C1.4. AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993) AS AMENDED

THIS AGREEMENT made at

on this the day of in the year between THE

DEPARTMENT OF TRANSPORT, Directorate Planning and Design (hereinafter

called "the Employer") of the one part, herein represented by

in his capacity as and delegate of the Employer in

terms of the Employer's standard powers of delegation pursuant to the provisions of Act No 7 of 1998,

and

(hereinafter called "the Mandatory") of the other part, herein represented by

in his capacity as and being duly authorised by

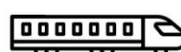
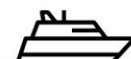
virtue of a resolution appended hereto as Annexure A;

WHEREAS the Employer is desirous that certain works be done, viz

.....
and has accepted a Tender by the Mandatory for the execution of such works and whereas the Employer and the Mandatory have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Mandatory with the provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993);

NOW THEREFORE THIS AGREEMENT WITNESSED AS FOLLOWS:

1. The Mandatory shall execute the work in accordance with the Contract Documents pertaining to this contract.
2. This Agreement shall hold good from its Commencement Date, which shall be the date of a written notice from the Employer or Engineer requiring him to commence the execution of the Works, to either -
 - (a) The date of the Final Certificate issued in terms of Clause 14 of the CIDB General Conditions of Contract (as contained in the "Standard Professional Services Contract", September 2005) (hereinafter referred to as "the GCC"), as contained in C1.2 of the Contract Documents pertaining to this Contract, or
 - (b) The date of termination of the Contract in terms of Clauses 8.4 of the GCC.



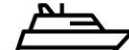
3. The Mandatory declares himself to be conversant with the following:
- (a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993) as amended by the OHS Amendment Act No 181 of 1993, hereinafter referred to as "The Act", with special reference to the following Sections of The Act:
 - (i) Section 8: General duties of Employers to their employees
 - (ii) Section 9: General duties of Employers and self-employed persons to persons other than employees
 - (iii) Section 37: Acts or omissions by employees or mandatories
 - (iv) Sub-section 37(2) relating to the purpose and meaning of this Agreement
 - (v) Other safety regulations, as applicable.
 - (b) The procedures and safety rules of the Employer as pertaining to the Mandatory and to all his sub-consultants.
4. The Mandatory is responsible for the compliance with the Act by all his sub-consultants, whether or not selected and/or approved by the Employer.
- The Mandatory warrants that all his and his sub-contractors' employees are covered in terms of the Compensation for Occupational Injuries and Diseases Act 1993 which cover shall remain in force whilst any such employees are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.
5. The Mandatory undertakes to ensure that he and/or sub-consultants and/or their respective employees will at all times comply with the following conditions:
- a) The Mandatory shall assume the responsibility in terms of Section 16.1 of the Occupational Health and Safety Act. The Mandatory shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Mandatory obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.
 - b) All incidents referred to in the Occupational Health and Safety Act shall be reported by the Mandatory to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.
 - c) The Employer hereby obtains an interest in the issue of any formal enquiry conducted in terms of section 32 of the Occupational Health and Safety Act into any incident involving the Mandatory and/or his employees and/or his sub-contractors.

In witness thereof the parties hereto have set their signatures hereon in the presence of the subscribing witnesses:

SIGNED FOR AND ON BEHALF OF THE EMPLOYER:

Witnesses: 1. 2.

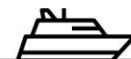
Names (in capitals): 1. 2.



SIGNED FOR AND ON BEHALF OF THE MANDATORY:

Witnesses: 1. 2.

Names (in capitals): 1. 2.



ANNEXURE A**CERTIFICATE OF AUTHORITY FOR SIGNATORY TO AGREEMENT IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)**

The signatory for the company that is the Service Provider in terms of the above-mentioned Contract and the Mandatory in terms of the above-mentioned Act shall confirm his or her authority thereto by attaching to this page a duly signed and dated copy of the relevant resolution of the board of directors.

An example is given below:

"By resolution of the board of directors passed at a meeting held on 202.....,

Mr/Ms whose signature

appears below, has been duly authorised to sign the AGREEMENT IN TERMS OF THE

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT 85 OF 1993) on behalf of

SIGNED ON BEHALF OF THE COMPANY:

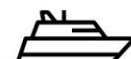
IN HIS/HER CAPACITY AS:

DATE:

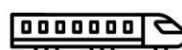
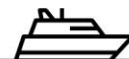
SIGNATURE OF SIGNATORY:

WITNESS 1: WITNESS 2:

NAME (in capitals): NAME (in capitals):



PART C2: PRICING DATA



PART C2.1: PRICING INSTRUCTIONS

Pre-ambles to Pricing Schedule

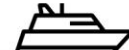
- The following words shall have the meanings hereby assigned to them:

Unit:	The unit of measurement for each activity / item of work for the services as defined in the Scope of Work
Quantity:	The number of units of work for each item of the services
Rate:	The payment per unit of work at which the Tenderer tenders to do the work for the services
Amount:	The product of the quantity and the rate tendered for an activity / item
Lump sum:	An amount tendered for an activity / item, the extent of which is described in the Pricing Schedule, the Scope of Work or elsewhere, but of which the quantity of work for the service is not measured in units.
Rate only:	An amount per unit to be entered by the tenderer for execution of the specific work for the services. No quantity is provided for this item, which may or may not be used by the Employer to extend the work to be done under the contract.

- The quantities set out in the Pricing Schedule are approximate quantities. The quantities of work accepted and certified for payment for the services, and **not** the quantities given in the Pricing Schedule, will be used to determine payments to the service provider.

The validity of the Contract shall in no way be affected by differences between the quantities in the Pricing Schedule and the quantities finally certified for payment. Work for the services will be valued at the rates or lump sums tendered, subject to the provisions of paragraphs 8 and 9 of this section.

- The tendered rates are all-inclusive and covers the execution of the activities as listed, including all accommodation, travelling expenses, all mandatory taxes and levies (excluding VAT), all liaison, insurance against damage, compensation for loss as well as any other possible expenses which have not been specifically mentioned, but which may be related to the execution of the work for the services. Value added tax (VAT) shall be excluded from the rates and prices and provided for as the total VAT on the cost of the Services in the Pricing Schedule.
- The tendered Lump Sum rates are all-inclusive and cover the execution of the activities as listed. These rates should include all work required to execute the activities, all accommodation, travelling expenses, all mandatory taxes and levies (excluding VAT), all liaison, attendance of all meetings, as well as any other possible expenses and disbursements which have not been specifically mentioned, but which may be related to the execution of the work for the services. Value added tax (VAT) shall be excluded from the rates and prices and provided for as the total VAT on the cost of the Services in the Summary of the Pricing Schedule.



5. The Tenderer shall fill in a rate or a lump sum for each activity / item where this is provided for. The Tenderer shall also fill in a rate against the activities / items where the words "Rate only" appear in the amount column. Although no work is foreseen under these activities / items, and no quantities are consequently given in the quantity column, the tendered rates shall apply should work under these items actually be required.

If the Tenderer has tendered a rate but omitted the amount, or vice versa, the missing amount or rate will, if possible, be determined in conjunction with the Tenderer from the available data, and the Tenderer must confirm his acceptance of these amounts and rates.

If the Tenderer groups a number of items together and tenders one lump sum for such group of items, this single tendered lump sum shall apply to that group of items and not to each individual item, or, should he indicate against any item that full compensation for such item has been included in another item, the rate for the item included in another item shall be deemed nil.

The tendered lump sums and rates shall be valid irrespective of any change in the quantities during execution of the Contract.

6. The services executed are being measured for payment in accordance with the methods described in the Contract Documents under the various payment items, notwithstanding any custom to the contrary.
7. The short descriptions of the payment items in the Pricing Schedule are given to identify the items and not to provide specific details. Reference shall inter alia be made to the Drawings, Scope of Work, Conditions of Contract and Special Conditions of Contract (if any) for more detailed information regarding the extent of the work entailed under each item.
8. Subject to the conditions stated in paragraph 9 below, the rates and lump sums filled in by the Tenderer in the Pricing Schedule shall be final and binding with regard to submitting the Tender, and may not be adjusted should there be any mistakes in the extensions thereof and in the total sums appearing in the Tender. Should there be discrepancies between the Tender Sum and the correctly extended and totalled Pricing Schedule, the rates will be deemed correct, and the Employer will have the right to make such adjustments to the Tender Sum as he deems necessary to reconcile the total of the Pricing Schedule with the Tender Sum.

In such an event the Tenderer will be consulted but, failing agreement between the parties, the decision of the Employer will be final and binding. Adjustment of the Tender Sum will take place only after acceptance of the Tender, but prior to the signing of the Contract. In their own interests Tenderers should make doubly sure of the correctness of their tendered rates, the extensions and the Tender Sum.

9. A Tender may be rejected if the unit rates or lump sums for some of the activities / items in the Pricing Schedule are in the opinion of the Employer, unreasonable or out of proportion and if the Tenderer fails within a period of seven (7) days of having been notified in writing by the Employer to adjust the unit rates or lump sums for such activities / items to make such adjustments.
10. All rates and sums of money quoted in the Pricing Schedule shall be in Rands and whole Cents. Fractions of a cent shall be discarded.



C2.2 PRICING SCHEDULE**C2.2.1 Contract B: Amathole Districts and Buffalo City Metropolitan**

Item Number	Description	Unit	Quantity	Rate	Amount
C3.9.1	Testing and Calibration Workshop	Lump Sum	1		
C3.9.2	<u>Inventory and Inspection:</u>				-
(i)	Small Bridges	No	113		
(ii)	Medium Bridges	No	87		
(iii)	Large Bridges	No	24		
(iv)	Very Large Bridges	No	6		
(v)	Major Culverts	No	303		
C3.9.3	Specialised Equipment Hire	Provisional Sum	1	-	R 100 000-00
C3.9.4	Handling Charges on C3.9.3	%	R 100 000-00		
C3.9.5	<u>Time-Based Fees:</u>				-
(i)	Structures Project Manager	Hr	80		
(ii)	Bridge Inspector	Hr	80		
(iii)	Major Culvert Inspector	Hr	32		
C3.9.6	Occupational Health and Safety Compliance	Sum	1		
Subtotal A					
Add: Contingencies on Subtotal A above (Fixed Amount)					R 300 000-00
Subtotal B					
Add: 15% Value Added Tax on Subtotal B above					
OFFERED TOTAL OF PRICES (TO BE CARRIED OVER TO FORM OF OFFER – FORM C1.1b)					

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

Signed

Date

Name

Position

Tenderer



C2.2.2 Contract C: Chris Hani and Joe Gqabi Districts

Item Number	Description	Unit	Quantity	Rate	Amount
C3.9.1	Testing and Calibration Workshop	Lump Sum	1		
C3.9.2	<u>Inventory and Inspection:</u>				-
(i)	Small Bridges	No	95		
(ii)	Medium Bridges	No	211		
(iii)	Large Bridges	No	26		
(iv)	Very Large Bridges	No	1		
(v)	Major Culverts	No	577		
C3.9.3	Specialised Equipment Hire	Provisional Sum	1	-	R 100 000-00
C3.9.4	Handling Charges on C3.9.3	%	R 100 000-00		
C3.9.5	<u>Time-Based Fees:</u>				-
(i)	Structures Project Manager	Hr	80		
(ii)	Bridge Inspector	Hr	80		
(iii)	Major Culvert Inspector	Hr	32		
C3.9.6	Occupational Health and Safety Compliance	Sum	1		
Subtotal A					
Add: Contingencies on Subtotal A above (Fixed Amount)					R 300 000-00
Subtotal B					
Add: 15% Value Added Tax on Subtotal B above					
OFFERED TOTAL OF PRICES (TO BE CARRIED OVER TO FORM OF OFFER – FORM C1.1c)					

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

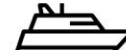
Signed

Date

Name

Position

Tenderer



C2.2.3 Contract D: Sarah Baartman District and Nelson Mandela Bay Metropolitan

Item Number	Description	Unit	Quantity	Rate	Amount
C3.9.1	Testing and Calibration Workshop	Lump Sum	1		
C3.9.2	<u>Inventory and Inspection:</u>				-
(i)	Small Bridges	No	82		
(ii)	Medium Bridges	No	82		
(iii)	Large Bridges	No	62		
(iv)	Very Large Bridges	No	36		
(v)	Major Culverts	No	448		
C3.9.3	Specialised Equipment Hire	Provisional Sum	1	-	R 100 000-00
C3.9.4	Handling Charges on C3.9.3	%	R 100 000-00		
C3.9.5	<u>Time-Based Fees:</u>				-
(i)	Structures Project Manager	Hr	80		
(ii)	Bridge Inspector	Hr	80		
(iii)	Major Culvert Inspector	Hr	32		
C3.9.6	Occupational Health and Safety Compliance	Sum	1		
Subtotal A					
Add: Contingencies on Subtotal A above (Fixed Amount)					R 300 000-00
Subtotal B					
Add: 15% Value Added Tax on Subtotal B above					
OFFERED TOTAL OF PRICES (TO BE CARRIED OVER TO FORM OF OFFER – FORM C1.1d)					

I, the undersigned, warrant that I am duly authorised to do so on behalf of the enterprise and confirm that the contents of this schedule are, to my personal knowledge and best belief, both true and correct.

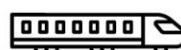
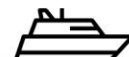
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Date

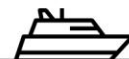
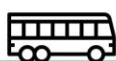
Name

Position

Tenderer



PART C3: SCOPE OF WORK



C3.1 EMPLOYERS OBJECTIVES

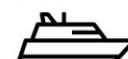
The Employer is responsible for the implementation and maintenance of a Road Asset Management System (RAMS) for all provincial road assets within the Eastern Cape.

According to the recommendations in the TMH19, the Employer is to conduct comprehensive visual inspections every 5 years on the bridges and major culverts on its network. The Employer therefore wishes to appoint suitable Service Providers to undertake inventories and inspections on the approximately 1019 bridges and 1505 major culverts along provincial paved and unpaved roads throughout the Eastern Cape, under 4 separate contracts.

C3.2 SITE LOCATION

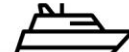
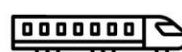
The project includes the inventory and inspection of bridges and major culverts along provincial roads throughout the Eastern Cape. The location of the structures to be inspected are indicated on the drawings attached as Appendix B and the total numbers, grouped per District / Metropolitan and Local Municipal area are provided in the table below. A schedule of bridges is attached as Appendix C, indicating the total length of each bridge. For the purpose of this contract, a structure is classified as a Bridge or a Major Culvert in terms of the criteria as stipulated in the latest TMH19.

District/Metropolitan	Local Municipal Area (LMA)	Estimated Quantities		
		Bridges	Major Culverts	Total
Amathole	Amahlathi	39	68	107
	Great Kei	12	23	35
	Mbhashe	21	31	52
	Mnquma	16	25	41
	Ngqushwa	16	31	47
	Raymond Mhlaba	45	63	108
	DM Total	149	241	390



District/Metropolitan	Local Municipal Area (LMA)	Estimated Quantities		
		Bridges	Major Culverts	Total
Chris Hani	Dr AB Xuma	29	35	64
	Emalahleni	11	19	30
	Enoch Mgijima	75	148	223
	Intsika Yethu	22	36	58
	Inxuba Yethemba	44	51	95
	Sakhisizwe	13	12	25
	DM Total	194	301	495
Joe Gqabi	Elundini	29	60	89
	Senqu	53	130	183
	Walter Sisulu	56	86	142
	DM Total	138	276	414
Sarah Baartman	Blue Crane Route	50	116	166
	Dr Beyers Naude	50	161	211
	Kouga	27	23	50
	Kou-Kamma	9	37	46
	Makana	21	64	85
	Ndlambe	7	5	12
	Sundays River Valley	14	28	42
	DM Total	178	434	612

District/Metropolitan	Local Municipal Area (LMA)	Estimated Quantities		
		Bridges	Major Culverts	Total
Buffalo City Metropolitan	Metropolitan Total	81	62	143
Nelson Mandela Bay Metropolitan	Metropolitan Total	84	14	98
Total		1019	1505	2524



C3.3 DESCRIPTION OF THE WORKS

The Works will comprise of the following key activities:

C3.3.1 TESTING AND CALIBRATION WORKSHOP

A testing and calibration workshop will be held at the offices of the Employer in King Williams Town (or East London). The Employer will invite all Service Provider's bridge inspectors and major culvert inspectors that have been provisionally approved, based on the pre-qualification criteria stated in the Tender Data, to attend the session.

The testing and calibration workshop will extend over a period of two full days. Seeing as the visual condition inspections and inventories will be undertaken in accordance with the procedures of the latest TMH19 (Manual for the Visual Assessment of Road Structures) and CSIR STRUMAN Bridge Management System, the pre-qualified bridge inspectors and major culvert inspectors will be tested on their knowledge of the inventory and inspection procedures. The required pass / calibration rate will be eighty-five percent (85%). Only COTO accredited Bridge Inspectors and Major Culvert Inspectors who pass the theoretical test will be allowed to perform inspections.

C3.3.2 INVENTORY AND INSPECTIONS

Inventory and inspection surveys are to be undertaken in accordance with the latest TMH19 document on the bridges and major culverts as listed under C3.2 above. Any other structures that are inspected will not be paid.

This component of the works will include the following activities:

- Fieldwork

The Employer will make available the following information to the Service Provider after successful completion of the testing and calibration workshop:

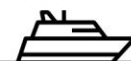
- Maps indicating the location and unique identification number of all structures to be inspected and inventoried,
- Standard inventory and visual inspection forms for bridges and major culverts; Examples of these forms are attached under **Appendix A**, and
- Data capture software/interface.

Inventory data shall be recorded during field inspections, with the inventory data being completed in full. Data fields shaded in light grey (**Appendix A refers**) need not to be completed when capturing inventory data during field inspections. Specific inventory photographs shall be taken, and GPS (WGS 84) co-ordinates recorded.

Inspectors will rate structural and non-structural elements on a DER-U rating basis as contained in the latest TMH19 documents. Inspectors shall also identify defects and make recommendations on maintenance, repair and remedial measure requirements and associated costs. Photographs are to be taken of distresses and supported by sketches of the distresses and/or cracking patterns.

- Data Capture

The CSIR STRUMAN Bridge Management System must be used to capture all data from the fieldwork. No further data capturing or post-processing is required. It is a pre-requisite for the Tenderer to make use of this application.



- Quality Control

It is a pre-requisite that a high degree of accuracy be obtained for the visual inspections and data capturing. It is the responsibility of the Service Provider to undertake its own process control testing to ensure the required quality.

- Reporting

The Service Provider will be required to prepare regular progress reports and attend monthly progress meetings with the Employer for the duration of the contract.

The Service Provider is also required to submit a close-out report summarising the work completed and main findings.

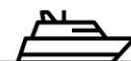
The following should be noted with regards to visual inspections and data capturing:

- Completed data is to be submitted on a monthly basis to substantiate progress and to allow for quality checking on an ongoing basis,
- All fieldwork must be undertaken in a manner that complies with the relevant safety legislation and regulations. The Employer accepts no responsibility for any eventuality that may occur during execution of the surveys. The Service Providers will perform the work entirely at their own risk and must ensure that suitable safety precautions are taken at all times. This includes the wearing of approved high visibility safety vests by their staff during the surveys, as well as equipping vehicles with appropriate signage and orange lights, and any other issues as stipulated in the Contract Data, and
- Should the Service Provider use any personnel for the visual surveys who have not attended the testing and calibration session, or personnel who attended the session but were not approved by the Employer in writing, the Contract will be terminated forthwith and the Service Provider will forfeit all further rights in terms of the Contract as from the date of such termination.

C3.4 USE OF SPECIALISED EQUIPMENT FOR INVENTORY AND / OR INSPECTIONS

Bridge and major culvert inspectors will be expected to provide ladders or similar equipment to access bridges and major culverts, where necessary. All components that can be inspected without the use of specialist equipment (such as “cherry-pickers”) will be deemed to be included under the activities listed under C3.3 above.

The Employer acknowledges that not all the components of certain bridges or major culverts may be accessible using conventional equipment. The Service Provider will be required to list the items / components of each bridge and major culverts that cannot be fully inspected and then present the requirements for achieving a comprehensive inspection to the Employer. The Employer will consider the feasibility of underrating more detailed inspections utilizing specialised equipment and, if warranted, will instruct the Service Provider to undertake these activities.



C3.5 QUALITY CONTROL

The Employer will undertake acceptance control testing as follows:

- Inspection Controls

Control inspections will be carried out by the Employer on random bridges and major culverts during or immediately after the period that the Service Provider undertakes its visual inspections. The control inspections will cover a representative sample of at least 5% of the total number of bridges and major culverts inspected.

For bridge and major culvert inspections, the calculated Condition Index (CI) of the Service Providers' inspection will be compared to the CI's of the control survey. The Service Provider's visual inspections will be considered acceptable if the CI's of more than 85% of the bridges correlate within a 10% variance of the control survey CI's. Furthermore, the individual distress ratings will be checked to establish that the correct distress is being identified and that the extent, degree and relevancy rating is being applied in terms of TMH19.

In addition to the condition inspection / assessment, the Employer will also assess the quality and completeness of the bridge and major culvert inventory inspections. The Service Provider's inventory inspections will be considered acceptable if:

- all the prerequisite minimum data fields have been completed in the format specified, and
- all the fields completed correlate within a 10% variance of the control inspection by the Employer.

Where inspection and inventory errors occur, the Service Provider shall, at his own cost, re-assess these structures within a time period considered reasonable by the Employer, to the satisfaction of the Employer.

The CI comparison will be conducted separately for each of the Service Provider's inspectors, per Local Municipal Area. Should the visual condition inspection and inventory information not meet the abovementioned quality test, the entire batch of visual inspection data (i.e. per inspector and Local Municipal Area) will be rejected.

- Data Capture Controls

The Service Provider will be required to ensure that all the required data fields are completed correctly. Data fields will be checked for completeness and formatting. Should the captured data not comply with the acceptance control check the Service Provider will be required to recapture it until such time as compliance is achieved.

C3.6 WORKS PROGRAMME

The Period of Performance will be **six months**. The following work programme is to be adhered to:

Activity	Commencement	Duration
Calibration and testing session	Within 14 days of Start Date	2 days
Visual inspection and data capture	Within 14 days after calibration and testing	5.5 months



C3.7 DELIVERABLES

The following is to be delivered in terms of the Contract:

- Supply of a suitable number and quality of Bridge Inspectors and / or Major Culvert Inspectors who attend and pass the testing and calibration session;
- Inventory and inspections on the identified bridges and major culverts, with each bridge and major culvert being assessed and the associated inventory and inspections forms completed correctly and in full, with the supporting photographs;
- Capturing and verification / validation of all data for each bridge and major culvert;
- Submission of all maps indicating any bridges and / or major culverts that could not be assessed, or other bridges and/or major culverts that were identified. This includes for spending time with the Employer's Agent to make the necessary spatial changes on the GIS;
- Attendance of monthly Project Progress meetings with the Employer; and
- Close-out report.



C3.8 OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS

C3.8.1 INTRODUCTION

a) List of abbreviations

ECDOT	Eastern Cape Department of Transport
HIRA	Hazard Identification Risk Assessment
OHSA	Occupational Health and Safety Act No. 85 of 1993 (as amended)
HSA	Health and Safety Agent
HSP	Health and Safety Plan
HSS	Health and Safety Specification
PPE	Personal Protective Equipment
SANS	South African National Standards (Authority)

b) Definitions

The definitions used will be those set out in the Regulation Gazette No 7721 of 18 July 2003 with the following additions:

Client: Means the Employer, as defined in the Conditions of Contract.

Hazard Identification and Risk Assessment (HIRA) and Risk Control: Means a documented plan, which identifies hazards, assesses the risks and details the control measures and safe working procedures which are to be used to mitigate and control the occurrence of hazards and risks during construction or operation phases.

Health and Safety Agent: Means any person who acts as a representative for the Client in managing the overall health and safety work as their responsible person.

Health and Safety Plan: Means a documented plan which answers to the Health and Safety Specification, including all the supporting documentation that indicate how the Principal Contractor or Contractor plans to manage Health and Safety for the duration of the Contract.

Principal Contractor: Means the Consultant appointed by the DRPW to undertake the visual assessment work as detailed in the tender.

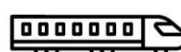
Regulation/s: Means the relevant regulation/s promulgated in terms of the Occupational Health and Safety Act, No. 85 of 1993.

Risk: Means the probability or likelihood that a hazard can result in injury or damage.

Site: Means the roads which are to be assessed by the Principal Contractor. Where there is no demarcated boundary it will include all adjacent areas and roads which are reasonably required for the activities of the Principal Contractor.

c) Key Role-players

Client's Representative: Head of Department, Province of the Eastern Cape Department of Transport



d) Key References

- Occupational Health and Safety Act No. 85 of 1993 and Regulations (as amended)
- Compensation for Injury and Occupational Diseases Act No. 100 of 1993 (as amended)
- Committee of Transport Officials (COTO)
- South African Roads Traffic Safety Manual (SARTSM) Chapter 2, Volume 13 of 1999
- Road Traffic Safety Act No. 93 of 1996 (as amended)

C3.8.2 PURPOSE OF THE HEALTH AND SAFETY SPECIFICATION (HSS)

The HSS is a performance specification to ensure that the Client and any bodies that enter into formal agreements with the Client (i.e. the Principal Contractor) achieve an acceptable level of OHS performance. The Client has a zero tolerance to non-compliance and the endangering of the lives of workers and the public. The purpose of the HSS is to assist Principal Contractors to achieve compliance with the Occupational Health and Safety Act and Regulations, in order to reduce incidents, injuries and occupational illnesses.

No advice, approval of any document required by the HSS (i.e. hazard identification and risk assessment, action plans) or any other form of communication from the Client shall be construed as an acceptance by the Client. Nor shall such communication relieve or absolve the Principal Contractor from any obligation or from achieving compliance with legal requirements. The Principal Contractor remains responsible for achieving the required performance levels and must sign an OHSA S.37.2 Mandatory Agreement with the Client. (Refer C1.3: Health and Safety Agreement).

The HSS highlights the aspects to be implemented over-and-above the minimum requirements of current legislation. Requirements may be changed should new risks or issues be identified during the course of the project.

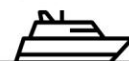
C3.8.3 IMPLEMENTATION OF THE HSS

The HSS forms an integral part of the Contract and Principal Contractors are required to make it an integral part of their Contracts with Contractors and Suppliers. No work may commence prior to receipt of written approval of the HSP by the HSA. Failure to do so will be noted as a serious offense, and will result in a fine, and/or stoppage of part of, or the whole works, with no extension of time or allowable claims.

This specification must be read in conjunction with the OHSA, its Regulations (as amended) and any other standards relating to work being done and ensure compliance thereto. The information relative to the Scope of the Work as detailed under Part 3 of the Contract (Refer C3.1 to C3.6), is to be taken into account when developing the Health and Safety Plan (HSP) and associated documentation.

Should there be a change in the Scope of Work, an amended HSS may be issued. In such an instance, the Principal Contractor will be required to resubmit an amended HSP for consideration by and approval of the HSA.

The HSA will conduct a monthly audit (or more frequently, if deemed necessary) of the Principal Contractor to monitor compliance with the HSP. Non-conformances will be noted, with fines being issued or work stopped, where appropriate.



C3.8.4 HSP FRAMEWORK

The Principal Contractor has to demonstrate to the Client that he has a suitable and sufficiently documented HSP as well as the necessary competencies, experience and resources to perform the work safely.

The current legislative requirements, SANS codes and any other standards that may guide practice are to be taken into consideration in the HSP. The HSP shall provide evidence of the Principal Contractor's planning regarding the following aspects of safety and include at least the following:

- Safety precautions for inspections / assessments
- Safety procedures during execution of the inspections / assessments
- Emergency procedures in cases of incidents and or accidents
- Compliance with OHSA as relevant

C3.8.5 PROJECT SPECIFIC REQUIREMENTS

a) Risk Management

The Client has identified the following risks, activities and considerations for which risk assessments, standard working procedures, management and control measures need to be addressed. (The Principal Contractor needs to supplement this with his own risk assessment, to ensure compliance with the OHSA):

- Working on or near roads, with particular emphasis on:
 - leaving and entering vehicles parked at the road side,
 - inspecting road surfaces,
 - travelling at slow speeds on public roads, and
 - conducting inspections whilst travelling
- Working in remote areas, with particular emphasis on:
 - access to sustenance, and
 - dehydration
- Neighbouring environmental influences such as bees, snakes, dogs, lightning, etc.

b) Emergency Procedures

As the site is remote and advanced medical support absent, attention to emergency planning and procedures is very important. Emergency procedure(s) shall include, but shall not be limited to, fire, accidents to employees, major incidents/accidents, etc. The Principal Contractor shall advise the HSA and all relevant authorities forthwith, of any emergencies, together with a record of action taken. This shall be confirmed in writing as soon as possible after the incident. A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc.) must be maintained and available to all personnel. These procedures shall form part of the HSP.



c) First Aid

Each assessor shall have completed at least a Level 1 accredited first aid course, prior to undertaking any visual inspections. Each assessor shall carry a first aid kit in their vehicle at all times.

The vehicle shall be equipped with an amber-coloured flashing light of the rotating parabolic reflector type, at least 150 mm high, with a minimum intensity of 100 W. It shall be visible at any angle from the vehicle. The warning light shall be switched on at all times and a sign reading "ROAD INSPECTION" with letters at least 150mm high shall be displayed when the vehicle is used on site.

d) Personal Protective Equipment and Clothing

The Principal Contractor shall ensure that all assessors are issued with and shall wear reflective vests at all times.

All inspection vehicles shall be fitted with at least one operational orange, rotating safety lamp and suitable warning signs, adequate for ensuring safety of the Assessors and all third parties.

C3.8.6 APPOINTMENT OF HEALTH AND SAFETY PERSONNEL

In terms of Section 16 of the OHSA, the Chief Executive Officer of the Principal Contractor may delegate, in writing, part or all of his powers to a suitable person on the site. For the purpose of this Contract, each assessor will be appointed as a Construction Supervisor (as defined in the OHSA). Each assessor (Construction Supervisor) will also assume the role of and perform the duties of a Health and Safety Officer and Traffic Safety Officer. The Principal Contractor shall ensure that the assessors are competent persons, capable of fulfilling this role.

The appointment of competent persons to supervise parts of the Works does not relieve the Principal Contractor from any of his responsibilities to comply with all requirements of the OHSA and Construction Regulations.

C3.8.7 HEALTH AND SAFETY FILE

The Principal Contractor, in terms of Construction Regulation 5(7), shall maintain a Health and Safety File in his office at all times. A copy thereof, shall be kept in each Assessor's vehicle for the duration of the contract. The Principal Contractor shall appoint a suitably qualified person to prepare the Health and Safety File and to keep it up to date for the duration of the contract.

The Health and Safety File shall include at least the following information:

- All Documents as required by the Act and Regulations
- All Health and Safety reports of inspections and audits
- All non-conformity reports
- All Hazard Identification and Risk Assessments carried out for the project.
- All method statements
- Minutes of all relevant meetings
- Incident records, including investigations and results
- Record of all appointments under the Regulations
- Medical certificates of fitness and a copy of drivers licenses
- Record of Competencies
- Training Records



The Health & Safety File shall, in electronic version, be handed over to the Client on completion of the contract.

It must contain all the documentation as set out above, or as instructed, as well as any handed to the Principal Contractor by any subcontractors.

C3.8.8 ARRANGEMENTS FOR MONITORING AND REVIEW

The Client, or the HSA, may conduct a Monthly Audit to audit compliance with Construction Regulation 4 (1) (d) to ensure that the Principal Contractor has implemented and is maintaining the agreed and approved HSP.

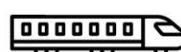
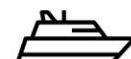
The Client reserves the right to conduct other ad hoc audits and inspections as deemed necessary. A representative of the Principal Contractor must accompany the Client, or his agent, on all audits and inspections and may conduct his own audit/inspection at the same time. Each party will, however, take responsibility for the results of his own audit/inspection results.

C3.8.9 NON-CONFORMANCES

At any time, should the Works, or part of the Works, be stopped in terms of Section 4 subsection (e) the Principal Contractor shall have no claim for extension of time or any other compensation.

Failure or refusal on the part of the contractor to take the necessary steps to ensure the safety of workers and the general public in accordance with these specifications or as required by statutory authorities or ordered by the HSA, shall be sufficient cause for the Client to apply penalties. A penalty shall be deducted for each and every occurrence of non-compliance with any of the requirements of the HSS. The following constitute examples of the types of non-conformances that will attract penalties:

- Minor – Penalty: R 50 / count
 - Not wearing PPE
 - Not completing vehicle check registers
- Medium – Penalty: R 500 / count and a non-conformance
 - Sub-contractors not audited
 - Working without training or the appropriate health and safety method statements
 - Legal non-conformances identified during the previous audit and not addressed within the agreed time frame
- Severe – Penalty: R 5 000 / count, a non-conformance and / or activity stoppage
 - Contractors working without Health and Safety Plan approval
 - Flashing light not working / not used or vehicle signage not displayed
 - Invalid Letters of Good Standing
 - Any breach of legal requirements



C3.9 MEASUREMENT AND PAYMENT

Item Number	Description	Unit
C3.9.1	Testing and Calibration Workshop	Lump Sum

The tendered rate will include full compensation for all activities and costs associated with the testing and calibration of all proposed bridge inspectors and major culvert inspectors, including the following:

- Attendance of the testing and calibration workshop by all proposed bridge inspectors and major culvert inspectors;
- Travel, accommodation and subsistence costs for attending the testing and calibration workshop and doing the calibration assessments; and
- Attendance and training in the use of the data capture module and loading of the software onto the appropriate hardware.

Payment will be made as a lump sum item, after the bridge inspectors and major culvert inspectors pass the testing and calibration workshop. Should a proposed bridge inspector or major culvert inspector fail the testing and calibration workshop, any costs incurred by the Employer or his representative in re-testing or testing additional personnel, may be deducted from payment due to the Service Provider.

Item Number	Description	Unit
C3.9.2	Inventory and Inspection	No

Separate items will be scheduled for bridge inventory and inspections, according to the length of the structures, with one item scheduled for major culvert inventory and inspections. The inventory and inspections items are as follows:

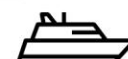
- Small Bridges: A bridge structure with an overall length of less than or equal to 20 meters;
- Medium Bridges: A bridge structure with an overall length exceeding 20 meters, but less than or equal to 50 meters;
- Large Bridges: A bridge structure with an overall length exceeding 50 meters, but less than or equal to 100 meters;
- Very Large Bridges: A bridge structure with an overall length exceeding 100 meters; and
- Major Culverts: A major culvert structure irrespective of the overall length of the structure.

The unit of measurement for the above inventory and inspection items will be the number of bridges and major culverts for which an inventory and condition inspection has been undertaken, the data captured, and submitted to the Employer in the prescribed format and accepted by the Employer.

Payment will not be made for those bridges or major culverts that were under construction or flooded at the time of the inspection and which were therefore not inspected.

The tendered rate will include full compensation for all activities and costs associated with undertaking the bridge and major culvert inventory, inspections and data capturing, including the following:

- Attendance of a briefing meeting with all Key Persons, including the Structures Project Manager at King Williams Town (or East London)
- Attendance of monthly progress meetings by the Structures Project Manager at King Williams Town (or East London)



- Printing of inventory and inspection forms and maps
- Inspections, inventories, safety, security and data capturing
- Travel, accommodation and subsistence costs
- Quality control by the Structures Project Manager
- Monthly Progress Reports, and
- Close-out Report

Payment will be paid in three instalments:

- 50% upon submission of the completed **inventory and inspection data** in hard copy format;
- 25% on submission of the data in the required electronic format, **including inventory and inspection photos**;
- 25% upon acceptance of the data by the Employer.

Item Number	Description	Unit
C3.9.3	Specialised Equipment Hire	Provisional Sum

The provisional sum is provided for the rental of specialised equipment for the bridge inspections, and the associated travel and disbursement costs. Payment will only be made for work / rentals that are pre-authorised by the Employer.

Item Number	Description	Unit
C3.9.4	Handling Charges on Specialised Equipment Hire	Percentage (%)

The handling charge shall include full compensation to the Service Provider for obtaining quotations, making arrangements for rental, payment on behalf of the Employer and all associated administrative costs.

Item Number	Description	Unit
C3.9.5	Time-based Services	Hour (Hr)

Separate items will be scheduled for the various categories of staff. The tendered rate will be for additional time-based services for the category of staff as instructed by the Employer. This is a provisional allowance, and payment will only be made for time pre-authorised by the Employer.

Item Number	Description	Unit
C3.9.6	Occupational Health and Safety Compliance	Sum

The tendered rate will include full compensation for all activities and costs associated with the Service Provider to comply with the relevant Occupational Health and Safety legislation, regulations and specifications.

This will include, but is not limited to the following:

- Preparing, maintaining, implementing and complying with the required statutory Safety Plans
- Provision and maintenance of the necessary safety equipment such as orange lights and signage for vehicles, safety vests, and the like
- Provision and maintenance of all the necessary insurances.

Payment will be made on a pro-rata basis per month, based on progress.



PART C4: APPENDICES

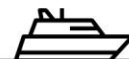
APPENDIX C4.1: ASSESSMENT FORMS (PRO-FORMA)

APPENDIX C4.2: LOCALITY PLAN / DRAWINGS

APPENDIX C4.3: SCHEDULE OF BRIDGES AND MAJOR CULVERTS



APPENDIX C4.1: ASSESSMENT FORMS (PRO-FORMA)



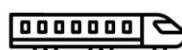
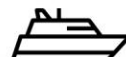
ROAD AUTHORITY		STRUCTURE TYPE		BRIDGE NUMBER		LOCATION SKETCH																									
		BRIDGE - GENERAL		BRIDGE NAME																											
INSPECTION INFORMATION																															
Inspection Type	Inspector Name		Firm	Date (dd/mm/yyyy)																											
GPS COORDINATES																															
Latitude (South)				Longitude (East)																											
DD	MM	SS.s	DD	MM	SS.s																										
VERTICAL CLEARANCES (road-over-road bridges only)																															
Position/ Span No																															
M in height (m)																															
LOCATION DETAIL																															
Road No.	Road km	Road Name		Feature Crossed	Feature Name/Road No.	Region/Depot																									
STRUCTURE INFORMATION																															
No. of Spans	Structure Orientation		Overall Length	Overall Width	Year Constructed	Bridge Type																									
INSPECTION RATINGS																															
INSPECTION ITEM	1. APPROACH EMBANKMENT			2. GUARDRAIL			3. WATERWAY			4. APPROACH EMB. PROT. WORKS			5. ABUTMENT FOUNDATIONS			6. ABUTMENTS			7. WING/ RETAINING WALLS			8. SURFACING			9. SUPER-STRUCT. DRAINAGE						
POSITION	D	E	R	D	E	R	D	E	R	D	E	R	D	E	R	D	E	R	D	E	R	D	E	R	D	E	R	D	E	R	
Abut																															
Abut																															
INSPECTION ITEM	10. KERBS/ SIDEWALKS			11. PARAPET/ HANDRAIL			21. MISC. ITEMS																								
	D	E	R	D	E	R	D	E	R																						
INSPECTION ITEM	12. PIER PROTECTION WORKS			13. PIER FOUNDATIONS			14. PIERS & COLUMNS			15. BEARINGS			16. SUPPORT DRAINAGE			17. EXPANSION JOINTS			INSPECTION ITEM	18. LONGITUDINAL MEMBER			19. TRANSVERSAL MEMBERS			20. DECK SLAB					
POSITION	D	E	R	D	E	R	D	E	R	D	E	R	D	E	R	D	E	R	POSITION	D	E	R	D	E	R	D	E	R	D	E	R
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Inspect or's assessment and further comments:

[illegible]

ROAD AUTHORITY		STRUCTURE TYPE		STRUCTURE NUMBER			
		BRIDGE		STRUCTURE NAME			
INVENTORY INFORMATION							
Inspector / Capturer Name		Firm		Date (dd/mm/yyyy)		INVENTORY	
SOURCE: Field <input type="checkbox"/> As Built Drawings <input type="checkbox"/> Design Drawings <input type="checkbox"/> Files <input type="checkbox"/>							
LOCATION DETAILS							
Route No.		Road No.		Road Name/ Route Description		Section	
Street						Town	
Region		District		Municipality		District Municipality	
Province							
Suburb		Ward		Depot			
COORDINATES							
Map Info							
Survey System				Elevation (m)			
Latitude (South)				Longitude (East)			
DD MM SS.s				DD MM SS.s			
Start				End			
Middle							
End							
LOCATION FEATURES							
Status		Ownership		Use			
Comments							
Orientation		App. Emb Orient.		Dir. River Flow			
Primary Feature Over/Under		Primary Feature Crossed		Primary Feature Name			
Primary Feature Road Number		Primary Feature Road Km					
Secondary Feature Over/Under		Secondary Feature Crossed		Secondary Feature Name			
Other Authority		Other Structure No.					



CONTRACT DETAILS

Design Engineers	Contractors	Contract Price	Escalated Cost	Total Cost (Design/Construct)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Construction Authority	Contract Number	Year Completed	Completion period (months)	Year Designed
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Construction Cost	Design Cost	Construction Period (months)		
<input type="text"/>	<input type="text"/>	<input type="text"/>		
Design Report Available	Location of Design Report	Construction Report Available	Location of Construction Report	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	

STRUCTURAL FEATURES

Classification			
<input type="text"/>			
No. of Spans	No. of Piers	No. of Abutments	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Facility Carried	Bridge Type	Bridge Description	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Deck Const. Method	Parapet/Handrails	Approach Slabs (Y/N/Unknown)	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Abutment Galleries (Y/N)	Abutment Walls (Y/N)		
<input type="text"/>	<input type="text"/>		
fcu Slabs (MPa)	fcu Beams (MPa)	fcu Piers (MPa)	fcu Abutments (Mpa)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
fcu Substructure (MPa)	fcu Foundations (MPa)	fcu Joint Noses (MPa)	fcu Parapets (Mpa)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

ARCH BRIDGE ONLY - STRUCTURAL FEATURES RELATED TO ARCHES

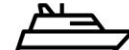
No. of Arches			
<input type="text"/>			
Arch Span	Springing Thickness	Crown Thickness	fcu Arches (Mpa)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

CABLE BRIDGE ONLY - STRUCTURAL FEATURES RELATED TO CABLES

No. of Cable Groups	No. of Pylons
<input type="text"/>	<input type="text"/>

DECK

Position	Type	Material	Deck Depth (m)			Span length (m)	Deck Soffit Profile
			Average	Min	Max		



BEARINGS

Position	Type	Fixity

EXPANSION JOINTS

Position	Type	Direction of Movement

PIERS

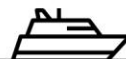
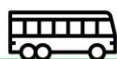
Position	Type	Material	Foundation Type	Founding Material	Hmax (m)	Dmax (m)

ABUTMENTS

Position	Type	Material	Foundation Type	Founding Material	Hmax (m)	Dmax (m)

WING / RETAINING WALLS

Position	Type	Material	Foundation Type	Founding Material	Hmax (m)	Dmax (m)



EMBANKMENT PROTECTION

Position	Type	Material	Thickness (m)	Slope (%)

CABLE BRIDGE ONLY**CABLE GROUPS**

Cable Group	No. of Cables in Group	Span Supported by Cable group

PYLON

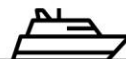
Pylon	Pier that is a Pylon

DIMENSIONS, GEOMETRY AND ROAD CLEARANCES

Overall Length (m)	Overall Width (m)	Kerb Width (m)	Maximum Height (m)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Balustrade Width (m)	<input type="text"/>		
Vertical Alignment	Horizontal Alignment	Camber/Crossfall	Angle of Skew (°)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Single/Dual C/way Over	<input type="text"/>		
Direction of Traffic	Carriageway 1	Carriageway 2	
	<input type="text"/>	<input type="text"/>	
Min Road Width (m)	<input type="text"/>	<input type="text"/>	
Approach Width (m)	<input type="text"/>	<input type="text"/>	
Height of Highest Pier/Abutment (m)	Longest Span (m)	Length of Spans (m)	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

DESIGN CHARACTERISTICS

Design Live Loading	Design Code(s)	Climate
<input type="text"/>	<input type="text"/>	<input type="text"/>
Temp Range (°C): From	Temp Range (°C): To	Temperature Gradient
<input type="text"/>	<input type="text"/>	<input type="text"/>
Percentage Overloading (%)	Wind Load (kN/m ²)	Natural Frequency (Hz)
<input type="text"/>	<input type="text"/>	<input type="text"/>
Checked for NB (units)	Checked for NC (units)	Load Checked (Y/N)
	<input type="text"/>	<input type="text"/>



HYDRAULIC DATA

Peak Disch. (HKFL) (m ³ /sec)	Design Discharge (m ³ /sec)	Design Flood Level (m above m.s.l.)
<input type="text"/>	<input type="text"/>	<input type="text"/>
Soffit Level (m above m.s.l.)	Clearance (Freeboard) (m)	
<input type="text"/>	<input type="text"/>	
Peak Year	Return Period (years)	Depth of Design Flow (m)
<input type="text"/>	<input type="text"/>	<input type="text"/>
Scour Protection	Risk of Scour	
<input type="text"/>	<input type="text"/>	
Design Scour Depth (m)	Ht above/below Soffit (m)	Catchment Area (km ²)
<input type="text"/>	<input type="text"/>	<input type="text"/>
Angle Between	Max Scour Depth (m)	
<input type="text"/>	<input type="text"/>	

DRAINAGE

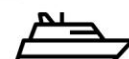
Support Drainage	Superstructure Drainage	Sub-surface Seepage Drains
<input type="text"/>	<input type="text"/>	<input type="text"/>

FACTORS INFLUENCING FIELD INSPECTION

Piers	Bearings	Box Girder
<input type="text"/>	<input type="text"/>	<input type="text"/>
Deck Soffit	Abutment Galleries	Traffic Volume
<input type="text"/>	<input type="text"/>	<input type="text"/>
Under Bridge Inspection Unit		
<input type="text"/>		
Effective Deck Area (m ²)	Availability of Drawings	Security Risk
<input type="text"/>	<input type="text"/>	<input type="text"/>
General Information		
<input type="text"/>		

SERVICES IN/ON/UNDER STRUCTURE

Service Type	Description	Location	Responsible Authority
Water Mains			
Sewers			
Stormwater Pipes			
Electricity Cables			
Communication Cables			
Spare Ducts			
Other			



MINIMUM HORIZONTAL CLEARANCES

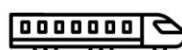
Date Recorded (dd:mm:yyyy)			Clearance (m)	Location Description

MINIMUM VERTICAL CLEARANCES

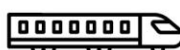
Date Recorded (dd:mm:yyyy)			Clearance (m)	Location Description

ROAD CONFIGURATION, TRAFFIC VOLUMES AND SURFACING

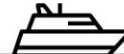
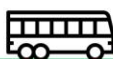
	ROAD OVER BRIDGE		ROAD UNDER BRIDGE
	Road On	Approach Road	
Class of Road			
No of Carriageways			
No of Lanes/Dimensions (m)			
Surfacing of Lanes			
No of Shoulders/Dimensions (m)			
Surfacing of Shoulders			
No of Sidewalks/Dimensions (m)			
Surfacing of Sidewalks			
Average Annual Daily Traffic (veh)			
No. of Heavy Vehicles (veh)			
Year ADT Recorded			
Peak Traffic AM			
Peak Traffic PM			
Year Peak Traffic Recorded			
Truck Factor (%)			
Detour Length (km)			
Minimum Class of Detour			
Metropolitan Significance			

ADDITIONAL REMARKS



[illegible]

ROAD AUTHORITY	STRUCTURE TYPE	STRUCTURE NUMBER	
	BRIDGE CELLULAR	STRUCTURE NAME	
INVENTORY INFORMATION			INVENTORY
Inspector / Capturer Name	Firm	Date (dd/mm/yyyy)	
SOURCE: Field <input type="checkbox"/> As Built Drawings <input type="checkbox"/> Design Drawings <input type="checkbox"/> Files <input type="checkbox"/>			
LOCATION DETAILS			
Route No.	Road No.	Road Name/ Route Description	Section
Street			Town
Region	District	Municipality	District Municipality
Province			
Suburb	Ward	Depot	
COORDINATES			
Map Info			
Survey System		Elevation (m)	
WGS84			
Latitude (South)		Longitude (East)	
DD	MM	SS.s	DD
Start			
Middle			
End			
LOCATION FEATURES			
Status	Ownership	Use	
Comments			
Orientation	App. Emb Orient.	Dir. River Flow	
Primary Feature Over/Under	Primary Feature Crossed	Primary Feature Name	
Primary Feature Road Number	Primary Feature Road Km		
Secondary Feature Over/Under	Secondary Feature Crossed	Secondary Feature Name	
Other Authority	Other Structure No.		



CONTRACT DETAILS

Design Engineers	Contractors	Contract Price	Escalated Cost	Total Cost (Design/Construct)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Construction Authority	Contract Number	Year Completed	Completion period (months)	Year Designed
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Construction Cost	Design Cost	Construction Period (months)		
<input type="text"/>	<input type="text"/>	<input type="text"/>		
Design Report Available	Location of Design Report	Construction Report Available	Location of Construction Report	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	

STRUCTURAL FEATURES

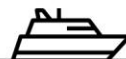
Classification			
<input type="text"/>			
No. of Cells			
<input type="text"/>			
Purpose of Culvert	Culvert Type	Culvert Description	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Parapet/Handrails	Culvert Road Slabs	Approach Slabs (Y/N/Unknown)	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
In/Outlet Walls	Causeway	Buried Structure (Y/N/Unknown/NA)	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Floor Slope (°)	Construction System	fcu Cells - Precast (MPa)	fcu Cells - Insitu (Mpa)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
fcu ApronSlab/CutWalls (MPa)	fcu Wing/Ret Walls (MPa)	fcu Road Slabs (MPa)	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

CELL

Position	Material		Foundation Type	Founding Material	Internal Diam. (s x h) (m)	
	Walls	Top Slab			Int. Width	Int. Height

APRON SLABS

Position	Material	Thickness (m)



INVERT SLABS

Position	Type	Material	Thickness (m)

CUT-OFF WALLS

Position	Material	Width (m)	Depth (m)

EMBANKMENT PROTECTION

Position	Material	Thickness (m)	Slope (%)

DISSIPATORS

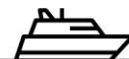
Position	Type	Material

WING/RETAINING WALLS

Position	Type	Material	Foundation Type	Founding Material	Hmax (m)	Slope (%)

DIMENSIONS, GEOMETRY AND ROAD CLEARANCES

Overall Length (m) <input type="text"/>	Overall Width (m) <input type="text"/>	Min Clear Width (m) <input type="text"/>	Overall Cell Length (m) <input type="text"/>
Vertical Alignment <input type="text"/>	Horizontal Alignment <input type="text"/>	Camber/Crossfall <input type="text"/>	Angle of Skew (°) <input type="text"/>
Max Fill Height (m) <input type="text"/>			
Slope of Invert Slab (%) <input type="text"/>	Min Vertical Clearance (m) <input type="text"/>	Max Cell Size - Width (m) <input type="text"/>	Max Cell Size - Height (m) <input type="text"/>
Max Depth of Fill Over (m) <input type="text"/>			
Single/Dual C/way Over <input type="text"/>			
Direction of Traffic <input type="text"/>	Carriageway 1 <input type="text"/>	Carriageway 2 <input type="text"/>	
Min Road Width (m) <input type="text"/>	<input type="text"/>	<input type="text"/>	
Approach Width (m) <input type="text"/>	<input type="text"/>	<input type="text"/>	



DESIGN CHARACTERISTICS

Design Live Loading

Design Code(s)

Climate

Warrant History

% Increase due to Overloading

HYDRAULIC DATACatchment Area (km²)

Design Return Period (years)

Design Discharge (m³/sec)

Design Flood Level (m above m.s.l.)

Clearance (Freeboard) (m)

Soffit Level (m above m.s.l.)

Peak Flood Level (m above m.s.l.)

Ht above/below Soffit (m)

Peak Discharge Year

Scour Protection

Risk of Scour

Max Scour Depth (m)

Design Scour Depth (m)

Angle Cell/River Flow (°)

Outlet Velocity (m/s)

DRAINAGE

Road Surface

Cell/s

Wing/Retaining Walls

Sub-surface Seepage Drains

FACTORS INFLUENCING FIELD INSPECTION

Access

Effective Cell Opening (m²)

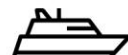
Availability of Drawings

Security Risk

General Information

SERVICES IN/ON/UNDER STRUCTURE

Service Type	Description	Location	Responsible Authority
Water Mains			
Sewers			
Stormwater Pipes			
Electricity Cables			
Communication Cables			
Spare Ducts			
Other			



MINIMUM HORIZONTAL CLEARANCES

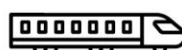
Date Recorded (dd:mm:yyyy)			Clearance (m)	Location Description

MINIMUM VERTICAL CLEARANCES

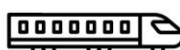
Date Recorded (dd:mm:yyyy)			Clearance (m)	Location Description

ROAD CONFIGURATION, TRAFFIC VOLUMES AND SURFACING

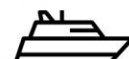
	ROAD OVER BRIDGE		ROAD UNDER BRIDGE
	Road On	Approach Road	
Class of Road			
No of Carriageways			
No of Lanes/Dimensions (m)			
Surfacing of Lanes			
No of Shoulders/Dimensions (m)			
Surfacing of Shoulders			
No of Sidewalks/Dimensions (m)			
Surfacing of Sidewalks			
Average Annual Daily Traffic (veh)			
No. of Heavy Vehicles (veh)			
Year ADT Recorded			
Peak Traffic AM			
Peak Traffic PM			
Year Peak Traffic Recorded			
Truck Factor (%)			
Detour Length (km)			
Minimum Class of Detour			
Metropolitan Significance			

ADDITIONAL REMARKS

[illegible]

[illegible]

ROAD AUTHORITY	STRUCTURE TYPE	STRUCTURE NUMBER	
	MAJOR CULVERT		
		STRUCTURE NAME	
INVENTORY INFORMATION			INVENTORY
Inspector / Capturer Name	Firm	Date (dd/mm/yyyy)	
SOURCE: Field <input type="checkbox"/> As Built Drawings <input type="checkbox"/> Design Drawings <input type="checkbox"/> Files <input type="checkbox"/>			
LOCATION DETAILS			
Route No.	Road No.	Road Km	RISFSA Class
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
District	Magisterial Region	Municipality	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
COORDINATES			
Map Info			
Survey System		Elevation (m)	
<input type="text"/>		<input type="text"/>	
1:50 000 TOPOGRAPHICAL MAP			
Map Name		Map Number	
<input type="text"/>		<input type="text"/>	
GIS/GPS Coordinates			
Latitude (South)			Longitude (East)
DD	MM	SS.s	DD MM SS.s
Start	<input type="text"/>	<input type="text"/>	<input type="text"/>
Middle	<input type="text"/>	<input type="text"/>	<input type="text"/>
End	<input type="text"/>	<input type="text"/>	<input type="text"/>
CLASSIFICATION			
Size Category		Asset Class	
<input type="text"/>		<input type="text"/>	
Facility Carried		Crossing Type	
<input type="text"/>		<input type="text"/>	
LOCATION FEATURES			
Status	Ownership	Use	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Comments			
<input type="text"/>			
Orientation	App. Emb Orient.	Dir. River Flow	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Primary Feature Over/Under	Primary Feature Crossed	Primary Feature Name	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Primary Feature Road Number	Primary Feature Road Km		
<input type="text"/>	<input type="text"/>		
Secondary Feature Over/Under	Secondary Feature Crossed	Secondary Feature Name	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Other Authority	Other Structure No.		
<input type="text"/>	<input type="text"/>		



CONTRACT DETAILS

Year Completed

Design Engineers

Contractors

Contract Price

Escalated Cost

Total Cost (Design/Construct)

Design Engineers

Contractors

Construction Authority

Contract Number

Year Completed

Completion period (months) Year Designed

Construction Cost

Design Cost

Constuction Period (months)

Design Report Available

Location of Design Report

Construction Report Available

Location of Construction Report

DIMENSIONS, GEOMETRY AND ROAD CLEARANCES

Overall Length (m)

Overall Width (m)

Min Clear Width (m)

Overall Cell Length (m)

Vertical Alignment

Horizontal Alignment

Camber/Crossfall

Angle of Skew (°)

Max Fill Height (m)

Slope of Invert Slab (%)

Min Vertical Clearance (m)

Max Cell Size - Width (m)

Max Cell Size - Height (m)

Max Depth of Fill Over (m)

Single/Dual C/way Over

Carriageway 1

Carriageway 2

Direction of Traffic

Min Road Width (m)

Approach Width (m)

STRUCTURAL FEATURES

No. of Cells

Purpose of Culvert

Culvert Type

Culvert Description

Parapet/Handrails

Culvert Road Slabs

Approach Slabs (Y/N/Unknown)

In/Outlet Walls

Causeway

Buried Structure (Y/N/Unknown/NA)

Floor Slope (°)

Construction System

fcu Cells - Precast (MPa)

fcu Cells - Insitu (Mpa)

fcu ApronSlb/CutWalls (MPa)

fcu Wing/Ret Walls (MPa)

fcu Road Slabs (MPa)



CELL

Position	Material		Foundation Type	Founding Material	Internal Diam. (s x h) (m)	
	Walls	Top Slab			Int. Width	Int. Height

APRON SLABS

Position	Material	Thickness (m)

INVERT SLABS

Position	Type	Material	Thickness (m)

CUT-OFF WALLS

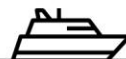
Position	Material	Width (m)	Depth (m)

EMBANKMENT PROTECTION

Position	Material	Thickness (m)	Slope (%)

DISSIPATORS

Position	Type	Material



WING/RETAINING WALLS

Position	Type	Material	Foundation Type	Founding Material	Hmax (m)	Dmax (m)

DESIGN CHARACTERISTICS

Design Live Loading <input type="text"/>	Design Code(s) <input type="text"/>	Climate <input type="text"/>
Warrant History <input type="text"/>	% Increase due to Overloading <input type="text"/>	

HYDRAULIC DATA

Catchment Area (km ²) <input type="text"/>	Design Return Period (years) <input type="text"/>	Design Discharge (m ³ /sec) <input type="text"/>
Design Flood Level (m above m.s.l.) <input type="text"/>	Clearance (Freeboard) (m) <input type="text"/>	
Soffit Level (m above m.s.l.) <input type="text"/>	Peak Flood Level (m above m.s.l.) <input type="text"/>	Ht above/below Soffit (m) <input type="text"/>
Peak Discharge Year <input type="text"/>	Scour Protection <input type="text"/>	
Risk of Scour <input type="text"/>	Max Scour Depth (m) <input type="text"/>	Design Scour Depth (m) <input type="text"/>
Angle Cell/River Flow (°) <input type="text"/>	Outlet Velocity (m/s) <input type="text"/>	

DRAINAGE

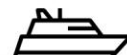
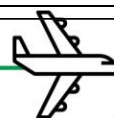
Road Surface <input type="text"/>	Cell/s <input type="text"/>	Wing/Retaining Walls <input type="text"/>	Sub-surface Seepage Drains <input type="text"/>
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FACTORS INFLUENCING FIELD INSPECTION

Access <input type="text"/>	Effective Cell Opening (m ²) <input type="text"/>	Availability of Drawings <input type="text"/>	Security Risk <input type="text"/>
General Information <input type="text"/>			

SERVICES IN/ON/UNDER STRUCTURE

Service Type	Description	Location	Responsible Authority
Water Mains			
Sewers			
Stormwater Pipes			
Electricity Cables			
Communication Cables			
Spare Ducts			
Other			



MINIMUM HORIZONTAL CLEARANCES

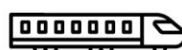
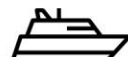
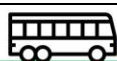
Date Recorded (dd:mm:yyyy)			Clearance (m)	Location Description

MINIMUM VERTICAL CLEARANCES

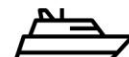
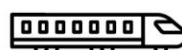
Date Recorded (dd:mm:yyyy)			Clearance (m)	Location Description

ROAD CONFIGURATION, TRAFFIC VOLUMES AND SURFACING

	ROAD OVER CULVERT		ROAD UNDER CULVERT
	Road On	Approach Road	
Class of Road	<input type="text"/>	<input type="text"/>	<input type="text"/>
No of Carriageways	<input type="text"/>	<input type="text"/>	<input type="text"/>
No of Lanes/Dimensions (m)	<input type="text"/>	<input type="text"/>	<input type="text"/>
Surfacing of Lanes	<input type="text"/>	<input type="text"/>	<input type="text"/>
No of Shoulders/Dimensions (m)	<input type="text"/>	<input type="text"/>	<input type="text"/>
Surfacing of Shoulders	<input type="text"/>	<input type="text"/>	<input type="text"/>
No of Sidewalks/Dimensions (m)	<input type="text"/>	<input type="text"/>	<input type="text"/>
Surfacing of Sidewalks	<input type="text"/>	<input type="text"/>	<input type="text"/>
Average Annual Daily Traffic (veh)	<input type="text"/>		<input type="text"/>
No. of Heavy Vehicles (veh)	<input type="text"/>		<input type="text"/>
Year ADT Recorded	<input type="text"/>		<input type="text"/>
Peak Traffic AM	<input type="text"/>		<input type="text"/>
Peak Traffic PM	<input type="text"/>		<input type="text"/>
Year Peak Traffic Recorded	<input type="text"/>		<input type="text"/>
Truck Factor (%)	<input type="text"/>		<input type="text"/>
Detour Length (km)	<input type="text"/>		<input type="text"/>
Minimum Class of Detour	<input type="text"/>		<input type="text"/>
Metropolitan Significance	<input type="text"/>		<input type="text"/>

ADDITIONAL REMARKS

APPENDIX C4.2: LOCALITY PLAN / DRAWINGS



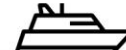
LIST OF DRAWINGS

Drawing Number	Drawing Title / Description
Appendix C4.2.3	Project B: Amathole DM and Buffalo City Metropolitan
Appendix C4.2.4	Project B: Amathole DM and Buffalo City Metropolitan
Appendix C4.2.5	Project C: Chris Hani and Joe Gqabi DM
Appendix C4.2.6	Project C: Chris Hani and Joe Gqabi DM
Appendix C4.2.7	Project D: Sarah Baartman DM and Nelson Mandela Bay Metropolitan
Appendix C4.2.8	Project D: Sarah Baartman DM and Nelson Mandela Bay Metropolitan

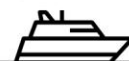
Note:

Total Number of Drawings = Eight (8).

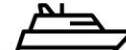
All the Drawings are bound in the back of this document and tenderers must ensure that all the Drawings listed above are included and attached to this document.



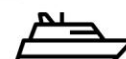
APPENDIX C4.3: SCHEDULE OF BRIDGES



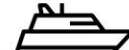
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
1813	Amathole	Amahlathi	Large Bridge	93.0
1953	Amathole	Amahlathi	Large Bridge	74.7
2191	Amathole	Amahlathi	Large Bridge	63.0
2175	Amathole	Amahlathi	Large Bridge	50.6
1866	Amathole	Amahlathi	Medium Bridge	50.0
2190	Amathole	Amahlathi	Medium Bridge	49.0
2174	Amathole	Amahlathi	Medium Bridge	39.1
1943	Amathole	Amahlathi	Medium Bridge	38.9
1917	Amathole	Amahlathi	Medium Bridge	37.5
1999	Amathole	Amahlathi	Medium Bridge	31.5
1994	Amathole	Amahlathi	Medium Bridge	28.1
1789	Amathole	Amahlathi	Medium Bridge	25.3
1838	Amathole	Amahlathi	Medium Bridge	25.3
1878	Amathole	Amahlathi	Medium Bridge	25.3
2007	Amathole	Amahlathi	Medium Bridge	25.2
1969	Amathole	Amahlathi	Medium Bridge	21.7
1963	Amathole	Amahlathi	Medium Bridge	21.6
1865	Amathole	Amahlathi	Medium Bridge	20.8
1896	Amathole	Amahlathi	Small Bridge	19.6
1901	Amathole	Amahlathi	Small Bridge	18.4
2004	Amathole	Amahlathi	Small Bridge	18.0
1966	Amathole	Amahlathi	Small Bridge	15.8
2177	Amathole	Amahlathi	Small Bridge	15.3
2193	Amathole	Amahlathi	Small Bridge	14.4
1883	Amathole	Amahlathi	Small Bridge	14.0
1877	Amathole	Amahlathi	Small Bridge	13.9
1837	Amathole	Amahlathi	Small Bridge	13.3
1860	Amathole	Amahlathi	Small Bridge	13.3
1861	Amathole	Amahlathi	Small Bridge	13.3
1871	Amathole	Amahlathi	Small Bridge	13.3
2182	Amathole	Amahlathi	Small Bridge	13.0
2181	Amathole	Amahlathi	Small Bridge	12.0
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
1965	Amathole	Amahlathi	Small Bridge	11.5
1958	Amathole	Amahlathi	Small Bridge	10.2
1967	Amathole	Amahlathi	Small Bridge	8.4
1788	Amathole	Amahlathi	Small Bridge	7.2
2006	Amathole	Amahlathi	Small Bridge	7.2
1961	Amathole	Amahlathi	Small Bridge	6.8
2003	Amathole	Amahlathi	Small Bridge	6.8
2112	Amathole	Great Kei	Large Bridge	60.0
2142	Amathole	Great Kei	Medium Bridge	49.8
2219	Amathole	Great Kei	Medium Bridge	41.0
2197	Amathole	Great Kei	Medium Bridge	34.5



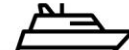
2143	Amathole	Great Kei	Medium Bridge	29.0
2145	Amathole	Great Kei	Medium Bridge	25.2
2199	Amathole	Great Kei	Medium Bridge	20.3
2116	Amathole	Great Kei	Small Bridge	20.0
2205	Amathole	Great Kei	Small Bridge	19.0
2088	Amathole	Great Kei	Small Bridge	13.5
2208	Amathole	Great Kei	Small Bridge	13.0
2150	Amathole	Great Kei	Small Bridge	6.4
1852	Amathole	Mbhashe	Large Bridge	80.4
1799	Amathole	Mbhashe	Large Bridge	72.8
1908	Amathole	Mbhashe	Large Bridge	54.6
2315	Amathole	Mbhashe	Medium Bridge	43.6
1846	Amathole	Mbhashe	Medium Bridge	40.5
1802	Amathole	Mbhashe	Medium Bridge	35.7
1800	Amathole	Mbhashe	Medium Bridge	34.3
1798	Amathole	Mbhashe	Medium Bridge	33.5
1776	Amathole	Mbhashe	Medium Bridge	33.0
1805	Amathole	Mbhashe	Medium Bridge	31.2
1910	Amathole	Mbhashe	Medium Bridge	30.6
1941	Amathole	Mbhashe	Medium Bridge	26.0
1888	Amathole	Mbhashe	Medium Bridge	25.0
1782	Amathole	Mbhashe	Medium Bridge	24.3
1845	Amathole	Mbhashe	Medium Bridge	22.6
1765	Amathole	Mbhashe	Small Bridge	17.1
1758	Amathole	Mbhashe	Small Bridge	15.6
1931	Amathole	Mbhashe	Small Bridge	13.0
1766	Amathole	Mbhashe	Small Bridge	8.4
1803	Amathole	Mbhashe	Small Bridge	6.9
1762	Amathole	Mbhashe	Small Bridge	6.7
1808	Amathole	Mnquma	Large Bridge	82.8
1751	Amathole	Mnquma	Medium Bridge	35.0
1793	Amathole	Mnquma	Medium Bridge	35.0
2977	Amathole	Mnquma	Medium Bridge	31.6
1790	Amathole	Mnquma	Medium Bridge	30.3
1826	Amathole	Mnquma	Medium Bridge	26.5
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
1820	Amathole	Mnquma	Medium Bridge	23.6
1828	Amathole	Mnquma	Medium Bridge	21.0
1792	Amathole	Mnquma	Medium Bridge	20.8
2317	Amathole	Mnquma	Medium Bridge	20.4
1847	Amathole	Mnquma	Small Bridge	15.6
1815	Amathole	Mnquma	Small Bridge	15.3
1825	Amathole	Mnquma	Small Bridge	15.3
1821	Amathole	Mnquma	Small Bridge	13.0
1812	Amathole	Mnquma	Small Bridge	12.8
1816	Amathole	Mnquma	Small Bridge	6.8
2622	Amathole	Ngqushwa	Very Large Bridge	158.2



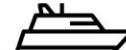
2012	Amathole	Ngqushwa	Large Bridge	69.0
2017	Amathole	Ngqushwa	Medium Bridge	40.0
2030	Amathole	Ngqushwa	Medium Bridge	31.0
1988	Amathole	Ngqushwa	Medium Bridge	27.5
2015	Amathole	Ngqushwa	Medium Bridge	26.8
2039	Amathole	Ngqushwa	Small Bridge	19.5
1979	Amathole	Ngqushwa	Small Bridge	15.8
1983	Amathole	Ngqushwa	Small Bridge	15.8
1980	Amathole	Ngqushwa	Small Bridge	15.7
1985	Amathole	Ngqushwa	Small Bridge	14.8
1971	Amathole	Ngqushwa	Small Bridge	13.4
2013	Amathole	Ngqushwa	Small Bridge	13.0
2016	Amathole	Ngqushwa	Small Bridge	12.8
2077	Amathole	Ngqushwa	Small Bridge	10.2
2014	Amathole	Ngqushwa	Small Bridge	6.9
2119	Amathole	Raymond Mhlaba	Large Bridge	79.7
2065	Amathole	Raymond Mhlaba	Medium Bridge	40.5
2121	Amathole	Raymond Mhlaba	Medium Bridge	34.7
2090	Amathole	Raymond Mhlaba	Medium Bridge	33.5
1786	Amathole	Raymond Mhlaba	Medium Bridge	31.8
2303	Amathole	Raymond Mhlaba	Medium Bridge	31.0
2120	Amathole	Raymond Mhlaba	Medium Bridge	29.5
2075	Amathole	Raymond Mhlaba	Medium Bridge	29.3
2091	Amathole	Raymond Mhlaba	Medium Bridge	27.0
2092	Amathole	Raymond Mhlaba	Medium Bridge	27.0
2136	Amathole	Raymond Mhlaba	Medium Bridge	24.5
2133	Amathole	Raymond Mhlaba	Medium Bridge	24.0
2058	Amathole	Raymond Mhlaba	Medium Bridge	21.4
1767	Amathole	Raymond Mhlaba	Medium Bridge	21.2
2982	Amathole	Raymond Mhlaba	Medium Bridge	21.1
2103	Amathole	Raymond Mhlaba	Medium Bridge	20.2
1920	Amathole	Raymond Mhlaba	Medium Bridge	20.0
2067	Amathole	Raymond Mhlaba	Medium Bridge	20.0
2304	Amathole	Raymond Mhlaba	Medium Bridge	20.0
2098	Amathole	Raymond Mhlaba	Small Bridge	20.0
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
2172	Amathole	Raymond Mhlaba	Small Bridge	19.3
2041	Amathole	Raymond Mhlaba	Small Bridge	17.6
1761	Amathole	Raymond Mhlaba	Small Bridge	16.6
1779	Amathole	Raymond Mhlaba	Small Bridge	16.3
2100	Amathole	Raymond Mhlaba	Small Bridge	15.8
2093	Amathole	Raymond Mhlaba	Small Bridge	15.6
2099	Amathole	Raymond Mhlaba	Small Bridge	15.5
2102	Amathole	Raymond Mhlaba	Small Bridge	15.3
2104	Amathole	Raymond Mhlaba	Small Bridge	14.8
1784	Amathole	Raymond Mhlaba	Small Bridge	14.6
2156	Amathole	Raymond Mhlaba	Small Bridge	14.2



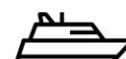
2159	Amathole	Raymond Mhlaba	Small Bridge	14.2
1795	Amathole	Raymond Mhlaba	Small Bridge	14.1
2170	Amathole	Raymond Mhlaba	Small Bridge	13.9
1755	Amathole	Raymond Mhlaba	Small Bridge	13.7
1778	Amathole	Raymond Mhlaba	Small Bridge	13.0
2167	Amathole	Raymond Mhlaba	Small Bridge	12.8
2094	Amathole	Raymond Mhlaba	Small Bridge	12.0
2146	Amathole	Raymond Mhlaba	Small Bridge	12.0
1775	Amathole	Raymond Mhlaba	Small Bridge	10.3
2195	Amathole	Raymond Mhlaba	Small Bridge	7.4
2108	Amathole	Raymond Mhlaba	Small Bridge	6.5
2165	Amathole	Raymond Mhlaba	Small Bridge	6.2
2095	Amathole	Raymond Mhlaba	Small Bridge	6.1
2097	Amathole	Raymond Mhlaba	Small Bridge	6.1
3437	Buffalo City	Buffalo City	Very Large Bridge	290.0
3442	Buffalo City	Buffalo City	Very Large Bridge	280.0
2245	Buffalo City	Buffalo City	Very Large Bridge	184.0
2252	Buffalo City	Buffalo City	Very Large Bridge	154.0
3207	Buffalo City	Buffalo City	Very Large Bridge	126.0
3436	Buffalo City	Buffalo City	Large Bridge	82.0
3210	Buffalo City	Buffalo City	Large Bridge	80.0
2240	Buffalo City	Buffalo City	Large Bridge	77.1
3141	Buffalo City	Buffalo City	Large Bridge	75.0
2330	Buffalo City	Buffalo City	Large Bridge	74.1
2256	Buffalo City	Buffalo City	Large Bridge	66.9
3139	Buffalo City	Buffalo City	Large Bridge	65.0
3209	Buffalo City	Buffalo City	Large Bridge	60.0
2291	Buffalo City	Buffalo City	Large Bridge	58.5
3159	Buffalo City	Buffalo City	Large Bridge	58.0
2251	Buffalo City	Buffalo City	Large Bridge	57.4
3087	Buffalo City	Buffalo City	Large Bridge	56.0
1814	Buffalo City	Buffalo City	Large Bridge	51.3
2274	Buffalo City	Buffalo City	Medium Bridge	47.0
3056	Buffalo City	Buffalo City	Medium Bridge	42.0
3433	Buffalo City	Buffalo City	Medium Bridge	40.0
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
3434	Buffalo City	Buffalo City	Medium Bridge	39.0
3435	Buffalo City	Buffalo City	Medium Bridge	39.0
2148	Buffalo City	Buffalo City	Medium Bridge	38.0
2218	Buffalo City	Buffalo City	Medium Bridge	35.0
2264	Buffalo City	Buffalo City	Medium Bridge	35.0
3208	Buffalo City	Buffalo City	Medium Bridge	34.0
2301	Buffalo City	Buffalo City	Medium Bridge	33.4
3182	Buffalo City	Buffalo City	Medium Bridge	32.0
3211	Buffalo City	Buffalo City	Medium Bridge	32.0
2314	Buffalo City	Buffalo City	Medium Bridge	30.6
1836	Buffalo City	Buffalo City	Medium Bridge	29.1



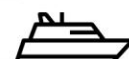
3302	Buffalo City	Buffalo City	Medium Bridge	29.0
2254	Buffalo City	Buffalo City	Medium Bridge	27.5
2290	Buffalo City	Buffalo City	Medium Bridge	26.9
2258	Buffalo City	Buffalo City	Medium Bridge	26.0
2223	Buffalo City	Buffalo City	Medium Bridge	22.2
2222	Buffalo City	Buffalo City	Medium Bridge	21.0
2242	Buffalo City	Buffalo City	Medium Bridge	21.0
2268	Buffalo City	Buffalo City	Medium Bridge	21.0
2286	Buffalo City	Buffalo City	Medium Bridge	20.7
2302	Buffalo City	Buffalo City	Medium Bridge	20.6
2284	Buffalo City	Buffalo City	Small Bridge	19.5
1862	Buffalo City	Buffalo City	Small Bridge	19.2
2272	Buffalo City	Buffalo City	Small Bridge	18.4
2288	Buffalo City	Buffalo City	Small Bridge	16.2
2271	Buffalo City	Buffalo City	Small Bridge	16.0
2247	Buffalo City	Buffalo City	Small Bridge	15.8
2250	Buffalo City	Buffalo City	Small Bridge	14.1
3140	Buffalo City	Buffalo City	Small Bridge	14.0
3443	Buffalo City	Buffalo City	Small Bridge	14.0
2262	Buffalo City	Buffalo City	Small Bridge	13.6
2310	Buffalo City	Buffalo City	Small Bridge	13.5
2215	Buffalo City	Buffalo City	Small Bridge	13.0
2985	Buffalo City	Buffalo City	Small Bridge	12.7
3166	Buffalo City	Buffalo City	Small Bridge	12.0
2276	Buffalo City	Buffalo City	Small Bridge	11.1
2979	Buffalo City	Buffalo City	Small Bridge	10.5
2278	Buffalo City	Buffalo City	Small Bridge	10.4
2296	Buffalo City	Buffalo City	Small Bridge	10.4
2273	Buffalo City	Buffalo City	Small Bridge	10.2
2306	Buffalo City	Buffalo City	Small Bridge	10.2
2243	Buffalo City	Buffalo City	Small Bridge	10.0
3165	Buffalo City	Buffalo City	Small Bridge	10.0
2153	Buffalo City	Buffalo City	Small Bridge	9.8
2265	Buffalo City	Buffalo City	Small Bridge	9.7
2241	Buffalo City	Buffalo City	Small Bridge	9.2
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
3158	Buffalo City	Buffalo City	Small Bridge	9.0
3181	Buffalo City	Buffalo City	Small Bridge	8.5
3454	Buffalo City	Buffalo City	Small Bridge	8.5
2221	Buffalo City	Buffalo City	Small Bridge	7.7
2263	Buffalo City	Buffalo City	Small Bridge	6.6
3438	Buffalo City	Buffalo City	Small Bridge	6.5
2217	Buffalo City	Buffalo City	Small Bridge	6.4
2216	Buffalo City	Buffalo City	Small Bridge	6.3
2285	Buffalo City	Buffalo City	Small Bridge	6.2
2287	Buffalo City	Buffalo City	Small Bridge	6.2
3100	Buffalo City	Buffalo City	Small Bridge	6.2



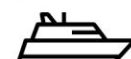
2281	Buffalo City	Buffalo City	Small Bridge	6.0
3432	Buffalo City	Buffalo City	Small Bridge	6.0
2282	Buffalo City	Buffalo City	Small Bridge	5.9
40	Chris Hani	Dr AB Xuma	Large Bridge	95.0
74	Chris Hani	Dr AB Xuma	Large Bridge	94.0
41	Chris Hani	Dr AB Xuma	Large Bridge	75.3
83	Chris Hani	Dr AB Xuma	Large Bridge	72.5
79	Chris Hani	Dr AB Xuma	Large Bridge	52.0
39	Chris Hani	Dr AB Xuma	Medium Bridge	45.0
38	Chris Hani	Dr AB Xuma	Medium Bridge	39.6
42	Chris Hani	Dr AB Xuma	Medium Bridge	39.6
117	Chris Hani	Dr AB Xuma	Medium Bridge	36.0
78	Chris Hani	Dr AB Xuma	Medium Bridge	35.5
98	Chris Hani	Dr AB Xuma	Medium Bridge	32.0
102	Chris Hani	Dr AB Xuma	Medium Bridge	32.0
109	Chris Hani	Dr AB Xuma	Medium Bridge	27.0
116	Chris Hani	Dr AB Xuma	Medium Bridge	26.6
122	Chris Hani	Dr AB Xuma	Medium Bridge	26.5
64	Chris Hani	Dr AB Xuma	Medium Bridge	24.0
100	Chris Hani	Dr AB Xuma	Medium Bridge	21.0
119	Chris Hani	Dr AB Xuma	Medium Bridge	21.0
121	Chris Hani	Dr AB Xuma	Small Bridge	20.0
75	Chris Hani	Dr AB Xuma	Small Bridge	16.5
63	Chris Hani	Dr AB Xuma	Small Bridge	16.0
113	Chris Hani	Dr AB Xuma	Small Bridge	14.0
87	Chris Hani	Dr AB Xuma	Small Bridge	13.5
88	Chris Hani	Dr AB Xuma	Small Bridge	13.0
56	Chris Hani	Dr AB Xuma	Small Bridge	6.2
80	Chris Hani	Dr AB Xuma	Small Bridge	6.2
76	Chris Hani	Dr AB Xuma	Small Bridge	6.1
45	Chris Hani	Dr AB Xuma	Small Bridge	6.0
68	Chris Hani	Dr AB Xuma	Small Bridge	3.0
11	Chris Hani	Emalahleni	Large Bridge	54.0
18	Chris Hani	Emalahleni	Medium Bridge	34.0
3000	Chris Hani	Emalahleni	Medium Bridge	30.8
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
32	Chris Hani	Emalahleni	Medium Bridge	30.3
16	Chris Hani	Emalahleni	Medium Bridge	27.5
21	Chris Hani	Emalahleni	Medium Bridge	27.2
3	Chris Hani	Emalahleni	Medium Bridge	26.0
4	Chris Hani	Emalahleni	Medium Bridge	23.0
13	Chris Hani	Emalahleni	Medium Bridge	21.7
26	Chris Hani	Emalahleni	Medium Bridge	21.2
10	Chris Hani	Emalahleni	Small Bridge	7.2
410	Chris Hani	Enoch Mgijima	Large Bridge	60.7
3362	Chris Hani	Enoch Mgijima	Large Bridge	54.0
553	Chris Hani	Enoch Mgijima	Large Bridge	53.4



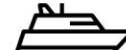
554	Chris Hani	Enoch Mgijima	Medium Bridge	46.5
644	Chris Hani	Enoch Mgijima	Medium Bridge	38.0
3377	Chris Hani	Enoch Mgijima	Medium Bridge	37.0
446	Chris Hani	Enoch Mgijima	Medium Bridge	35.7
436	Chris Hani	Enoch Mgijima	Medium Bridge	30.0
139	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
140	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
141	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
142	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
143	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
144	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
145	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
146	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
148	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
149	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
150	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
151	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
152	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
153	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
154	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
155	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
274	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
384	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
385	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
386	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
388	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
389	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
390	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
391	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
392	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
393	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
394	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
395	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
396	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
397	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
398	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
400	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
401	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
402	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
403	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
404	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
405	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
406	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
407	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
408	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
559	Chris Hani	Enoch Mgijima	Medium Bridge	28.8



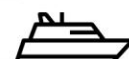
560	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
564	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
567	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
570	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
573	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
574	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
577	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
588	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
593	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
595	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
596	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
597	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
601	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
602	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
603	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
604	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
605	Chris Hani	Enoch Mgijima	Medium Bridge	28.8
440	Chris Hani	Enoch Mgijima	Medium Bridge	24.0
444	Chris Hani	Enoch Mgijima	Medium Bridge	23.0
326	Chris Hani	Enoch Mgijima	Medium Bridge	22.0
496	Chris Hani	Enoch Mgijima	Small Bridge	18.6
433	Chris Hani	Enoch Mgijima	Small Bridge	17.0
450	Chris Hani	Enoch Mgijima	Small Bridge	8.0
637	Chris Hani	Enoch Mgijima	Small Bridge	7.6
459	Chris Hani	Enoch Mgijima	Small Bridge	7.2
447	Chris Hani	Enoch Mgijima	Small Bridge	6.8
321	Chris Hani	Intsika Yethu	Large Bridge	62.5
1954	Chris Hani	Intsika Yethu	Medium Bridge	41.6
352	Chris Hani	Intsika Yethu	Medium Bridge	40.2
2034	Chris Hani	Intsika Yethu	Medium Bridge	36.4
330	Chris Hani	Intsika Yethu	Medium Bridge	34.0
292	Chris Hani	Intsika Yethu	Medium Bridge	33.5
324	Chris Hani	Intsika Yethu	Medium Bridge	32.0
316	Chris Hani	Intsika Yethu	Medium Bridge	31.5
280	Chris Hani	Intsika Yethu	Medium Bridge	31.0
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
299	Chris Hani	Intsika Yethu	Medium Bridge	30.0
341	Chris Hani	Intsika Yethu	Medium Bridge	27.0
300	Chris Hani	Intsika Yethu	Medium Bridge	26.0
318	Chris Hani	Intsika Yethu	Medium Bridge	26.0
315	Chris Hani	Intsika Yethu	Medium Bridge	20.3
301	Chris Hani	Intsika Yethu	Small Bridge	16.0
279	Chris Hani	Intsika Yethu	Small Bridge	14.0
291	Chris Hani	Intsika Yethu	Small Bridge	12.5
276	Chris Hani	Intsika Yethu	Small Bridge	11.0
278	Chris Hani	Intsika Yethu	Small Bridge	9.5
281	Chris Hani	Intsika Yethu	Small Bridge	9.5



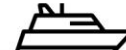
310	Chris Hani	Intsika Yethu	Small Bridge	6.8
308	Chris Hani	Intsika Yethu	Small Bridge	6.0
201	Chris Hani	Inxuba Yethemba	Large Bridge	90.3
170	Chris Hani	Inxuba Yethemba	Large Bridge	86.4
195	Chris Hani	Inxuba Yethemba	Large Bridge	75.0
191	Chris Hani	Inxuba Yethemba	Large Bridge	70.8
172	Chris Hani	Inxuba Yethemba	Large Bridge	68.4
200	Chris Hani	Inxuba Yethemba	Large Bridge	50.5
202	Chris Hani	Inxuba Yethemba	Medium Bridge	47.3
189	Chris Hani	Inxuba Yethemba	Medium Bridge	40.6
206	Chris Hani	Inxuba Yethemba	Medium Bridge	39.0
209	Chris Hani	Inxuba Yethemba	Medium Bridge	36.2
211	Chris Hani	Inxuba Yethemba	Medium Bridge	29.2
185	Chris Hani	Inxuba Yethemba	Medium Bridge	28.6
165	Chris Hani	Inxuba Yethemba	Medium Bridge	28.1
171	Chris Hani	Inxuba Yethemba	Medium Bridge	27.8
241	Chris Hani	Inxuba Yethemba	Medium Bridge	27.1
181	Chris Hani	Inxuba Yethemba	Medium Bridge	26.5
169	Chris Hani	Inxuba Yethemba	Medium Bridge	25.5
177	Chris Hani	Inxuba Yethemba	Medium Bridge	25.5
178	Chris Hani	Inxuba Yethemba	Medium Bridge	24.8
190	Chris Hani	Inxuba Yethemba	Medium Bridge	21.4
192	Chris Hani	Inxuba Yethemba	Medium Bridge	20.7
188	Chris Hani	Inxuba Yethemba	Small Bridge	19.8
207	Chris Hani	Inxuba Yethemba	Small Bridge	18.8
210	Chris Hani	Inxuba Yethemba	Small Bridge	18.6
168	Chris Hani	Inxuba Yethemba	Small Bridge	17.7
166	Chris Hani	Inxuba Yethemba	Small Bridge	17.0
176	Chris Hani	Inxuba Yethemba	Small Bridge	16.4
199	Chris Hani	Inxuba Yethemba	Small Bridge	14.9
208	Chris Hani	Inxuba Yethemba	Small Bridge	14.2
175	Chris Hani	Inxuba Yethemba	Small Bridge	14.0
197	Chris Hani	Inxuba Yethemba	Small Bridge	14.0
198	Chris Hani	Inxuba Yethemba	Small Bridge	14.0
260	Chris Hani	Inxuba Yethemba	Small Bridge	13.6
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
173	Chris Hani	Inxuba Yethemba	Small Bridge	13.2
167	Chris Hani	Inxuba Yethemba	Small Bridge	13.0
196	Chris Hani	Inxuba Yethemba	Small Bridge	12.2
212	Chris Hani	Inxuba Yethemba	Small Bridge	11.6
194	Chris Hani	Inxuba Yethemba	Small Bridge	11.0
257	Chris Hani	Inxuba Yethemba	Small Bridge	9.8
254	Chris Hani	Inxuba Yethemba	Small Bridge	9.7
266	Chris Hani	Inxuba Yethemba	Small Bridge	8.9
174	Chris Hani	Inxuba Yethemba	Small Bridge	7.4
193	Chris Hani	Inxuba Yethemba	Small Bridge	7.1
205	Chris Hani	Inxuba Yethemba	Small Bridge	6.6



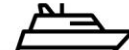
523	Chris Hani	Sakhisizwe	Medium Bridge	34.0
504	Chris Hani	Sakhisizwe	Medium Bridge	31.2
515	Chris Hani	Sakhisizwe	Medium Bridge	27.0
500	Chris Hani	Sakhisizwe	Medium Bridge	22.0
529	Chris Hani	Sakhisizwe	Small Bridge	18.0
506	Chris Hani	Sakhisizwe	Small Bridge	15.0
502	Chris Hani	Sakhisizwe	Small Bridge	12.0
507	Chris Hani	Sakhisizwe	Small Bridge	9.3
539	Chris Hani	Sakhisizwe	Small Bridge	6.5
3197	Chris Hani	Sakhisizwe	Small Bridge	6.4
514	Chris Hani	Sakhisizwe	Small Bridge	6.2
520	Chris Hani	Sakhisizwe	Small Bridge	6.0
3196	Chris Hani	Sakhisizwe	Small Bridge	6.0
652	Joe Gqabi	Elundini	Large Bridge	72.6
1274	Joe Gqabi	Elundini	Medium Bridge	50.0
654	Joe Gqabi	Elundini	Medium Bridge	48.6
655	Joe Gqabi	Elundini	Medium Bridge	48.6
1473	Joe Gqabi	Elundini	Medium Bridge	47.8
668	Joe Gqabi	Elundini	Medium Bridge	42.0
658	Joe Gqabi	Elundini	Medium Bridge	40.2
653	Joe Gqabi	Elundini	Medium Bridge	39.8
656	Joe Gqabi	Elundini	Medium Bridge	33.7
659	Joe Gqabi	Elundini	Medium Bridge	31.7
675	Joe Gqabi	Elundini	Medium Bridge	29.0
663	Joe Gqabi	Elundini	Medium Bridge	26.0
678	Joe Gqabi	Elundini	Medium Bridge	25.0
664	Joe Gqabi	Elundini	Medium Bridge	24.4
666	Joe Gqabi	Elundini	Medium Bridge	24.4
667	Joe Gqabi	Elundini	Medium Bridge	24.4
669	Joe Gqabi	Elundini	Medium Bridge	24.4
670	Joe Gqabi	Elundini	Medium Bridge	24.4
665	Joe Gqabi	Elundini	Medium Bridge	24.0
671	Joe Gqabi	Elundini	Medium Bridge	21.0
661	Joe Gqabi	Elundini	Medium Bridge	20.7
660	Joe Gqabi	Elundini	Medium Bridge	20.2
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
673	Joe Gqabi	Elundini	Medium Bridge	20.1
662	Joe Gqabi	Elundini	Small Bridge	20.0
674	Joe Gqabi	Elundini	Small Bridge	20.0
728	Joe Gqabi	Elundini	Small Bridge	20.0
738	Joe Gqabi	Elundini	Small Bridge	20.0
679	Joe Gqabi	Elundini	Small Bridge	19.4
676	Joe Gqabi	Elundini	Small Bridge	13.0
883	Joe Gqabi	Senqu	Large Bridge	78.0
888	Joe Gqabi	Senqu	Large Bridge	77.0
886	Joe Gqabi	Senqu	Large Bridge	62.0
887	Joe Gqabi	Senqu	Large Bridge	62.0



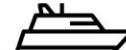
907	Joe Gqabi	Senqu	Large Bridge	62.0
914	Joe Gqabi	Senqu	Large Bridge	62.0
884	Joe Gqabi	Senqu	Large Bridge	60.0
1044	Joe Gqabi	Senqu	Medium Bridge	41.6
1028	Joe Gqabi	Senqu	Medium Bridge	37.0
929	Joe Gqabi	Senqu	Medium Bridge	36.0
915	Joe Gqabi	Senqu	Medium Bridge	35.0
1041	Joe Gqabi	Senqu	Medium Bridge	32.0
932	Joe Gqabi	Senqu	Medium Bridge	31.0
885	Joe Gqabi	Senqu	Medium Bridge	28.0
916	Joe Gqabi	Senqu	Medium Bridge	28.0
931	Joe Gqabi	Senqu	Medium Bridge	28.0
912	Joe Gqabi	Senqu	Medium Bridge	27.0
920	Joe Gqabi	Senqu	Medium Bridge	27.0
1019	Joe Gqabi	Senqu	Medium Bridge	26.8
926	Joe Gqabi	Senqu	Medium Bridge	26.6
1013	Joe Gqabi	Senqu	Medium Bridge	26.4
913	Joe Gqabi	Senqu	Medium Bridge	26.0
918	Joe Gqabi	Senqu	Medium Bridge	25.0
910	Joe Gqabi	Senqu	Medium Bridge	24.6
925	Joe Gqabi	Senqu	Medium Bridge	23.0
933	Joe Gqabi	Senqu	Medium Bridge	22.0
921	Joe Gqabi	Senqu	Medium Bridge	21.6
908	Joe Gqabi	Senqu	Medium Bridge	21.0
1057	Joe Gqabi	Senqu	Medium Bridge	20.7
909	Joe Gqabi	Senqu	Small Bridge	18.0
924	Joe Gqabi	Senqu	Small Bridge	18.0
928	Joe Gqabi	Senqu	Small Bridge	18.0
1064	Joe Gqabi	Senqu	Small Bridge	16.8
922	Joe Gqabi	Senqu	Small Bridge	16.5
1039	Joe Gqabi	Senqu	Small Bridge	16.5
1060	Joe Gqabi	Senqu	Small Bridge	16.5
1040	Joe Gqabi	Senqu	Small Bridge	16.1
923	Joe Gqabi	Senqu	Small Bridge	16.0
935	Joe Gqabi	Senqu	Small Bridge	15.0
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
917	Joe Gqabi	Senqu	Small Bridge	14.5
906	Joe Gqabi	Senqu	Small Bridge	14.0
934	Joe Gqabi	Senqu	Small Bridge	14.0
1058	Joe Gqabi	Senqu	Small Bridge	14.0
1070	Joe Gqabi	Senqu	Small Bridge	13.8
911	Joe Gqabi	Senqu	Small Bridge	12.0
1020	Joe Gqabi	Senqu	Small Bridge	11.0
1026	Joe Gqabi	Senqu	Small Bridge	10.5
919	Joe Gqabi	Senqu	Small Bridge	10.0
1022	Joe Gqabi	Senqu	Small Bridge	9.9
1025	Joe Gqabi	Senqu	Small Bridge	9.0



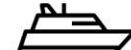
1062	Joe Gqabi	Senqu	Small Bridge	7.2
927	Joe Gqabi	Senqu	Small Bridge	6.5
930	Joe Gqabi	Senqu	Small Bridge	6.5
3019	Joe Gqabi	Walter Sisulu	Large Bridge	80.0
876	Joe Gqabi	Walter Sisulu	Large Bridge	62.5
3231	Joe Gqabi	Walter Sisulu	Medium Bridge	45.0
3385	Joe Gqabi	Walter Sisulu	Medium Bridge	43.0
831	Joe Gqabi	Walter Sisulu	Medium Bridge	41.6
3018	Joe Gqabi	Walter Sisulu	Medium Bridge	39.2
805	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
806	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
807	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
808	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
809	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
810	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
811	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
812	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
813	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
814	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
815	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
816	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
817	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
818	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
819	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
821	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
822	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
823	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
824	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
825	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
826	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
827	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
828	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
829	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
830	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
857	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
858	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
859	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
860	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
861	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
862	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
863	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
864	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
865	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
866	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
867	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
868	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7



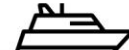
875	Joe Gqabi	Walter Sisulu	Medium Bridge	28.7
3006	Joe Gqabi	Walter Sisulu	Medium Bridge	26.0
871	Joe Gqabi	Walter Sisulu	Medium Bridge	25.6
870	Joe Gqabi	Walter Sisulu	Medium Bridge	21.8
3371	Joe Gqabi	Walter Sisulu	Medium Bridge	21.0
879	Joe Gqabi	Walter Sisulu	Medium Bridge	20.9
869	Joe Gqabi	Walter Sisulu	Small Bridge	20.0
835	Joe Gqabi	Walter Sisulu	Small Bridge	19.3
873	Joe Gqabi	Walter Sisulu	Small Bridge	15.4
878	Joe Gqabi	Walter Sisulu	Small Bridge	14.7
842	Joe Gqabi	Walter Sisulu	Small Bridge	7.0
3016	Joe Gqabi	Walter Sisulu	Small Bridge	6.8
3021	Joe Gqabi	Walter Sisulu	Small Bridge	6.7
3493	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	1500.0
3494	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	1500.0
3393	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	484.0
3490	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	346.0
3479	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	320.0
3491	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	308.0
3480	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	300.0
3481	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	300.0
3487	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	296.0
3477	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	269.0
3484	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	248.0
3486	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	231.0
3394	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	230.0
3478	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	214.0
2909	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	201.0
3482	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	196.0
3035	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	193.0
3492	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	184.0
3483	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	174.0
3420	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	153.0
3476	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	140.0
3081	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	138.0
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
3066	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	132.5
3473	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	116.5
3485	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	114.0
3092	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	110.0
3489	Nelson Mandela Bay	Nelson Mandela Bay	Very Large Bridge	106.0
2897	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	100.0
3399	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	97.3
3488	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	93.0
3048	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	92.6
3064	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	92.0
3070	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	91.0



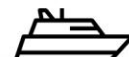
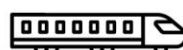
3095	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	89.5
3096	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	89.5
3428	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	86.5
3410	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	82.0
3409	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	81.6
3408	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	80.0
3094	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	78.0
3050	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	75.3
3415	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	65.5
3412	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	64.5
3049	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	64.4
3425	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	64.0
3206	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	63.0
3401	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	62.0
2929	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	60.0
3079	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	59.0
3067	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	58.0
3082	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	56.5
3046	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	56.3
3047	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	56.3
3411	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	54.4
3421	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	53.0
3390	Nelson Mandela Bay	Nelson Mandela Bay	Large Bridge	52.0
3065	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	50.0
3422	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	50.0
3068	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	44.0
3072	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	42.0
3071	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	41.0
3474	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	37.0
3475	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	37.0
3034	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	36.6
3069	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	34.0
2930	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	33.6
3471	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	31.0
3062	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	30.5
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
3080	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	30.5
3078	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	29.5
3044	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	22.4
3043	Nelson Mandela Bay	Nelson Mandela Bay	Medium Bridge	21.8
3398	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	20.0
3042	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	17.3
3045	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	17.3
3396	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	15.8
3403	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	13.6
3073	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	11.5
3391	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	10.0



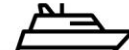
2789	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	9.8
2798	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	7.6
3392	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	7.0
3085	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	6.6
3086	Nelson Mandela Bay	Nelson Mandela Bay	Small Bridge	6.6
2410	Sarah Baartman	Blue Crane Route	Large Bridge	76.8
2507	Sarah Baartman	Blue Crane Route	Large Bridge	73.7
2511	Sarah Baartman	Blue Crane Route	Large Bridge	69.0
2441	Sarah Baartman	Blue Crane Route	Large Bridge	64.8
2467	Sarah Baartman	Blue Crane Route	Large Bridge	51.5
2417	Sarah Baartman	Blue Crane Route	Medium Bridge	48.5
2435	Sarah Baartman	Blue Crane Route	Medium Bridge	47.8
2476	Sarah Baartman	Blue Crane Route	Medium Bridge	45.9
2495	Sarah Baartman	Blue Crane Route	Medium Bridge	40.8
2493	Sarah Baartman	Blue Crane Route	Medium Bridge	30.7
2403	Sarah Baartman	Blue Crane Route	Medium Bridge	29.1
2437	Sarah Baartman	Blue Crane Route	Medium Bridge	29.1
2741	Sarah Baartman	Blue Crane Route	Medium Bridge	26.8
2537	Sarah Baartman	Blue Crane Route	Medium Bridge	24.6
2742	Sarah Baartman	Blue Crane Route	Medium Bridge	24.6
2496	Sarah Baartman	Blue Crane Route	Medium Bridge	24.4
2451	Sarah Baartman	Blue Crane Route	Medium Bridge	24.2
2483	Sarah Baartman	Blue Crane Route	Medium Bridge	24.0
2500	Sarah Baartman	Blue Crane Route	Medium Bridge	24.0
2502	Sarah Baartman	Blue Crane Route	Medium Bridge	24.0
2506	Sarah Baartman	Blue Crane Route	Medium Bridge	24.0
2565	Sarah Baartman	Blue Crane Route	Medium Bridge	24.0
2528	Sarah Baartman	Blue Crane Route	Medium Bridge	22.4
2563	Sarah Baartman	Blue Crane Route	Medium Bridge	22.4
2559	Sarah Baartman	Blue Crane Route	Medium Bridge	22.2
2558	Sarah Baartman	Blue Crane Route	Medium Bridge	20.3
2480	Sarah Baartman	Blue Crane Route	Small Bridge	16.5
2510	Sarah Baartman	Blue Crane Route	Small Bridge	16.5
2560	Sarah Baartman	Blue Crane Route	Small Bridge	16.0
2486	Sarah Baartman	Blue Crane Route	Small Bridge	15.2
2454	Sarah Baartman	Blue Crane Route	Small Bridge	14.8
2460	Sarah Baartman	Blue Crane Route	Small Bridge	14.7
2468	Sarah Baartman	Blue Crane Route	Small Bridge	14.3
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
2413	Sarah Baartman	Blue Crane Route	Small Bridge	13.8
2449	Sarah Baartman	Blue Crane Route	Small Bridge	11.6
2485	Sarah Baartman	Blue Crane Route	Small Bridge	11.4
2474	Sarah Baartman	Blue Crane Route	Small Bridge	10.2
2488	Sarah Baartman	Blue Crane Route	Small Bridge	10.2
2547	Sarah Baartman	Blue Crane Route	Small Bridge	10.0
2472	Sarah Baartman	Blue Crane Route	Small Bridge	9.7
2436	Sarah Baartman	Blue Crane Route	Small Bridge	9.6



2521	Sarah Baartman	Blue Crane Route	Small Bridge	9.1
2445	Sarah Baartman	Blue Crane Route	Small Bridge	8.3
2522	Sarah Baartman	Blue Crane Route	Small Bridge	7.5
2536	Sarah Baartman	Blue Crane Route	Small Bridge	7.5
2562	Sarah Baartman	Blue Crane Route	Small Bridge	7.4
2498	Sarah Baartman	Blue Crane Route	Small Bridge	7.0
2497	Sarah Baartman	Blue Crane Route	Small Bridge	6.9
2566	Sarah Baartman	Blue Crane Route	Small Bridge	6.6
2812	Sarah Baartman	Blue Crane Route	Small Bridge	6.6
2667	Sarah Baartman	Dr Beyers Naude	Very Large Bridge	167.1
2782	Sarah Baartman	Dr Beyers Naude	Large Bridge	99.0
2878	Sarah Baartman	Dr Beyers Naude	Large Bridge	96.5
3153	Sarah Baartman	Dr Beyers Naude	Large Bridge	95.5
2663	Sarah Baartman	Dr Beyers Naude	Large Bridge	56.4
2687	Sarah Baartman	Dr Beyers Naude	Medium Bridge	49.8
2776	Sarah Baartman	Dr Beyers Naude	Medium Bridge	48.8
2696	Sarah Baartman	Dr Beyers Naude	Medium Bridge	45.6
2635	Sarah Baartman	Dr Beyers Naude	Medium Bridge	41.1
2688	Sarah Baartman	Dr Beyers Naude	Medium Bridge	40.3
2692	Sarah Baartman	Dr Beyers Naude	Medium Bridge	40.0
2378	Sarah Baartman	Dr Beyers Naude	Medium Bridge	39.9
2646	Sarah Baartman	Dr Beyers Naude	Medium Bridge	39.4
2657	Sarah Baartman	Dr Beyers Naude	Medium Bridge	38.9
2755	Sarah Baartman	Dr Beyers Naude	Medium Bridge	38.4
2726	Sarah Baartman	Dr Beyers Naude	Medium Bridge	35.7
2711	Sarah Baartman	Dr Beyers Naude	Medium Bridge	34.7
2840	Sarah Baartman	Dr Beyers Naude	Medium Bridge	34.7
2841	Sarah Baartman	Dr Beyers Naude	Medium Bridge	34.7
2377	Sarah Baartman	Dr Beyers Naude	Medium Bridge	33.8
2710	Sarah Baartman	Dr Beyers Naude	Medium Bridge	29.5
2762	Sarah Baartman	Dr Beyers Naude	Medium Bridge	29.5
2848	Sarah Baartman	Dr Beyers Naude	Medium Bridge	29.4
2884	Sarah Baartman	Dr Beyers Naude	Medium Bridge	29.4
2724	Sarah Baartman	Dr Beyers Naude	Medium Bridge	28.8
2839	Sarah Baartman	Dr Beyers Naude	Medium Bridge	27.4
2639	Sarah Baartman	Dr Beyers Naude	Medium Bridge	27.0
2644	Sarah Baartman	Dr Beyers Naude	Medium Bridge	27.0
2381	Sarah Baartman	Dr Beyers Naude	Medium Bridge	26.3
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
2376	Sarah Baartman	Dr Beyers Naude	Medium Bridge	26.0
2846	Sarah Baartman	Dr Beyers Naude	Medium Bridge	25.3
2662	Sarah Baartman	Dr Beyers Naude	Medium Bridge	25.0
2725	Sarah Baartman	Dr Beyers Naude	Medium Bridge	24.2
2672	Sarah Baartman	Dr Beyers Naude	Medium Bridge	20.4
2675	Sarah Baartman	Dr Beyers Naude	Medium Bridge	20.4
2717	Sarah Baartman	Dr Beyers Naude	Medium Bridge	20.4
2405	Sarah Baartman	Dr Beyers Naude	Small Bridge	20.0



2652	Sarah Baartman	Dr Beyers Naude	Small Bridge	20.0
2847	Sarah Baartman	Dr Beyers Naude	Small Bridge	20.0
2778	Sarah Baartman	Dr Beyers Naude	Small Bridge	19.9
2658	Sarah Baartman	Dr Beyers Naude	Small Bridge	18.5
2761	Sarah Baartman	Dr Beyers Naude	Small Bridge	15.6
2689	Sarah Baartman	Dr Beyers Naude	Small Bridge	15.1
2691	Sarah Baartman	Dr Beyers Naude	Small Bridge	15.1
2697	Sarah Baartman	Dr Beyers Naude	Small Bridge	15.1
2713	Sarah Baartman	Dr Beyers Naude	Small Bridge	14.0
2712	Sarah Baartman	Dr Beyers Naude	Small Bridge	9.9
2765	Sarah Baartman	Dr Beyers Naude	Small Bridge	9.5
2856	Sarah Baartman	Dr Beyers Naude	Small Bridge	8.7
2734	Sarah Baartman	Dr Beyers Naude	Small Bridge	6.7
2394	Sarah Baartman	Kouga	Very Large Bridge	530.0
2398	Sarah Baartman	Kouga	Very Large Bridge	497.0
2402	Sarah Baartman	Kouga	Very Large Bridge	287.2
2880	Sarah Baartman	Kouga	Very Large Bridge	183.9
2881	Sarah Baartman	Kouga	Very Large Bridge	114.4
2863	Sarah Baartman	Kouga	Large Bridge	100.0
2917	Sarah Baartman	Kouga	Large Bridge	95.0
2396	Sarah Baartman	Kouga	Large Bridge	93.2
2388	Sarah Baartman	Kouga	Large Bridge	83.5
2854	Sarah Baartman	Kouga	Large Bridge	80.5
2920	Sarah Baartman	Kouga	Large Bridge	74.0
2392	Sarah Baartman	Kouga	Large Bridge	71.5
2870	Sarah Baartman	Kouga	Large Bridge	64.8
2918	Sarah Baartman	Kouga	Large Bridge	64.0
2915	Sarah Baartman	Kouga	Large Bridge	62.5
2916	Sarah Baartman	Kouga	Large Bridge	62.5
2862	Sarah Baartman	Kouga	Large Bridge	57.6
2526	Sarah Baartman	Kouga	Large Bridge	57.0
2389	Sarah Baartman	Kouga	Medium Bridge	33.6
2864	Sarah Baartman	Kouga	Medium Bridge	28.8
2853	Sarah Baartman	Kouga	Medium Bridge	24.0
2404	Sarah Baartman	Kouga	Medium Bridge	22.0
2401	Sarah Baartman	Kouga	Small Bridge	18.6
2787	Sarah Baartman	Kouga	Small Bridge	18.0
2784	Sarah Baartman	Kouga	Small Bridge	11.2
ID	District/Metropolitan	Local Municipality	New Structure Type	Estimated Overall Length (m)
2393	Sarah Baartman	Kouga	Small Bridge	8.4
2399	Sarah Baartman	Kouga	Small Bridge	8.0
2379	Sarah Baartman	Kou-Kamma	Very Large Bridge	101.9
2341	Sarah Baartman	Kou-Kamma	Large Bridge	78.6
2933	Sarah Baartman	Kou-Kamma	Large Bridge	71.0
2919	Sarah Baartman	Kou-Kamma	Large Bridge	67.0
2921	Sarah Baartman	Kou-Kamma	Large Bridge	65.0
2340	Sarah Baartman	Kou-Kamma	Large Bridge	57.5



2358	Sarah Baartman	Kou-Kamma	Medium Bridge	36.4
2344	Sarah Baartman	Kou-Kamma	Medium Bridge	34.5
2339	Sarah Baartman	Kou-Kamma	Small Bridge	15.6
2019	Sarah Baartman	Makana	Very Large Bridge	158.0
2570	Sarah Baartman	Makana	Very Large Bridge	120.0
3169	Sarah Baartman	Makana	Large Bridge	86.0
2593	Sarah Baartman	Makana	Large Bridge	80.0
2576	Sarah Baartman	Makana	Large Bridge	77.8
2575	Sarah Baartman	Makana	Large Bridge	75.4
2746	Sarah Baartman	Makana	Large Bridge	61.0
2564	Sarah Baartman	Makana	Medium Bridge	41.1
2822	Sarah Baartman	Makana	Medium Bridge	22.3
2824	Sarah Baartman	Makana	Medium Bridge	21.5
2816	Sarah Baartman	Makana	Medium Bridge	20.9
2613	Sarah Baartman	Makana	Small Bridge	18.7
2820	Sarah Baartman	Makana	Small Bridge	16.1
2568	Sarah Baartman	Makana	Small Bridge	13.5
2608	Sarah Baartman	Makana	Small Bridge	9.4
2609	Sarah Baartman	Makana	Small Bridge	7.2
2829	Sarah Baartman	Makana	Small Bridge	6.9
2619	Sarah Baartman	Makana	Small Bridge	6.8
2573	Sarah Baartman	Makana	Small Bridge	6.7
2585	Sarah Baartman	Makana	Small Bridge	6.6
2606	Sarah Baartman	Makana	Small Bridge	6.6
2922	Sarah Baartman	Ndlambe	Large Bridge	82.0
3167	Sarah Baartman	Ndlambe	Medium Bridge	49.0
2828	Sarah Baartman	Ndlambe	Medium Bridge	48.5
2833	Sarah Baartman	Ndlambe	Small Bridge	19.7
2834	Sarah Baartman	Ndlambe	Small Bridge	19.5
3157	Sarah Baartman	Ndlambe	Small Bridge	17.0
2831	Sarah Baartman	Ndlambe	Small Bridge	15.9
2898	Sarah Baartman	Sundays River Valley	Medium Bridge	45.0
3117	Sarah Baartman	Sundays River Valley	Medium Bridge	22.0
2886	Sarah Baartman	Sundays River Valley	Small Bridge	18.8
2892	Sarah Baartman	Sundays River Valley	Small Bridge	17.3
2877	Sarah Baartman	Sundays River Valley	Small Bridge	16.1
2867	Sarah Baartman	Sundays River Valley	Small Bridge	14.4
2891	Sarah Baartman	Sundays River Valley	Small Bridge	11.3
2810	Sarah Baartman	Sundays River Valley	Small Bridge	11.1
2807	Sarah Baartman	Sundays River Valley	Small Bridge	10.2
2887	Sarah Baartman	Sundays River Valley	Small Bridge	8.7
2893	Sarah Baartman	Sundays River Valley	Small Bridge	7.3
2803	Sarah Baartman	Sundays River Valley	Small Bridge	7.0
2882	Sarah Baartman	Sundays River Valley	Small Bridge	6.9
2885	Sarah Baartman	Sundays River Valley	Small Bridge	6.9

