



CLUSTER
Human Settlement, Engineering, and Transport

UNIT
Engineering

DEPARTMENT
Coastal Stormwater and Catchment Management

PROCUREMENT DOCUMENT
PROFESSIONAL SERVICES

Documents are to be obtained, free of charge, in electronic format, from the National Treasury's eTenders website or the eThekweni Municipality's website.

Contract No: 30270 (1D)

**Contract Title: Infrastructure Asset Management, CCTV and PCSWMM
Stormwater Modelling - Phase 8**

CLARIFICATION MEETING AND QUERIES

Clarification Meeting: Compulsory Clarification Meeting. Questions and answers from the clarification meeting will be consolidated and posted on eTenders/Municipal website for the benefit of all tenderers by 10 July 2025.

Meeting Location, Date, Time: Room 527, 5th Floor, City Engineers Building On 18 June 2025 at 09h30

Queries can be addressed to: Kiyash Sha
Tel: 031 311 7333
The Employer's Agent's: eMail: Kiyash.sha@durban.gov.za
Representative: SSS Queries: Lindo Dlamini; Tel: 031 3227133 / 031 3227153;
Email: Supplier.selfservice@durban.gov.za

TENDER SUBMISSION

Delivery Location: The Tender Box in the foyer of the Municipal Building
166 KE Masinga Road, Durban

Closing Date/ Time: Friday, 18 July 2025 at 11h00

FACSIMILE, eMAIL, or POSTED TENDERS WILL NOT BE ACCEPTED

Issued by:

ETHEKWINI MUNICIPALITY

Deputy Head: Coastal Stormwater and Catchment Management

Date of Issue: 13/06/2024

Document Version : 14/03/2023(a)

FOR OFFICIAL USE ONLY

Tenderer Name:			VAT Registered: Yes No
	Price (excl)	VAT	Price (incl)
Submitted: R		R	R
Corrected: R		R	R

INDEX to PROCUREMENT DOCUMENT

TENDER PART	Part T1	TENDERING PROCEDURES		Page
		T1.1	Tender Notice and Invitation to Tender	
		T1.1.1	Tender Notice and Invitation to Tender	2
		T1.2	Tender Data	
		T1.2.1	Standard Conditions of Tender	3
		T1.2.2	Tender Data (<i>applicable to this tender</i>)	3
		T1.2.3	Additional Conditions of Tender	10
	Part T2	RETURNABLE DOCUMENTS		Page
		T2.1	List of Returnable Documents	13
		T2.2	Returnable Schedules, Forms and Certificates	14

CONTRACT PART	Part C1	AGREEMENT AND CONTRACT DATA		Page
		C1.1	Form of Offer and Acceptance	
		C1.1.1	Offer	37
		C1.1.2	Acceptance	38
		C1.1.3	Schedule of Deviations	39
		C1.2	Contract Data	
		C1.2.1	Standard Conditions of Contract	40
		C1.2.2	Contract Data.....	40
		C1.2.3	Additional Conditions of Contract	43
	Part C2	PRICING DATA		Page
		C2.1	Pricing Assumptions / Instructions.....	45
		C2.2	Pricing Schedule (separate page numbering system)	46
	Part C3	SCOPE OF WORK		Page
		C3.1	Background.....	49
		C3.2	Employer's Requirements	49
		C3.3	Annexures	62
		C3.3.1	Standard Conditions of Tender.....	63
		C3.3.2	Standard Professional Services Contract.....	64

PART T1: TENDERING PROCEDURES

T1.1.1: TENDER NOTICE AND INVITATION TO TENDER

Tenders are hereby invited for Professional Services to carry out stormwater Modelling (PCSWMM and other software) and CCTV conditional Assessment of Stormwater Infrastructure

Subject	Description	Tender Data Ref.
Employer	The Employer is the eThekweni Municipality as represented by: Deputy Head: Coastal Stormwater and Catchment Management	F.1.1.1
Tender Documents	Documents can only be obtained in electronic format, issued by the eThekweni Municipality. Documentation can be downloaded from the National Treasury's eTenders website or the eThekweni Municipality's Website . The <u>entire document</u> should be printed (on A4 paper) and suitably bound by the tenderer.	F.1.2
Clarification Meeting	Room 527, 5th Floor, City Engineers Building On 18 June 2025 at 09h30	F.2.7
Seek Clarification	Queries relating to these documents are to be addressed to the Employer's Agent's Representative whose contact details are: Kiyash Sha Tel: 031 311 7333 eMail: Kiyash.sha@durban.gov.za SSS Queries: Lindo Dlamini; Tel: 031 3227133 / 031 3227153; Email: Supplier.selfservice@durban.gov.za	F.2.8
Submitting a Tender Offer	Tender offers shall be delivered to: The Tender Box in the foyer of the Municipal Building 166 KE Masinga Road, Durban	F.2.13
Closing Time	Tender offers shall be delivered on or before Friday, 18 July 2025 at or before 11h00 .	F.2.15
Evaluation of Tender Offers	The 80/20 Price Preference Point System, as specified in the PPPFA Regulations 2022 will be applied in the evaluation of tenders. Refer to Clause F.3.11 of the Tender Data for the Specific Goal(S) for the awarding of Preference Points, and other related evaluation requirements.	F.3.11
Requirements for sealing, addressing, delivery, opening and assessment of tenders are further stated in the Tender Data		

PART T1: TENDERING PROCEDURES

T1.2: TENDER DATA

T1.2.1 STANDARD CONDITIONS OF TENDER

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement (July 2015) as published in Government Gazette No 38960, Board Notice 136 of 2015 of 10 July 2015.

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

T1.2.2 TENDER DATA

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

F.1: GENERAL

F.1.1 The employer: The Employer for this Contract is the eThekweni Municipality as represented by: Deputy Head: **Coastal Stormwater and Catchment Management**

F.1.2 Tender documents: The Tender Documents issued by the Employer comprise:

- 1) This procurement document.
- 2) The “Standard Professional Services Contract – 3rd Edition July 2009” published by the Construction Industry Development Board (CIDB). This document is obtainable separately, and Tenderers shall obtain their own copies.
- 3) In addition, Tenderers are advised, in their own interest, to obtain their own copies of the following acts, regulations, and standards referred to in this document as they are essential for the Tenderer to get acquainted with the basics of construction management, the implementation of preferential construction procurement policies, and the participation of targeted enterprise and labour.
 - The Employer’s current (as at advertising date) Supply Chain Management Policy.
 - The Preferential Procurement Policy Framework Act No 5 of 2000, and the Preferential Procurement Policy Framework Act Regulations (2022).
 - The Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the Construction Regulations (2014).
 - The Construction Industry Development Board Standard for Uniformity in Construction Procurement (July 2015).
 - Any other eThekweni Policy documents referenced in the Tender Documents.

Electronically downloaded documentation is obtainable from the National Treasury’s **eTenders Website** or the **eThekweni Municipality’s Website** at URLs:

- <https://www.etenders.gov.za/>
- <https://www.durban.gov.za/pages/business/procurement>

The entire downloaded document should be printed on white A4 paper (single-sided) and suitably bound by the tenderer.

Bidders must submit a “hard copy” submission to the Tender Box located in the ground floor foyer of the Municipal Buildings, 166 KE Masinga Road (Old Fort Rd), Durban and an electronic submission via SSS. Bidders must ensure that the hard copy and electronic submission are the same, failing which the submission will be deemed invalid. Bidders are responsible for resolving all access rights and submission queries before the tender closing date.

F.1.4 Communication and employer’s agent: The Employer’s Agent’s Representative is:

Kiyash Sha

Tel: 031 311 7333

eMail: Kiyash.sha@durban.gov.za

SSS Queries: Lindo Dlamini; Tel: 031 3227133 / 031 3227153;

Email:Supplier.selfservice@durban.gov.za

The Tenderer’s contact details, as indicated in the Contract Data: Clause C1.2.2.2 “Data to Be Provided by Contractor”, shall be deemed as the only valid contact details for the Tenderer for use in communications between the Employer’s Agent and the Tenderer.

F.2: TENDERER'S OBLIGATIONS

F.2.1 Eligibility: General

A Tenderer will not be eligible to submit a tender if:

- (a) the Tenderer submitting the tender is under restrictions or has principles who are under restriction to participate in the Employer’s procurement due to corrupt or fraudulent practices.
- (b) the Tenderer does not have the legal capacity to enter into the contract.
- (c) the Tenderer does not comply with the legal requirements as stated in the Employer’s current SCM Policy.
- (d) the Tenderer cannot provide proof that he is in good standing with respect to duties, taxes, levies and contributions required in terms of legislation applicable to the work in the contract.
- (e) In the event of a Compulsory Clarification Meeting:
 - i) the Tenderer fails to attend the Compulsory Clarification Meeting.
 - ii) the Tenderer fails to have form “Certificate of Attendance at Clarification Meeting / Site Inspection” (in T2.2) signed by the Employer’s Agent or his representative.
- (f) in the case of JV submissions, two or more JV entities have common directors / shareholders or common entities tendering for the same works.
- (g) at the time of closing of tenders, the Tenderer is not registered on the **National Treasury Central Supplier Database (CSD)** as a service provider. In the case of a Joint Venture, this requirement will apply individually to each party in the Joint Venture.
- (h) The tender fails to complete and sign the Declaration of Municipal Fees in T2.2: “Returnable Documents” and submits the required documentation. Reference is to be made to Returnable Document T2.2.12.

SCM Policy (CI.14(4)) requires suppliers/ service providers/ contractors to be registered on the **eThekweni Municipality Central Supplier Database**.

In the event of the Tenderer not being registered on the eThekweni Municipality’s Central Supplier Database, the tenderer must register on the internet at www.durban.gov.za by following these links:

- Business
- Supply Chain Management (SCM)
- Accredited Supplier and Contractor's Database.

The following are to be noted regarding registration on the **eThekwini Municipality Central Supplier Database**:

- (a) The information for registration as in the possession of the eThekwini Municipality will apply.
- (b) It is the Tenderer's responsibility to ensure that the details as submitted to the Municipality are correct.
- (c) Tenderers are to register prior to the submission of tenders.

F.2.2.2 The cost of the tender documents:

"Documents are to be obtained, free of charge, in electronic format, from the **National Treasury's eTenders website** or the **eThekwini Municipality's Website**. The entire electronically downloaded document should be printed on white A4 paper (single-sided) and suitably bound by the tenderer.

F.2.6 Acknowledge addenda: Add the following paragraphs to the clause:

"Addenda will be published, in electronic format, on the websites specified in F.1.2. Tenderers are to ensure that the eTenders website is consulted for any published addenda pertaining to this tender up to three days before the tender closing time as stated in the Tender Data."

"Acknowledgement of receipt of the addenda will be by the return of the relevant completed, dated, and signed portion of the addenda, to the physical or email address as specified on the addenda. Failure of the tenderer to comply with the requirements of the addenda may result in the tender submission being made non-responsive."

F.2.7 Clarification meeting: **Room 527, 5th Floor, City Engineers Building On 18 June 2025 at 09h30**

In the event of a Compulsory Clarification Meeting, Tenderers must sign the attendance register in the name of the tendering entity. The Tenderer's representative(s) at the clarification meeting must be able to clearly convey the discussions at the meeting to the person(s) responsible for compiling the entity's tender offer.

F.2.12 Alternative tender offers: No alternative tender offers will be considered.

F.2.13 Submitting a tender offer: Submissions must be submitted on official submission documentation issued (in electronic format) by the eThekwini Municipality. The entire downloaded document should be printed on white A4 paper (single-sided) and suitably bound by the tenderer.

Identification details to be shown on each tender offer package are:

- Contract No. : **30270 (1D)**
- Contract Title : **Infrastructure Asset Management, CCTV and PCSWMM Stormwater Modelling - Phase 8**

The Employer's address for delivery of tender offers is:

The Tender Box in the foyer of the Municipal Building
166 KE Masinga Road, Durban

Tenderers are to include, with their paper ("hard copy") submission, a memory-stick containing an electronically scanned (300 dpi resolution) Public Document Format (PDF) copy of their complete bid submission. This PDF file should be named using the contract number and the Tenderer's name, eg. "**30270 (1D) IAM Phase 8 – Tenderers Name.PDF**". The memory-stick must be labelled with the Tenderer's name and securely fixed to the paper submission.

Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.

F.2.15 Closing time: The closing time for delivery of tender offers is:

- Date : **Friday, 18 July 2025**

- Time : **11h00**

F.2.16 Tender offer validity: The Tender Offer validity period is 120 Days from the closing date for submission of tenders.

F.2.23 Certificates: Refer to T2.1 for a listing of certificates that must be provided with the tender. All certificates must be valid at the time of tender closing.

Tenderers are to include, at the back of their tender submission document, a printout of the required documents/ certificates.

The Form of Offer (C1.1.1), Data to be provided by the Contractor (C1.2.2.2), and the Bill of Quantities (C2.2) are also required to be completed in full.

Tax Clearance

Refer also to returnable form in T2.2.3: "Tax Compliance Status PIN/ Tax Clearance Certificate".

SARS has introduced a new Tax Compliance Status System. Tenderers must submit a **Tax Compliance Status PIN** (TCS PIN) instead of an original Tax Clearance Certificate. This TCS PIN can be used by third parties to certify the taxpayer's real-time compliance status. This TCS PIN is to be entered on Returnable Document T2.2.1: "Compulsory Enterprise Questionnaire". Separate Tax Clearance Certificates / TCS PINs are required for each entity in a Joint Venture.

Failure to comply will make the tender non-responsive.

Central Supplier Database (CSD)

Refer also to returnable form in T2.2.12: "Eligibility: CSD Registration Report".

The entities (full) **CSD Registration Report**, obtained from the National Treasury Central Supplier Database, is to be included in the tender submission (<https://secure.csd.gov.za>).

Separate CSD Registration Reports are required for each entity in a Joint Venture.

F.3: THE EMPLOYER'S UNDERTAKINGS

F.3.1.1 Respond to requests from the tenderer: five working days

F.3.2 Issue addenda: Addenda will be published, in electronic format, on the same platform(s) as the Tender Notification (refer to F.1.2).

F.3.4 Opening of Tender Submissions: Tenders will be opened immediately after the closing time for tenders. The public reading of tenders will take place in the SCM Boardroom, 6th Floor, Engineering Unit Building, 166 KE Masinga Road, Durban.

F.3.11 Evaluation of Tender Offers:

Eligibility

Tenders will be checked for compliance with the ELIGIBILITY requirements, as specified in Clause F.2.1. Tenderers not in compliance will be deemed non-responsive.

Functionality

FUNCTIONALITY will be evaluated to determine the responsiveness of tenders received. The minimum score for FUNCTIONALITY is **70 points**. Those tenders not achieving the minimum score

will be deemed non-responsive.

The functionality Criteria, Sub-Criteria, Points per Criteria/ Sub-Criteria, Returnable Documentation and Schedules, Method of Evaluation, and Prompts for Judgement are as specified in T1.2.3: "Additional Conditions of Tender".

Preference Point System

The financial offer will be reduced to a comparative basis using the **Tender Assessment Schedule**.

The procedure for the evaluation of responsive tenders is **PRICE AND PREFERENCE** in accordance with the Employer's current SCM Policy, the Preferential Procurement Policy Framework Act (5 of 2000), and the Preferential Procurement Policy Framework Act Regulations (2022).

Price Points

The **80/20** preference points system will be applied. The Formula used to calculate the **Price Points (max. 80)** will be according to that specified Regulation 4.1.

Preference Points

Refer to T2.2.6: "MBD 6.1: Preference Points Claim".

The Preference Points (either 20 or 10) will be derived from points allocated/ claimed for **Specific Goals** as indicated in the table(s) below, according to the specified **Goal/ Category Weightings**.

- **Ownership Goal**

Goal Weighting: 60%

The tendering entity's **Percentage Ownership**, in terms of the **Ownership Category(s)** listed below, is to be used in the determination of the tenderer's claim for **Preference Points**.

Ownership Categories	Criteria	80/20
Race: Black (w1)	Equals 0%	0
	Between 0% and 51%	8
	Greater or equal to 51% and less than 100%	16
	Equals 100%	20
Gender: Female (w2)	Equals 0%	0
	Between 0% and 51%	8
	Greater or equal to 51% and less than 100%	16
	Equals 100%	20
Maximum Goal Points:		

The Weightings of the Ownership Categories will be: • $w1 = 75\%$, $w2=25\%$ (where: $w1 + w2 = 100\%$)
Proof of claim as declared on MBD 6.1 (1 or more of the following will be used in verifying the tenderer's status) • Companies and Intellectual Property Commission registration document (CIPC) • CSD report. • B-BBEE Certificate of the tendering entity. • Consolidated BBBEE Certificate if the tendering entity is a Consortium, Joint Venture, or Trust (Issued by verification agency accredited by the South African Accreditation System). • Agreement for a Consortium, Joint Venture, or Trust.

- **RDP Goal: The promotion of South African owned enterprises**

Goal Weighting: 40%

The tendering entity's **Address** (as stated on the National Treasury Central Supplier Database (CSD) or on the eThekweni Municipality Vendor Portal) is to be used in the determination of the tenderer's claim for **Preference Points** for this Specific Goal.

Location	80/20
Not in South Africa	0
South Africa	5
Kwa Zulu Natal	10
eThekweni Municipality	20
Maximum Goal Points:	

Proof of claim as declared on MBD 6.1 (1 or more of the following will be used in verifying the tenderer's status)

- CSD report

F.3.13 Acceptance of tender offer: In addition to the requirements of Clause F.3.13 of the Standard Conditions of Tender, tender offers will only be accepted if:

- The tenderer submits a **valid Tax Clearance Certificate OR Tax Compliance Status PIN**, issued by the TCS System of the South African Revenue Services, or has made arrangements to meet outstanding tax obligations.
- The tenderer or any of its directors/shareholders 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.
- The tenderer has not:
 - Abused the Employer's Supply Chain Management System; or
 - Failed to perform on any previous contract and has been given a written notice to this effect.
- The tenderer has completed the **Compulsory Enterprise Questionnaire** and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the Employer or potentially compromise the tender process.

The Municipality does not bind itself to accept the lowest or any tender. It reserves the right to accept the whole or any part of a tender to place orders. Bidders shall not bind the Municipality to any minimum quantity per order. The successful Tenderer (s) shall be bound to provide any quantities stipulated in the specification.

F.3.17 Copies of contract: The number of **paper copies** of the signed contract to be provided by the Employer is ONE (1).

Bidders must submit a "hard copy" submission to the Tender Box located in the ground floor foyer of the Municipal Buildings, 166 KE Masinga Road (Old Fort Rd), Durban and an electronic submission via SSS. Bidders must ensure that the hard copy and electronic submission are the same, failing which the submission will be deemed invalid. Bidders are responsible for resolving all access rights and submission queries before the tender closing date.

T1.2.3 ADDITIONAL CONDITIONS OF TENDER

T1.2.3.1 Appeals

In terms of Regulation 49 of the Municipal Supply Chain Management Regulations persons aggrieved by decisions or actions taken by the Municipality, may lodge an appeal within 14 days of the decision or action, in writing to the Municipality. All appeals (clearly setting out the reasons for the appeal) and queries with regard to the decision of award are to be directed to:

The City Manager
Attention Ms S. Pillay eMail: Simone.Pillay@durban.gov.za
P O Box 1394
DURBAN, 4000

T1.2.3.2 Prohibition on awards to persons in the service of the state

Clause 44 of the Supply Chain Management Regulations states that the Municipality or Municipal Entity may not make any award to a person:

- (a) Who is in the service of the State;
- (b) If that person is not a natural person, of which a director, manager, principal shareholder or stakeholder is a person in the service of the state; or
- (c) Who is an advisor or consultant contracted with the municipality or a municipal entity.

Should a contract be awarded, and it is subsequently established that Clause 44 has been breached, the Employer shall have the right to terminate the contract with immediate effect.

T1.2.3.3 Code of Conduct and Local Labour

The Tenderers shall make themselves familiar with the requirements of the following policies that are available on web address: <ftp://ftp.durban.gov.za/cesu/StdContractDocs/>:

- Code of Conduct;
- The Use of CLOs and Local Labour.

T1.2.3.5 Functionality Specification

Functionality Evaluation is applicable to this tender.

- The minimum number of evaluation points for Functionality is **70**
- The Functionality criteria and maximum score in respect of each of the criteria are as follows:

Functionality criteria	Subcriteria	Points	Evaluation Schedule(s)
Experience of Tenderer	Experience of service provider in executing work of similar scope	50	
Experience of Key Resources in executing work of similar nature	Project Manager (Civil Engineer)	10	
	Key Personnel 1 (Civil Engineer)	7.5	
	Key Personnel 2 (Civil Engineer)	7.5	
Methodology	Including programme, risk management and approach	25	
Maximum possible score for Functionality (M_s)		100	

- Each evaluation criteria will be assessed in terms of five indicators – no response, poor, satisfactory, good and very good. Scores of 0, 40, 70, 90 or 100 will be allocated to no

response, poor, satisfactory, good and very good, respectively;

- The prompts for judgment and the associated scores used in the evaluation of Functionality shall be as follows:

Level	pts	Criterion: Tenderer's Experience Similar in nature refers to large scale modelling which includes a minimum of 1,000 nodes
0	0	No Submission or Submission of no substance / irrelevant information provided
1	40	To have successfully completed 1 to 5 <u>projects</u> of a similar nature within the past 10 years.
2	70	To have successfully completed 6 to 10 <u>projects</u> of a similar nature within the past 10 years..
3	90	To have successfully completed 11 to 15 <u>projects</u> of a similar nature within the past 10 years.
4	100	To have successfully completed 15+ <u>projects</u> of a similar nature within the past 10 years.

Experience of Key Resources in executing work of similar nature								
Job Title	Minimum Qualification Required	Professional Registration Required	Number of Years' Relevant Experience on projects of a similar nature					Total Points
			Level 0 0 pts	Level 1 40 pts	Level 2 70 pts	Level 3 90 pts	Level 4 100 pts	
Project Manager (Civil Engineer)	BSc Eng or BEng or BTech	Pr. Eng, or Pr Tech Eng	No Submission	≤ 5	> 5 ≤ 10	> 10 ≤ 15	> 15	10
Key Personnel 1 (Civil Engineer)	BSc Eng or BEng or BTech	Pr. Eng, or Pr Tech Eng	No Submission	≤ 3	> 3 ≤ 7	> 7 ≤ 10	> 10	7.5
Key Personnel 2 (Civil Engineer)	BSc Eng or BEng or BTech	Pr. Eng, or Pr Tech Eng	No Submission	≤ 3	> 3 ≤ 7	> 7 ≤ 10	> 10	7.5
Note 1: "experience" implies experience on projects of a similar nature with respect to the Scope								

Level	Pts	Criterion : Approach / Methodology
Level 0	0 pts	No response/ no documents submitted/ methodology submitted does not relate to the project.
Level 1	40 pts	The technical approach/methodology is poor and is unlikely to satisfy project objectives or requirements. The tenderer has misunderstood certain aspects of the scope of work and does not deal with the core aspects of the project as provided in the scope of works. The technical approach/methodology does not include a quality control statement and/or programme.
Level 2	70 pts	The technical approach/methodology is brief and is considered satisfactory. It provides a brief overview of the core aspects of the projects as provided in the scope of works. The technical approach/methodology includes a brief quality control statement that some of the the requirements and deliverables of the project. The technical approach/methodology also includes a basic programme that displays how they will meet the key milestone dates as set out in the scope of works.
Level 3	90 pts	The technical approach/methodology is tailored to address the core aspects in great detail and is considered above satisfactory. The technical approach/methodology includes a detailed quality control statement that is specific and covers all the requirements and deliverables of the project. The technical approach/methodology also includes a detailed programme that displays how they will meet the key milestone dates as set out in the scope of works as well as their approach to managing project specific risks. The technical approach/methodology also includes a brief health and safety plan.
Level 4	100 pts	The technical approach/methodology addresses all aspects in great detail and makes mention of the following additional aspects (Inspection methodology, Modelling methodology). The technical approach/methodology includes a detailed quality control statement that is specific and covers all the requirements and deliverables of the project. The technical approach/methodology also includes a detailed programme that displays how they will meet the key milestone dates as set out in the scope of works as well as their approach to managing project specific risks. The programme also includes critical pathing and makes allowance for all the key risk areas. The technical approach/methodology also includes a detailed health and safety plan.

PART T2: RETURNABLE DOCUMENTS

T2.1 LIST OF RETURNABLE DOCUMENTS

T2.1.1 General

The Tender Submission Documentation must be submitted in its entirety. All forms must be properly completed as required.

The Tenderer is required to complete each and every Schedule and Form listed below to the best of their ability as the evaluation of tenders and the eventual contract will be based on the information provided by the Tenderer. Failure of a Tenderer to complete the Schedules and Forms to the satisfaction of the Employer will inevitably prejudice the tender and may lead to rejection on the grounds that the tender is non-responsive.

T2.1.2 Returnable Schedules, Forms and Certificates

Entity Specific

T2.2.1	Compulsory Enterprise Questionnaire	15
T2.2.2	Certificate of Attendance at Clarification Meeting	17
T2.2.3	Tax Compliance Status PIN / Tax Clearance Certificate	18
T2.2.4	MBD 4: Declaration of Interest	19
T2.2.5	MBD 5: Declaration for Procurement Above R10 Million	21
T2.2.6	MBD 6.1: Preference Points Claim Form ITO the Preferential Regulations	22
T2.2.7	MBD 8: Declaration of Bidder's Past SCM Practices	22
T2.2.8	MBD 9: Certificate of Independent Bid Determination	27
T2.2.9	Joint Venture Agreements (if applicable)	30
T2.2.10	Record of Addenda to Tender Documents (if applicable)	31
T2.2.11	Declaration of Municipal Fees	32
T2.2.12	CSD Registration Report	33

Technical or Functionality Evaluation

T2.2.13	Experience of Tenderer	34
T2.2.16	Experience of Key Personnel	35
T2.2.17	Approach Paper / Methodology / Programme	36

T2.2 RETURNABLE SCHEDULES, FORMS, AND CERTIFICATES

The returnable schedules, forms, and certificates, as listed in T2.1.2, can be found on pages 15 to 31.

NOTE

The **Form of Offer** (C1.1.1), The **Data to be Provided by Contractor** (C1.2.2.2), and the **Bill of Quantities** (C2.2) are also required to be completed by the tenderer.

T2.2.1 COMPULSORY ENTERPRISE QUESTIONNAIRE

Ref	Description	Complete or Circle Applicable
1.1	Name of enterprise	
1.2	Name of enterprise's representative	
1.3	ID Number of enterprise's representative	
1.4	Position enterprise's representative occupies in the enterprise	
1.5	National Treasury Central Supplier Database Registration number	MAAA
1.6	eThekweni Supplier Database: Reference number (PR), if any:	PR
1.7	VAT registration number, if any:	
2.0	Particulars of sole proprietors and partners in partnerships (attach separate pages if more than 4 partners)	
	Full Name	Identity No.
2.1		
2.2		
2.3		
2.4		
3.0	Particulars of companies and close corporations	
3.1	Company registration number, if applicable:	
3.2	Close corporation number, if applicable:	
3.3	Tax Reference number, if any:	
3.4	South African Revenue Service: Tax Compliance Status PIN:	

4.0 Record in the service of the state (Insert on a separate page if necessary)

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:

- | | |
|---|--|
| ☐ a member of any municipal council | ☐ a member of any provincial legislature |
| ☐ an official of any municipality or municipal entity | ☐ a member of an accounting authority of any national or provincial public entity |
| ☐ a member of the board of directors of any municipal entity | ☐ a member of the National Assembly or the National Council of Province |
| ☐ 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) | ☐ an employee of Parliament or a provincial legislature |

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 mths

5.0 Record of spouses, children and parents in the service of the state (Insert on a separate page if necessary)

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 in the service of any of the following:

- | | |
|---|--|
| ☐ a member of any municipal council | ☐ a member of any provincial legislature |
| ☐ an official of any municipality or municipal entity | ☐ a member of an accounting authority of any national or provincial public entity |
| ☐ a member of the board of directors of any municipal entity | ☐ a member of the National Assembly or the National Council of Province |
| ☐ 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) | ☐ an employee of Parliament or a provincial legislature |

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 mths

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

- i) authorizes the Employer to verify the tenderers tax clearance status from the South African Revenue Services that it is in order.
- ii) confirms that the 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.
- iii) 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.
- 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.

NAME (Block Capitals):

Date

SIGNATURE:

T2.2.2 CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING / SITE INSPECTION

Reference is to be made to Clauses F.2.1(c) and F.2.7 of the Tender Data.

This is to certify that:

(tenderer name):

of (address):

was represented by the person(s) named below at the Clarification Meeting held for all tenderers, the details of which are stated in the Tender Data (F.2.7).

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:

Name:

Signature:

Signature:

Capacity:

Capacity:

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

Name:

Signature:

Date:

T2.2.3 TAX COMPLIANCE STATUS PIN / TAX CLEARANCE CERTIFICATE

Reference is to be made to Clauses F.2.23 and F.3.13(a) of the Tender Data.

SARS has introduced a new Tax Compliance Status System. Tenderers can submit a Tax Compliance Status PIN (TCS PIN) instead of an original Tax Clearance Certificate. This TCS PIN can be used by third parties to certify the taxpayer's real-time compliance status.

Separate Tax Clearance Certificates / TCS PINs are required for each entity in a Joint Venture.

The TCS PIN(s) are to be entered under item 3.4 on form **T2.1.2.1: Compulsory Enterprise Questionnaire**.

Tenderers are to include, at the back of their tender submission document, a printout of their Tax Compliance Status PIN (TCS PIN) OR an original Tax Clearance Certificate.

Failure to include the required document will make the tender submission non-responsive.

*I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct, **and that the requested documentation has been included in the tender submission.***

NAME (Block Capitals): _____

Date

SIGNATURE: _____

T2.2.4 MBD 4: DECLARATION OF INTEREST

MSCM Regulations: “**in the service of the state**” means to be:

- (a) a member of:
 - (i) any municipal council.
 - (ii) any provincial legislature.
 - (iii) the national Assembly or the national Council of provinces.
- (b) a member of the board of directors of any municipal enterprise.
- (c) an official of any municipality or municipal enterprise.
- (d) an employee of any national or provincial department, national or provincial public enterprise or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999).
- (e) a member of the accounting authority of any national or provincial public enterprise.
- (f) an employee of Parliament or a provincial legislature.

“**Shareholder**” means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.

- 1 No bid will be accepted from persons **in the service of the state**¹.
- 2 Any person, having a kinship with persons **in the service of the state**, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to **persons in service of the state**, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest.
- 3 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

3.1 Name of enterprise

Name of enterprise’s representative

3.2 ID Number of enterprise’s representative

3.3 Position enterprise’s representative occupies in the enterprise

3.4 Company Registration number

3.5 Tax Reference number

3.6 VAT registration number

3.7 The names of all directors / trustees / shareholders / members / sole proprietors / partners in partnerships, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below. In the case of a joint venture, information in respect of each partnering enterprise must be completed and submitted.

3.8 Are you presently in the service of the state?

If yes, furnish particulars:

3.9 Have you been in the service of the state for the past twelve months?

If yes, furnish particulars:

Complete T2.1.2.1 Item 1.1
Complete T2.1.2.1 Item 1.2
Complete T2.1.2.1 Item 1.3
Complete T2.1.2.1 Item 1.4
Complete T2.1.2.1 Item 3.1 or 3.2
Complete T2.1.2.1 Item 3.3
Complete T2.1.2.1 Item 1.7

Circle Applicable

YES

NO

YES

NO

3.10 Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid?

YES

NO

If yes, furnish particulars:

3.11 Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid?

YES

NO

If yes, furnish particulars:

3.12 Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state?

YES

NO

If yes, furnish particulars:

3.13 Are any spouse, child or parent of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state?

YES

NO

If yes, furnish particulars:

3.14 Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract?

YES

NO

If yes, furnish particulars:

- 4 The names of all directors / trustees / shareholders / members / sole proprietors / partners in partnerships, their individual identity numbers and state employee numbers must be indicated below. In the case of a joint venture, information in respect of each partnering enterprise must be completed and submitted

Full Name	Identity No.	State Employee No.	Personal income tax No.
Use additional pages if necessary			

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct.

NAME (Block Capitals):

Date

SIGNATURE:

T2.2.5 MBD 5: DECLARATION FOR PROCUREMENT ABOVE R10 MILLION
(ALL APPLICABLE TAXES INCLUDED)

For all procurement expected to exceed R10 million (all applicable taxes included), bidders must complete the following questionnaire.

		Circle Applicable	
		YES	NO
1.0	Are you by law required to prepare annual financial statements for auditing?		
1.1	If YES, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.		
2.0	Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days?	YES	NO
2.1	If NO, this serves to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than three months or other service provider in respect of which payment is overdue for more than 30 days.		
2.2	If YES, provide particulars.		
3.0	Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract?	YES	NO
3.1	If YES, provide particulars.		
4.0	Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic?	YES	NO
4.1	If YES, provide particulars.		

If required by 1.1 above, tenderers are to include, at the back of their tender submission document, a printout of their audited annual financial statements.

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct, and, if required, that the requested documentation has been included in the tender submission.

NAME (Block Capitals):

Date

SIGNATURE:

T2.2.6 MBD 6.1: PREFERENCE POINTS CLAIM
In terms of THE PREFERENTIAL PROCUREMENT REGULATIONS (2022)

Reference is to be made to Clause F.3.11 of the Tender Data.

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

1.0 GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included).
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 The applicable preference point system for this tender is the 80/20 preference point system.

1.3 Preference Points for this tender shall be awarded for:

- **Price and Specific Goals:** 80(price) and 20 (specific goals), in terms of 1.2 above.
- The total Preference Points, for Price and Specific Goals, is 100.

1.4 Failure on the part of the tenderer to submit the required proof or documentation, in terms of the requirements in the Conditions of Tender for claiming specific goal preference points, will be interpreted that preference points for specific goals are not claimed.

1.5 The Municipality 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 of preferences, in any manner required by the Municipality.

2.0 DEFINITIONS

2.1 **“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.

2.2 **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts.

2.3 **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes.

2.4 **“tender for income-generating contracts”** means a written offer in the form determined by Municipality 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 Municipality and a third party that produces revenue for the Municipality, 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.

2.5 **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3.0 FORMULA FOR CALCULATION OF PREFERENCE PRICE POINTS

3.1 PROCUREMENT OF GOODS AND SERVICES

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

<u>80 / 20 Points System</u>	OR	<u>90 / 10 Points System</u>
$P_s = 80 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$		$P_s = 90 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$

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

4.0 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 goal(s) stated in **Table 1** below, as supported by proof/ documentation stated in the **Conditions of 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.

TABLE 1: Specific Goals for the tender and maximum points for each goal are indicated per the table below.

Tenderers are to indicate their points claim for each of the Specific Goals in the shaded blocks.

The Specific Goals to be allocated points in terms of this tender	Maximum Number of points ALLOCATED (80/20 system)	Number of points CLAIMED (80/20 system)
Ownership Goal: Race (black)	9	
Ownership Goal: Gender (female)	3	
RDP Goal: The promotion of South African owned enterprises.	8	
Total CLAIMED Points (20 Maximum)		

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, certify that the points claimed, based on the specific goals as specified in the tender, qualifies the tendering entity for the preference(s) shown.

I acknowledge that:

- 1) The information furnished is true and correct.
- 2) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form.
- 3) 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.
- 4) If the specific goals have been claimed or obtained on a fraudulent basis, or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have:
 - (a) disqualify the person from the tendering process.
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct.
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation.
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

NAME (Block Capitals):

Date

SIGNATURE:

T2.2.7 **MBD 8: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES**

- 1.0 This Municipal Bidding Document must form part of all bids invited.
- 2.0 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3.0 The bid of any bidder may be rejected if that bidder, or any of its directors have:
- a) abused the municipal entity's supply chain management system or committed any improper conduct in relation to such system.
 - b) been convicted for fraud or corruption during the past five years.
 - c) wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years.
 - d) been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- 4.0 In order to give effect to the above, the following questions must be completed and submitted with the bid.

- 4.1 Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector?

(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer / Authority of the institution that imposed the restriction after the audi alteram partem rule was applied.)

The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.

Circle Applicable	
YES	NO

- 4.1.1 If YES, provide particulars.

.....

.....

- 4.2 Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?

The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.

YES	NO
-----	----

- 4.2.1 If YES, provide particulars.

.....

.....

- 4.3 Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?

YES	NO
-----	----

- 4.3.1 If YES, provide particulars.

.....

.....

4.4 Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?

YES

NO

4.4.1 If YES, provide particulars.

.....

.....

4.5 Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?

YES

NO

4.5.1 If YES, provide particulars.

.....

.....

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct.

I accept that, in addition to cancellation of a contract, action may be taken against me should this declaration prove to be false.

NAME (Block Capitals):

Date

.....

SIGNATURE:

.....

.....

T2.2.8 MBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION

NOTES

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

² Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

1.0 This Municipal Bidding Document (MBD) must form part of all **bids**¹ invited.

2.0 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or **bid rigging**).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.

3.0 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:

- a. take all reasonable steps to prevent such abuse;
- b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
- c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.

4.0 This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of **bid rigging**.

5.0 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid.

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Municipality / Municipal Entity)

do hereby make the following statements that I certify to be true and complete in every respect.

I certify, on behalf of:

(Name of Bidder)

that:

1. I have read and I understand the contents of this Certificate.
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect.
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation.
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience.
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder.
6. 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 consortium³ will not be construed as collusive bidding.

7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
- (a) prices.
 - (b) geographical area where product or service will be rendered (market allocation).
 - (c) methods, factors or formulas used to calculate prices.
 - (d) the intention or decision to submit or not to submit, a bid.
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid.
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements, or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. 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.
10. 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.

NAME (Block Capitals):

Date

SIGNATURE:

T2.2.9 JOINT VENTURES AGREEMENTS

Joint Venture agreement and Power of Attorney Agreements to be attached here (if applicable).

T2.2.10 RECORD OF ADDENDA TO TENDER DOCUMENTS

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

ADD.No	DATE	TITLE OR DETAILS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct.

It is also confirmed that the requirements, as stated on the Addenda, have been complied with.

NAME (Block Capitals): _____

Date

SIGNATURE: _____

T2.2.11 DECLARATION OF MUNICIPAL FEES

Reference is to be made to Clause F.2.1(f)(ii) of the Tender Data.

I, the undersigned, do hereby declare that the Municipal fees of:

.....
(full name of Company / Close Corporation / partnership / sole proprietary/Joint Venture)

(hereinafter referred to as the TENDERER) are, as at the date hereunder, fully paid or an Acknowledgement of Debt has been concluded with the Municipality to pay the said charges in instalments.

The following account details relate to property of the said TENDERER:

<u>Account</u>	<u>Account Number: to be completed by tenderer</u>											
Consolidated Account												
Electricity												
Water												
Rates												
JSB Levies												
Other												

I acknowledge that should the aforesaid Municipal charges fall into arrears, the Municipality may take such remedial action as is required, including termination of any contract, and any payments due to the Contractor by the Municipality shall be first set off against such arrears.

- Where the tenderer's place of business or business interests are outside the jurisdiction of eThekweni municipality, a copy of the accounts/ agreements from the relevant municipality are to be provided.
- Where the tenderer's Municipal Accounts are part of their lease agreement, then a copy of the agreement, or an official letter to that effect, is to be provided.

Tenderers are to include, at the back of their tender submission document, a printout of the above account's and or agreements signed with the municipality.

Failure to include the required document will make the tender submission non-responsive.

*I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct, **and that the requested documentation has been included in the tender submission.***

NAME (Block Capitals):

Date

SIGNATURE:

T2.2.12 CSD REGISTRATION REPORT

Reference is to be made to Clauses F.2.1(e) and F.2.23 of the Tender Data.

The Conditions of Tender, Clause F.2.1: Eligibility, requires a tenderer to be registered, at the time of tender closing, on the **National Treasury Central Supplier Database (CSD)** as a service provider.

CSD Registration Reports can be obtained from the National Treasury's CSD website at <https://secure.csd.gov.za/Account/Login>.

The date of obtaining the printout is to be indicated on the printout.

The following is an example of the beginning of the printout obtained from the above website.

	CENTRAL SUPPLIER DATABASE FOR GOVERNMENT		Report Date:	
			Report Ran By:	
CSD REGISTRATION REPORT				
SUPPLIER IDENTIFICATION				
Supplier number		Have Bank Account		
Is supplier active?		Total annual turnover		
Supplier type		Financial year start date		
Supplier sub-type		Registration date		
Legal name		Created by		
Trading name		Created date		
Identification type		Edit by		
Government breakdown		Edit date		
Business status		Restricted Supplier		
Country of origin		Restriction Last Verification Date		
South African company/CC registration number				

Tenderers are to include, at the back of their tender submission document, a printout of their (full) CSD Registration Report.

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct, and that the requested documentation has been included in the tender submission.

NAME (Block Capitals):

Date

SIGNATURE:

T2.2.13 EXPERIENCE OF TENDERER

Refer to T1.2.3.5: "Functionality Specification" for Functionality Points evaluation prompts (if applicable).

The experience of the tendering entity or joint venture partners in the case of an unincorporated joint venture or consortium, as opposed to the key staff members/experts, in projects of similar in nature refers to large scale modelling which includes a minimum of 1,000 nodes. Tenderers must provide details of their knowledge of the local area and previous experience with key local stakeholders.

Tenderers should very briefly describe their experience in this regard and attach it to this schedule. Proof of participation, in the form of Letters of Award and Projection Competition Certificates with contact details of clients of the relevant projects similar in nature, i.e. large-scale stormwater models (1000+ nodes), must also be provided. This is a compulsory requirement, non-submission will render the tenderer non-compliant and will result in the Service Area submission being made non-responsive.

The description should be put in tabular form with the following headings:

Employer, contact person and telephone number, where available	Description of event	Detail of work undertaken, nature of work & value	Date undertaken
--	----------------------	---	-----------------

The scoring of the tenderer's experience will be as follows:

Level	Points	Criterion: Tenderer's Experience Similar in nature refers to large scale modelling which includes a minimum of 1,000 nodes
0	0	No Submission or Submission of no substance / irrelevant information provided
1	40	To have successfully completed 1 to 5 projects of a similar nature within the past 10 years.
2	70	To have successfully completed 6 to 10 projects of a similar nature within the past 10 years..
3	90	To have successfully completed 11 to 15 projects of a similar nature within the past 10 years.
4	100	To have successfully completed 15+ projects of a similar nature within the past 10 years.

*I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct, **and that the requested documentation has been included in the tender submission.***

NAME (Block Capitals):

Date

SIGNATURE:

T2.2.16 EXPERIENCE OF KEY PERSONNEL

Refer to T1.2.3.5: "Functionality Specification" for Functionality Points evaluation prompts (if applicable).

The experience of assigned staff member in relation to the scope of work will be evaluated from three different points of view:

- 1) General experience, level of education and training and positions held of each operational area team leader.
- 2) The skills and experience of the assigned staff in the specific operational areas. Linked to the scope of work.
- 3) The key staff members' / experts' knowledge of issues which the tenderer considers pertinent to events e.g. local conditions, legislation, techniques etc.

CVs of the Project Manager and Key Personnels of **not more than 3 pages each** is to be included after this schedule. Each CV should contain the "CV Summary" form (on the next page) as a cover page to the CV.

The CV of the Key Persons should be structured under the following headings:

- (a) Personal particulars (name, date and place of birth);
- (b) Place(s) of tertiary education and dates associated therewith;
- (c) Qualifications (degrees, diplomas etc)
- (d) Grade(s) of professional registrations and membership of professional societies;
- (e) Name of current employer and position in enterprise;
- (f) Overview of post professional registration experience (year, organization and position);
- (g) Outline of projects / assignments / experience that has a bearing on the required Service Area (reference should be made to the requirements and key indicators as specified in the Service Area Scope of Works).
- (h) Papers and publications;
- (i) Professional awards etc.

The scoring of the experience of key staff will be as follows:

Experience of Key Resources in executing work of similar nature								
Job Title	Minimum Qualification Required	Professional Registration Required	Number of Years' Relevant Experience on projects of a similar nature					Total Points
			Level 0 0 pts	Level 1 40 pts	Level 2 70 pts	Level 3 90 pts	Level 4 100 pts	
Project Manager/Project Manager (Civil Engineer)	BSc Eng or BEng or BTech	Pr. Eng, or Pr Tech Eng	No Submission	≤ 3	> 3 ≤ 7	> 7 ≤ 10	> 10	10
Key Personnel 1 (Civil Engineer)	BSc Eng or BEng or BTech	Pr. Eng, or Pr Tech Eng	No Submission	≤ 3	> 3 ≤ 7	> 7 ≤ 10	> 10	7.5
Key Personnel 1 (Civil Engineer)	BSc Eng or BEng or BTech	Pr. Eng, or Pr Tech Eng	No Submission	≤ 3	> 3 ≤ 7	> 7 ≤ 10	> 10	7.5

*I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct, **and that the requested documentation has been included in the tender submission.***

NAME (Block Capitals):

Date

SIGNATURE:

T2.2.17 APPROACH PAPER / METHODOLOGY / PROGRAMME

Refer to T1.2.3.5: "Functionality Specification" for Functionality Points evaluation prompts (if applicable).

Tenderers must explain their understanding of the objectives of the assignment and the Employer's stated and implied requirements, highlight the issues of importance, and explain the technical approach they would adopt to address them. The approach paper should explain the methodologies to be adopted, and should also include a project plan and programme which outlines processes, procedures and associated resources, indicates how risks will be managed and identifies what contribution can be made regarding value management.

Tenderers must attach their approach papers to this page. The approach paper should not be longer than 6 pages.

The scoring of the approach paper will be as follows:

Criterion : Approach / Methodology		
Level 0	0 pts	No response/ no documents submitted/ methodology submitted does not relate to the project.
Level 1	40 pts	The technical approach/methodology is poor and is unlikely to satisfy project objectives or requirements. The tenderer has misunderstood certain aspects of the scope of work and does not deal with the core aspects of the project as provided in the scope of works. The technical approach/methodology does not include a quality control statement and/or programme.
Level 2	70 pts	The technical approach/methodology is brief and is considered satisfactory. It provides a brief overview of the core aspects of the projects as provided in the scope of works. The technical approach/methodology includes a brief quality control statement that some of the the requirements and deliverables of the project. The technical approach/methodology also includes a basic programme that displays how they will meet the key milestone dates as set out in the scope of works.
Level 3	90 pts	The technical approach/methodology is tailored to address the core aspects in great detail and is considered above satisfactory. The technical approach/methodology includes a detailed quality control statement that is specific and covers all the requirements and deliverables of the project. The technical approach/methodology also includes a detailed programme that displays how they will meet the key milestone dates as set out in the scope of works as well as their approach to managing project specific risks. The technical approach/methodology also includes a brief health and safety plan.
Level 4	100 pts	The technical approach/methodology addresses all aspects in great detail and makes mention of the following additional aspects (Inspection methodology, Modelling methodology). The technical approach/methodology includes a detailed quality control statement that is specific and covers all the requirements and deliverables of the project. The technical approach/methodology also includes a detailed programme that displays how they will meet the key milestone dates as set out in the scope of works as well as their approach to managing project specific risks. The programme also includes critical pathing and makes allowance for all the key risk areas. The technical approach/methodology also includes a detailed health and safety plan.

*I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct, **and that the requested documentation has been included in the tender submission.***

NAME (Block Capitals):

Date

SIGNATURE:

PART C1 : AGREEMENTS AND CONTRACT DATA

C1.1 : FORM OF OFFER AND ACCEPTANCE

C1.1.1 : OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

Contract No: **30270 (1D)**

Contract Title: **Infrastructure Asset Management, CCTV and PCSWMM Stormwater Modelling - Phase 8**

The Tenderer, identified in the Offer signature block below, has examined the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the Tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Contractor 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:**

R..... (In words)
.....)

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 Contractor in the Conditions of Contract identified in the Contract Data.

For the Tenderer:

*** Name of Tenderer (organisation)** :

*** Signature (of person authorized to sign the tender)** :

*** Name (of signatory in capitals)** :

Capacity (of Signatory) :

Address :

:

Witness:

Signature :

Name(in capitals) : :

Date :

Notes:

*** Indicates what information is mandatory.**

Failure to complete the mandatory information and sign this form will invalidate the tender.

C1.1 : FORM OF OFFER AND ACCEPTANCE

C1.1.2 : FORM OF ACCEPTANCE

This Form will be completed by the Employer

By signing this part of the Form of Offer and Acceptance, the Employer identified below accepts the Tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor 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 : Agreement and Contract Data, (which includes this Agreement)
- Part C2 : Pricing Data, including the Bill of Quantities
- Part C3 : Scope of Work
- Part C4 : Site Information

and the schedules, forms, drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto 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 duly signed by the authorised representatives 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 fulfill 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 Contractor) within five 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.

Signature (*person authorized to sign the acceptance*) :

Name (*of signatory in capitals*) :

Capacity (*of Signatory*) :

Name of Employer (*organisation*) :

Address :

:

Witness:

Signature : **Date** :

Name(*in capitals*) : :

C1.1 : FORM OF OFFER AND ACCEPTANCE

C1.1.3 : SCHEDULE OF DEVIATIONS

This form will be completed by THE EMPLOYER and ONLY THE SUCCESSFUL TENDERER

1. **Subject** :
- Details** :
- :
2. **Subject** :
- Details** :
- :
3. **Subject** :
- 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 change to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

FOR THE TENDERER

.....

Signature

.....

Name (*in capitals*)

.....

Capacity

.....

Name and Address of

.....

Organisation

.....

.....

.....

Witness Signature

.....

Witness Name

.....

Date

FOR THE EMPLOYER

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

C1.2 : CONTRACT DATA

C1.2.1 CONDITIONS OF CONTRACT

C1.2.1.1 GENERAL CONDITIONS OF CONTRACT

The Conditions of Contract are the Standard Professional Services Contract (Third edition: July 2009) published by the Construction Industry Development Board. (see www.cidb.co.za - copied for ease of reference in C4.2).

The Contract Data (including variations and additions) shall amplify, modify or supersede, as the case may be, the Standard Professional Services Contract, to the extent specified below, and shall take precedence and shall govern.

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

C1.2.2 CONTRACT DATA

C1.2.2.1 DATA TO BE PROVIDED BY THE EMPLOYER

The Employer is the eThekweni Municipality as represented by : Deputy Head : **Coastal Stormwater and Catchment Management**

3.4 & The authorised and designated representative of the Employer is: Mr Kiyash Sha

4.3.2 The contact details of the authorised and designated representative are:

- Telephone : 031 311 7333
- e-mail : Kiyash.sha@durban.gov.za

The address for the Receipt of communications is: Kiyash.sha@durban.gov.za

1 The Project is : **30270 (1D)**
: **Infrastructure Asset Management, CCTV and PCSWMM Stormwater Modelling - Phase 8**

1 Period of Performance : **36 Months**

1 Start Date : **14 days after receipt of Letter Of Award (LOA)**

3.4.1 Communications by e-mail is permitted.

3.5 The location for the performance of the Project is : **Ethekwini Municipality**

3.6 The Service Provider may not release public or media statements or publish material related to the Services or Project under any circumstances.

3.9.2 The time-based fees used to determine changes to the Contract Price are as stated in the Pricing Data.

- 3.12 The penalty per Day for the following key deliverables, listed below, payable is : **R 8 000** subject to a maximum amount of **R 1 000 000**.
- I. Preliminary GIS to be handed over to Client for review
 - II. Preliminary Wincan Data is to be handed over to the Client for review
 - III. Preliminary PCSWMM Data is to be handed over to the Client for review
 - IV. Final GIS to be handed over to Client for review
 - V. Final Wincan Data is to be handed over to the Client for review
 - VI. Final PCSWMM Data is to be handed over to the Client for review
- 3.15.1 The programme shall be submitted within **14 Days** of the award of the Contract, receipt of the LOA.
- 3.15.2 The Service Provider shall update the programme at intervals not exceeding **9 Months**.
- 3.16 The time-based fees shall not be adjusted for inflation.
- 3.16.2 The indices are those contained in **Table A of P0141 Consumer Price Index** for “CPI for services” Published by Statistics South Africa.
- 4.3.1(d) The Service Provider is not required to assist in the obtaining of approvals, licenses and permits from the state, regional and municipal authorities having jurisdiction over the Project.
- 5.4.1 The Service Provider is required to provide Professional indemnity in an amount of : **R 10 000 000**.
- 5.5 The Service Provider is required to obtain the Employer’s prior approval in writing before taking any of the following actions:
- 1) Cleaning of a Stormwater Pipe, Manhole, Canal, Culvert or Headwall using any other means other than High Pressure Water Jetting.
 - 2) Relocation to a project area not specified by the client.
 - 3) Re-cleaning of Stormwater Pipe, Manhole, Canal, Culvert or Headwall due to consequential rain days.
- 7.2 The Service Provider is required to provide personnel in accordance with the provisions of clause 7.2 and to complete the Personnel Schedule.
- 8.1 The Service Provider is to commence the performance of the Services within **14 Days** of date that the Contract becomes effective. Contract is effect from date of receipt of the Letter of Award.
- 8.2.1 The Contract is concluded when : **All required deliverables have been reviewed and accepted within the 36-month period or when the 36-month period has lapsed.**
- 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 **Adjudication**.
- 12.2/3 Final settlement is by **Arbitration**.
- 12.2.1 In the event that the parties fail to agree on a arbitrator, the arbitrator is nominated by : **Employer**.
- 12.4.1 In the event that the parties fail to agree on an arbitrator, the arbitrator is nominated by: **Specify**.

- 13.1.3 All parties in a joint venture or consortium shall carry a minimum professional indemnity insurance of **R 10 000 000**.
- 13.4 Neither the Employer nor the Service Provider is liable for any loss or damage resulting from any occurrence unless a claim is formally made within **1 month** from the date of termination or completion of the Contract.
- 13.5.1 The maximum amount of compensation payable by either Party to the other in respect of liability under the Contract is limited to **R 100 000**.
- 15 The interest rate will be the prime interest rate of the Employers bank at the time that the amount is due.

C1.2.3 ADDITIONAL CONDITIONS OF CONTRACT

The additional conditions of contract are:

C1.2.3.1 PERFORMANCE MONITORING OF SERVICE PROVIDERS

For contract awards that are greater than R10m, the Service Provider shall be subjected to “Performance Monitoring” assessments in terms of the applicable Section of the Council’s current Supply Chain Management Policy.

C1.2.3.3 EMPOWERMENT INITIATIVE

It is a condition of contract that the Professional Service Provider / Civil Engineering Consultant must allow for a minimum of 15% of the contract value (excluding PC Sum and Fixed Cost allowances) to be subcontracted to persons who are >51% Black owned. Proof of payment to the subcontractors will be required to verify that the minimum has been achieved.

The subcontracting aspect will comprise of the following items, Security, Cleaning of Manholes/Headwalls/Canals and Waste Disposal. This makes up 15 percent of the contract and will meet the minimum requirements. To ensure we enforce this condition of the contract, the penalty for not achieving the specified subcontracting will be 0.5% of the contract value (excluding PC Sum items and Fixed Cost allowances) for every 1% of subcontracting not achieved.

C1.2.2.2 DATA TO BE PROVIDED BY THE SERVICE PROVIDER

Ref / Clause Number	Data
1	The Service Provider is: Address : Telephone : Fax :
5.3	The authorised and designated representative of the Service Provider is: Name : The address for receipt of communications is: Address : Telephone : Fax : E-Mail :
1	The Period of Performance is :
5.5 & 7.1.2	The Key Persons and their jobs / functions in relation to the services are: Name : Specific Duties : Name : Specific Duties :

PART C2 : PRICING DATA
C2.1 : PRICING INSTRUCTIONS

- C 2.1.1 The Service Provider is required to provide all the services necessary to undertake the project requirements in accordance with the Scope of Work. This includes all things necessary and incidental to providing the Services, including appointment and payment of subcontractors.
- C 2.1.2 The sole basis for the remuneration of the Service Provider to be appointed to proceed with the project shall be:
 - C 2.1.2.1 By monthly interim progress payment certificates assessed by the Employers Agent and based on the measure in which the work actually carried relates to the extent of the work to be done by the Contractor in accordance with the Schedule of Quantities.

C2.2 : PRICING SCHEDULE

	Infrastructure Asset Management, Phase 8, CCTV and PCSWMM Modelling				
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	STORMWATER SITE INVESTIGATIONS				
1.1	Preliminary & General Costs for Jetting and CCTV Inspection Contractor	sum	1		
1.2	Insurance of Works	sum	1		
1.3	Armed Security Requirements where necessary	Prov Sum	1500000	R 1.00	R 1,500,000.00
1.4	Site Establishment Costs	Sum	1		
1.5	Site Supervision & Monitoring	months	36		
1.6	Traffic Accomodation	Sum	1		
1.7	Health & Safety Monthly Audits	months	36	R 16 000	
1.8	COMMUNITY LIAISON OFFICER Allow for a CLO to be appointed.	months	24		
1.9	Provision of Cap & Tap Municipal Water Meters	No	5		
1.10	Municipal Water Charges	Prov Sum	2400000	R1.00	R 2,400,000.00
1.11	Pre-Cleaning Visual Inspections	sum	1		
1.12	Locate Buried / Concealed Manholes and Expose	No.	480		
1.13	GPS locations of all manhole positions using mobile GPS Unit (for CCTV Inspection Teams)	No.	4800		
1.14	Detailed Tache Surveys of Manhole poistions (Cover Levels, Depths, Invert Levels & Types) Accuracy level 0,02m	No.	4800		
1.15	Locating of Damaged Stormwater Infrastructure & Report submission to relevant municipal departments	No.	4800		
1.16	CCTV Pipeline Inspections	m	120000		
1.17	Conditional Reporting of Pipeline per segment using WinCan Software	m	120000		
1.18	Populate GIS Database of Stormwater Pipeline and Manhole Information	m	120000		

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.19	Cleaning of Silted & Blocked Stormwater Pipeline (<75% of pipe cross section silted), by means of high pressure water jetting, rate to include dump charges	m	90000		
1.20	Cleaning of Silted & Blocked Stormwater Pipeline (>75% of pipe cross section silted), by means of high pressure water jetting, rate to include dump charges	m	18000		
1.21	Vacuuming / Desilting of blocked manholes / pipes	No.	3600		
1.22	Headwall / Outlet Stream Cleaning	m3	1440		
1.23	Extra Over for Re-Cleaning of Stormwater Pipelines after Heavy Rains (Rate only)	m	36000		
1.24	Cleaning of Silted Open Channels (including dump charges)	m3	18000		
1.25	Waste Disposal	Prov Sum	1500000	R 1.00	R 1,500,000.00
1.26	Visual Inspections of Channels / Canals	m	18000		
1.27	Project Manager (Pr Eng / Pr Tech Eng)	Months	36		
1.28	Data Storage (30 TB) with offsite backup for a period of 60 months beyond contract period	Sum	1		
1.29	Data Drives for data Handover, 8TB ,Samsung 870 QVO 8TB 2.5" SSD or similar in specification	No	8		
1.30	Monthly Project Team Meetings	Months	36		
Subtotal (1)					
2	STORMWATER HYDRAULIC MODELING				
2.1	Catchment Delineation	Sum	1		
2.2	Hydrology of all Minor Catchment Areas	Sum	1		
2.3	Hydraulic Modeling of all Stormwater Systems	m	138000		
2.4	PC SWMM Modeling for various return periods (1:2, 1:5, 1:10, 1:20, 1:50, 1:100)	m	138000		
Subtotal (2)					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3	ADDITIONAL WORK For Concept Stormwater Design & Recommendation				
3.1	Pr Eng / Pr Tech Eng	Hrs	100		
3.2	BSc / B Tech	Hrs	200		
3.3	Technician	Hrs	500		
3.4	Liaison with other Municipal Departments & Parastatals (Water, Sewer Roads & Stormwater) including ward councillors	Hrs	250		
3.5	Final Reports & Submission to CSCM	sum	1		
Subtotal (3)					
4	DISBURSEMENTS				
4.1	Travel	km	60000		
4.2	Printing	Prov Sum	600000	R 1.00	R 600,000.00
4.3	Training of eThekweni Asset Management Team Staff(field and inhouse)	Prov Sum	600000	R 1.00	R 600,000.00
Subtotal (4)					
SUB-TOTAL (1) + (2) + (3) + (4)					
VAT					
TOTAL					

NAME : (Block Capitals)

SIGNATURE : DATE:
(of person authorised to sign on behalf of the Tenderer)

PART C3 : SCOPE OF WORK

C3.1 BACKGROUND

In 2006 the CSCM Department identified a need to fill gaps in the GIS stormwater records arising from a lack of information in the outlying areas of the Municipality. Tenders were invited for field location of the so-called unknown stormwater system, converting this information to GIS files and checking the acquired data by theoretical modeling of the stormwater system using the new data.

Many areas of the City that were previously administered by separate entities have little or no stormwater management information and it is thus difficult to respond to queries from the public in this regard. To address this problem, a Framework Service was set up in terms of the approved system for Framework Agreements to extend the database of stormwater information for Ethekekwini.

The Framework agreement for Stormwater Modelling provides for:

- a. The estimation, determination and mapping of the existing and proposed stormwater infrastructure in primarily urban stormwater catchments and sub-catchments to determine and estimate the rates and volumes of stormwater runoff and the likely risks or causes of flooding by developing deterministic urban water systems models using PCSWMM software for advanced watershed, stormwater and wastewater modelling;
- b. The determination of actual stormwater events and developing stormwater hyetographs for rainfall in the eThekekwini municipal area; and
- c. Proposing and modelling solutions to flooding events in the form of attenuation areas, environmental impacts and interventions to the existing drainage networks to remove or resolve flooding problems. Calibration of models and rainfall events and catchment runoff.

C3.2 EMPLOYER'S OBJECTIVES

The objective of this project is to provide the client with an effective asset management database that contains all relevant data on strategic infrastructure assets. This will extend the asset management capabilities of the client which will in turn allow the client to effectively manage their assets in terms of upgrading stormwater infrastructure, determine service levels, improve development control and undertake scenario planning associated with urban densification, climate change and maintenance regimens.

The scope of works outlined below can therefore be grouped into the following categories:

- Review existing asset data
- Conditionally Inspect assets (where accessible)
- Determine and map new and existing infrastructure
- Assessment of current and future demand on stormwater networks to aid:
 - Development of short term maintenance plans
 - Medium (1 to 5years) refurbishment plan
 - Long term (5 to 10years) capital budget plan for pipeline replacements
- Stormwater Modelling in PCSWMM

C3.2.1 ASSETS TO BE INSPECTED

The Assets to be investigated would entail but not limited to the following:

- Stormwater Pipelines
- Stormwater Manholes
- Piped Culverts
- Open channels
- Headwalls & Outlets to Streams

C3.2.2 BASELINE INFORMATION AND DATA COLLECTION

If available any relevant as-built drawings, GIS shape-files, rainfall data, and contour maps (electronically) soil types will be sourced and reviewed in order to begin a baseline to ultimately create the PC SWMM model. This is fundamental in determining a “realistic” model.

GIS data, where available, will be imported into PCSWMM (pipe diameters, gradients, invert levels, cover levels etc.) Where no AS-BUILT data is available, either Field Inspections data would be relied upon or alternatively reasonable Engineering judgement would be used to determine the characteristics of missing data due to inaccessibility of the respective stormwater infrastructure.

The results of this baseline study would then be utilised in the execution of the remainder of works (PCSWMM, delineation and mapping etc.)

This task would entail the expansion of task (3.1.) Drainage networks, river centrelines, bank lines and flow lines (rivers), catchment and sub-catchment delineation. Catchment delineation would be done on either ArcGIS or PCSWMM depending on final preference by the Client.

Where little or no data is available then one or more of the following systems of information would be utilised:

- Extract data from AS-BUILTS
- Sound Engineering Judgement in determining assumptions
- Field Surveys

The results of this task would serve as a detailed input into software for detailing modelling.

C3.2.3 FIELD SURVEYS AND MAPPING

Field Surveys would consist of the following:

- CCTV conditional Inspections (Physical attributes of Pipes and manholes)
- Tache Surveys (Invert & Cover levels)

This information would be used to populate/update the database in order to be incorporated into the PCSWMM model.

The specialist CCTV Inspection Vehicle shall be equipped as follows:

CAMERA

- High resolution CCD-colour camera with zoom(10x Optical, 12x Digital)
- Endless rotation range
- Panning range approx... 135°
- Indication of panning and rotation angle on GUI
- Built in laser diodes for Fracture/crack width measurement
- Homogenous illumination through LED lighting and step less control from 0-100%
- Auto and manual shutter, auto focus
- Light sensitivity to 1 Lux

CABLE REEL

- 500m cable length
- Horizontal & vertical Inspection operation
- Meter counter
- Continuous brake and winding support

CRAWLER

- Steerable 4 wheel drive
- Large ground Clearance
- Two shift gear box for faster retrieval
- Electrically operated clutch with safety mode
- Capable of inspecting pipelines up to 2000mm at centre of pipe
- 4 manually adjustable LED lamps for optimum illumination
- Constant monitoring by pitch and roll sensor
- Location transmitter can be activated

The integration of the specialised equipment into the internal conditional assessment process reduces the entry of confined spaces to a bare minimum.

- Thereby reducing the possible hazards, such as the following:
- Loss of consciousness from asphyxiation(arising from fumes, gases, vapour or lack of oxygen)
- Drowning arising from increased water level
- Loss of consciousness arising from an increase in body temperature
- Asphyxiation/ suffocation arising from free flowing solid (engulfment) or inability to reach breathable atmosphere due to entrapment.

The image below represents the output from the CCTV conditional inspections, indicating the pipe being CCTV'd and any defects etc. picked up.

Town or Village	Road	Date	PLR	Section
SHALLCROSS 3	ZIRCON	2019/02/12	IB924IB923	16



IB924IB923_a68075e8-99a3-4a0e-8689-9c6a0a549afd_20190212_092544_581.jpg, 00:01:21, 6.54m
Roots, tap at joint



IB924IB923_521d0a29-fe39-406b-ac6a-29c8abb10171_20190212_092607_409.jpg, 00:01:44, 6.75m
Broken pipe at joint at 3 o'clock ,



IB924IB923_5148e35b-5f3e-4467-bbb3-cbe76bf29c74_20190212_092633_465.jpg, 00:02:10, 6.75m
Broken pipe at joint from 10 o'clock to 11 o'clock ,



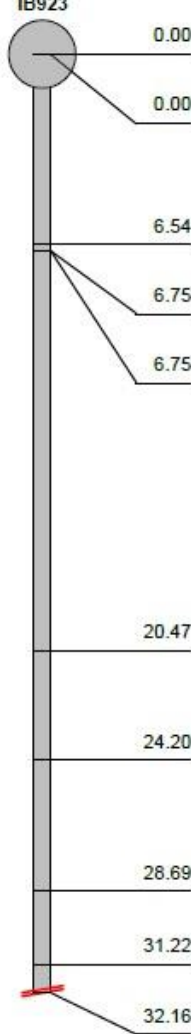
IB924IB923_420347bd-94c8-4755-85af-2e096edd2e5e_20190212_092757_809.jpg, 00:03:39, 20.47m
General photograph taken at this point

Section Inspection - 2019/02/12 - IB924IB923

Date 2019/02/12	Camera	Weather No rain or snow	PLR IB924IB923	Section 16
Project Name shellcross 3_2018-11-30	Video Location System Time code	Vehicle NUR 33353	Operator LEE	Job Name 168e77676

Town or Village SHALLCROSS 3	Upstream Node IB924	Joint Length [m] 2.4
Road ZIRCON	Upstream Node Type Manhole	Total Length [m] 32.16
Location Verge	Downstream Node IB923	Inspected Length [m] 32.16
	Downstream Node Type Manhole	Year Constructed [yyyy]

Type of Pipe Circular 375mm	Inspection Purpose
Use Surface water	Inspection Method CCTV
Pipe Material Concrete	Inspection Direction Upstream
	Pre Cleaned yes
	Comments

1:237	m+	Code	Observation	Grade
	0.00	MH	Start node type, manhole, reference number: IB923 / 10	
	0.00	WL	Water level, 0% of the vertical dimension	
	6.54	RTJ	Roots, tap at joint	4
	6.75	BJ	Broken pipe at joint at 3 o'clock ,	4
	6.75	BJ	Broken pipe at joint from 10 o'clock to 11 o'clock ,	4
	20.47	GP	General photograph taken at this point	
	24.20	RFJ	Roots, fine at joint	2
	28.69	RT	Roots, tap	4
	31.22	RTJ	Roots, tap at joint	4
	32.16	SA	Survey abandoned / ROOT OBSTRUCTING	

C3.2.4 CLEANING OF STORMWATER INFRASTRUCTURE

Subsequent to the CCTV inspection of Stormwater Infrastructure and recognition of Stormwater Infrastructure in need of cleaning, the following shall be adhered to:

The Cleaning teams will be equipped with the following:

- Digital Cameras;
- Specialised Manhole opener
- Relevant traffic accommodation and safety equipment
- A4 whiteboard and marker
- Measuring equipment (such as measuring tapes, laser range finders);
- Appropriate PPE (may include gas monitoring equipment, lights)
- Traffic Flag Men

The Specialist Cleaning teams will be equipped as above and including the following specific machinery:

1. High Pressure Jetting:

- a. High pressure jetting water supply of approx. 5000 litres, self-contained
- b. Flowrate at 120 bar of approx. 252 litres/minute
- c. Truck mounted Hose reel (180° swivel)
- d. 120 metres of 25mm diameter thermoplastic lightweight hose
- e. Jetting nozzles
- f. Retro jet- general purpose nozzle to agitate debris in pipe
- g. Grenade bomb – cylindrical rear acting nozzle to remove settled and heavy debris
- h. Pointed – conical forward acting nozzle to penetrate blockages
- i. Flounder – wide pointed rear acting nozzle to target the invert of pipe/manhole

2. Vacuum:

- a. Self-contained debris storage of approx. 4 cubic metres
- b. Flowrate at -50kPa of approx. 600 litres of free air per second
- c. Full vacuum up to -0.91 Bar
- d. Top mounted Suction Arm (4" diameter) allows 240° rotation
- e. Approx. 40° tilt angle of tank on tipping stage

The cleaning crews will need to assess the impacts of flow in the pipelines, particularly the main lines as this will impact on the conditional assessment of the pipeline. This information shall be monitored and reported to allow for the planning of the CCTV Conditional Assessment.

The field work for the Cleaning teams shall comprise the following activities:

- Plan daily logistics;
- Prepare cleaning field sheet as well as safety assessment sheet;
- Travel to site and carry out field task which will include:
 - Site Health and safety requirements
 - Condition of Asset
 - Take a set minimum No of reference photos (Time referenced);
 - Take additional Photos to support any key observations
 - Proceed with and completion of Asset cleaning
 - Fill in Field Data sheet hard copy
 - Removal of Debris from site
 - Return to office
 - Capture Field Data

As per training; prior to the opening of manholes, the structural condition of infrastructure shall be visually inspected and the safety implications shall be determined. (Taking special note of surroundings, e.g. Trip hazards, low lying branches etc.)

The pipe segment shall be aerated via the sequential opening of manhole lids in pairs along the same pipe segment. Manhole lids shall only be opened using a specific manhole opener to avoid damaging the stormwater infrastructure and placed on the adjacent sidewalk to avoiding a potential trip hazard.

If deemed necessary, a gas detection test shall be carried out within the infrastructure and should the presence of noxious/ hazardous gases be detected (above safety levels), the client's representative shall be informed immediately and work suspended until safe working conditions have resumed.

The integration of our specialist vacuum equipment into the cleaning process reduces the entry of confined spaces to a bare minimum.

When required, only personnel trained in the accordance with the specific regulations shall enter a confined space. Prior to entry of a confined space, precautionary measures such as:

- Standby Personnel before entry to the system.
- Testing of breathable air/ presence of hazardous gases
- Observation and monitoring of personnel within confined space
- Communication and alert signals
- Predetermined rescue plan with appropriate safety harness and relevant safety equipment shall be adhered to and a checklist shall be completed at the daily safety meeting.

The checklist to include the following:

- Has a safety meeting been carried out prior to entry?
- Are you permitted to enter the confined space?
- Was the atmosphere in the confined space tested?
- Was Oxygen level at least 20.8% but not more than 21%?
- Were toxic, flammable, or oxygen-diluting gases/vapours present?

- Hydrogen Sulphide
- Carbon Monoxide
- Methane
- Carbon dioxide
- Has the space been ventilated before entry?
- Is special clothing/equipment required?
- Have you been trained in confined space entry and know what to look for?
- Will the standby Person/ Safety officer be able to see/communicate with you at all times?

At end of daily shift, all removed/loosened material shall be removed at the end of the working day, failing which, it shall be removed within 24 hours of the same being surfaced.

On final stage of the cleaning process, all debris shall be vacuumed into the tanker and disposed of at an approved tip site to the client's satisfaction. All debris too large to be vacuumed into tanker, shall be manually stored in refuse bags not more than 50% of refuse bag capacity to allow for safe loading onto carting vehicle.

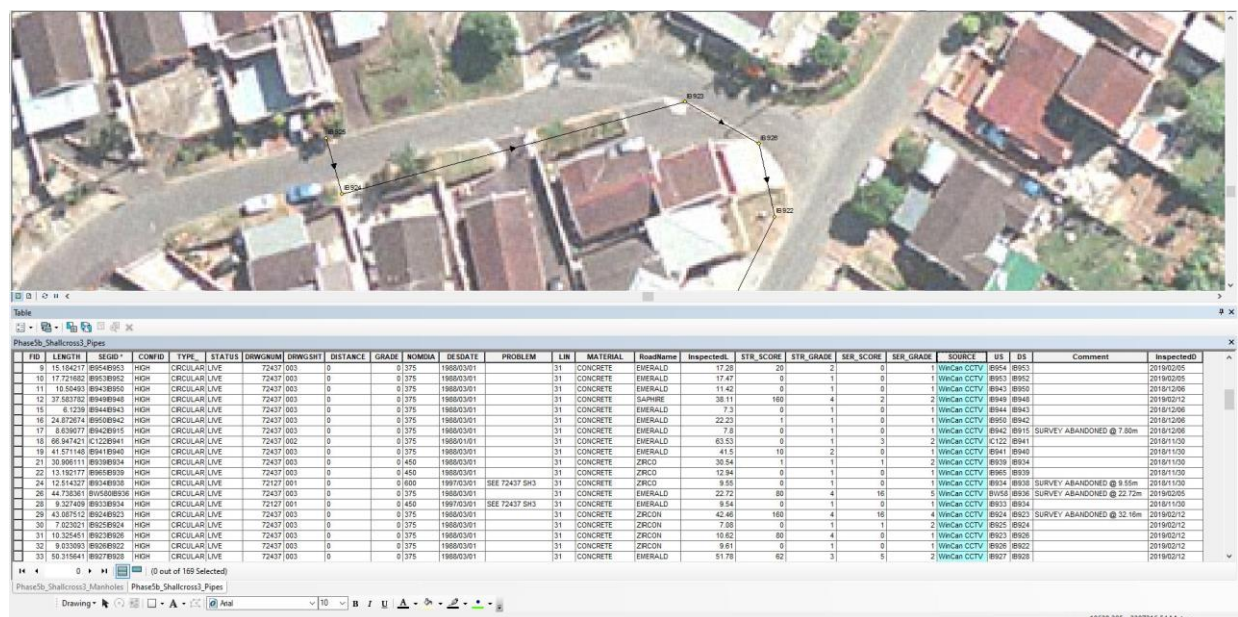
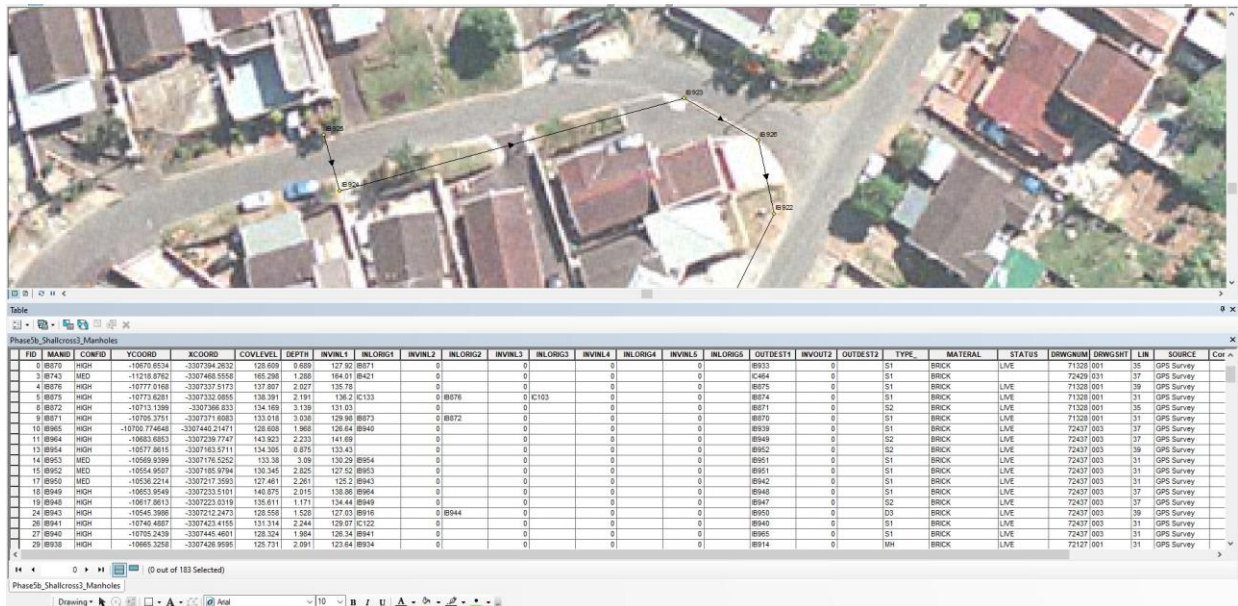
C3.2.5 GIS INTEGRATION

1. Generate Inventory of Assets to be inspected
 - a. Review Existing Asset data
 - b. Retrieve GIS baseline data of existing bulk infrastructure
 - c. Cross reference As-Built drawings from Local Municipality with baseline data
 - d. Preliminary Site Inspection : Accessibility and Cleaning (Mentioned above)
 - e. Conduct conditional assessment of existing networks using CCTV inspections (Mentioned above)
 - f. Demarcate working Boundary into sub-drainage catchments based on major culverts
 - g. Accurate GPS Survey of existing and new manholes
 - h. GPS points to include X & Y co-ordinates, Cover and Invert Levels
 - i. Labelling of Manholes with Asset ID's
 - j. CCTV Conditional Assessment of all clean pipes
 - k. Pipeline and Manhole conditional Assessment Report

2. Field Surveys and Mapping

- a. Tachometry Survey (GPS Survey of Invert & Cover levels)
 - i. Accurate GPS Survey of existing and new infrastructure
 - ii. GPS points to include X & Y co-ordinates, Cover and Invert Levels
 - iii. Labelling of Manholes with municipal Asset ID's
- b. CCTV Inspections is inclusive of but not limited to the following:
 - i. CCTV Inspections makes use of CCTV equipment, GIS specialists and GPS surveying of manholes, to produce accurate GIS on the infrastructure of buried assets.
 - ii. Determine defects from pipe diameters, pipe type, structural weighting, maintenance weighting, and even the inspected lengths.
 - iii. Compile a detailed report on per pipe of their defects and grading, pipe profile, and digital images linked to severe and critical incidents.
- c. GIS Shapefile creation
 - i. Update/Populate SW manhole shapefile with GPS Survey
 - ii. Data review : CCTV vs Existing GIS
 - iii. Delineate new infrastructure , if any
 - iv. Export CCTV database
 - v. Populate SW Infrastructure data
 - vi. Update attribute table X/Y Coordinates, Length
 - vii. Check/Record unassigned ID's
 - viii. Send Prelim block to PCSWMM

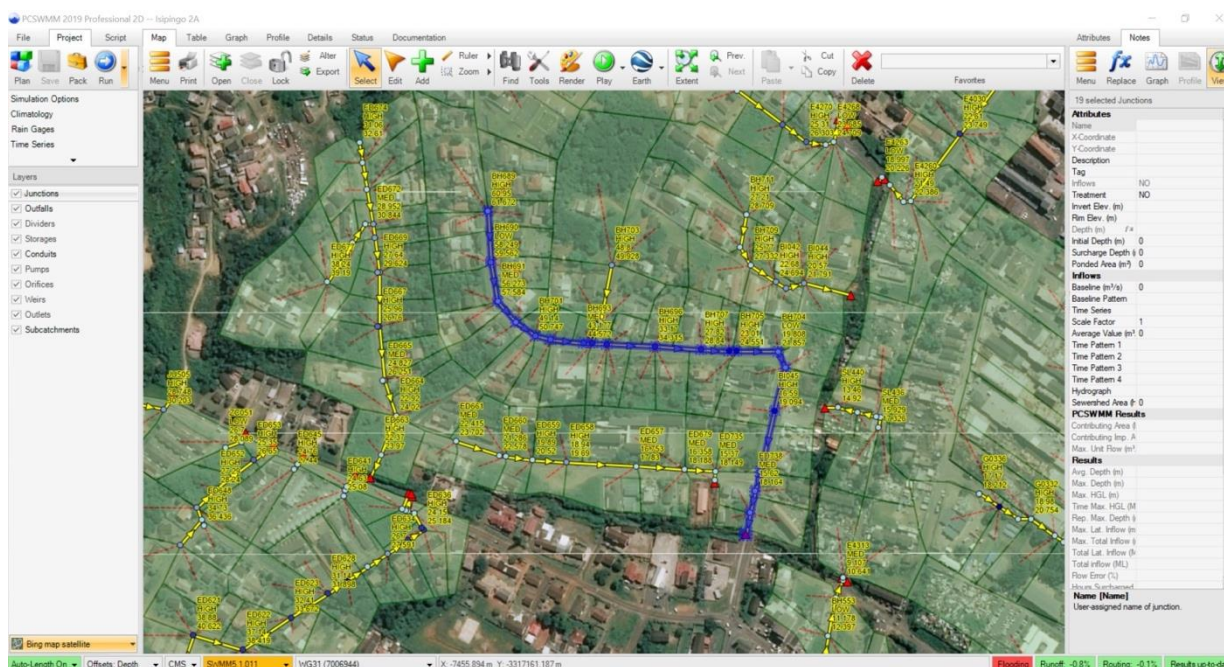
The images below represent an example of a GIS database created (Manhole and Pipe Shapefile with their corresponding attributes):



C3.2.6 PCSWMM MODELLING

Shapefiles for manholes and pipes will be received after GIS integration for PCSWMM Modelling. Stormwater infrastructure will be modelled with survey data. Where survey data is unavailable, proper engineering judgement will be used to make appropriate assumptions. This includes cover & invert levels, depths, slopes etc. Consideration must also be given to surrounding land use and discharge points of the networks. Detailed sub-catchments will be drawn up for modelling purposes using orthophotos, contours, junctions, and conduits. Import all necessary conduits, junctions, outfalls when none available and inserted into the model. Open channels surveyed on site to be included in the model. Field inspection data and engineering judgement will be used to make reasonable assumptions. Once all important components for modelling have been obtained that is surveyed, and reviewed the capacity and performance will be modelled.

The image below represents the model in plan.



Storms from rainfall depths for different Times of concentration will be generated for the various return periods in order to insert in the model. These will be based on available rainfall curves from the EThekweni Municipality.

Subcatchments will have appropriate percentages of impervious and pervious areas will be defined for a range of land use categories and densification scenarios in tabular format linked to city suburb examples. Depression storage values/ranges will also be defined. Assign the most suitable outlets for the subcatchments.

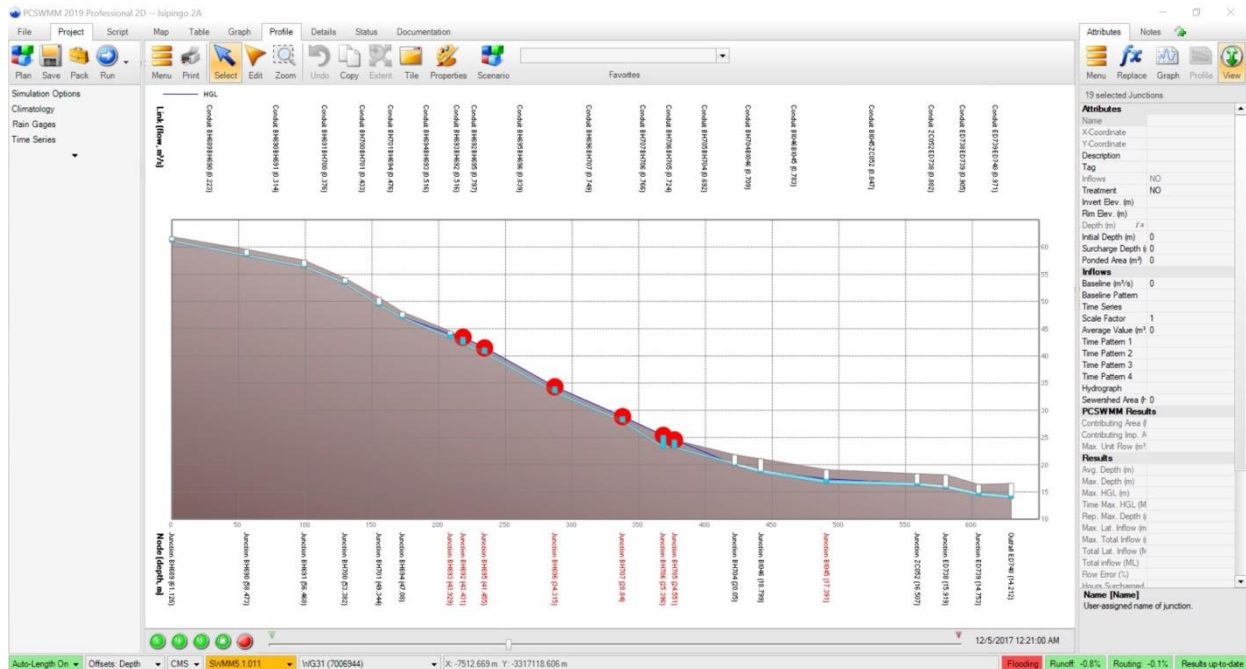
Typical overland flow paths will be analysed and incorporated into the model.

The results of the model would be able to accurately determine the following:

- Pipe Capacity problems
- Surcharge at manholes
- Possible future scenarios (upgrades, new infrastructure etc.)
- Recommendations on future upgrades

Once the model is complete, a final check to be completed on the exports from the model by GIS.

The image below represents a long section of one of the stormwater networks and the results during a 5 year storm.



C3.2.6 PROJECT DELIVERABLES

Item	Condition to be met:	Key date
1	Preliminary GIS to be handed over to Client for review	20 Months from date of Letter of Award
2	Preliminary Wincan Data to be handed over to Client for review	20 Months from date of Letter of Award
3	Preliminary PCSWMM Data to be handed over to Client for review	20 Months from date of Letter of Award
4	Final GIS to be handed over to Client for review	32 Months from date of Letter of Award
5	Final Wincan Data to be handed over to Client for review	32 Months from date of Letter of Award
6	Final PCSWMM Data to be handed over to Client for review	32 Months from date of Letter of Award

C3.2.7 PROJECT AREA

The department has determined that the project has an approximate pipe length of 120 000 meters.

C3.3 ANNEXURES

- 1. STANDARD CONDITIONS OF TENDER**
- 2. CIDB STANDARD PROFESSIONAL SERVICES OF CONTRACT**

Annex F
(normative)

Standard Conditions of Tender

F.1 General

F.1.1 Actions

F.1.1.1 The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.

F.1.1.2 The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict, and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Note:

- 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can erode an appearance of impartiality that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.
- 2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

F.1.1.3 The employer shall not seek and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

F.1.2 Tender Documents

The documents issued by the employer for the purpose of a tender offer are listed in the tender data.

F.1.3 Interpretation

F.1.3.1 The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these conditions of tender.

F.1.3.2 These conditions of tender, the tender data and tender schedules which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender.

F.1.3.3 For the purposes of these conditions of tender, the following definitions apply:

- a) **conflict of interest** means any situation in which:
 - i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfill his or her duties impartially;
 - ii) an individual or organisation is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or

STANDARD PROFESSIONAL SERVICES CONTRACT

(July 2009)
(Third Edition of CIDB document 1014)



Construction Industry Development Board
Pretoria
Tel: 012 343 7136 or 012 481 9030
Fax: 012 343 7153
E-mail: cidb@cidb.org.za

July, 2009: Edition 3 of CIDB document 1015

Standard Professional Services Contract