



METSIMAHOLO LOCAL MUNICIPALITY

**APPOINTMENT OF A 6CE OR HIGHER CIDB REGISTERED CONTRACTOR FOR
CONSTRUCTION OF BLOCK PAVED ROADS AND STORMWATER IN GORTIN
TOWNSHIP WARD 01 (MLM 18/2022/23).**

BID NO.: MLM 18/2022/23

**CIDB GRADING: 6 CE OR HIGHER
(VOLUME 4)**

ISSUED BY:

Metsimaholo Local Municipality
Municipal Building
10 Fichardt Street
Sasolburg
4800



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Name of Company :

Contact Name :

Contact No :

Email Address :

CSD Supplier Number:

CIDB: CRS Number :

Tender Amount (VAT incl.): R

TENDER NUMBER: MLM 18/2022/23

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LIST OF CONTRACT DOCUMENTS

The following documents form part of this contract:

Volume 1: The General Conditions of Contract for Construction Works, Third Edition (GCC 2015), published by the South African Institute of Civil Engineers, which the Tenderer shall purchase himself (see note 1 below).

Volume 2: SANS 1200 The Standard Specifications for Civil Engineering Construction

Volume 3: The Standard Specifications for Road and Bridge Works for State Road Authorities, 1998 Edition (COLTO) published by the South African Institute of Civil Engineers, which the Tenderer shall purchase himself (see note 3 below).

Volume 4: The Project Document containing the Tender Notice, Conditions of Tender, Tender Data, Returnable Schedules, Form of Offer, General and Particular Conditions of Contract, Pricing Schedule, Project Specifications and Site Information, issued by the Employer (see note 4 below). The Employer's Form of Acceptance and any correspondence from the selected Tenderer, performance security-demand guarantee and all addenda issued during the period of tender will also form part of this volume once a Tenderer has been appointed.

Volume 5: The civil drawings are part of Volume 4

Notes to Tenderer

1. **Volume 1 is obtainable from SAICE, Private Bag X200, Halfway House, 1685.**

Tel: +27 11 805 5947 Fax: +27 11 805 5971, email: civilinfo@saice.org.za.

Website: <http://www.saice.org.za>

2. **Volume 2 is obtainable from SA Bureau of Standards Dr Lategan Road; Groenkloof; Pretoria; 0001. Private Bag X191, Pretoria, 0001.**

3. **Volume 3 is obtainable from SAICE, Private Bag X200, Halfway House, 1685.**

Tel: +27 11 805 5947 Fax: +27 11 805 5971, email: civilinfo@saice.org.za.

Website: <http://www.saice.org.za>

4. **Volume 4 is issued at tender stage as per tender advertisement. The pricing data is available on request in Excel format**

At contract stage Volume 4 will be a bound signed paper copy containing the following documents:

- **Returnable schedules relevant to the project**

- **Agreements and Contract Data**
 - **Pricing Data**
 - **Scope of Work**
 - **Site Information**
4. **SUBMISSION OF TENDER – Refer to clause F2 in the Tender Data**
- Information provided by a Tenderer over and above the above elements of Volume 4 shall be treated as information only and will only be bound into the document if the tenderer notes on Form A4: Schedule of Variations or deviations that the information has a bearing on the tender price.**
5. **For alternative offers, the Tenderer shall refer to clause F2.12 in the Tender Data**

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PART T1: TENDERING PROCEDURES

PART T2: RETURNABLE DOCUMENTS

T.1.1 TENDER NOTICE AND INVITATION TO TENDER



TENDER NOTICE

BID NO: MLM 18/2022/23

METSIMAHOLO LOCAL MUNICIPALITY invites tenders for the **APPOINTMENT OF A 6CE OR HIGHER CIDB REGISTERED CONTRACTOR FOR CONSTRUCTION OF BLOCK PAVED ROADS AND STORMWATER IN GORTIN TOWNSHIP WARD 01 (MLM 18/2022/23).**

Tenderers should have a CIDB Contractor grading designation of **6CE** or higher.

Bid documents will be available during working hours upon payment of R1000.00 at The Municipal Building, 10 Fichardt Street, Sasolburg. Documents can also be downloaded for the e-tender portal www.e-tenders.gov.za for free.

No clarification meeting will be required.

It is a pre-requisite that Bidders must be in good standing with SARS, have the requisite CIDB certificate, and must be registered on the Central Supplier Database (CSD)..

The closing time and date for receipt of tenders is **28 March 2023, 11H00**. Bid documents, clearly marked **BID MLM 18/2022/23; APPOINTMENT OF A 6CE OR HIGHER CIDB REGISTERED CONTRACTOR FOR CONSTRUCTION OF BLOCK PAVED ROADS AND STORMWATER IN GORTIN TOWNSHIP WARD 01**, must be deposited in the bid box at the Municipal Building, 10 Fichardt Street, Sasolburg before the closing time. Bid documents will be opened in public soon after the closing time. Telegraphic, telephonic, telex, e-mail, facsimile and late tenders will not be accepted. Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

Service providers will be adjudicated according to the Supply Chain Management Policy using the 80/20-point system, based on the Preferential Procurement Policy Framework Act 5 of 2005 and MFMA, Act 56 of 2003 as well as the Broad-Based Black Economic Empowerment Act, Act 53 of 2003.

Queries relating to the issues of these documents may be addressed to:

Administrative:

Sibusiso Bila

Tel No. +27 16 973 8487

E-mail: sibusiso.bila@metsimaholo.gov.za

Technical:

Mr C. Mokoene

Tel No.+27 83 4042 135

E-mail: clement@epitomeconsulting.co.za

T1.2 CONDITIONS OF TENDER

T1.2 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 create an appearance of impropriety 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 fulfil 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
 - iii) in compatibility or contradictory interests exist between an employee and the organisation which employs that employee.
- b) **comparative offer** means the tenderer's financial offer after all tendered parameters that will affect the value of the financial offer have been taken into consideration in order to enable comparisons to be made between offers on a comparative basis
- c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents, *or any official in the public service or in the employ of an Organ of State*, in the tender process; and
- d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels
- e) **organization** means a company, firm, enterprise, association or other legal entity, whether incorporated or not, or a public body
- f) **quality (functionality)** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs
- g) **tenderer** *means any organisation who is represented by a duly authorised employee, partner, shareholder or director that responds to the Tender Notice by drawing tender documents*
- h) **these conditions of tender** *mean the Standard Conditions of Tender (as published and amended from time to time by the Construction Industry Development Board) and the employer's Special Conditions of Tender, the latter are demonstrated by appearing in italics.*

F.1.4 Communication and employer's agent

Each communication between the employer and a tenderer shall be to or from the employer's agent only, and in a form that can be readily read, copied and recorded. Communications shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a tenderer. The name and contact details of the employer's agent are stated in the tender data.

F.1.5 The employer's right to accept or reject any tender offer

F.1.5.1 The employer *does not bind itself to accept the lowest or any other tender, and may, in addition, accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such cancellation and rejection, but will give written reasons for such action upon written request to do so.*

F.1.5.2 The employer may not subsequent to the cancellation or abandonment of a tender process or the rejection of all responsive tender offers re-issue a tender covering substantially the same scope of work within a period of six months *(measured between the relevant closing dates of the abandoned tender and the re-issued tender)* unless only one tender was received and such tender was returned unopened to the tenderer, *or if there is agreement by the participating tenderers.*

F.2 Tenderer's obligations

F.2.1 Eligibility

F.2.1.1 Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with the employer.

F.2.1.2 Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.

F.2.2 Cost of tendering

Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of *attending any clarification meeting*) and any testing necessary to demonstrate that aspects of the offer complies with the requirements.

F.2.3 Check documents

Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.

F.2.4 Confidentiality and copyright of documents

Treat as confidential, *regardless whether or not a tender offer is submitted*, all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.

F.2.5 Reference documents

Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

F.2.6 Acknowledge addenda

Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary, apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

F.2.7 Clarification meeting

Attend, where required, *in person or designate a suitably qualified person in the direct employ of the tenderer*, a clarification meeting at which tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the tender data.

F.2.8 Seek clarification

Request clarification of the tender documents, if necessary, by notifying the employer at least five working days before the closing time stated in the tender data. *Any variation or deviation*

based on a point for which clarity should have been requested may render a tenderer's offer non-responsive in terms of F.3.8.

F.2.9 Insurance

Be aware that the extent of insurance to be provided by the employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.

F.2.10 Pricing the tender offer

F.2.10.1 Include in the rates, prices, and the tendered total of the prices (if any) all costs *prescribed as being applicable to the specified pay items as well as all duties, taxes except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the tender data.*

F.2.10.2 Show VAT payable by the employer separately as an addition to the tendered total of the prices.

F.2.10.3 Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.

F.2.10.4 State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

F.2.11 Alterations to documents

Not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited.

F.2.12 Alternative tender offers

F.2.12.1 Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed. *Alternative tender offers shall not alter any contingency pay items provided in the tender documents, or offer fixed prices (except where such are provided in the postulated pricing schedule) or a fixed price contract.*

F.2.12.2 Accept that an alternative tender offer may be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.

F.2.12.3 *Qualify a tender offer (except that no qualifications shall be in conflict with F.2.8) but undertake to do so by submitting such qualification in terms of F.2.12.1 and F.2.12.2.*

F.2.13 Submitting a tender offer

F.2.13.1 Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.

F.2.13.2 Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.

F.2.13.3 Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.

F.2.13.4 Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.

F.2.13.5 Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.

F.2.13.6 Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.

F.2.13.7 Seal the original tender offer in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.

F.2.13.8 Accept that the employer will not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.

F.2.13.9 Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

F.2.14 Information and data to be completed in all respects

Accept that tender offers, which do not provide all the data or information requested completely and, in the form, required, may be regarded by the employer as non-responsive.

F.2.15 Closing time

F.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.

F.2.15.2 Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

F.2.16 Tender offer validity

F.2.16.1 Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.

F.2.16.2 If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.

F.2.16.3 Accept that a tender submission that has been submitted to the employer may only be *modified, corrected*, withdrawn or substituted by giving the employer written notice before the closing time for tenders that a tender is to be *modified, corrected*, withdrawn or substituted.

F.2.16.4 Where a tender submission is to be substituted, submit a substitute tender in accordance with the requirements of F.2.13 with the packages clearly marked as "SUBSTITUTE".

F.2.17 Clarification or *withdrawal* of tender offer after submission

F.2.17.1 Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors *or adjusting of imbalanced rates*, by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

F.2.17.2 *Accept that the employer may, at its sole discretion, accept a less favourable tender from those already received or invite fresh tenders if a tenderer, at any time after the opening of his tender offer but prior to the signing of a contract based on his tender offer:*

- a) *withdraws his tender; or*
- b) *gives notice of his inability to execute the contract in terms of his tender; or*
- c) *fails to sign a contract or furnish the performance security within the period fixed in the letter of award or any extended period fixed by the employer; or*
- d) *fails to comply with a request made in terms of F.2.17.1 or F.2.18.1,*

in which case such tenderer shall be automatically barred from tendering on any of the employer's future tenders for a period to be determined by the employer, but not less than twelve (12) months, from the date of tender closure. The employer may fully or partly exempt a tenderer from the provisions of this condition if he is of the opinion that the circumstances justify the exemption.

Note: Sub-clause F.2.17 does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the Employer elect to do so.

F.2.18 Provide other material

F.2.18.1 Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in

the employer's request, the employer may regard the tender offer as non-responsive *and may invoke the same remedy as provided for under F.2.17.2.*

F.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

F.2.18.3 *Accept the employer's right, at its sole discretion, to appoint suitably qualified persons to report on the financial resources, standing with the South African Revenue Service regarding all taxes, management structure and ownership details of any tenderer and/or to verify the correctness of any information furnished to the employer in terms of F.2.17.1. Comply with the employer's request within the time stated in the request. Failure on the part of the tenderer to cooperate with such an inquiry shall entitle the employer to declare such tender offer as non-responsive and may invoke the same remedy as provided for under F.2.17.2.*

F.2.19 Inspections, tests and analysis

Provide access during working hours to premises for inspections, tests and analysis as provided for in the tender data.

F.2.20 Submit securities, bonds, policies, etc.

If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.

F.2.21 Check final draft

Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.

F.2.22 Return of other tender documents

If so instructed by the employer, return all retained tender documents within 28 days after the expiry of the validity period stated in the tender data.

F.2.23 Certificates

Include in the tender submission or provide the employer with any certificates as stated in the tender data.

F.3 The employer's undertakings

F.3.1 Respond to requests from the tenderer

F.3.1.1 Unless otherwise stated in the tender data respond to a request for clarification received up to five working days before the tender closing time stated in the tender data and notify all tenderers who drew *tender* documents.

F.3.1.2 Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence: -

- a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;
- b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
- c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

F.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until three working days before the tender closing time stated in the tender data. If, as a result a tenderer applies for an extension to the closing time stated in the tender data, the Employer may grant such extension and, shall then notify all tenderers who drew *tender* documents.

F.3.3 Return late tender offers

Return tender offers *withdrawn in terms of F.2.16.3* or received after the closing time stated in the tender data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.

F.3.4 Opening of tender submissions

F.3.4.1 Unless the two-envelope system is to be followed, open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.

F.3.4.2 Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices, preferences claimed and time for completion for the main tender offer only.

F.3.4.3 Make available the record outlined in F.3.4.2 to all interested persons upon request.

F.3.5 Two-envelope system

F.3.5.1 Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.

F.3.5.2 Evaluate the quality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the quality evaluation *equal to or more than* the minimum number of points for quality stated in the tender data, and announce the total price. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for quality.

F.3.6 non-disclosure

Not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.

F.3.7 Grounds for rejection and disqualification

F.3.7.1 Determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices. *In addition, any such disqualification shall entitle the employer, at its sole discretion, to impose a specified period during which tender offers will not be accepted from the offending tenderer.*

F.3.7.2 *Communicate to other state tender boards, provincial tender boards or parastatal tender boards any tenderer disqualified in terms of special condition F.3.7.1.*

F.3.7.3 *Consider rejecting any tender offers received from tenderers who are involved in any form of litigation or legal proceedings by or against the Employer.*

F.3.7.4 *Reject any offer from a tenderer who has not purchased the tender documents in his own name or in the name of a fellow member of a joint venture.*

F.3.7.5 *Reject any offer from a tenderer that contains information or data that is not in compliance with the minimum key staff qualification requirements.*

F.3.8 Test for responsiveness

F.3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received:

- a) complies with the requirements of these Conditions of Tender,
- b) has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the tender documents.

F.3.8.2 A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

- a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or
- c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation *unless it can be subsequently rendered responsive by correction of non-material deviations.*

F.3.9 Arithmetical errors, omissions, discrepancies and imbalanced unit rates

F.3.9.1 Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.

F.3.9.2 Check *responsive* tender offers for:

- a) the gross misplacement of the decimal point in any unit rate;
 - b) omissions made in completing the pricing schedule or bills of quantities; or
 - c) arithmetic errors in:
 - i) line-item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
 - ii) the summation of the prices.
- F) *imbalanced unit rates*.

F.3.9.3 Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.

F.3.9.4 Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:

- a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the unit rate shall be corrected.
- b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall be *corrected*.
- c) *Where the unit rates are imbalanced request tenderers to amend and adjust any rates declared imbalanced by the employer while retaining the total of the prices derived after any adjustment made.*

F.3.9.5 *Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of his arithmetical errors or amend/adjust an imbalanced unit rate in the manner described above.*

F.3.10 Clarification of a tender offer

Obtain clarification from a tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

F.3.11 Evaluation of tender offers

F.3.11.1 General

Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate them using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

F.3.11.2 Method 1: Financial offer

In the case of a financial offer:

- a) Rank tender offers from the most favourable to the least favourable comparative offer.
- b) Recommend the highest ranked tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- c) Re-rank all tenderers should there be compelling and justifiable reasons not to recommend the highest ranked tenderer and recommend the highest ranked tenderer, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.

F.3.11.3 Method 2: Financial offer and preference

In the case of a financial offer and preferences:

- a) Score each tender in respect of the financial offer made and preferences claimed, if any, in accordance with the provisions of F.3.11.7 and F.3.11.8.
- b) Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula:

$$T_{EV} = N_{FO} + N_P$$

where: N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;

N_P is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated

F.3.11.4 Method 3: Financial offer and quality

In the case of a financial offer and quality:

- a) Score each tender in respect of the financial offer made and the quality offered in accordance with the provisions of F.3.11.7 and F.3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- b) Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula:

$$T_{EV} = N_{FO} + N_Q$$

where: N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;

N_Q is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points and

recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.

F.3.11.5 Method 4: Financial offer, quality and preferences

In the case of a financial offer, quality and preferences:

- a) Score each tender in respect of the financial offer made, preference claimed, if any, and the quality offered in accordance with the provisions of F.3.11.7 to F.3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- b) Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula, unless otherwise stated in the tender data:

$$T_{EV} = N_{FO} + N_P + N_Q$$

where: N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;
 N_P is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8;
 N_Q is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.

F.3.11.6 Decimal places

Score financial offers, preferences and quality, as relevant, to two decimal places.

F.3.11.7 Scoring Financial Offers

Score the financial offers of remaining responsive tender offers using the following formula:

$$N_{FO} = W_1 \times A$$

where: N_{FO} is the number of tender evaluation points awarded for the financial offer.
 W_1 is the maximum possible number of tender evaluation points awarded for the financial offer as stated in the tender data.
 A is a number calculated using the formula and option described in Table F.1 as stated in the tender data.

Table F.1: Formulae for calculating the value of A

Formula	Comparison aimed at achieving	Option 1 ^a	Option 2 ^a
1	Highest price or discount	$A = (1 + \frac{P - P_m}{P_m})$	$A = P_m / P$

2	Lowest price or percentage commission / fee	$A = (1 - \frac{P - P_m}{P_m})$	$A = P_m / P$
<p>P_m is the comparative offer of the most favourable comparative offer (<i>excluding all Provisional and Prime Cost Sums and the associated VAT</i>).</p> <p>P is the comparative offer of the tender offer under consideration (<i>excluding all Provisional and Prime Cost Sums and the associated VAT</i>).</p>			

F.3.11.8 Scoring preferences

Confirm that tenderers are eligible for the preferences claimed in accordance with the provisions of the tender data and reject all claims for preferences where tenderers are not eligible for such preferences.

Calculate the total number of tender evaluation points for preferences claimed in accordance with the provisions of the tender data.

F.3.11.9 Scoring quality

Score each of the criteria and sub-criteria for quality in accordance with the provisions of the tender data.

Calculate the total number of tender evaluation points for quality using the following formula:

$$N_Q = W_2 \times S_O / M_S$$

where: S_O is the score for quality allocated to the submission under consideration;
 M_S is the maximum possible score for quality in respect of a submission; and
 W_2 is the maximum possible number of tender evaluation points awarded for the quality as stated in the tender data.

F.3.12 Insurance provided by the employer

If requested by the proposed successful tenderer, submit for the tenderer's information the policies and / or certificates of insurance which the conditions of contract identified in the contract data, require the employer to provide.

F.3.13 Acceptance of tender offer

Accept the tender offer, if in the opinion of the employer, it does not present any unacceptable commercial risk and only if the tenderer:

- is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement,
- can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,
- has the legal capacity to enter into the contract,
- is not insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,
- complies with the legal requirements, if any, stated in the tender data, and
- is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

F.3.14 Prepare contract documents

F.3.14.1 If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of:

- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents, and
- c) other revisions agreed between the employer and the successful tenderer.

F.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

F.3.15 Complete adjudicator's contract

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.

F.3.16 Notice to unsuccessful tenderers

F.3.16.1 Notify the successful tenderer of the employer's acceptance of his tender offer by completing and returning one copy of the form of acceptance before the expiry of the validity period stated in the tender data, or agreed additional period.

F.3.16.2 After the successful tenderer has been notified of the employer's acceptance of the tender, notify other tenderers that their tender offers have not been accepted.

F.3.17 Provide copies of the contracts

Provide to the successful tenderer the number of copies stated in the tender data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

F.3.18 Provide written reasons for actions taken

Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender, but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.

F.3.19 Delegation of authority

The Employer may delegate any power vested in him by virtue of these Conditions of Tender to an officer or employee of the Employer.

T1.3 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement (May 2010) as published in Government Gazette No 33239, Board Notice 86 of 2010.

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 of inconsistency between it and the Standard Conditions of Tender.

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

Sub-clause	Data
F.1.1	The Employer is Metsimaholo Local Municipality.
F.1.2	<p>The Project Document issued by the Employer consists of the following:</p> <p>THE TENDER</p> <p>Part T1: Tendering procedures:</p> <p style="padding-left: 40px;">T1.1 Tender notice and invitation to tender</p> <p style="padding-left: 40px;">T1.2 Tender Data</p> <p>Part T2: Returnable documents</p> <p style="padding-left: 40px;">T2.1 Returnable Schedules required for Tender Evaluation</p> <p style="padding-left: 40px;">T2.2 Other Documents required for Tender Evaluation</p> <p style="padding-left: 40px;">T2.3 Returnable Schedules that will be incorporated into the Contract</p> <p>THE CONTRACT</p> <p>Part C1: Agreements and contract data</p> <p style="padding-left: 40px;">C1.1 Form of Offer and Acceptance</p> <p style="padding-left: 40px;">C1.2 Agreement in terms of Occupation Health and Safety Act</p> <p style="padding-left: 40px;">C1.3 Form of Guarantee</p> <p style="padding-left: 40px;">C.1.4 Contract Data</p> <p>Part C2: Pricing data</p> <p style="padding-left: 40px;">C2.1 Pricing instructions</p> <p style="padding-left: 40px;">C2.2 Bills of quantities</p> <p>Part C3: Scope of work</p> <p>Part C4: Site information</p> <p style="padding-left: 40px;">Drawings</p>

Tender data contd.

Sub-clause	Data
F.1.3	The Tender Document is available upon payment of R1000.00 or can be downloaded free of charge from the e tender website.
F.1.4	<p>Name: Epitome Consulting</p> <p>Address: 03 Rose Avenue, Kempton Park, Gauteng 1619</p> <p>Contact person: Karel Hermanus</p> <p>Tel: +27 11 390 5049</p> <p>Cell: +27 83 4451 188</p> <p>E-mail: karel@epitomeconsulting.co.za</p>
	Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to 6CE or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for an 6CE class of construction work, are eligible to have their tenders evaluated.
	<p>a) Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to 6CE or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for an 6CE class of construction work, are eligible to have their tenders evaluated.</p> <ol style="list-style-type: none"> every member of the joint venture is registered with the CIDB; the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for an 6CE class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations.

Tender data contd.

Sub- clause	Data
F.1.4	<p>b) The following tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated:</p> <ol style="list-style-type: none"> 1. contractors who have a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) of 25(7A) of the Construction Industry Development Regulations, for an 6CE class of construction work; and <ul style="list-style-type: none"> • the employer is satisfied that such a contractor has the potential to develop and qualify to be registered in that higher grade as determined in accordance with the provisions of the CIDB Specification for Social and Economic Deliverables in Construction Works Contracts; and • the employer agrees to provide the financial, management or other support that is considered appropriate to enable the contractor to successfully execute that contract. <p>c) No clarification meeting will be required.</p>
F.2.1	<p>Eligibility</p> <p>Only those tenderers who satisfy the following eligibility criteria and who provide the required evidence in their tender submissions are eligible to submit tenders and have their tenders evaluated:</p> <ol style="list-style-type: none"> a) Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to 6CE or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a 6CE class of construction work, are eligible to have their tenders evaluated. <p>Joint ventures are eligible to submit tenders provided that:</p> <ul style="list-style-type: none"> - every member of the joint venture is registered with the CIDB; - the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for an 6CE class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations.

Tender data contd.

Sub-clause	Data
F.2.1	<p>b) The following tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated:</p> <ol style="list-style-type: none"> I. contractors who have a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) of 25(7A) of the Construction Industry Development Regulations, for an 6CE class of construction work; and <ul style="list-style-type: none"> • the employer is satisfied that such a contractor has the potential to develop and qualify to be registered in that higher grade as determined in accordance with the provisions of the CIDB Specification for Social and Economic Deliverables in Construction Works Contracts; and • the employer agrees to provide the financial, management or other support that is considered appropriate to enable the contractor to successfully execute that contract. <p>c) No clarification meeting will be required.</p>
F.2.10	<p>a) The Valued Added Tax (VAT) rate shall be 15% or as otherwise provided for by legislation.</p> <p>b) The successful Tenderer shall be required to produce a VAT invoice that shall only be prepared once measurements and valuations for work done in terms of the contract offer have been agreed with the Employers agent and a certificate of payment issued.</p> <p>Payment of VAT to previously non-VAT vendors shall be processed from the month in which the Tenderers liability with the South African Revenue Services is effective.</p>
F.2.11	A Tender offer shall not be considered if alterations have been made to the forms of tender data or contract data (unless such alterations have been duly authenticated by the Tenderer) or if any particulars required therein have not been completed in all respects.
F.2.12	No alternative tender offers will be considered
F.2.13.1	The Tenderer may not make an offer for only part of the services as defined in the Scope of Work.

Tender data contd.

Sub-clause	Data																					
F.2.13.3	Parts of each tender offer communicated on paper shall be submitted as original, plus 0 copies. Under no circumstances whatsoever may the tender forms be retyped or redrafted.																					
F.2.13.5	<p>The Employer’s address for delivery of tender offers and identification details to be shown on each tender offer package is: Municipal Building, 10 Fichardt Street, Sasolburg</p> <p>Location of tender box: As mentioned on the tender advertisement</p>																					
F.2.15	The closing time for submission of Tender Offers is: 11:00 Hrs on 28 MARCH 2023 Telephonic, telegraphic, telex, electronic or emailed tenders will not be accepted.																					
F.2.16	The tender offer validity period is 90 days																					
F.2.23	<div>Returnables<table><tr><th>NO</th><th>RETURNABLES</th><th>NOTES</th></tr><tr><td>1</td><td>Form of Offer</td><td><ul style="list-style-type: none">Fully completed and signed in black ink pen.</td></tr><tr><td>2</td><td>A copy of a CSD summary report OR CSD number.</td><td><ul style="list-style-type: none">CSD full report or summary report OR CSD number.Municipality may not make any award to a person whose tax matters are not complaint with SARS, please note that tax compliance will be verified before any award.</td></tr><tr><td>3</td><td>Proof of company registration documents with the Director’s details must be attached.</td><td><ul style="list-style-type: none">The company registration documents must indicate the company and Director’s details.In a case where the Director has changed names, proof of name change must be attached.</td></tr><tr><td>4</td><td>Fully completed and signed MBD forms</td><td><ul style="list-style-type: none">Fully Completed and signed in hand writing and in black ink pen.</td></tr><tr><td>5</td><td>Fully completed Bill Of Quantity (BOQ)</td><td><ul style="list-style-type: none">Fully completed in hand writing and in black ink pen</td></tr><tr><td>6</td><td>Fully Completed and signed MBD 5 form for Bidders quoted over R10 Million</td><td><ul style="list-style-type: none">If required by law submit Audited Financial Statements for the past 3 years or since the</td></tr></table></div>	NO	RETURNABLES	NOTES	1	Form of Offer	<ul style="list-style-type: none">Fully completed and signed in black ink pen.	2	A copy of a CSD summary report OR CSD number.	<ul style="list-style-type: none">CSD full report or summary report OR CSD number.Municipality may not make any award to a person whose tax matters are not complaint with SARS, please note that tax compliance will be verified before any award.	3	Proof of company registration documents with the Director’s details must be attached.	<ul style="list-style-type: none">The company registration documents must indicate the company and Director’s details.In a case where the Director has changed names, proof of name change must be attached.	4	Fully completed and signed MBD forms	<ul style="list-style-type: none">Fully Completed and signed in hand writing and in black ink pen.	5	Fully completed Bill Of Quantity (BOQ)	<ul style="list-style-type: none">Fully completed in hand writing and in black ink pen	6	Fully Completed and signed MBD 5 form for Bidders quoted over R10 Million	<ul style="list-style-type: none">If required by law submit Audited Financial Statements for the past 3 years or since the
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		(Submitted Annual Financial Statements must clearly stating that they are Audited, Reviewed AFS won't be expected)	date of establishment if established within the past 3 years. Audited Financial Statements signed by the CA/RA/PR Accountant & Director of the company (MBD 5 form)
	7	Joint Venture Agreement (Must indicate the lead partner, if the bidders grading is not the same the lead partner must have the higher grading)	<ul style="list-style-type: none"> • If applicable submit a complete and signed JV agreement. • JV agreement stating who the lead partner is with the shared percentages. • Note: JV agreement must be as per CIDB regulation of 2008 regulation 25 (5)(a),(b) and (6)
<p>NB! The following documents will not be accepted: for number 8, 9 and 10</p> <ul style="list-style-type: none"> • Affidavits; Address confirmation letter; invoices from the body corporates or agents, rates and taxes of the lessor (without a lease agreement) and municipal tender / rates clearance letter. 			
	8	Latest Municipal rates and taxes account for the COMPANY AND DIRECTORS/TRUSTEES/ MEMBERS/SHAREHOLDER S.	<ul style="list-style-type: none"> • Submit strictly February 2023 • or March 2023 municipal rates & taxes statement must be attached • The submitted account must not be in arrears for more than 3 months. • In a case of Rates & Taxes Account being in a family member's name, ONLY MUNICIPAL Account where the address of the Account matches the address on the company registration documents will be accepted) if not in arrears for more than 3 months.
	9	In the event of a tenant renting a lease agreement MUST be attached for the COMPANY AND DIRECTORS/TRUSTEES/ MEMBERS/SHAREHOLDERS.	<p>The lease agreement must include the following:</p> <ul style="list-style-type: none"> • A valid copy of the lease agreement must be signed by (both Lessor and lessee). • The lease agreement must indicate dates of commencement and expiry or duration. • In a case where the lease agreement has expired and

		<p>there is a clause indicating an automatic renewal the original lease agreement and a confirmation letter signed by Lessor must be attached.</p> <ul style="list-style-type: none"> • In the occasion where the lease agreement has expired the original lease agreement AND extension must be attached with commencement and expiry dates or duration. • In a case of lease agreement being in a family member's name, the lease agreement will be accepted if the address on the lease matches the address on the company registration documents, AND ONLY if the lease agreement is valid
		<p>Note: If the company registration document's physical address on lease agreement or the municipal rates and taxes statement is the same as the Director's physical address we will accept for both Company & Director.</p>
10	Municipal rates and taxes for bidders who are from the rural areas for the COMPANY AND DIRECTORS/TRUSTEES/MEMBERS/SHAREHOLDERS.	<ul style="list-style-type: none"> • In the event that the bidder is from the rural area a letter from the municipality that the area is not liable to pay municipal rates and taxes OR a signed letter from the chief indicating that the bidder is from that particular rural/tribal area.
11	CIDB Grading	<ul style="list-style-type: none"> • Copy of Company CIDB Grading designation 6 CE or Higher
The following certificates/documents must be provided with the tender:		
<p><u>Failure to comply with the above-mentioned terms and conditions will deem your bid to be disqualified.</u></p> <p><u>Bidders must keep a copy of a completed excel spreadsheet BOQ which may be required during the evaluation processes</u></p>		
	Functionality Returnable	

	<ul style="list-style-type: none"> • Completion certificates of similar projects • Plant Schedule and registrations • Key Staff / Personnel CV • Financial Stability
F.3.4	Opening of Tender Submissions
F.3.4.2	Tenders will be opened in public soon after closing time and recording of received documents but not later than 11:00 at the Tender office. Tenderers' names and total prices where practical will be read out
F.3.5	A two-envelope procedure will not be followed
F.3.8.2	The Employer shall reject a non-responsive tender offer and not allow it to be subsequently made responsive by correction or withdrawal of non-conforming deviation or reservation.
F.3.11	<p>Tenders will be evaluated for Functionality. Tenderers who qualify for Functionality will be evaluated further for Price and Preference only. Points for Functionality will not contribute to further evaluation. Tenderers who do not qualify will not be evaluated further. Functionality will be scored out of 100 points. A Tenderer who scores less than 75 points will automatically be disqualified.</p> <p>The 80/20 evaluation criteria will be used where Price will be allocated 80 points and Preference will be scored out of 20 points.</p>
F.3.11.1	The procedure for evaluation of responsive Tender Offers will be Method 4: Financial Offer, Functionality and Preferences. The responsive tender with the highest total points as defined below is the preferred tender
F.3.11.2	<p>The financial offer will be scored in terms of Formula 2, Option 1 of Table F.1 of SANS 294:2004, which reads as follows:</p> $Nfo = W1 \times A$ <p>Where: Nfo = number of tender evaluation points awarded for the financial offer;</p> <p>W180 points for rand value less than R50 000 000;</p>

F.3.11.3	(a) Functionality will include the following:			
	Functionality		100 Points	
	A. PROJECT EXPERIENCE AND PERFORMANCE		40	
	B. CONSTRUCTION PLANT		35	
	C. COMPANY KEY PERSONNEL		10	
	D. FINANCIAL STABILITY		15	
	E. Total		100	
	Minimum Threshold		75	
	Criteria	Evaluation Indicators	Points Allocated	Weight
	A. PROJECT EXPERIENCE AND PERFORMANCE			MAX. 40 POINTS
	Company experience with regards to Road Construction projects	Required submission to claim points: 1. Project signed Appointment letter (letter must be within the past 10 years and the value of the project must be above R6 000 000.00) & corresponding reference letter or Completion certificate/ letter as a main contractor. 2. A minimum of one project must be submitted from a State/Government/ SOE. Non-submission of a state project will render any submission for experience as none responsive and Zero (00) point will be allocated for Company experience.	10 points per project	40

B. CONSTRUCTION PLANT				MAX. 35 POINTS	
TLB X 2	Vehicle Registration Certificates in a company or directors name/ Signed letter from Rental Company on rental company letterhead	5 points if owned 3-point if rented		Max 10 Points	
Excavator	Vehicle Registration Certificates in a company or directors name/ Signed letter from Rental Company on rental company letterhead	10 points		Max 10 points	
Grader	Vehicle Registration Certificates in a company or directors name/ Signed letter from Rental Company on rental company letterhead	10 points		Max 10 points	
Roller Compactor	Vehicle Registration Certificates in a company or directors name/ Signed letter from Rental Company on rental company letterhead	5 points		Max 5 points	
C. COMPANY KEY PERSONNEL	BIDDERS MUST SUBMIT CVs OR COMPLETE ANNEXURE A TO CLAIM POINTS			MAX. 10 POINTS	
Site Agent	Personnel 1- is required to attach a National Diploma qualification or higher in the Built environment and have project construction experience. NB: Submit CV and Qualifications. If no CV is attached, please complete personnel form on ANNEXURE A To claim points	5 or More Projects = 5 Points		Max 5 points	
Foreman	Personnel 2- is required to have projects construction experience in Road construction projects.	3 or more Projects = 3 Points		Max 3 points	

		NB: Submit CV. If no CV is attached, please complete personnel form on ANNEXURE A To claim points			
	Safety Officer	Safety officer on permanent/contract basis, with First Aid plus OHS (Construction Regulations) qualification or related qualification with experience in construction projects of not less than two (2) projects. NB: Submit CV and Qualifications. If no CV is attached, please complete personnel form on ANNEXURE A To claim points	2 Projects- 2 Points	Max 2 points	
	D. FINANCIAL STABILITY			MAX 15 POINTS	
	Bank Rating Letter	Submit bank rating letter not older than 3 months of rating of A, B or C	15 Points	Max 15 POINTS	
	MINIMUM SCORE			75	
	TOTAL			100	

In order to qualify for the second round of evaluation the tenders must score a minimum of 75 functionality points.

The recommended bidders company personnel and completed projects may be verified before appointments can be finalised. Misrepresentation of information will lead to disqualification of the bidder and the bidder can be blacklisted on National Treasury database

For points calculation, submit the following:

RETURNABLE	NOTES
BBBE Certificate or Affidavit	Valid Certified copy of SANAS only accredited BBEE certificate OR valid copy of BBEE Sworn Affidavit must be attached.

NB: THE MUNICIPALITY RESERVES THE RIGHT TO VERIFY THE SUBMITTED FUNCTIONALITY DOCUMENTS

Tender data contd.

Sub-clause	Data
F.3.13	Acceptance of Tender Offer
F.3.13.1	<p>Tender offers will only be accepted if:</p> <ul style="list-style-type: none"> a) the tenderer is registered on the Central Supplier Database (CSD) for the South African government (see https://secure.csd.gov.za/) b) the tenderer is in good standing with SARS according to the Central Supplier Database; c) the tenderer submits a letter of intent from an approved insurer undertaking to provide the Performance Bond to the format included in Part C1.3 of this procurement document d) the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation; e) 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; f) the tenderer has not: <ul style="list-style-type: none"> i. abused the Employer's Supply Chain Management System; or ii. failed to perform on any previous contract and has been given a written notice to this effect; g) the tenderer has completed the Compulsory Declaration 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; h) the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer; i) the employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.
F.3.17	The number of paper copies of signed contract to be provided by the Engineer is one (1).

ANNEXURE A- Site Agent

NB: Attach: Copy of qualification (Failure to fully complete will lead to no point scoring for functionality)

[illegible]

ANNEXURE A - Foreman

NB: Attach: NON (Failure to fully complete will lead to no point scoring for functionality)

[illegible]

ANNEXURE A - Foreman

NB: Attach: NON (Failure to fully complete will lead to no point scoring for functionality)

Name & Surname	ID/Passport Number	Highest Qualification	Employer & Contact reference No.	Project	Project Duration (Year)

NB: Attach copy of qualification (Failure to fully complete will lead to no point scoring for functionality)

[illegible]



METSIMAHOLO LOCAL MUNICIPALITY

BID NO: MLM 18/2022/23

**APPOINTMENT OF A 6CE OR HIGHER CIDB REGISTERED CONTRACTOR FOR
CONSTRUCTION OF BLOCK PAVED ROADS AND STORMWATER IN GORTIN
TOWNSHIP WARD 01 (MLM 18/2022/23).**

PART T2 : RETURNABLE DOCUMENTS

T2.1 LIST OF RETURNABLE DOCUMENTS

The Tender Document must be submitted as a whole. All forms must be properly completed as required, and the document shall not be taken apart or altered in any way whatsoever.

All the certificates and forms to be provided with the tender are listed in the Tender Data under F2.23: Certificates, and under the returnable schedules and forms in T2.2 hereafter.

The list of returnable documents comprises the following:

1. All the certificates listed in the Tender Data under F2.23: Certificates;
2. All the returnable schedules and forms listed in T2.2.1: Returnable Schedules Required for Tender Evaluation Purposes;
3. All the returnable documents listed in T2.2.2: Preferential Procurement Schedules and Affidavits that will be incorporated into the Contract;
4. All the agreements and forms listed in T2.2.3: Forms to be completed by Successful Tenderer;
5. All the forms and agreements in the Contract Data in C1.2, where some of the forms (agreements) need to be completed only by successful Tenderer;
6. Pricing Data in C2.2: Bill of Quantities.

T2.2 RETURNABLE SCHEDULES

NOTE: The Tenderer is required to complete each and every schedule and form listed above to the best of his 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 not responsive.

SCHEDULE A: MUNICIPAL BIDDING DOCUMENTS**TABLE OF CONTENTS**

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PART A
INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE METSIMAHOLO LOCAL MUNICIPALITY					
BID NUMBER:	MLM 18/2022/23	CLOSING DATE:	28 March 2023	CLOSING TIME:	11H00
DESCRIPTION	APPOINTMENT OF A 6CE OR HIGHER CIDB REGISTERED CONTRACTOR FOR CONSTRUCTION OF BLOCK PAVED ROADS AND STORMWATER INFRASTRUCTURE IN GORTIN TOWNSHIP WARD 01				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT (MBD7).					
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN					
BOX SITUATED AT (STREET ADDRESS)					
Metsimaholo Local Municipality					
No 10 Fichardt Street					
Finance Building					
Ground Floor					
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
TAX COMPLIANCE STATUS		TCS PIN:		OR	CSD No

B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE [TICK APPLICABLE BOX]	<input type="checkbox"/> Yes <input type="checkbox"/> No	B-BBEE STATUS LEVEL SWORN AFFIDAVIT	<input type="checkbox"/> Yes <input type="checkbox"/> No
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMEs & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]			
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER PART B:3]
TOTAL NUMBER OF ITEMS OFFERED		N/A	N/A
SIGNATURE OF BIDDER	DATE	
CAPACITY UNDER WHICH THIS BID IS SIGNED			
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:		TECHNICAL INFORMATION MAY BE DIRECTED TO:	
DEPARTMENT		CONTACT PERSON	MR S BILA
CONTACT PERSON		TELEPHONE NUMBER	016 973 8487
TELEPHONE NUMBER		FACSIMILE NUMBER	
FACSIMILE NUMBER		E-MAIL ADDRESS	
E-MAIL ADDRESS			

MBD1

PART B

TERMS AND CONDITIONS FOR BIDDING

<p>1. BID SUBMISSION:</p> <p>1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.</p> <p>1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR ONLINE</p> <p>1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.</p>
<p>2. TAX COMPLIANCE REQUIREMENTS</p> <p>2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.</p> <p>2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.</p> <p>2.3 APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.</p> <p>2.4 FOREIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PART B:3.</p> <p>2.5 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.</p> <p>2.6 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.</p> <p>2.7 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.</p>
<p>3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS</p> <p>3.1. IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.</p>

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

NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:

DATE:

MBD 4

DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state¹.
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.
3. **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

3.1 Full Name of bidder or his or her representative:

3.2 Identity Number:

3.3 Position occupied in the Company (director, trustee, hareholder²):

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, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.

3.8 Are you presently in the service of the state? YES / NO

3.8.1 If yes, furnish particulars.

.....

¹MSCM Regulations: "in the service of the state" means to be –

(a) a member of –

- (i) any municipal council;
- (ii) any provincial legislature; or
- (iii) the national Assembly or the national Council of provinces;

(b) a member of the board of directors of any municipal entity;

(c) an official of any municipality or municipal entity;

(d) an employee of any national or provincial department, national or provincial public entity 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 entity; or
- (f) an employee of Parliament or a provincial legislature.

² 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.

3.9 Have you been in the service of the state for the past twelve months?YES / NO

3.9.1 If yes, furnish particulars.....

.....

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

3.10.1 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

3.11.1 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

3.12.1 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

3.13.1 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 contract or not they are bidding for this..... YES / NO

3.14.1 If yes, furnish particulars:

.....

Full details of directors / trustees / members / shareholders.

Full Name	Identity Number	State Employee Number

.....
Signature

.....
Date

.....
Capacity

.....
Name of Bidder

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:

- 1 Are you by law required to prepare annual financial statements for auditing?

***YES / NO**

- 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. 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.

.....

.....

* Delete if not applicable

3. 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, furnish particulars

.....

.....

4. 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, furnish particulars

.....

.....

CERTIFICATION

I, THE UNDERSIGNED (NAME)

.....

**CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS
CORRECT.**

**I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION
PROVE TO BE FALSE.**

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

MBD 6.1

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

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

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

1. GENERAL CONDITIONS

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

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

1.2 To be completed by the organ of state

(delete whichever is not applicable for this tender).

- a) The applicable preference point system for this tender is the **90/10** preference point system.
- b) The applicable preference point system for this tender is the **80/20** preference point system.
- c) Either the **90/10 or 80/20 preference point system** will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

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

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

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

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

2. DEFINITIONS

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

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

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

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

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

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

3.2.1. POINTS AWARDED FOR PRICE

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

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

Where

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

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (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 points claimed are indicated per the table below.

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

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

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

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

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

.....	
SIGNATURE(S) OF TENDERER(S)	
SURNAME AND NAME:
DATE:
ADDRESS:

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Municipal Bidding Document must form part of all bids invited.
- 2 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 The bid of any bidder may be rejected if that bidder, or any of its directors have:
 - a. abused the municipality's / 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. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - 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 **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

Item	Question	Yes	No
4.1	<p>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?</p> <p>(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 <i>audi alteram partem</i> rule was applied).</p> <p>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.</p>	<p>Yes</p> <p><input type="checkbox"/></p>	<p>No</p> <p><input type="checkbox"/></p>
4.1.1	If so, furnish particulars:		

4.2	<p>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)?</p> <p>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.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		
4.3	<p>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?</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
4.4	<p>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?</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	<p>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?</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.7.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)CERTIFY
THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM 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.

.....

Signature

.....

Date

.....

Position

.....

Name of Bidder

MBD 9

CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Municipal Bidding Document (MBD) must form part of all bids¹ invited.
- 2 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 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. takes all reasonable steps to prevent such abuse;
 - b. rejects 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 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 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

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

MBD 9

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: _____ that:

(Name of Bidder)

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; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder

MBD 9

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; or
 - (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.

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.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

SCHEDULE B: RECORD OF ADDENDA TO TENDER DOCUMENTS

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

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

SIGNATURE:

SCHEDULE C: CERTIFICATE OF AUTHORITY

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

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

(i) CERTIFICATE FOR COMPANY

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

Managing Director:

(ii) CERTIFICATE FOR CLOSE CORPORATION

We, the undersigned, being the key members in the business trading as

.....

hereby authorise Mr/Ms, acting in the capacity of, to sign all documents in connection with this tender and any contract resulting from it, on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

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

(iii) CERTIFICATE FOR PARTNERSHIP

We, the undersigned, being the key partners in the business trading as,

.....

hereby authorize Mr/Ms acting in the capacity of, to sign all documents in connection with this tender and any contract resulting from it, on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

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

(iv) CERTIFICATE FOR JOINT VENTURE

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorize Mr/Ms, authorized signatory of the company,, acting in the capacity of lead partner, to sign all documents in connection with this tender offer and any contract resulting from it, on our behalf. This authorization is evidenced by the attached power of attorney signed by legally authorized signatories of all the partners to the Joint Venture.

NAME OF FIRM	ADDRESS	AUTHORIZING SIGNATURE, NAME AND CAPACITY
(Lead partner)		

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

(v) CERTIFICATE FOR SOLE PROPRIETOR

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

.....

Signature of Sole owner:

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

Registration Certificates for Companies, Close Corporations and Partnerships, or Agreements and Powers of Attorney for Joint Ventures, or ID documents for Sole Proprietors, all as referred to in the foregoing forms and in T2.1, must form part of this submission either separately as separate bunch of supporting documents or at the end of the this bid document and must be properly referenced.

SCHEDULE D: COMPULSORY ENTERPRISE QUESTIONNAIRE

The following particulars must be furnished. **In the case of a Joint Venture, separate enterprise questionnaires in respect of each partner must be completed and submitted. The questionnaires for the other partners must be inserted after this questionnaire.**

Section 1: Name of enterprise:

Section 2: VAT registration number:

Section 3: CIDB registration number:

Section 4: Particulars of sole proprietors and partners in partnerships

Name*	Identity number*	Personal income tax number*

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

Section 5: Particulars of companies and close corporations

Company registration number

Close corporation number

Tax reference number

Section 6: Record of service of the state

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

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

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

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

Insert separate page if necessary

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

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

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

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

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

Insert separate page if necessary

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

- i) confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- ii) 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;
- iii) 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;
- iv) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed Date

Name Position

Enterprise
Name



METSIMAHOLO LOCAL MUNICIPALITY

BID NO MLM 18/2022/23

**APPOINTMENT OF A 6CE OR HIGHER CIDB REGISTERED CONTRACTOR FOR
CONSTRUCTION OF BLOCK PAVED ROADS AND STORMWATER IN GORTIN
TOWNSHIP WARD 01 (MLM 18/2022/23).**

THE CONTRACT

PART C1	:	AGREEMENTS AND CONTRACT DATA
PART C2	:	PRICING DATA
PART C3	:	SCOPE OF WORK
PART C4	:	SITE INFORMATION

PART C1: AGREEMENTS AND CONTRACT DATA

C1.1 FORM OF OFFER AND ACCEPTANCE**OFFER**

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

BID NUMBER MLM 18/2022/23: APPOINTMENT OF A 6CE OR HIGHER CIDB REGISTERED CONTRACTOR FOR CONSTRUCTION OF BLOCK PAVED ROADS AND STORMWATER IN GORTIN TOWNSHIP WARD 01.

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 Returnable Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the Tenderer, deemed to be duly authorized, signing this part of this Form of Offer and Acceptance, the Tenderer offers to perform all of the obligations and liabilities of the 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.

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

Name: (of signatory in capitals):

Capacity: (of Signatory):

Name of Tenderer: (organisation):

Address:

Telephone number: Fax number:

Cell phone number:

Witness:

Signature:

Name: (in capitals): **Date:**

ACCEPTANCE

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 as set out in the General and Special Conditions of Contract, and 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 1 Agreement and Contract Data, (which includes this Agreement)

Part 2 Pricing Data, including the Bill of Quantities

Part 3 Scope of Work

Part 4 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 authorized representatives of both parties.

The Tenderer shall deliver the Guarantee in terms of Clause 7 of the General Conditions of Contract 2004 within the period stated in the Contract Data, and he shall, immediately 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 other bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data, within 14 days of the date on which this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the Tenderer receives the fully completed original of this document, including the Schedule of Deviations (if any). Unless the Tenderer (now Contractor) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract between the parties.

Signature:

Name:

Capacity: **Municipal Manager**

For: **METSIMAHOLO LOCAL MUNICIPALITY**
10 FICHARDT STREET, SASOLBURG, 4800

Witness: **Name:**

Date:

SCHEDULE OF DEVIATIONS

The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Tender Data and the Conditions of Tender.

A Tenderer's covering letter will not necessarily be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid becomes the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.

Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here.

Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract.

1. Subject:

Details:

2. Subject:

Details:

3. Subject:

Details:

4. Subject:

Details:

5. Subject:

Details:

6. 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.

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

FOR THE TENDERER:

Signature:

Name:

Capacity:

Witness:

Name:

Date:

FOR THE EMPLOYER:

Signature:

Name:

Capacity:

Witness:

Name:

Date:

C1.2 CONTRACT DATA

C1.2.1 CONDITIONS OF CONTRACT

GENERAL CONDITIONS OF CONTRACT

This Contract will be based on the "General Conditions of Contract for Construction Works – 3rd Edition 2015, issued by the South African Institution of Civil Engineering. (Short title: "General Conditions of Contract 2015").

It is agreed that the only variations from the General Conditions of Contract 2015 are those set out hereafter under "Contract Specific Conditions".

CONTRACT SPECIFIC CONDITIONS

1. GENERAL

These Contract Specific Conditions (CSC) form an integral part of the Contract. The Contract Specific Conditions shall amplify, modify or supersede, as the case may be, the General Conditions of Contract 2015 to the extent specified below, and shall take precedence and shall govern.

The clauses of the Special Conditions hereafter are numbered "CSC" followed in each case by the number of the applicable clause or sub-clause in the General Conditions of Contract 2015, and the applicable heading, or (where a new special condition that has no relation to the existing clauses is introduced) by a number that follows after the last clause number in the General Conditions, and an appropriate heading.

2. AMENDMENTS TO THE GENERAL CONDITIONS OF CONTRACT

CSC 1.1.25 DEFINITIONS, INTERPRETATIONS AND GENERAL PROVISIONS

Add the following definitions:

"Labour-based Construction" means the effective employment of appropriate technologies and labour-intensive construction methods on projects specifically designed to maximize the workforce with limited use of machines.

"Community" shall mean all persons deemed to reside in the immediate vicinity of the project.

"Materials Provided by Client (MPC)" shall mean the materials provided to the Contractor by the Client as set out later in the technical specifications, preamble to the BoQ and the BoQ.

CSC1.10 Add the following Sub-Clause 1.10:

Training will be provided by the employer through various training providers. Training will be theoretical and practical and will be conducted in class rooms and on site. No separate payment of any nature will be made to the contractor for attendance of training sessions by the contractor or the contractor's staff. The Construction Project Manager will program and manage all training to ensure limited disruption to the contractors and the overall project.

SETA Accredited skills training and student for In-service training will also be added as a compulsory item on the bill to enable labour and Engineering students to benefit from the project even after completion.

CSC 2.3 Specific Approval of the Employer required

The Engineer has to obtain specific approval or consent from the Employer for the decisions in the following clauses:

Clauses 6.2, 6.6, 3.2.1, 3.2.4, 4.7, 8.2.2.2, 6.3.2, 6.4.1.4, 5.8.1, 5.11.1, 5.11.3, 6.6.1, 2.2.3, 6.10, 6.11, 5.14.1, 5.16.1, 7.8.2.2, 5.7.3 and 7.8.2.

CSC 4.5 Compliance with applicable laws

CSC 4.5.2 Health and Safety

Add the following:

"The Occupational Health and Safety Act No. 85 and Amendment Act No 181 of 1993 and the Construction Regulations 2003 will in all respects be applicable to this contract."

CSC 6.6.2 Payment to subcontractor

Add the following:

"The above-mentioned procedure shall adhere to the **Preferential procurement regulations, 2011, pertaining to the Preferential Procurement Policy Framework Act, Act No. 5 of 2000, published by National Treasury on 1 December 2011** and to any prescribed regulations of the FREESTATE Provincial Government pertaining to procurement.

CSC 40 PROGRESS OF THE WORKS

Add the following to Sub-Clause 40.1 :

Delete the last sentence and add the following:

The contractor shall within 3 days of receipt of notification submit to the Engineer in writing the action(s) the contractor intends to take to expedite the rate of progress, and within 7 days of receipt of notification implement such steps. The contractor shall as part of his actions submit to the Engineer a detailed revised program accommodating the agreed steps to meet the Due Completion date.

CSC 49.6 GUARANTEE IN LIEU OF RETENTION

Add to all references to a "Bank" also "or an accredited Insurance Company"

Add the following sub-clause

CSC 46: CONTRACT PRICE ADJUSTMENT SCHEDULE

Paragraph 1

Adjust the definitions of "L", "P", "M" and "F" in the 4th to the 7th subparagraphs with the following:

Definition of "L":

Insert "(Consumer Price Index)" after "P0141.1" in the third line

Insert "(Consumer Price Index and Percentage Change according to Urban Area)" after "Table 21" in the third line

Definition of "P":

Insert "(Production Price Index)" after "P0142.1" in the second line

Insert "(Production Price Index for Selected Materials, item 'Civil Engineering Plant')" after "Table 16" *in the second line*

Definition of "M":

Insert "(Production Price Index)" after "P0142.1" in the second line

Insert "(Production Price Index for Materials used in Certain Industries, item 'Civil Engineering Plant')" after "Table 15" *in the second line*

Definition of "F": *Insert "(Production Price Index)" after "P0142.1" in the second line*

Insert "(Production Price Index for Selected Materials, item Diesel Oil – Coast and Witwatersrand)" after "Table 16" in the second line

[Note: The indices are obtainable in www.statssa.gov.za. The latest indices for L (certain urban areas only), P, M and F, are more readily obtainable in www.safcec.org.za under "CPAF Indices"]

Paragraph 2 : Assessment of Amount subject to Adjustment: *Add the following to the paragraph defining "E":*

"Where the amount is based on current costs de-escalated to the base month, or where daywork is calculated at rates tendered in a daywork schedule, the costs shall not be included in the value of "E".

C1.2.2 CONTRACT SPECIFIC DATA

General

This section contains the Contract Specifications Data referred to under Clause 1(1) of the General Conditions of Contract. Electrical and Mechanical Engineering Work (1985)

Should any requirements of the Specific Data conflict with the requirements of the General Conditions of Contract, then the requirements of the Specific Data shall prevail.

Clause

1 Definitions and interpretation

The “**Employer**” as defined under Clause 1(1) of the General Conditions shall be the METSIMAHOLO LOCAL MUNICIPALITY

MUNICIPAL BUILDING
10 FICHARDT
SASOLBURG
4800

The “**Engineer**” as defined under Clause 1(1)(d) of the General Conditions shall be EPITOME CONSULTING

3 ROSE AVENUE
KEMPTON PART
GAUTENG
1619

Tel: + 27 11 3915 049
+ 27 83 4451 188

4.1 Language

English

4.2 Law

The governing law shall be that of the Republic of South Africa.

5.13.1 Penalty for delay

The penalty applicable to and be applied to the completion of the Permanent Works as may be specified in terms of the requirements of the Contract Data and Scope of Work.

R 8000 per calendar day

Add the following at the end of Clause 5.13.1:

For non-compliance with submitting EPWP Reports And Labour sheets and ID's, the penalty will be as follows :

If the Contractor shall, in terms of Clause 4.10.2, fail to deliver the information (monthly EPWP Report and Labour sheets and ID's) timeously and adequately, the Contractor shall be liable to the Employer for the sum calculated by the Engineer as a penalty for every calendar day which shall lapse between the monthly due date and the actual date of receiving such information.

The penalty shall be R 500 per calendar day.

For non-compliance with OHS requirements, the penalty will be as follows:

Per occurrence – R 8000-00

Per day after the occurrence until satisfactory remedied in order to meet compliance - R 1000-00 per day

For non-compliance with Micro Enterprises (SMME) targets, the penalty will be as follows:

For noncompliance with Local Labour targets, the penalty will be as follows :

Should the contractor fail to meet the minimum requirement of creating 10 employment opportunities on site for the duration of the contact, a penalty of 1,5 * the value of the amount of employment that was not created, calculated at R200-00 per day per person, will be calculated and imposed. This amount will be deducted from the Contractor's payment certificate.

7.1 Time for Completion

..... * (months). To be completed by Tenderer*.

9.1 Performance Board or Surety

10 % of Contract amount.

12.1 Programme

The limit for submission of programme – one week.

14.3 Electricity, water and gas

Contractor to arrange and pay for.

16.4 Limitation of liability

Contractor's liability shall not exceed 100 % of the Contract Sum.

The contractor's liability shall expire on the date of issue of the Final Certificate.

17.1 Insurance of Works

Amount of insurance during Defects Liability Period: 100 % of the Contract Sum.

17.2 Minimum Amount of Third-Party Insurance

R5 000 000 for any single claim, number of claims unlimited.

20.6 Import permits and licenses

The Contractor shall obtain and provide all necessary import permits and licenses required.

31.1 Amount of Reduction for delay

R8 000,00 per Calendar Day of delay.

Maximum Reduction

15 % of Contract Price.

32.1 Bonus

No bonus will apply.

33.1 Defects liability period

12 Months with use of works assumed 24 hours per day.

33.4 Maximum permitted extension: 12 months

34.1 Variations

The total variation shall not be more than 35 % of the Contract Sum for any single Contract.

37.3 Certificates and Payment

Payment certificates shall be paid within 28 days of submission of the approved invoice by the engineer to the PMU. 10 % Retention retained up to Completion Certificate.

Builders' lien is not applicable in this contract.

40. Payment Conditions

For Civil and Structural Work payment up to the Completion Certificate will be @ 90 % of tendered rates with 10 % retention held back, 5 % retention paid on issue of Completion Certificate and 5 % after the Defects Liability period.

41.4 Payment in foreign currencies

No payment will be made in foreign currencies.

52.1 Changes in Cost and Legislation
(Labour, Materials and Transport)

Prices to be fixed if award is made within 90 days of closing of date of tender.

53.1 Customs and import duties

All customs and import duties shall be paid for by the Contractor.

.....
SIGNATURE

C1.2.3 DATA PROVIDED BY THE TENDERER

Clause 6.8.3 of the GCC 2010:

Special materials	Unit on which variation will be determined *	Rate or price for the base Month (Excl. VAT) **
Not applicable		

Notes:

* Indicate whether the material will be delivered in bulk or in containers.

** The price for special materials is only the price for the material and does not include the cost of transport, labour or any other costs. When called upon to do so, the Tenderer shall substantiate the above prices with acceptable documentary evidence.

.....
SIGNATURE

C1.3 FORM OF GUARANTEE

BID NO MLM 18/2022/23

WHEREAS **METSIMAHOLO LOCAL MUNICIPALITY** (hereinafter referred to as the Employer") entered into, a Contract with:

.....
(hereinafter called "the Contactor") on the day of20.

.....
for **APPOINTMENT OF A 6CE OR HIGHER CIDB REGISTERED CONTRACTOR FOR CONSTRUCTION OF BLOCK PAVED ROADS AND STORMWATER IN GORTIN TOWNSHIP WARD 01 (MLM 18/2022/23).**

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

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

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

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

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

.....
.....
.....
.....

IN WITNESS WHEREOF this guarantee has been executed by us at

..
on this day of 20

Signature

Duly authorized to sign on behalf of
..

Address
..
.....
..
.....
..

As witnesses:

1

2

**C1.4 ADJUDICATOR'S AGREEMENT
(Pro Forma only)**

To be entered into when required

This agreement is made on the day of between:
..... (name of company /
organisation) of
..... (address)
and (name of company /
organization) of
.....
(address) (the Parties) and
..... (name) of
.....
..... (address) **(the Adjudicator)**.

Disputes or differences may arise/have arisen* between the Parties under a Contract dated and known as
..... and these disputes or differences shall be/have been* referred to adjudication in accordance with GCC 2004, Clause 58.3, and the Adjudicator may be / has been* requested to act.

* Delete as necessary

IT IS NOW AGREED as follows:

1. The adjudication shall be conducted in accordance with the rights and obligations of the Adjudicator and the Parties as set out in the Procedure as per Clause 58.3.1 of the GCC 04.
2. The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance with the Procedure.
3. The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses in accordance with the Procedure.

4. The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and shall endeavour to ensure that anyone acting on their behalf or through them will do likewise, save with the consent of the other Parties which consent shall not be unreasonably refused.
5. The Adjudicator shall inform the Parties if he intends to destroy the documents which have been sent to him in relation to the adjudication and he shall retain documents for a further period at the request of either Party.
6. The Adjudicator shall be paid at the hourly rate of R. in respect of all time spent upon, or in connection with, the adjudication including time spent travelling.
7. The Adjudicator shall be reimbursed in respect of all disbursements properly made including, but not restricted to:
 - (a) Printing, reproduction and purchase of documents, drawings, maps, records and photographs.
 - (b) Telegrams, telex, faxes, and telephone calls.
 - (c) Postage and similar delivery charges.
 - (d) Travelling, hotel expenses and other similar disbursements.
 - (e) Room charges.
 - (f) Charges for legal or technical advice obtained in accordance with the Procedure.
8. The Adjudicator shall be paid an appointment fee of R This fee shall become payable in equal amounts by each Party within 14 days of the appointment of the Adjudicator, subject to an Invoice being provided. This fee will be deducted from the final statement of any sums which shall become payable under item 6 and/or item 7. If the final statement is less than the appointment fee the balance shall be refunded to the Parties.
9. The Adjudicator is/is not* currently registered for VAT.
10. Where the Adjudicator is registered for VAT it shall be charged additionally in accordance with the rates current at the date of invoice.
11. All payments, other than the appointment fee (item 8) shall become due 7 days after receipt of invoice, thereafter interest shall be payable at 5% per annum above the Reserve Bank base rate for every day the amount remains outstanding.

SIGNED
by: _____

Name: _____
.....

who warrants that he / she is
duly authorized to sign for
and on behalf of the first Party
in the presence of

Witness _____

Name: _____

Address: _____

Date: _____

SIGNED
by: _____

Name: _____
.....

who warrants that he / she
is duly authorized to sign
for and behalf of the
second Party in the
presence of

Witness: _____

Name _____

Address: _____

Date: _____

SIGNED
by: _____

Name: _____
.....

the Adjudicator in the
presence of

Witness: _____

Name: _____

Address: _____

Date: _____

* Delete as necessary



METSIMAHOLO LOCAL MUNICIPALITY

BID NO. MLM 18/2022/23

APPOINTMENT OF A 6CE OR HIGHER CIDB REGISTERED CONTRACTOR FOR CONSTRUCTION OF BLOCK PAVED ROADS AND STORMWATER IN GORTIN TOWNSHIP WARD 01 (MLM 18/2022/23).

PART C2: PRICING DATA

C2.1 PRICING INSTRUCTIONS – CIVIL AND STRUCTURAL WORK

1. Measurement and payment shall be in accordance to COLTO.
2. The units of measurement described in the Bill of Quantities are metric units. Abbreviations used in the Bill of Quantities are as follows:

%	=	percent
h	=	hour
ha	=	hectare
kg	=	kilogram
kl	=	kiloliter
km	=	kilometer
km-pass	=	kilometer-pass
kPa	=	kilopascal
kW	=	kilowatt
ℓ	=	liter
m	=	meter
mm	=	millimeter
m ²	=	square meter
m ² -pass	=	square meter-pass
m ³	=	cubic meter
m ³ .km	=	cubic meter-kilometer
MN	=	mega newton
MN.m	=	mega newton-meter
MPa	=	megapascal
No.	=	number
Prov sum	=	Provisional Sum
PC sum	=	Prime Cost Sum
R/only	=	rate only
Sum	=	lump sum
t	=	ton (1000 kg)
W/day	=	work day

3. For the purpose of the Bill of Quantities, the following words shall have the meanings hereby assigned to them:

Unit: The unit of measurement for each item of work as defined in the COLTO
Quantity: The number of units of work for each item.
Rate: The agreed payment per unit of measurement.
Amount: The product of the quantity and the agreed rate for an item.
Lump sum: An agreed amount for an item, the extent of which is described in the Bill of Quantities but the quantity of work of which is not measured in any units.
4. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
5. It will be assumed that prices included in the Bill of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.stanza.org.za or www.iso.org for information on standards).

6. The prices and rates in the Bill of Quantities are fully inclusive prices for the work described under the items. Such prices and rates cover all costs and expenses that may be required in and for the execution of the Works described in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices will be used as a basis for assessment of payment for additional work that may have to be carried out.
7. Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amounts tendered under such items.
8. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bill of Quantities. A single lump sum will apply should a number of items be grouped together for pricing purposes.
9. The quantities set out in the Bill of Quantities are approximate and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the Bill of Quantities.
10. The short descriptions of the items of payment given in the Bill of Quantities are only for the purposes of identifying the items. More details regarding the extent of the work entailed under each item appear in the Scope of Work.
11. The item numbers appearing in the Bill of Quantities refer to the corresponding item numbers in the "SANS 1200 as prepared by South African National Roads Agency Limited" and additional Project Specifications as per the Scope of Work.
12. Those parts of the contract to be constructed using labor-intensive methods have been marked in the Bill of Quantities with the letters LI in a separate column filled in against every item so designated. The works, or parts of the Works so designated are to be constructed using labor-intensive methods only. The use of plant to provide such Works, other than plant specifically provided for in the Scope of Work, is a variation to the contract. The items marked with the letters LI are not necessarily an exhaustive list of all the activities which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour intensive specification in the Scope of Works.
13. Payment for items, which are designated to be constructed labour-intensively (either in this schedule or in the Scope of Works), will not be made unless they are constructed using labour-intensive methods. Any unauthorized use of plant to carry out work which was to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment.
14. Those parts of the contract to be constructed using **Materials Supplied by the Client (MSC)**, have been marked in the Bill of Quantities accordingly. The works, or parts of the Works so designated are to be constructed using materials supplied by the Client. Thus, the rate tendered by the Contractor will be for the works items only, excluding the cost of the materials provided by the Client.

**C2.3
BILL OF QUANTITIES**



METSIMAHOLO LOCAL MUNICIPALITY

BID NO MLM 18/2022/23

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1200	SECTION 1200: GENERAL REQUIREMENTS & PROVISIONS				
PS 12.01	Locating existing services (known and unknown)	No.	20		
PS 12.02	Quality control tests ordered by Engineer	Lump Sum	1		
PS12.03	Charges and profit on PS12.02	%			
PS 12.04	Standing time cost	Day			
PS12.05	Remuneration of Liaison Office (CLO) (a) Remuneration of CLO (based on /month incl. cellphone and traveling allowance)	Month	9		
PS12.06	Contractor's obligations i.r.o. emerging Contractors	Lump Sum	1		
PS12.07	Wages and salaries of local and other labourer employed by the Contractor and Emerging Contractor i.r.o. training periods (b) Accredited training courses for selected local and other labourers including Wages during training periods (c) Contractors charge to allow for	Prov Sum	1	R 200 000,00	
PS12.08	Relocating of measured by length services (a) Relocating water services (b) Relocating sewer services	% km km	200000 2,1 2,1		
PS12.09	(a) Relocate other services (eg. Telkom) (b) Charges for profit on PS12.09(a)	Prov Sum %	1		
PS12.10	Contract Notice Board (as directed by Engineer)	No.	1		
PS12.11	Complying with safety specification and Contractor safety plan (OHS)	Prov Sum	1	R 150 000,00	
PS12.12	(a) Implementation of Site Management (b) (i) Audit of Site Management System (ii) Profit on above item PS12.12(b)	Prov Sum Lump Sum %	1 1	R 150 000,00	
PS12.13	SETA Accredited skill training and student for in-service training (ii) Profit on above item PS12.13	Prov Sum %	1 R150 000,00	R 150 000,00	
PS12.14	(a) Payment of personal security	Prov Sum	1	R 150 000,00	
				TO SUMMARY	
1300	SECTION 1300: CONTRACTORS ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				
PS13.01	(a) Fixed obligations (b) Value-related obligations (c) Time-related obligations (d) Provision of offices and related items	Incl. Incl. Incl. Incl.	1		
				TO SUMMARY	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1500	SECTION 1500: ACCOMMODATION OF TRAFFIC				
PS15.01	Accommodating traffic and maintaining temporary deviations	km	2,10		
PS15.03	Temporary traffic control facilities				
	(a) Flagmen	Man-day	360		
	(b) Portable STOP and GO-RY signs	No.	4		
	(d) Amber flicker lights	No.	12		
	(e) Road signs, R- and TR series,	No.	12		
	(f) Road signs, TW-series (1 500mm	No.	12		
	(g) Road signs, STW-DTG, TGS and	m ²	14		
	(h) Delineators (TW401/TW402), 600mm x 150mm				
	(ii) Mounted back to back	No.	14		
	(i) Movable barricade/road sign	No.	8		
	(j) Traffic cones (750mm high)	No.	40		
	(n) Other signs or facilities				
	(i) Provision of other signs or facilities	Prov Sum	1	R 50 000,00	
				TO SUMMARY	
1600	SECTION 1600: OVERHAUL				
PS16.03	Overhaul on material hauled in excess of a free-haul distance 10km (ordinary overhaul)	m ³ -km	11528		
				TO SUMMARY	
1700	SECTION 1700: CLEARING AND GRUBBING				
17,01	Clearing and grubbing	m ²	18060		
17,02	Removal and grubbing or large trees and tree stumps:				
	(a) Girth exceeding 1m up to and	No.	5		
				TO SUMMARY	
2100	SECTION 2100: DRAINS				
21,01	Excavation for open drains				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0m to 1.5m	m ³	2040		
				TO SUMMARY	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2300	SECTION 2300: CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS				
23,01	Concrete kerbing				
	(a) Precast kerbing to SABS 927 (iii) Figure 8 kerb (all types)	m	4200		
23,07	Trimming of excavations for concrete-lined open drains				
	(a) In soft material	m ²	1320		
	(b) In hard material	m ²			
23,08	Concrete lining for open drains				
	(a) Cast in-situ concrete lining Class 25/19				
	(2) Vee drain				
	(i) Narrow side drain type v5 - v8	m ³	264		
23,09	Formwork to cast in situ concrete lining for open drains (Class F2 surface finish)				
	(a) To sides with formwork on the	m ²	264		
23,1	Sealed joints in concrete linings of open drains				
	(b) Polyurethane-based sealant	m	1320		
	(c) Welded steel fabric	kg	10428		
3300	SECTION 3300: MASS EARTHWORKS				
PS33.01	Cut and borrow to fill, including free-haul up to 10km				
	(a) Gravel material in compacted layer thickness of 200mm and less				
	(i) Compacted to 90% MOD. AASHTO	m ³	2174		
	(g) Supply and compact dump rock	m ³	3162		
	(h) Fill from commercial sources	m ³	151		
33,03	Extra-over item 33.01 for excavating and breaking down material in:				
	(a) Soft excavation	m ³	5336		
	(b) Intermediate excavation	m ³	1334		
	(c) Hard excavation	m ³	534		
33,1	Roadbed preparation and the compaction of material:				
	(b) Compaction to 93% MOD. AASTHO	m ³	2079		
33,13	Finishing off cut and slopes, medians and interchange areas:				
	(a) Cut slopes	m ²	3756		
	(b) Fill slopes	m ²	3248		
				TO SUMMARY	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3400	SECTION 3400: PAVEMENT LAYERS OF GRAVEL MATERIAL				
	(d) Gravel sub-base (chemically/mechanically stabilized material) compacted to:	m ³	1985		
	(i) 95% MOD. AASHTO density sub-				
	(g) Gravel shoulder/sidewalks compacted to:	m ³			
	(i) 93% MOD. AASHTO density	m ³	1985		
	(ii) E.O. Item 34.01 for Imported G5	m ³			
34/PS16.02	Overhaul on material hauled in excess of 10km (ordinary overhaul)	m ³ -km			
34,02	Extra-over Item 34.01 for excavating and breaking down material in:				
	(a) Intermediate excavation	m ³	496		
	(b) Hard excavation	m ³	198		
PS34.14	Extra-over Item 34.01 for construction of layers from commercial sources:				
	(a) Gravel base (chemically/mechanically stabilized material) compacted to:				
	(i) 97% MOD. AASHTO density base	m ³	1985		
				TO SUMMARY	
3500	SECTION 3500: STABILIZATION				
35,02	Chemical stabilizing agent:				
	(a) Ordinary Portal cement				
	(i) CEM V S-V 32,5N	t	93		
				TO SUMMARY	
5600	SECTION 5600: ROAD SIGNS				
56,01	Road sign boards with painted or coloured semi-matt background. Symbols, lettering and borders in semi-matt black or in Class 1 retro-reflective material, where the sign board is constructed from:				
	(c) Prepainted galvanized steel plate (Chromadek 1.6mm thick or approved equivalent):				
	(i) Area not exceeding 2m ²	m ²	8		
56,02	Extra-over Item 56.01 for using:				
	(a) Background of retro reflective material:				
	(i) Class 1	m ²	8		
PS56.03	Road sign supports (overhead road sign structures excluded)				
56,05	Excavation and backfilling for road sign supports (not applicable to km posts)	m ³	8		
				TO SUMMARY	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5700	SECTION 5700: ROAD MARKINGS				
57,02	Retro-reflective road marking paint:				
	(a) White lines (broken or unbroken)				
	(i) 100mm wide	m	2100		
	(b) Yellow lines (broken or unbroken)				
	(i) 100mm wide	m	4200		
	(d) White lettering and symbols	m ²	16		
57,04	Variations in rate or application				
	(a) White paint	l	240		
	(b) Yellow paint	l	760		
57,06	Setting out and pre-marking the lines (excluding traffic-island marking lettering and symbols)	km	2,1		
				TO SUMMARY	
5900	SECTION 5900: FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS				
59,01	Finishing the road and road reserve:				
	(b) Single carriageway road	km	2,1		
				TO SUMMARY	
7300	SECTION 7300: CONCRETE BLOCK PAVING FOR ROADS				
73,01	Concrete block paving:				
	(a) Grey interlocking precast concrete paving blocks type SA, including straight cutting of units to fit between edge restraints, laid on and including 20mm river sand bed, compacted and plaster sand broomed into joints on completion				
	(ii) 80mm to roads	m ²	12600		
	(b) 230 x 115 x 75mm Thick semi-facebrick terra cotta coloured paving bricks, including straight cutting of units to fit between edge restraints, laid on and including 20mm				
	river sand bed, compacted and plaster sand broomed into joints on completion				
	(ii) 75mm to roads	m ²	315		
73,03	Provision of approved herbicide and ant poison:				
	(a) Provision of materials	PC Sum	1		
	(b) Contractor's charges and profit added to the prime cost sum	%			
				TO SUMMARY	

APPOINTMENT OF A 6CE OR HIGHER CIDB REGISTERED CONTRACTOR FOR CONSTRUCTION OF BLOCK PAVED ROADS AND STORMWATER IN GORTIN TOWNSHIP WARD 01 (MLM 18/2022/23)		
ITEM	SUMMARY	AMOUNT
1200	SECTION 1200: GENERAL REQUIREMENTS & PROVISIONS	
1300	SECTION 1300: CONTRACTORS ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	
1500	SECTION 1500: ACCOMMODATION OF TRAFFIC	
1600	SECTION 1600: OVERHAUL	
1700	SECTION 1700: CLEARING AND GRUBBING	
2100	SECTION 2100: DRAINS	
2300	SECTION 2300: CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS	
3300	SECTION 3300: MASS EARTHWORKS	
3400	SECTION 3400: PAVEMENT LAYERS OF GRAVEL MATERIAL	
3500	SECTION 3500: STABILIZATION	
5600	SECTION 5600: ROAD SIGNS	
5700	SECTION 5700: ROAD MARKINGS	
5900	SECTION 5900: FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	
7300	SECTION 7300: CONCRETE BLOCK PAVING FOR ROADS	
11000	MISCELLANEOUS ACTION	
	SUB-TOTAL 1:	
	10% Contingency	
	SUB-TOTAL 2:	
	15% VAT	
	TOTAL:	

**APPOINTMENT OF A 6CE OR HIGHER CIDB REGISTERED CONTRACTOR FOR
CONSTRUCTION OF BLOCK PAVED ROADS AND STORMWATER IN GORTIN
TOWNSHIP WARD 01 (MLM 18/2022/23).**

C3: SCOPE OF WORK

PART C3: SCOPE OF WORKS

Pages

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Status

Should any requirement or provision in the parts of the Scope of Work conflict with any requirement of any Standardised Specification, or any drawings, the order of precedence, unless otherwise specified, is:

- Project Specifications
- Drawings
- Scope of Works
- The following variations and additions to the SABS 1200 Standardized Specifications referred to shall apply to this Contract.

C3.1 DESCRIPTION OF THE WORKS

CONTENTS

1. EMPLOYER'S OBJECTIVES
2. OVERVIEW OF THE WORKS
3. EXTENT OF THE WORKS

1. EMPLOYER'S OBJECTIVES

Metsimaholo Local Municipality is faced with immense roads backlog whereby 80% of the roads within the municipality are currently not paved and are in a bad state. Due to the high roads backlog the Municipality receives continuous legal claims and road flooding challenges within the community. The project of constructing roads in Gortin ward 01 is a step towards annually decreasing the roads backlog within the Municipality.

The purpose of the project is to upgrade internal streets from gravel to paved roads including their associated stormwater infrastructure systems. The objective is to have surfaced streets with formalised stormwater management, kerb and channels and unsurfaced formalised pedestrian footways. The project will benefit a total population of 4200 households within Gortin Township.

The project is to be completed within **9 months** of the Commencement Date.

2. OVERVIEW OF THE WORKS

2.1 Location of the Site

Gortin is located in the METSIMAHOLO Local Municipality and approximately 15 km East of Sasolburg, Gortin can be accessed via R59 southern bypass and R57.

The area is located on flat slopes and rolling terrain. However, the flat terrain observed on the road will allow sufficient drainage runoff. The rolling terrain has definite drainage channels like streams and rivers

2.2 General description of scope of works

The scope of work comprises construction of internal roads and stormwater management system for Gortin Ward 01 township.

Typical road specification components:

- 80mm Block Pavers
- 20mm Sand Layer
- 150mm Base C4 compacted to 97% Mod. AASHTO Density
- 150mm Sub-base G5 compacted to 95% Mod. AASHTO Density
- 150mm Rip and Recompact Sub Grade Insitu Material
- 200mm Dump Rock
- 2000mm wide 250mm deep V-drain

Surfacing Specifications

Block paving is a form of surfacing a road but their structural properties are similar to those of a road base. The crushing strength of blocks should be sufficient to avoid excessive breakage during handling. Bedding sand will be angular with a maximum size of 9,5mm. Surface layers shall comply with a Road Category Surfacing Compressive Strength of UD (Access Street) 80 mm Block Pavers 30 MPa

Kerbs

To prevent vehicular traffic from cutting corners and to enhance pedestrian safety, the bell mouths of all road intersections must be lined with short length barrier kerbs and channels unless otherwise. Other kerbs shall be edge beams. All kerb types shall be precast concrete type and conform to South African Bureau of Standards (SABS) 927. Bedding and backing material shall consist of a Class 15/19 concrete mix.

At grade Intersections

The following basic criteria for intersections shall apply:

- Bell mouth radii shall be between 4.0 m and 10,0m on all roads.
- Intersecting roads should where practically meet at 90°.
- Intersections shall not be positioned in or near horizontal curves of small radii, on the inside of horizontal curves or on or close to sharp crests.
- The maximum grade for approach legs to an intersection is 5%, for a minimum distance of 20 m from the edge of the intersection. Normally the grade of the major road should be carried through unless it needs to be flattened. A maximum grade of 3% to 4% for intersections is recommended.
- All turning manoeuvres shall be checked for compliance with the swept path of the design vehicle applicable to the intersection.

Access to properties

The slope within the road reserve be between 2.5% - 10%.

Road Signs and Markings

The following road signs will be installed:

Signs

- Stop Signs are to be placed at all T-Junctions.
- Stop markings are to be painted at all intersections and T-Junctions.

Sign posts

- All posts to be galvanized with their top ends capped.
- Posts shall be 3 m long by 60 mm in diameter, 2 mm wall thickness, with 13 mm hole drilled in bottom to provide for a 300 mm long steel rod (Y10) to prevent pole from being pulled out or from twisting.
- As an alternative wooden pole can be considered.

Street name signage

No road and street name signage will be provided.

3.EXTENT OF THE WORKS

WORKS SPECIFICATIONS

CONTENTS

C3.4.1 PART A: GENERAL

A1 GENERAL

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C3.4.1 PART A: GENERAL

A GENERAL

A 1 Particular generic specification

For the purpose of this Contract:

- a) where gender terms are used, it shall be applicable to both male and female.
- b) "VAT" shall mean Value Added Tax in terms of the Value Added Tax Act 89 of 1991 as amended.

A 2 Plant and materials

The Contractor is required to provide all plant and materials necessary to carry out the works as required. No additional allowances other than those already specified in the schedule of quantities shall be allowed for with respect to plant and materials, except for the items which are to be constructed using **Materials Supplied by the Client (MSC)**, have been marked in the Bill of Quantities accordingly. The works, or parts of the Works so designated are to be constructed using materials supplied by the Client. Thus, the rate tendered by the Contractor will be for the works items only, excluding the cost of the materials.

A 3 Construction equipment

The Contractor is required to provide all equipment necessary to carry out the works as required. No additional allowances other than those already specified in the schedule of quantities shall be allowed for with respect to equipment.

A 4 Existing services

The Contractor:

- a) must make provision for the possible existence of numerous services (e.g.: Stormwater, Water, Electrical, Sasol, PRASA, Rand Water, Eskom, Telkom, Neotel etc.) within and in close proximity to the work areas.
- b) is to record on as built drawings the location of existing services or services which have been relocated during Contract Period.
- c) must inform the relevant service provider immediately (within 2 hours of incident) such that procedures for the reinstatement of the service can be affected, should he damage or break an existing service (whether known or unknown).
- d) is responsible to provide his own equipment in order to determine the location of existing services. The provision of such equipment shall be deemed to have been included in the rates.

A 5 Site usage

Site usage shall be limited to hours as specified in the Contract Data, unless prior arrangement is made with the Engineer.

A 6 Permits

The Contractor will be required to obtain permits from all the applicable service providers within the jurisdiction of the Municipality. It is the Contractor's responsibility to obtain final permit approval according to applicable procedures and specifications. Permits associated costs shall be deemed to have been included in the scheduled rates for excavation and location of existing services under the relevant section of SANS 1200 A.

A 7 Inspection of adjoining properties

The Contractor shall carry out inspections and evidence collection of properties adjoining the works to ensure that in the event of a claim arising from any of the owners of the adjoining properties for damage to property and the like, the Contractor has substantial evidence to support or refute such claims. The Contractor accepts full liability and responsibility for damage which he causes to adjoining properties as well as any costs involved in refuting or processing of such claims.

A 8 Electricity for construction purposes

The Contractor shall make arrangements with the relevant authority for the supply and distribution of power for purposes of this Contract, the cost of which shall be deemed to be included in the rates inserted in the Schedule of Quantities.

Power used for carrying out of the works in accordance with these Specifications will not be subject to measurement or payment.

A 9 Survey control and setting out of the works

The Contractor is to confirm the levels and coordinates of all benchmarks prior to commencing with construction.

A10 Method Statement

The Contractor shall provide the Engineer with a method statement indicating the manner and sequence in which he intends to construct the works, for each work area, with the program. In the method statement the Contractor must address at least the following items:

1. Sequence of the works for the relevant works area
2. Target dates for the tasks identified in sequence of the works for the relevant works area
3. Materials requirements
4. Construction Plant to be used
5. Services affecting construction
6. Any factors that could affect construction progress after commencement

The method statement must be approved by the Engineer before commencement of construction. In order to minimize the impact on traffic, pedestrians and business the Contractor will be required to segment the works in such a manner that no portion of the works is more than one day ahead of the following position i.e. trenches cannot be excavated more than one day ahead of pipe laying, pipes more than one day in advance of manhole construction and finishing off etc. These segments of the works shall be clearly defined in the Contractor's method statement for each work area.

The approval by the Engineer of any program shall have no contractual significance other than that the Engineer would be satisfied if the work is carried out in accordance to such program and that the Contractor undertakes to carry out the work in accordance with the program. It shall not limit the right of the Engineer to instruct the Contractor to vary the program should circumstances make this necessary.

A11 Software application for programming

The construction programme shall be completed in Microsoft ® Project 2010 or compatible software. The construction programme and updated versions thereof shall be made electronically available to the Engineer.

A12 Methods and procedures

The methods and procedures for the execution of the works shall be in accordance with the standard specifications and the variations and additions thereto.

A13 Quality plans and control

The Contractor shall be required to provide and maintain a quality plan to ensure that the quality of all work components is of a high standard. Such a quality plan shall be approved by the Engineer.

A14 Accommodation of traffic on public roads occupied by the Contractor

a) Accommodation of traffic

The Contractor shall ensure the safe accommodation of traffic at all areas where the work may impact on traffic and shall provide all drums, watching, lighting, signs and barricades required by the road authorities, and in accordance with the South African Road Traffic Signs Manual. Penalties shall be imposed on the Contractor for non-compliance.

b) Access to properties

Adequate access shall at all times be maintained to public and private properties unless otherwise arranged and approved. Details of the proposed means of access shall be submitted before any such access is restricted. Claims arising from impeded access shall be the responsibility of the Contractor.

At least 2 days before commencing any work affecting access to a property, the Engineer and the occupier/owner of each such property shall be notified of the Contractor's intention to commence work, the date of commencement, expected duration and arrangements which will be made regarding maintenance of access.

c) Transport Department requirements

The Contractor must provide a bridge with side rails across excavations to allow pedestrians access to the sidewalk. Allowance for the costs associated with providing pedestrian access to sidewalks will be deemed to have been included under relevant Items in the Schedule of Quantities.

d) Services

Services to a property shall remain unimpeded. Where necessary for access or egress, excavated and filled works, concrete or asphalt surfaces shall be satisfactorily covered temporarily to protect the work from damage and to maintain access.

A15 Other contractors on site

There may be other contractors working in close proximity and/ or within the site boundaries road reserve completing other projects. As such, the Contractor is required to make adequate allowances for such possibilities. No claims with respect to works being carried out by other contractors will be entertained by the Employer.

A16 Testing, completion, commissioning and correction of defects

The onus is on the Contractor to produce work which will conform in quality and in accuracy of detail to the requirements hereinafter specified. The Contractor must clearly understand that it is not a duty of the Engineer or his representative to act as foreman or surveyor on the Works.

The Contractor shall, at his own expense, provide experienced engineers, foremen and surveyors together with all transport, instruments and equipment for supervising, checking and controlling the work.

The act of passing any completed work for payment by the Engineer shall not be construed as signifying approval or acceptance there-of. Failure on the part of the Engineer to reject any defective work or material shall not in any way relieve the Contractor of his obligations under the Contract, nor prevent later rejection when such work or material is discovered.

The contractor shall keep files of all the test results, which shall be accessible by the Engineer at any time. Two copies of these files shall be provided to the Engineer at the end of the project.

A17 Key personnel

The Contractor is to provide the Curriculum Vitae of key personnel to be employed on the project as well as the person's position and responsibilities within the project team. The Contractor shall provide the following minimum key staff:

- a) Contracts manager;
- b) Site Agent;
- c) Health and Safety Officer; and
- d) Foremen.

A18 Management meetings

Bi-Monthly site meetings shall be arranged and facilitated by the Engineer. Senior Contractor management staff attendance shall be compulsory. The Contractor shall be required to provide reporting with regard to project progress, resources (human, plant and equipment), community issues, environmental and health and safety aspects.

A19 Forms for contract administration

The Contractor shall maintain files which shall contain project information related to project progress, resources (human, plant and equipment), community issues, environmental, health and safety aspects, penalties imposed, claims lodged and outcomes, disputes and resolutions, payment and variations.

A20 Daily records

The Contractor shall keep daily site records as required by the Employer and as specified herein. Daily records shall include, labour, plant, materials, rainfall, daily diary and the like.

A21 Payment certificates

Payment certificates shall be submitted to the Engineer, in the format required, for approval and final submission to the Employer on a monthly basis.

A22 FEATURES REQUIRING SPECIAL ATTENTION

A22.1 Security

The Contractor is responsible to provide his own security on site, as he deems necessary. The Employer shall not be held responsible for any loss or damage suffered by the Contractor, his plant, equipment, materials, subcontractors or employees as a result of a security incident of any nature.

A 22.2 Community liaison and community relations

The Contractor will be required to employ a community liaison officer for each section of the works for the duration of the construction activities, taking place within such area. The community liaison officer is to be appointed in consultation with the relevant ward councillor.

A 22.3 Notices and warning to the public

The Contractor must provide written notice to all consumers affected by the construction activities. The written notice shall outline the:

- a) nature of the works;
- b) expected inconvenience / disruption that the consumers can expect;
- c) timeframes for construction; and
- d) contact details in case of problems encountered.

A 22.4 Causes for rejection

Causes for rejection of the works shall include but is not limited to:

- a) incorrect grades and crossfalls;
- b) poor kerbing alignment and broken kerbs
- c) incorrect vertical and horizontal alignments
- d) layerworks and surfacing fail density and other prescribed tests
- e) Incorrect pipe grades, water infiltration at joints, poor workmanship to kerb inlets, manholes, etc.

PART A: GENERAL

PART A: GENERAL

A1 MISCELLANEOUS

The Construction Specifications form an integral part of the contract documents and supplement the Standard Specifications.

In the event of any discrepancy with a part or parts of the Construction Specifications, the Standard Specifications, the bill of quantities or the drawings, the Construction Specifications shall take precedence.

The Standard Specifications (Part B) which form part of this contract have been written to cover all phases of work normally required for road contracts, and they may therefore cover items not applicable to this particular contract.

A2 PLANT AND MATERIAL SUPPLIED BY EMPLOYER

No material will be supplied by the Employer.

A3 CONSTRUCTION EQUIPMENT SUPPLIED BY EMPLOYER

No construction equipment will be supplied by the Employer.

A4 SITE ESTABLISHMENT

a) Contractor's Camp

No specific land has been made available for the Contractor's camp site and office facilities for the Engineer. The councillor shall provide space for the camp site and office facilities for the Engineer to the Contractor. The Contractor shall have a responsibility to arrange a suitable site camp with access to site, as well as the provision of water, electricity and other services for the camp site and office facilities.

The Contractor's camp site shall be maintained in a neat and tidy condition and on completion of the Works, the camp area shall be cleared and reinstated; all to the satisfaction of the Engineer. Any damage to property shall be made good to the satisfaction of the Engineer and at the Contractor's expense.

In order to facilitate compliance with the General Conditions of Contract the Contractor may establish storage accommodation, works offices, workshops, mess-rooms, kitchens, shelters for watchmen, latrines, ablutions and the like in such positions and under such conditions as may be agreed by the Engineer and/or Employer. The Contractor shall note that only watchmen will be permitted to remain in the camp site overnight.

Temporary buildings and fencing are to be neat and presentable and the surrounding areas must at all times be kept in a neat, clean and orderly condition. The Contractor shall not make any excavation without written permission of the Engineer and/or Employer.

Covered accommodation for perishable or corrodible materials, fittings and the like shall be adequate and suitable for their purpose, and, particularly in the case of cement stores, shall be well

ventilated, weatherproof and waterproof with floors raised off the ground, so as to keep the materials perfectly dry and freely aerated.

All such accommodation shall be subject to the approval of the Engineer and/or Employer who shall have free access there at all times.

b) Facilities for the Engineer

Facilities are required for the Engineer's Representative on site. The contractor shall provide facilities for use by the Engineer as listed in the Bill of Quantities.

c) Sanitation facilities

The Contractor shall provide latrines for his staff and workmen, to the approval of the Engineer and/or Employer, who shall have the right of access thereto.

Latrines shall be conveniently available to workmen whenever work is in progress and sufficient portable units shall be placed and moved as necessary to avoid public nuisance. They shall be kept well ventilated, properly disinfected, clean and sanitary at all times.

The Contractor shall provide a proper sewer connection, for approved toilet facilities, into the relevant authorities existing sewer network, to serve the relevant buildings on the camp site.

If no sewer connection is available, the Contractor shall make his own arrangements for the provision of a waterborne sewer system and other sanitary and waste water disposal facilities in accordance with municipal or other local authority regulations.

d) Telephone

The Contractor shall make his own arrangements for the provision of a telephone and facsimile service.

A5 SITE USAGE: ADDITIONAL REQUIREMENTS FOR CONSTRUCTION ACTIVITIES

a) In addition to what is indicated in the General Conditions, the Contractor shall take all necessary measures and provide all necessary facilities to ensure an adequately safe and easy passage for traffic and pedestrians through areas in which work is in progress, or is uncompleted. The Contractor shall determine his methods of construction and programmes of work on the basis that no road, or portion of road, may be completely closed to traffic for any appreciable period, since only in exceptional circumstances will permission be granted for this to be done.

b) The Contractor's tendered rates for the relevant items in the schedule of quantities shall include full compensation for all possible additional costs which may arise from this, and

no claims for extra payment following on inconvenience caused by or as a result of the modus operandi to be followed will be considered.

- c) The traveling public shall have the right of way on public roads, and the Contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.
- d) Failure to maintain road signs, warning signs or flicker lights, etc. in a good condition shall constitute ample reason for the Engineer and/or Employer to stop the works until the road signs, etc. have been repaired to his satisfaction.
- e) The Contractor may not commence constructional activities before adequate provision has been made for accommodating traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual.
- f) The Contractor shall submit proposals in connection with directional signs to the Engineer and/or Employer for approval.
- g) The Contractor may not construct any deviations without the written approval from the Engineer and/or Employer.

A6 PERMITS AND WAYLEAVES

The Contractor shall be responsible to renew all expired wayleaves already obtained by Employer's Agent before construction commences from the following services agencies:

Service Providers
Dark Fibre
Roads & SW
Transnet pipeline
Transnet
Electricity Department
Link Africa
Neotel/Liquid Telecom
Rand Water
Sasol
Telkom

Service Providers
Transnet
Vodacom
MTN
PRASA

(Note: The Employer's Agent and/or Employer to supply approved drawings, contact names and addresses

A7 ALTERATIONS, ADDITIONS, EXTENSIONS AND MODIFICATION TO EXISTING WORKS

The Contractor must satisfy himself that the dimensions accuracy, alignment, levels and setting out of the existing road, structures or components thereof are compatible with the proposed Works and must notify the Engineer and/or Employer where this is not the case.

A8 INSPECTION OF ADJOINING PROPERTIES

The Contractor together with the Engineer and/or Employer must inspect all adjacent properties for defects, cracks etc. before commencing with the works that may have a potential to damage surrounding buildings and properties. Notes and photographs must be taken to record any existing defects prior to the commencement of the works.

A9 WATER FOR CONSTRUCTION PURPOSES, POWER SUPPLY AND OTHER SERVICES

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

A10 SURVEY CONTROL AND SETTING OUT OF THE WORKS

The Contractor must check all survey control beacons indicated on the drawings before commencing with the works and must notify the Engineer and/or Employer of any discrepancy.

A11 CONSTRUCTION IN CONFINED AREAS

- a) It may be necessary for the Contractor to work within confined areas. Apart from the case of the exceptions described in this subclause, no additional payment will be made for work done in

restricted areas. In certain places the width of the fill material and pavement layers may reduce to as little as zero and the working space may be confined. The method of construction in these confined areas will depend largely on the Contractor's constructional plant. However, the Contractor shall note that measurement and payment will be in accordance with the specified cross-sections and dimensions irrespective of the method used to achieve these cross-sections and dimensions that the tendered rates and amounts shall be deemed to include full compensation for any special equipment and construction methods or for any difficulty encountered in working in confined areas and narrow widths, and at/or around obstructions, and that no extra payment will be made nor will any claim for additional payment be considered in such cases.

- b) Additional compensation for work in confined areas will be paid in the following cases, provided that provision has been made expressly therefore in the Construction Specifications and in the Bill of Quantities:
 - i). For fill in restricted areas at structures as specified in clause 6108.
 - ii). For portions of road rehabilitation work for which provision has been made in the relevant clauses and payment items of series the Special Provisions. (Additional compensation for work in confined areas.)

A12 TRAINING

Technical skills training shall be provided by the Contractor to all local labor involved in the Contract to enhance their development, and to assist in the empowerment of the local communities. Part G of the Construction Specifications deals specifically with matters regarding training, and a payment item for that is included in Clause B 1231 of Part B2 of the Construction Specifications.

A13 USE OF LOCAL RESOURCES

The major objective of this Contract is the optimum use of local resources as required by the Department of Labour's Special Public Works Programme (Government Notice No R63 of 25 January 2002)

One of the methods to be adopted to achieve this objective is through the implementation of labour-optimising construction methods.

A14 PROCUREMENT

Requirements

The contractor shall be required to adopt labour-based techniques through the full spectrum of the works with the provision that the Clients specific objectives regarding time and quality are not compromised. **Maximisation of employment shall be of the essence on this contract.**

Together with their tenders, all Tenderers are required to submit a comprehensive **implementation plan** clearly stating the labour content and number of jobs that shall be created. The employment of labour shall be reflected in a programme in sufficient details to enable the Project Manager to monitor and compare it with the implementation plan. The Contractor shall be required to submit employment data on a monthly basis to the Project Manager.

a) Operations to be executed using labour-based techniques

The following portions of the Works are suitable to be executed using labour-optimising construction methods:

- (i) Clearing and grubbing the site and borrow areas.
- (ii) Removing and grubbing large trees and tree stumps.
- (iii) Clearing and grubbing at inlets and outlets of hydraulic structures.
- (iv) Cleaning hydraulic structures.
- (v) Excavations for all open drains, culverts, inlet and outlet structures, concrete structures, fence posts, road sign posts and guardrail posts.
- (vi) Constructing catch water banks and mitre banks.
- (vii) Constructing culvert inlet and outlet structures as well as cast in situ slabs, including all masonry work and minor precast work. All concrete shall be mixed by hand or by hand-driven mixing machines.
- (viii) Backfilling and compaction of all excavations.
- (ix) Removal of oversize material.
- (x) Removing existing concrete and masonry work, irrespective of class and type.
- (xi) Stone pitching and erosion protection.
- (xii) Finishing off borrow areas in specified areas allocated for labor-intensive construction.
- (xiii) Finishing off cut and fill slopes.
- (xiv) Finishing the road and road reserve.
- (xv) Treatment of old roads and temporary diversions

Tenderers are to also note that it is an explicit condition of this tender that all unskilled labourers on the project are to be employed from the local community. The Contractor shall in general, maximise the involvement of the local community and employ a minimum of 10 people.

3.3.2 Subcontracting – Special Conditions of Contract

Participation and Advancement of Start-Up, Small and Micro Enterprises

The Metsimaholo Local Municipality (MLM) has identified job creation and access to procurement opportunities by Start-ups, Small and Micro enterprises (SMMEs) as an essential requirement towards building an economically viable City. In this regard the following definitions are applicable:

“Start-up Enterprises” means an enterprise that has been in existence and operating for less than two years.

“Small Enterprises” means an enterprise that has a CIDB grading designation of 1 or 2.

“Micro Enterprises” means an enterprise that has a CIDB grading designation of 3.

“Locally based SMMEs” means enterprises that have their operational base in the ward in which the project is to be executed or, alternatively, the members of the enterprise are resident in the particular ward. Should suitable locally based SMME contractors as defined above not be available in the particular ward, then they shall be sourced from adjacent wards.

If it is established that the SMMEs are sufficiently resourced to execute the proposed works as a complete package the Contractor may conclude full sub-contract agreements with locally based SMMEs.

The appointed contractor will go out on tender to appoint local sub-contractors with CIDB grading of 2 or 3 CE . The main contractor will allocate works to the local sub-contractor and will be required to assist the local contractor to upgrade their grading and as well as mentor the contractor throughout construction. This requirement will be added as an item on the bill to ensure effective implementation of local contractor development.

The Contract Data must record the specific requirements in respect of penalties, retention and payment. With regard to the latter, the Contractor is to allow for fortnightly certificates from the SMMEs and for payment to the SMMEs to be affected within 7 days of certification. In order to achieve the goals of this policy and to ensure that the SMMEs are treated fairly and given every opportunity to advance their business whilst delivering a successful project, the Contractor is to note the following and provide for any cost that may be associated therewith.

1. If appropriate, the SMME bill of quantities is to provide for market related P&G items in order that the SMME may be compensated for any unforeseen delays or events that impact on his ability to complete his works.
2. The Contractor will be expected to have clearly specified the programme dates to the SMME contractors and these dates are to be included in the contract of agreement between the two parties. The Contractor is to monitor the SMME contractor's progress against the programme and hold progress meetings with the SMME contractors where minutes are to be kept and signed off by both parties.
3. The Contractor is to assess the skills of the SMME contractor and provide the relevant support and training where it is necessary in order for the SMME contractor to complete the works to programme, budget and specification. The Managing Contractor will be expected to provide on-site training to the SMME contractors that will ensure that the SMME contractor's staff is suitably trained to execute the works and that they receive sufficient relevant experience on the project.

4. The Contractor is responsible for safety compliance on the project and will assist the SMME contractors in all aspects to achieve safety compliance, that will include:
 - a) Assisting the SMME contractors with developing their safety files, legal appointments, etc
 - b) Assisting the SMME contractors with achieving safety on site.
 - c) Having tool box talks with the SMME contractor's employees on a daily basis.
 - d) Providing all safety equipment and signage.
 - e) Providing safety training where necessary.
5. Contractor is to provide all the necessary equipment for the timeous monitoring and the checking of the quality of works as carried out by the SMME contractors. The Contractor will be expected to monitor the SMME contractor's works for quality compliance and provide all the necessary support to the SMME contractors in order to achieve quality requirements. The Contractor is to ensure that if the SMME contractor's quality of works does not achieve specification the Contractor will assist the SMME contractors to achieve specification and not allow the works to continue until the quality requirements are achieved.
6. The Contractor is to generate monthly reports for submission to the MLM that includes the following:
 - a) SMME contractor resources on the site, ie supervisors, labour, plant tools and equipment
 - b) SMME contractor progress of works on site.
 - c) SMME contractor quality control on site.
 - d) SMME contractor expenditure on the project versus target expenditure.
 - e) Copies of minutes of the SMME contractor and Contractor progress meetings.
 - f) Concerns and improvements to be made.

The Tenderers are to price the works to achieve full compliance with the above requirements. Failure of the Contractor to achieve these requirements may result in the MLM enforcing compliance by appointing 3rd parties if necessary to assist and deducting all reasonable costs for achieving compliance from money due to the Contractor.

Following from the above, the SMME's to be contracted on the project must be selected from the provided database which is attached on this document contract. The data base includes SMME that are youth, women owned, disabled and ex-combats. The contractor will be expected to give preference to SMME's that comply with all/most of these groups. The following information must be provided by said contractor on the date of tender closure.

1. Detailed approach and methodology on the employment of local SMME's
2. SMME/s company name/s to be employed on the project.
3. SMME contact persons
4. Works to be executed by SMME/s
5. Programme (anticipated start, duration and end dates) applicable to the works defined in item 4 above.
6. Estimated value of the works identified in item 4 above.

The Metsimaholo Local Municipality (MLM) reserves the right to withdraw our acceptance of offer, should the appointed Contractor fail to satisfactorily address the above requirements (1 to 6) within 14 days of the commencement date of the contract. Approved documentation will form part of the contract.

MEASUREMENT AND PAYMENT

	Item	Unit
3.3.3	Mark Up for Management of Micro Enterprises (SMME's)	%

The percentage Mark Up tendered on the value of the Micro Enterprises work shall include full compensation for all guidance, supervision, mentoring, setting out and monitoring activities that may be deemed necessary to ensure the Works carried out by MEs are in accordance with the technical and OHS specifications and within the agreed timeframes.

The payment will be made on a monthly basis, based on the actual certificate value of the ME, for the said month.

3.3.4 Penalty Calculation

A15 RESTRICTIONS ON THE USE OF PERSONNEL IN THE PERMANENT EMPLOYMENT OF THE CONTRACTOR

- a) The Contractor shall limit the use on the Works of his permanently employed personnel to that of key personnel only (as defined in Part B of the Construction Specifications) and shall, subject to the further provisions of the following parts of the Construction Specifications -

- i) Part C - Provision of the temporary workforce,
- ii) Part D - Provision of structured training,

Execute and complete the Works using a temporary workforce employed directly by the Contractor and/or by Subcontractors.

- b) The Engineer and/or Employer may at his discretion, upon receipt of a written and fully motivated application from the Contractor and where he deems the circumstances to warrant, to authorize in writing that the Contractor may use in the execution of the Works, workers not being his key personnel but who are in his permanent employ. Without limiting the generality of application of this subclause, circumstances which may be considered by the Engineer and/or Employer to warrant the authorization of the use of the Contractor's permanent employees not being key personnel, include:

- i) The unavailability of sufficient numbers of temporary workers and/or Subcontractors to execute the Works, provided always that the Contractor has proven that he has exercised his best endeavors and taken all reasonable actions to recruit sufficient numbers of temporary workers and Subcontractors and has exhausted all reasonable recruitment options
- ii) The unavailability within the temporary worker pool and/or Subcontractor sources available to the Contractor in terms of the Contract, of sufficient of the required knowledge and skills necessary for the execution of the Works or specific portions

thereof, in cases where the time for completion allowed in the Contract is insufficient to facilitate the creation of the necessary skills through the provision of training as contemplated in this Contract

- iii) Any other circumstances which the Engineer and/or Employer may deem as constituting a warrant.

A16 ENVIRONMENTAL MANAGEMENT PLAN (EMP)

The Contractor will be required to adhere to the condition, standards and requirements depicted by the EMP. The EMP is compliant with the following regulations & guidelines:

- Regulation 385 under NEMA (Act No. 107 of 1998);
- DEAT (2004) information series 12 – Environmental Management Plans;
- Relevant guidelines issued by the Metsimaholo Local Municipality.

The content of the EMP covers:

- Potential environmental impacts addressed by the EMP;
- Management action required to mitigate impacts;
- Mitigation standards;
- Monitoring methods & frequencies.

The EMP is divided into the following sections:

- Planning and design;
- Pre-construction and construction;
- Operation & maintenance;
- Rehabilitation of the environment.

The following conditions are inter alia stipulated:

- Way leaves must be obtained prior to commencement of the Works;
- Contractors and all visitors must adhere to the conditions and regulations under the OHSA;
- Excavation trenches must be clearly fenced or delineated and maintained.
- Temporary bridges over trenches will be provided to allow access to property entrances;
- Mixing of concrete will be restricted to selected areas;
- The Contractor must provide chemical toilets for workers;

- The site and its surroundings are to be kept clean;
- Waste management related requirements; and
- Rehabilitation as per requirements of the EMP.

A17 COVID – 19 SAFETY PLAN

The Contractor shall be responsible for the Health & Safety on all construction/maintenance and health and safety requirements of any activities may not be compromised during the time of COVID-19 Pandemic. If any activity cannot be undertaken in a health and safety manner due to lack of suitable qualified personnel being available or social distancing being implemented, the activity should not commence. The Contractor shall prepare a COVID-19 Safety Plan, in accordance with the COVID-19 specifications prepared by the Occupational Health and Safety Agent. The COVID-19 shall be compliant with the following regulations & guidelines:

1. The Department of Employment and Labour has appealed to employers to use the prescriptions of the Occupational Health and Safety Act, Act 85 of 1993 in particular the Hazardous Biological Agents Regulations governing workplaces in relation to Coronavirus Disease 2019 cause by the SARS-CoV-2 and the COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2020.
2. The OHS Act read with the Hazardous Biological Agents Regulations requires the employer to provide and maintain as far as is reasonably practicable a working environment that is safe and without risks to the health of employees. Section 8(2)(b) requires steps such as may be reasonably practicable to eliminate or mitigate any hazard or potential hazard before resorting to personal protective equipment (PPE). However, in the case of COVID19, a combination of controls is required, although the main principle is to follow the hierarchy of controls.
3. Section 14 of the Occupational Health and Safety, (OHS) Act obliges employees to take reasonable care for health and safety of him- or herself and others who may be affected by their acts or omissions. This obliges employees to comply with any duty or requirement imposed by the employer or any other person by OHS Act to co-operate with the employer or person to enable that duty or requirement to be performed or complied with. Employees are also required by OHS Act to carry out lawful orders and obey the health and safety rules and procedures laid down by is employer or by anyone authorized by his employer in the interest of health and safety.

COVID -19 Risk Assessment

The HIRA methodology is to provide specific focus on COVID-19 and adapt the measures required and taking into account the specific circumstances of the workplace. The Contractor must focus on the identification of different exposure level, high contact activities and identification of vulnerable workers e.g. immunocompromised employees

and employees 60 years and above and special measures for their protection, including protection against unfair discrimination or victimization.

COVID-19 START UP - CONSTRUCTION CHECKLIST

Phase 1 – Pre-Construction	Yes / No	Proof
Upon receiving an instruction to commence with the works. The Contractor must obtain trade certificate with CIPC required and essential permits for all employees signed. (visit bizportal for certificate and essential staff permit Form 2 Annexure A)		
COVID-19 Ready Workplace Plan including: <ul style="list-style-type: none"> ○ The planned date the construction site to start; ○ The hours it will be open ○ A timetable programme, indicating the how the construction teams will be allocated work to ensure and enable appropriate measures to be taken to avoid and reduce the spread of the virus; ○ List of employees who can work from home, employees who are 60 years or older and those with comorbidities. ○ Proof of Appointment of a COVID-19 compliance officer responsible for the duties as outlined in regulation 16(6) of the said Notice COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2020 		
Deep cleaning at Construction site, site offices, working areas, ablution facilities, welfare facilities, eating facilities, hand washing facilities, confined spaces.		
Security Access Controls implemented and register for all entries and exits on site.		
Availability of Sanitizer (with at least 70% alcohol content), sufficient clean water and soap on site for all employees		
Risk assessment to identify the potential health hazards that employees and other affected persons are or may be exposed to during the construction process and identify the appropriate risk mitigation measures.		
All medical certificates of fitness are still valid. Provide list and schedule of timeframe for invalid.		
Safe working procedure identifying potentially infected employees, sub-contractors, visitors and suppliers, the management of exposure to COVID-19 and a response plan.		
Dedicated eating areas identified within Social Distancing requirements.		
Register available for all employees with the following information included: <ul style="list-style-type: none"> ○ Age of Employees ○ Health status – (High risk immunocompromised) ○ Socio economic status/Unskilled Labour ○ Accommodation ○ Cross borders/towns/cities 		

Phase 1 – Pre-Construction	Yes / No	Proof
Medical Surveillance Programme and Procedure in place, communicated and implemented.		
Communication with workforce by mean of: <ul style="list-style-type: none"> ○ Awareness training ○ Toolbox talks/Daily briefings ○ Policies and procedures ○ Safety work methods ○ Employee wellness programme ○ Good Hygiene Practices 		
Full time registered Safety Officer and site supervisor appointed on site to ensure Social distancing practices are adhered to.		
Appointment of COVID-19 Compliance Officer under Regulation 16(6)(a) of the Disaster Management Act to oversee the implementation of the Work place plan and adherence to the standards of hygiene and health protocols relating to COVID-19 at the work place		
Transportation arrangement procedure of employees to, from and on sites.		
Accommodation arrangement procedure for employees		
Waste Management plan and bins		
Items included in the Bill of Quantities: <ul style="list-style-type: none"> ○ COVID-19 OHS Plan ○ COVID -19 Risk Assessment ○ Signage & Decals – COVID-19 ○ Face masks – according to Government requirements for different exposure – according to risk assessment. ○ Surgical gloves – security & cleaning staff ○ Safety Goggles for screening persons ○ Screening ○ Non-contact Thermometers ○ Facility preparation – COVID-19 Safe ○ Hand sanitizer 70% alcohol content 		

Day 1 – Start-up	Yes / No	Proof
Declaration form of travelling before commencing to work completed and signed by employees.		
Safe Working Procedures communicated with the workforce before entering the site re Medical Surveillance, Screening, Social distancing requirements and site rules.		
Safe working procedure for Screening of employees before entering the workplace and what frequency.		
Safe Working Procedure implemented for employees arriving at work with a temperature or other symptoms of COVID-19.		

Day 1 – Start-up	Yes / No	Proof
Issuing of PPE (all workers to wear cloths masks or homemade item to cover the mouth and nose at all times if not wearing task specific PPE)		
<p>Induction training must be conducted in a well-ventilated area in smaller manageable groups.</p> <ul style="list-style-type: none"> ○ The induction should include the following but is not limited to the list ○ The safe usage and disposal of PPE (Dust masks and gloves) ○ Emergency procedures ○ COVID-19 Awareness ○ Social distancing rules ○ Site Rules 		
Awareness Posters displayed and signage around the workplace on keeping at least 1.5 meters social distancing.		
Social distancing 1.5 meters rule applied by application of decals in site office and working areas.		
Safe working procedure for Chemical storage and preventative measures to prevent cross contamination.		
Chemical stored in container on site clearly marked and stored according to manufacturer's Material Safety Data sheet – Deep cleaning disinfectants and Sanitizers. (MSDS/SDS to be available on site)		
Alcohol and Drug Testing procedure.		
Ablution facilities procedure addressing high risk areas and preventative controls implemented.		
Emergency Plans implemented and communicated, and numbers displayed.		
Specialized work activities identified.		
<p>Screening before entering the site</p> <ul style="list-style-type: none"> ○ screen workers, at the time that they report for work, to ascertain whether they have any of the observable symptoms associated with COVID-19, namely fever, cough, sore throat, redness of eyes or shortness of breath (or difficulty in breathing) ○ Employees to immediately inform the employer if they experience any of the symptoms. 		

PART B: MATTERS RELATING TO COLTO STANDARD SPECIFICATIONS

PART B : MATTERS RELATING TO THE COLTO STANDARD SPECIFICATIONS

B0000 PROJECT SPECIFICATIONS RELATING TO THE STANDARD SPECIFICATIONS AND OTHER ADDITIONAL SPECIFICATIONS

The standard specifications on which this contract is based are the **COLTO - Standard Specifications for Road and Bridge Works for State Road Authorities**.

The following SANS specifications are also referred to in this document and the Contractor is advised to obtain them from Standards South Africa (a division of SABS) in Pretoria.

SANS 10396: 2003: Implementing Preferential Construction Procurement Policies using Targeted Procurement Procedures

SANS 1914-1 to 6 (2002): Targeted Construction Procurement

SANS 1921 – 1 (2004): Construction and Management Requirements for Works Contracts

Part 1: General Engineering and Construction Works and where accommodation of traffic is involved.

SANS 1921-2 (2004): Construction and Management Requirements for Works Contracts; and Part 2: Accommodation of Traffic on Public Roads Occupied by the Contractor.

This portion of the Project Specifications deals with matters relating to the Standard Specifications.

Where reference is made in the Standard Specifications to the Project Specifications, this portion shall include the relevant information pertaining thereto, (e.g. the requirements where a choice of materials or construction methods is provided for in the Standard Specifications).

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

The number of each clause and each payment item in this portion of the Project Specifications consists of the prefix B, followed by a number corresponding to the number of the relevant clause or payment item in the Standard Specifications. The item number of any new clause or payment item (that does not form part of an existing clause or a payment item in the Standard Specifications) is also prefixed by "B or H or G" followed by a new number. The new numbers follow on the last clause or item number used in the relevant section of the Standard Specifications.

Where, in the Schedule of Quantities, an item from a particular section of the Standard Specifications is used in another section, the item number of the source section is retained but prefixed by the number of the section where the item is used. This applies to new items introduced in the Project Specifications for a specific section but used in another section.

B1204 PROGRAMME OF WORK

A network-based programme in accordance with the precedence method shall be provided by the Contractor showing the various activities in such details as may be required by the Engineer. The programme shall be updated monthly in accordance with the progress made by the Contractor.

Failure to comply with these requirements will entitle the Engineer to apply a programme based on his own assumptions for the purpose of evaluating claims for extension of time for completion of the works, or for additional compensation.

a) Preliminary Programme

A preliminary programme is required to show how the contractor intends to execute the works.

The Contractor shall be deemed to have allowed fully in his tendered rates and prices as well as in his programme for all possible delays due to normal adverse weather conditions and special non-working days as specified in the Special Conditions of Contract, in the Project Specifications and in the Contract Data.

(b) Programme in terms of Clause 5.6 of the General Conditions of Contract

It is essential that the construction programme, which shall conform in all respects to Clause 5.6 of the General Conditions of Contract, be furnished within the time stated in the Contract Data. The preliminary programme to be submitted with the tender shall be used as basis for this programme. The Contractor's attention is also drawn to clause 5.6.4 of the General Conditions of Contract 2010.

B1205 Quality Assurance (QA) *(Read with SANS 1921 – 1: 2004 clause 4.4)*

The Contractor will be solely responsible for the production of work that complies with the Specifications to the satisfaction of the Engineer. To this end it will be the full responsibility of the Contractor to institute an appropriate Quality Assurance (QA) system on site. The Engineer will audit the Contractor's quality assurance (QA) system on a regular basis to verify that adequate independent checks and tests are being carried out and to ensure that the Contractor's own control is sufficient to identify any possible quality problems which could cause a delay or failure.

B1208 Drawings *(Read with SANS 1921 – 1: 2004 clauses 4.1.7; 4.1.11 and 4.1.12)*

The Contractor shall be issued with a duplicate set of construction drawings for the works. All information including workshop details that is in the possession of the Contractor and that is required by the Engineer's Representative in order to complete the As-Built Drawings and to prepare a completion report for the Employer must be submitted to the Engineer's Representative before a Certificate of Completion will be issued for any portion or phase of the Works.

Only figured dimensions may be used, and the Drawings shall not be scaled unless the Contractor is so instructed by the Engineer in writing. The Engineer will upon written request provide any dimensions that may have been omitted from the Drawings. The Contractor shall ensure that efficient supervisory staff, the required transport, instruments, equipment and tools are available to control the quality of his own workmanship in accordance with his QA-system. His attention is drawn to the fact that it is not the duty of the Engineer or the Engineer's representative to act as foreman or surveyor.

B1302 Site Establishment *(Read with SANS 1921 - 1 : 2004 clause 4.14)***(a) Water and Electricity**

Water shall be provided by Metsimaholo Municipality Water. Rates and points are to be arranged between themselves and the Contractor, but the position of the Employer (or his agent) as a supplier of water shall be identical to that of other suppliers and quite separate from his position as Employer under the contract. As in the case of a supplier, a failure on the part of the Employer (or his agent) to supply water will not relieve the Contractor of any of his obligations under the Contract, nor in respect of any such failure shall the Contractor have any claim under the Contract against the Employer.

The Contractor is to make his own arrangements in this regard and should note that the Employer shall not be held responsible for any shortages of either water or power due to unforeseen circumstances.

All water required for construction purposes is to be sourced by the Contractor and is to be allowed for in his rates.

(b) Location of Site Office

A suitable site on or close to the Works will be indicated at the Site Inspection.

The contractor is to provide adequate sanitary and waste facilities for his staff and is to ensure that the camp is kept clean and neat at all times. No littering is to take place at either the camp or on the site.

The site is to be left in a neat, landscaped condition without any improvements on completion of the contract and final retention will not be released until such time as this condition has been complied with

(c) Telephone

The contractor shall make his own arrangements in this regard. Cellular phone coverage is available in the area as are the normal land line facilities provided by Telkom.

B1502(a) Health and Safety (*Read with SANS 1921 - 1: 2004 clause 4.18*)

The Works will be constructed in an area inhabited by people including many children. It is a requirement of this contract that the Contractor shall provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his activities, are not exposed to hazards to their health and safety. To this end the Contractor shall assume full responsibility to conform to all the provisions of the Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the OHSA 1993 Construction Regulations 2003 issued on 18 July 2003 by the Department of Labour.

For the purpose of this contract the Contractor is required to confirm his status as mandatory and employer in his own right for the execution of the contract by entering into an agreement with the Employer in terms of the Occupational Health and Safety Act in the form as included in section C1.2.2.

The rates and prices tendered by the Contractor shall be deemed to include all costs for conforming to the requirements of the Act, the Construction Regulations and the Employer's Health and Safety Specification as applicable to this contract.

Should the Contractor fail to comply with the provisions of the Construction Regulations, he will be liable for penalties as provided in the Construction Regulations and in the Employer's Health and Safety Specification.

The Contractor's failure to comply will also be recorded on the Zululand District Municipal data base and will affect the award of adjudication points to the Contractor on future work tendered for.

B1502(j) COVID -19 Health and Safety (*Read COVID-19 (C19 OHS), 2020*)

The Contractor shall be responsible for the Health & Safety on all construction/maintenance and health and safety requirements of any activities may not be compromised during the time of COVID-19 Pandemic. If any activity cannot be undertaken in a health and safety manner due to lack of suitable qualified personnel being available or social distancing being implemented, the activity should not commence. The Contractor shall prepare a COVID-19 Safety Plan, in accordance with the COVID-19 specifications prepared by the Occupational Health and Safety Agent.

B1302(c) Management of the Environment (*Read with SANS 1921 - 1 : 2004 clause 4.19*)

Respect for the environment is an important aspect of this contract and the Contractor shall pay special attention to the following:

(a) Natural Vegetation

Only those trees and shrubs directly affected by the works and such others as the Engineer may direct writing shall be cut down and stumped. The natural vegetation, grassing and other plants shall not be disturbed other than in areas where it is essential for the execution of the work or were directed by the Engineer.

(b) Fires

The Contractor shall comply with the statutory and local fire regulations. He shall also take all necessary precautions to prevent any fires. In the event of fire the Contractor shall take active steps to limit and extinguish the fire and shall accept full responsibility for damages and claims resulting from such fires which may have been caused by him or his employees.

B1215 Abnormal Climatic Conditions

The Contractor shall erect an effective rainfall gauge on the site and record the daily rainfall figures in the daily diary (book). Such book shall be handed to the employer's representative for his signature no later than 1 days after rain that is considered to justify an extension of time occurs.

Extensions of time in respect of Clause 5.12 of the GCC (2010) in respect of abnormal rainfall shall be calculated using the following formula for each calendar month or part thereof:

$$V = (Nw - Nn) + \frac{Rw/Rn}{X}$$

Where:

V = Extension of time in calendar days in respect of the calendar month under consideration.

Nw = Actual number of days during the calendar month on which a rainfall of 10mm or more is recorded.

Nn = Average number of days, as derived from existing rainfall records, on which a rainfall of 10mm or more has been recorded for the calendar month

Rw = Actual rainfall recorded for the calendar month.

Rn = Average rainfall for the calendar month under consideration as determined from existing rainfall records.

A delay caused by inclement weather conditions will be regarded as a delay only if, in the opinion of the Engineer, all progress on an item or items of work on the critical path of the working programme of the contractor has been brought to a halt. Delays on working days only (based on a five-day working week) will be taken into account for the extension of time, but the Contractor shall make provision in his programme of work for an expected delay of "n" working days caused by normal rainy weather, for which he will not receive any extension of time, where "n" equals two (X) days.

Extension of time during working days will be granted to the degree to which actual delays, as defined above, exceed the number of "n" working days.

The total extension of time for completion shall be the sum of the values of

V minus the sum of the values of V¹

Total extension of time = $V - V^1$

The 'n' value of working days, as specified in this clause as being expected delays for which the contractor must make allowance in his programme, have been calculated from the figures given in Table B1215/1 below.

Table B1215/1: Average delays due to inclement weather

Source of Information : Weather Bureau, Department of Environment
Rainfall Station :
Period :

Month	Nn	Rn	Month	Nn	Rn
			er		
			er		
			er		

Average Annual Rainfall XXX

x = 20 mm

y = 10 mm

The number of rain-related delays is the average number of days on which (10 mm) of rain or more has been measured by the weather station at _____ over nine (X) years.

Rainfall gauging will be taken and recorded by the Contractor at his Site Office and agreed with the Engineer on a daily basis.

Should an extension of time be granted by the Engineer the Contractor shall be reimbursed for his time related Preliminary and General items contained in the schedule of Quantities. The amount of reimbursement shall be calculated as follows:

No of days extension of time granted

Total number of working days in the Contract X Total for time related General Items

B1000 GENERAL (SERIES 1000)

B1200, 1300, 1400: GENERAL REQUIREMENTS AND PROVISION, CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS, HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL

B1206 Setting out of the work and protection of beacons

The Contractor shall be responsible for the true and proper setting out of the Works from existing basic control points, reference pegs or benchmarks shown on the Drawings or indicated by the Engineer's representative on site and shall ensure the correct location of the Works in relation to such points. The Contractor has to ascertain himself of the correctness of the pegs and benchmarks in the field. Any discrepancy shall be immediately reported to the Engineer. Any costs arising from failure to do so, shall be the responsibility of the Contractor. The Engineer may alter any part of the

works to suit local conditions if necessary. No claim for incorrect setting out will be considered.

B1202 Services

The drawings show the approximate location of the known services, based on available information. All excavations to expose existing known services shall be excavated by hand in all materials by the contractor. Any existing service in the road reserve or municipal servitude that is damaged as a result of negligence by the contractor will be repaired by the contractor to the satisfaction of the Engineer at his own cost.

B1503 Temporary Traffic-Control Facilities

All open excavations shall be properly demarcated with reflective tape, white drums and any other requirements that the Local Authority has. For safety reasons the contractor may not have more than 200m of trenching open at a specific time, in one working area for one labour team.

B1202 & 1214 Services and Contractor's Activities in Respect of Property outside the Road Reserve and Services Moved, Damaged or Altered

The contractor must contact house owners at least two days prior to working in close proximity to existing buildings and to inspect buildings before and after work had been completed.

Before commencing with any work in an area, the Contractor shall ascertain the presence and actual position of all services which can reasonably be expected by an experienced and competent Contractor to be present on, under, over or within the Site.

Without in any way limiting its liability in terms of the Conditions of Contract in relation to damage to property and interference with services, the Contractor shall, in collaboration with the Engineer, obtain the most up-to-date plans as are available, showing the positions of services existing in the area where it intends to work. Neither the Employer nor the Engineer offer any warranty as to the accuracy or completeness of such plans and because services can often not be reliably located from plans, the Contractor shall ascertain the actual location of services depicted on such plans by means of careful inspection of Site and the provision and utilisation of suitable detecting and testing equipment.

Thereafter, the Contractor shall, by the use of appropriate methodologies carefully expose the services at such positions as are agreed to by the Engineer, for the purposes of verifying the exact location and position of the services. Where the exposure of existing services involves excavation to expose underground services.

The aforesaid procedure shall also be followed in respect of services not shown on the plans but which may reasonably be anticipated by an experienced Contractor to be present or potentially present on the site.

All services, the positions of which have been determined as aforesaid at the critical points, shall henceforth be designated as 'Known Services' and their positions shall be indicated by the Contractor on a separate set of Drawings, a copy of which shall be furnished to the Engineer without delay.

As soon as any service which has not been identified and located as described above is encountered on, under, over or within the Site, it shall henceforth be deemed to be a Known Service and the aforesaid provisions pertaining to locating, verifying and recording its position on the balance of the Site shall apply. The Contractor shall notify the Engineer immediately any such service is encountered or discovered on the Site.

Whilst it is in possession of the Site, the Contractor shall be liable for all loss of or damage as may occur to:

- (a) Known Services, anywhere along the entire lengths of their routes, as may reasonably be deduced from the actual locations at which their positions were verified as aforesaid, due cognisance being taken of such deviations in line and level which may reasonably be anticipated ; and
- (b) any other service which ought reasonably to have been a Known Service in accordance with the provisions of this clause ;

as well as for consequential damage, whether caused directly by the Contractor's operations or by the lack of proper protection;

Provided always that the Contractor will not be held liable in respect of damages occurring to services not being Known Services.

No separate payment will be made to the Contractor in respect of its costs of providing, holding available on the Site and utilising the said detecting and testing equipment, nor for any costs incurred in preparing and submitting to the Engineer, the Drawings as aforesaid and these costs shall be deemed included in the Contractor's other tendered rates and prices included in the Contract.

Payment to the Contractor's in respect of exposing services at the positions agreed by the Engineer and as described above will be made under the payment items (if any) as may be provided therefore in the respective sections of the Specifications pertaining to the type of work involved.

The Contractor shall take all reasonable precautions and arrange its operations in such a manner as to prevent damage occurring to all Known Services during the period which the Contractor has occupation and/or possession of the Site

Services left exposed shall be suitably protected from damage and in such a manner as will eliminate any danger arising there from for the public and/or workmen, all in accordance with the requirements of the prevailing legislation and related regulations.

Unless the contrary is clearly specified in the Contract or ordered by the Engineer, the Contractor shall not carry out alterations to existing services.

When any such alterations become necessary, the Contractor shall promptly inform the Engineer, who will either make arrangements for such work to be executed by the owner of the service, or instruct the Contractor to make such arrangements himself.

Should damage occur to any existing services, the Contractor shall immediately inform the Engineer, or when this is not possible, the relevant authority, and obtain instructions as to who should carry out repairs. In urgent cases the Contractor shall take appropriate steps to minimise damage to and interruption of the service. No repairs of telecommunication cables or electric power lines and cables shall be attempted by the Contractor.

The Employer will accept no liability for damages due to a delay in having alterations or repairs affected by the respective service owners. The Contractor shall provide all reasonable opportunity, access and assistance to persons carrying out alterations or repairs of existing services."

B1222, B1228 & B1502 (a) Use of Explosives, Legal Provisions & Safety

Add the following:

1. The Contractor shall at all times observe adequate safety precautions on Site to ensure the safety of his own staff as well as that of the public and other persons engaged in or about the Works. In this respect he shall observe all laws, ordinances and regulations pertaining to his work.
2. The Contractor's attention is specifically drawn to the following Acts, and particularly to the relevant regulations under each Act, copies of which shall at all times be kept by him on the Site:
 - (a) The Factories, Machinery and Building Work Act (Act 22 of 1941)
 - (b) The Explosives Act (Act 26 of 1956)
 - (c) The Mines and Works Act (Act 27 of 1956)
 - (d) The Occupational Health and Safety Act (Act 85 of 1993)
3. The Contractor is also required to comply with the safety precautions set out in the following publications, copies of which shall also be kept by him on the Site:
 - (i) The Code of Practise relating to the safety of men in civil engineering inspection pits and small –diameter vertical shafts. (Transactions of the South African Institution of Civil Engineers, Vol. 2, No. 11, November 1960, obtaining from the Secretary, S.A. Institution of Civil Engineers, PO Box 93495, Yeoville, 2143).
4. The Contractor shall provide suitable and safe access by way of ladders, gangways, etc. to all parts of the Works as may be required for construction purposes or for inspection by the Engineer or the authorised Inspectors in terms of the above-mentioned Acts.
5. All precautions shall be taken to protect workmen against falling material and/or objects and other dangers whilst they are carrying out their duties. Trenches shall in every way be made and kept safe for persons working therein.
6. All persons working, inspecting or supervising in places where falling material and/or objects could be encountered shall be provided by the Contractor with hard hats of a type approved by the Inspector of Mines, the use of which shall be strictly enforced.
7. The Contractor shall provide a properly equipped first-aid box, which shall be accessible at all times.

8. Where adequate safety precautions are not being observed, the Engineer may order the Contractor to comply with minimum safety requirements at the latter's expense. Compliance with such order will not absolve the Contractor from any of his responsibilities and obligations under the Contract.
9. The Contractor shall display on a prominent place the following emergency information:
 - (a) Local Police Telephone number
 - (b) Local Ambulance Telephone number
 - (c) Local Fire Brigade Telephone number
 - (e) Nearest Doctor
 - (i) Name
 - (ii) Telephone number (office hours)
 - (iii) Telephone number (after hours)
 - (iv) Consulting room street address
10. The Contractor shall furthermore comply with the requirements of the "Safety Instructions" contained at the end of this Document.

B1220 Authorized Measurements and Tolerances

Degree of Accuracy shall apply to all components of the Works except where otherwise specified in the Schedule of Quantities and/or Drawings and provided that the minimum permissible deviation given for an element will prevail where more than one deviation can be interpreted in Clause 6.2.3(d).

B1205 Workmanship and Quality Control

The onus rests on the Contractor to produce work, which conforms in quality and accuracy of detail to the requirements of the Specifications and Drawings and the Contractor must at his own expense, institute a quality control system and provide experienced engineers, foremen, surveyors, materials technicians and other technical staff, together with all instruments and equipment, to ensure adequate supervision and positive control of the works.

The cost of the all supervision and process control, including testing, so carried out by the Contractor, shall be deemed to be included in the rates rendered for the related items of work.

The Contractor's attention is drawn to the provisions of the various sections of the Specifications regarding the minimum frequency of the testing that will be required for process control. The Contractor shall at his own discretion increase the frequency where necessary to ensure adequate control.

The Contractor shall submit to the Engineer the results of all relevant tests, measurements and levels indicating compliance with the specifications on completion of every part of the work for examination.

Should the results of any of these tests fall below the required standards as specified in the specifications, the cost of any additional tests required by the Engineer will be to the account of the Contractor.

A Laboratory for the use of the Engineer's representative is not required on site. A commercial laboratory approved by the Engineer and appointed by the Contractor shall do all acceptance control tests required in terms of the Contract. All tests must be done according to the tests prescribed in the COLTO Series under the relevant sections.

Statistical control methods will not be applied under this contract. All compaction will be done as specified, especially on layers for road works, where the % and compaction will be the minimum allowed for any single test. Compaction tests will be submitted to the Engineer on intervals as requested by the Engineer.

B1230 Training

Structured training shall be provided to temporary personnel involved in the contract in accordance with the provisions set out in Part G. The selection of the candidates will be approved by the Engineer, the representatives of the local communities and the Employer's Representative in the area, subject to the required entrance levels. All training courses must be offered through approved accredited training organizations.

The Contractor shall provide the following for the training:

- a) Electrified venue with sufficient lighting and furniture
- b) All necessary stationary, consumables and study material
- c) Transport to and from the training venue
- d) Wages for candidates attending technical skills training during working hours
- e) Payment to approved training organizations for the provision of training.

B1207 Notices, Signs and Advertisement

Two name board will be manufactured and erected according to drawings to be supplied by the Engineer or Employer, complete with dimensions, wording and specifications as prescribed, within one month from the commencement date and shall be remove completely from site after construction is completed, before the last payment certificate shall be approved. A Provisional Sum is included to cover this cost.

Two additional name boards with MLM specific information will also be required as per the drawing supplied by the Employer.

B1231 Sums stated provisionally by the Engineer

(Provisional Sum)

Unit: Sum

The provision of this clause shall in no way prejudice the right of the Employer or the Contractor to determine the Contract under the provisions of Clause 57 of the General Conditions of Contract.

B1232 Allowance for Dayworks

See particular specifications for the provision for dayworks.

B1233 Material to be used during the execution of dayworks

In addition to the above-mentioned amount, provision is made for a mark-up on any payments made by the contractor in this regard. The mark-up shall be regarded as full compensation

for overheads, charges and profits as provided for in clause 48(2) of the General Conditions of the contract.

B1234 Employment of Community Liaison Officer (CLO)

The successful tenderer shall enter into an employment agreement with a Community Liaison Officer (CLO) identified and approved by the employer. The CLO will be utilized for liaison with the recipient community, who as part of his/her duties will act as Labour Desk Officer (LDO) for labour recruitment. The agreement shall make provision for the payment by the contractor to the CLO a maximum amount of R9,489.43 (Excluding VAT) per month. One (1) CLO will be appointed for the project as the project spans over more than one ward, the relevant ward councillors shall agree on the respective CLO to be appointed by the Contractor.

Payment to the contractor shall be made in equal monthly instalments, spread over the tendered completion period, upon proof of payment to the CLO.

The CLO shall attend all site and other meetings concerning the project and shall be working the same hours as labourers.

In addition to the above-mentioned amount, provision is made for a mark-up on any payments made by the contractor in this regard. The mark-up shall be regarded as full compensation for overheads, charges and profits as provided for in clause 6.6 of the General Conditions of the contract.

Duties for the Liaison Officer

The Liaison Officer(s) shall

- (i) be available in Site daily between the hours agreed on by the Contractor, the Employer and the Engineer from time to time;
- (ii) determine, in consultation with the Contractor, the needs of the temporary Labourers for relevant skills Training. He is responsible for the identification of suitable trainees and shall attend one of each of the training sessions;
- (iii) communicate with the Contractor and the Engineer to determine the labour requirements with regard to numbers and skills;
- (iv) assist in maintaining relations, and when applicable partake in labourer grievance and dispute procedures;
- (v) assist in and facilitate the recruitment of suitable temporary labour and the establishment of the Labour Register;
- (vi) attend all meetings in which the local community and/or labourers are present or are required to be represented;
- (vii) assist in the identification, and screening of labourers from the local community in accordance with the Contractor's requirements;

- (viii) inform temporary labourers of their conditions of temporary employment, and inform temporary labourers as early as possible when their period of employment will be terminated;
- (ix) attend disciplinary proceedings to ensure that hearings are fair and reasonable;
- (x) keep a daily written record of his interviews and community liaison activities;
- (xi) carry out specific tasks ordered by the Engineer; and
- (xii) perform such other duties as required and agreed upon between all parties concerned.

B1235 Additional testing that may be required by the Engineer

A provisional sum has been included in the Schedule of Quantities for additional acceptance control testing of earthworks ordered by the Engineer to be undertaken by a commercial laboratory. Payment will be based on actual invoicing by the laboratory to the contractor.

In addition to the above-mentioned amount, provision is made for a mark-up on any payments made by the contractor in this regard. The mark-up shall be regarded as full compensation for overheads, charges and profits as provided for in clause 6.6 of the General Conditions of the contract.

B1236 Development of Small, Medium and Micro Enterprises (SMMEs) and Local Labour Employment**1.1.1. Subcontracting – Special Conditions for Contract Participation and Advancement of local Emerging Contractors (SMMEs).**

Metsimaholo Municipality has identified job creation through among other means, access to procurement opportunities by Small, Medium and Micro Enterprises (SMMEs) as an essential requirement towards building an economically viable City. This is at the core of the COJ's service delivery agenda. For the purpose of this tender, SMMEs are defined as locally based Emerging Enterprises / Contractors with a CIDB grading designation of CE and GB 1 to 4.

In furtherance of the MLM mandate in promoting the development of Small, Medium and Micro Enterprises (SMMEs), the Contractor shall be required to adopt labour- intensive techniques as far as is technically and economically feasible as per advice from the Consulting Engineer, through the full spectrum of the works with the proviso that the Client's specific objectives regarding time and quality are not compromised. **Maximisation of employment creation shall one of the key objectives on this contract.**

In pursuance of this provision, the Contractor must meet the following requirements of the Bid :-

- i). The Main Contractor shall give preference for participation in the subcontracted works to locally based SMMEs. For this purpose, locally based SMME subcontractors shall mean" enterprises / contractors that have their operational base in the Ward and/or Region in which the project is to be executed or, alternatively, the members of the enterprise are residents in the particular Ward /

Region. Should suitable locally based SMME Contractors as defined above not be available in the particular Ward / Region, then they shall be sourced from adjacent Wards / Regions

- ii). Expanded Public Works Programme(EPWP) Guidelines shall be utilised in the employment of labour by both the Main Contractor and the SMME subcontractor(s).
- iii). In keeping with GCC (2015) provisions and applicable industry and legislative and regulatory prescripts, the maximum value of the contract that may be sub contracted, other than to SMMEs, is 25% .
- (iii) In appointing local sub-contractors (SMMEs) to undertake the execution of the works required in this bid to complete the project, the Bidder shall follow a fair, and transparent tendering process as is required by Public Procurement guidelines and legal prescripts.

1.1.2. Together with their tenders, all Tenderers are required to submit a comprehensive **Implementation Plan** clearly stating the estimated labour content and number of jobs that shall be created. The employment of labour shall be reflected in a programme in sufficient details to enable the MLM Project Manager to monitor and compare it with the Implementation Plan. The Contractor shall be required to submit employment data on a monthly basis to the Project Manager and no invoice will be processed by the MLM without the monthly labour data.

1.1.3. Tenderers are to also note that it is an explicit condition of this tender that all unskilled labourers on the project are to be employed from the local community. The Contractor shall in general, maximise the involvement of the local community, including relevant local suppliers.

1.1.4. Flowing from the above, the SMMEs to be contracted on the project shall be appointed through a tendering process which will be deemed fair, transparent and without bias which shall be monitored by the MLM to underwrite such fairness. The preferred target groups shall include any combination of the designated groups as defined in the Public Preferential Procurement Regulations, 2017 , namely youth, women owned, disabled and ex-combatants.

1.1.5. The form of contract to be used with sub-contracting SMMEs is the SAFCEC General Conditions of Sub-Contract for Civil Works and/or a MLM approved form of contract. The MLM reserves the right to review and comment on any contract documents between local SMMEs and Main Contractor before the contracts are signed. The Contract Data to be issued to SMMEs must record the specific requirements in respect of scope of works, estimated value, duration of the works, penalties, retention and payment terms. The MLM requirement that an owner / director / senior manager / delegated persons of the SMME company must be present on site at all times must be included in the above contract.

1.1.6. The SMME sub-contractor shall be allowed to invoice the Main Contractor fortnightly and the Main Contractor shall settle all SMME invoices within seven (7) days after certification, irrespective of whether the main contractor has invoiced the MLM or received payment of any previous or outstanding invoices. Should the Main Contractor failed to pay SMME for approved invoices with the stipulated timelines, the MLM reserves the right to pay the SMMEs directly and recover all costs directly from the Main Contractor.

1.1.6. In order to achieve the goals of this policy and to ensure that the SMMEs are treated fairly and given every opportunity to advance their business whilst delivering a successful project, the Contractor is to note the following and provide for any cost that may be associated therewith.

B1237: SMME Supervisor/Foreman

1. The successful tenderer shall enter into an employment agreement with an SMME Supervisor for SMMEs to be identified and approved by the employer. The SMME Supervisor will be required to supervise all the SMME subcontracted appointed on the project as part of MLM's mandatory requirements. The proposed SMME Supervisor is expected to have at least a Diploma in Civil Engineering and three (3) years Road Construction experience.
2. **The appointed SMME Supervisor/Foreman must be tasked ensuring delivery of with the following SMME development related functions:**
 - 2.1 Produce a clearly specified the work programme dates for work to be executed by local SMME Contractors which shall be included in the contract of agreement between the two parties. There shall be congruence between the SMME Work Schedule and the overall project Programme of works. It is the responsibility of the Main Contractor to ensure that appointed local SMMEs ,are issued with a detailed *Bill of Quantities (BoQ), Specification, Construction drawings, expected resource plan and planned daily production rates per activity* before commencing with works.
 - 2.2 Ensure that the APPOINTMENT VALUE of each SMME subcontractor, is at least, equivalent to the CIDB grade one notch above the current SMME subcontractor grade to enable progression to that grade upon completion of subcontracted works.
3. The Main Contract BoQ shall be broken down to allow the specification of all the Allowable Costs for each pay item and clear resource allocation per activity shall be indicated.
4. The Main Contractor shall produce a detailed SMME Management and Monitoring plan for MLM approval within 14 days of appointment by MLM. The SMME Management Plan shall entail breakdown of the scope of works to be executed by local SMMEs, SMME selection approach, management and skills transfer approach, number of local

SMMEs to be engaged on the project, detailed CVs of the personnel responsible for the supervision of the local SMMEs, and potential training requirements.

5. The Main Contractor shall be responsible to monitor and ensure that local SMME Contractors execute works as per the approved scope, specifications and programme. The Main Contractor shall provide the MLM with monthly progress reports clearly indicating progress and challenges affecting local SMMEs. The Main Contractor shall hold weekly production meetings with the local SMME Contractors where minutes are to be kept and signed off by both parties.
6. The Contractor shall assess the skills of the SMME Contractor and provide the relevant support and training where this necessary in order for the local SMME Contractors to complete the works to programme, budget and specification. The Main Contractor will be expected to provide on-site training to the SMME.
7. The Main Contractor shall ensure that the SMME Contractor's staff is suitably trained to execute the works and that they receive sufficient relevant experience on the project.
8. The Main Contractor is responsible for safety compliance on the project and will assist the SMME Contractors in all aspects to achieve safety compliance, that will include:
 - a) Assisting the local SMME subcontractors with developing their safety and OHS files and other applicable legal compliance,
 - b) Assisting the local SMME Contractors with achieving safety on site.
 - c) Facilitating Safety (Toolbox) talks with the local SMME sub contractor's employees on a daily basis.
 - d) Providing all safety equipment and signage.
 - e) Providing Safety Training where necessary.
9. The Main Contractor shall delegate a competent and experienced full-time key resource who will responsible for providing on the site guidance and supervision to local SMME subcontractors throughout the duration of the SMME subcontractor works.
10. The Main Contractor shall make provision for SMME P&G allowance for Site Establishment expenses which shall be itemised but not limited to: *Small tools and Equipment and PPE, safety file, transportation, cell phone allowance, monthly stipend for SMME Directors and any other related items that will assist the SMME company to start with the works.* Such allowance will be allocated once the scope of works is prepared to ensure that the P&G for that particular works is sufficient i.e. ancillary works P&G shall differ to the road works scope. The P&G shall be provisioned with the quantified scope of works in the Main Contractors BOQ and shall be developed further into SMME mini-BoQ.

11. A Provisional sum has been included in the Schedule of Quantities for the development of SMMEs in terms of no 10 above. The Contractor is required to tender a mark-up on the payments made as part of the developments of SMMEs. The mark-up shall be regarded as full compensation for overheads, charges and profits as provided for in clause 6.6 of the General Conditions of the Contract (GCC 2015). The mark up shall not exceed 10%. Should the bidder exceed this specified mark-up, a motivation letter will be required by MLM to justify why the higher mark-up should be accepted.
12. The MLM will monitor that any such P & G allowance included in the SMME Schedule of Rates is not duplicated in the Main Contractor's rates.
13. The Main Contractor will be expected to monitor the local SMME subcontractors works for quality compliance and provide all the necessary support to local SMME Contractors in order to achieve quality requirements. The Main Contractor is to ensure that if the local SMME Contractor's quality of works does not achieve specifications, the necessary corrective measures are developed and implemented to assist the SMME Contractors to achieve specification and shall not allow the works to continue until the quality requirements have been achieved.
14. The Main Contractor shall generate and submit for the attention of the MLM SMME Development Unit Manager , monthly SMME Development Progress Reports for the MLM that includes the following:
 - a) SMME Contractor resources on the site, i.e. supervisors, labour (as per EPWP reporting requirements), plant, tools and equipment
 - b) SMME Contractor progress of works on site.
 - c) SMME Contractor quality control on site.
 - d) SMME Contractor expenditure on the project versus target expenditure.
 - e) Copies of minutes of the SMME Contractor and Main Contractor progress meetings.
 - f) Concerns and improvements to be made.
 - g) The report shall be signed by both the Main Contractor and the local SMME Contractors.
15. A Template for Monthly SMME Development Progress Report ,shall be provided by the MLM through the SMME Development Unit and the relevant Project Manager.

The tenderers rates shall be deemed to include all labour, plant and materials to achieve full compliance with the above requirements. Failure of the Main Contractor to achieve these requirements may result in the MLM enforcing compliance by appointing 3rd parties if necessary to assist and deducting all reasonable costs for achieving compliance from money due to the Main Contractor.

Failure of the Main Contractor to achieve the above requirements shall be deemed to be a breach of contract between the MLM and the Main Contractor. The MLM reserves the right to terminate the Contract, should the appointed Main Contractor fail to satisfactorily address the above requirements within 14 days of the commencement date of the contract. Approved documentation will form part of the contract.

MLM reserves the right to request the Main Contractor to replace any key personnel on site who is deemed to be performing unsatisfactorily.

MEASUREMENT AND PAYMENT

Item	Unit
B12.01	The Contractor's obligations in respect of Local and other Labourers
	(d) Provision for Medical Examination for Local Labourers
	Prov Sum
B12.02	Salary for Community Liaison OfficerProvisional Sum
	A Provisional Sum has been included for a salary to be paid to the Community Liaison Officer.
	In addition to the abovementioned amount, provision is made for a mark-up on the amount to be paid. The mark-up shall be regarded as full compensation for overheads, charges and profits as provided for in the Conditions of Contract.
B12.03	Contractor's obligations in respect of Emerging Contractors
	(a) Remuneration Supervisor for SMMEs Prov Sum
B12.04	Training
	.1) EPWP training courses for selected local and other labourers Provisional Sum
	.2) Overheads, charges and other labourersPercentage (%)
	.3) Payment of labour wages while on approved EPWP trainingProvisional Sum
	.4) Overheads, charges and profit on abovePercentage (%)
	Payment under sub-item (.1) shall be the amounts actually paid to the training institutions and shall be made in accordance with the provisions of the General Conditions of Contract.
	In addition to the abovementioned amount, provision is made for a mark-up on the amount to be paid under sub-item (.2). The mark-up shall be regarded as full compensation for overheads, charges and profits as provided for in the Conditions of Contract.

Payment under subitem (.3) shall be the actual sum paid to workers undergoing technical skills training.

In addition to the abovementioned amount, provision is made for a mark-up on the amount to be paid under sub-item (.4). The mark-up shall be regarded as full compensation for overheads, charges and profits as provided for in the Conditions of Contract.

Item		Unit
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B12.06 Work to Existing Services

- | | |
|--|-----------------|
| (.1) Locating existing services | Provisional Sum |
| (.2) Overhead, charges and profit on above | percentage (%) |
| (.3) Relocating existing services | Provisional Sum |
| (.4) Overhead, charges and profit on above | percentage (%) |

A Provisional Sum has been included for the relocation of existing services by specialists if and when required and ordered by the Employer's Agent.

The mark-up shall be regarded as full compensation for overheads, charges and profits as provided for in the Conditions of Contract

The bided rates shall include full compensation for all excavation, backfilling, compacting to 90% of modified AASHTO density, disposing of surplus excavated material, keeping the excavations safe, dealing with any surface or subsurface water, taking special care to ensure that services are not damaged in any way and any other operation necessary for completing the work.

No distinction will be made between hard and soft material nor will distinction be made between the various types of services to be exposed or the depths to which excavations are taken.

NOTE:

The Contractor shall supply adequate supervision for the labourers when excavating to expose services. Any damage to a service caused by the Contractor shall be repaired at his expense to the satisfaction of the owner of the service and the Employer's Agent.

Item
Unit
B12.07 Advertising signboards as per MLM specifications number (No)

The tendered rate shall include full compensation for the procuring and furnishing all the materials and for manufacturing and supplying the completed signboards, including amongst others the supporting framework, reinforcement and items required, transport handling etc. necessary for the manufacture , completion, delivery and installation of the signboards complete as specified. The tendered rate shall also include any handling costs the contractor may incur.

B12.08 Relocation, removal, realignment and replacement of services

- (a) Relocation, removal, realignment and replacement of
existing services including wayleavesProvisional Sum
- (b) Handling cost and profit in respect of subitem B12.08(a)..... percentage (%)

The provisional sum shall be paid in accordance with the provisions of the General Conditions of Contract sub-clause 13.5 as amended by Particular Conditions of Contract. The tendered percentage is a percentage of the amount actually spent under the prime-cost item, which shall include full compensation for the profit in connection with providing the specified service.

Expenditure under this item B12.08(a) shall be made in accordance with the general conditions of contract.

The provisional sum under sub-item B12.08(a) allows for the relocation and/or protection of existing services by either the contractor or the service provider.

The bided rates shall include full compensation for all excavation, backfilling, compacting to 90% of modified AASHTO density, disposing of surplus excavated material, keeping the excavations safe, dealing with any surface or subsurface water, taking special care to ensure that services are not damaged in any way and any other operation necessary for completing the work.

No distinction will be made between hard and soft material nor will distinction be made between the various types of services to be exposed or the depths to which excavations are taken.

NOTE:

The Contractor shall supply adequate supervision for the labourers when excavating to expose services. Any damage to a service caused by the Contractor shall be repaired at his expense to the satisfaction of the owner of the service and the Employer's Agent.

Item	Unit
B12.09 Additional survey as required by the Employer's Agent	
(a) Additional Survey	
(i) Additional survey as required by the Employer's Agent prime cost (PC) sum	
(ii) Handling cost and profit in respect of subitem B12.03(a)(i)	percentage (%)

The prime cost item shall be paid in accordance with the provisions of the General Conditions of Contract sub-clause 13.5 as amended by Particular Conditions of Contract. The tendered percentage is a percentage of the amount actually spent under the prime-cost item, which shall include full compensation for the profit in connection with providing the specified service.

Item	Unit
B12.10 Specialist Services	
.1) Registration of a new servitude for the stormwater channel	Provisional Sum
.2) Overhead, charges and profit on above	percentage (%)
.3) Provisional sum for Registered Land Surveyor to confirm stand corner pegs.....	Provisional Sum
.4) Overhead, charges and profit on above	percentage (%)

Item B12.10.1) allows for the registration of a new servitude for the stormwater channel. This will include the services of a professional land surveyor, conveyancer, property valuator and any other services that may be required. The servitude must be registered in order to allow for construction works to take place under the current contract and for future maintenance to be done by the MLM.

In addition to the abovementioned amount, provision is made for a mark-up on the amount to be paid. The mark-up shall be regarded as full compensation for overheads, charges and profits as provided for in the Conditions of Contract.

Item B12.10.3) allows for the confirmation of existing stands corner pegs. This will include the services of a professional land surveyor and any other services that may be required. The stands corner pegs must be confirmed in order to allow for construction works to take place and before the issue of the certificate of completion under the current contract and for future maintenance to be done by the MLM.

In addition to the abovementioned amount, provision is made for a mark-up on the amount to be paid. The mark-up shall be regarded as full compensation for overheads, charges and profits as provided for in the Conditions of Contract.

SECTION B1300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

B1301 Site Establishment *(Read with SANS 1921 - 1 : 2004 clause 4.14)* (c) Health and Safety Obligations

Add the following sub-sub-clause defining 'the contractor's general obligations':

- i) The contractor must comply with the provisions and contractual arrangements of the Occupational Health and Safety Act (OHSA) as well as the Environmental Management Act (NEMA): Waste Management.
- ii) All workers of any project undertaken as part of this bid must undergo a medical fitness test by an Occupational Health and Safety Practitioner who is registered with the South African Nursing Council (SANC).
- iii) The medical test certificates must be presented by the successful contractor to MLM after the appointment of the successful contractor.

B1302 Site Establishment *(Read with SANS 1921 - 1 : 2004 clause 4.14)*

(a) Water and Electricity

Water shall be provided by MLM. Rates and points are to be arranged between themselves and the Contractor, but the position of the Employer (or his agent) as a supplier of water shall be identical to that of other suppliers and quite separate from his position as Employer under the contract. As in the case of a supplier, a failure on the part of the Employer (or his agent) to supply water will not relieve the Contractor of any of his obligations under the Contract, nor in respect of any such failure shall the Contractor have any claim under the Contract against the Employer.

The Contractor is to make his own arrangements in this regard and should note that the Employer shall not be held responsible for any shortages of either water or power due to unforeseen circumstances.

All water required for construction purposes is to be sourced by the Contractor and is to be allowed for in his rates.

(b) Location of Site Office

The Contractor is required to set up one main site camp (office), as per agreement with the concilor of Ward 8 Gortin and MLM. The works are to be carried out. For this Contract the Contractor shall have one main site office and one satellite office.

A suitable site on or close to the Works will be indicated at the Site Inspection.

The contractor is to provide adequate sanitary and waste facilities for his staff and is to ensure that the camp is kept clean and neat at all times. No littering is to take place at either the camp or on the site.

The site is to be left in a neat, landscaped condition without any improvements on completion of the contract and final retention will not be released until such time as this condition has been complied with.

(c) Telephone

The contractor shall make his own arrangements in this regard. Cellular phone coverage is available in the area as are the normal land line facilities provided by Telkom.

B1302 (c) Management of the Environment (Read with SANS 1921 - 1 : 2004 clause 4.19)

Respect for the environment is an important aspect of this contract and the Contractor shall pay special attention to the following:

(a) Natural Vegetation

Only those trees and shrubs directly affected by the works and such others as the Engineer may direct writing shall be cut down and stumped. The natural vegetation, grassing and other plants shall not be disturbed other than in areas where it is essential for the execution of the work or where directed by the Engineer.

(b) Fires

The Contractor shall comply with the statutory and local fire regulations. He shall also take all necessary precautions to prevent any fires. In the event of fire, the Contractor shall take active steps to limit and extinguish the fire and shall accept full responsibility for damages and claims resulting from such fires which may have been caused by him or his employees.

B1302 MEASUREMENT AND PAYMENT

Item	Unit
B13.01	The contractor's general obligations

Add the following paragraphs:

The contractor's general obligation shall be the 15% of the tendered sum

"Should the combined total tendered for subitems (a), (b), and (c) exceed 15% of the tender sum (excluding CPA, contingencies and VAT), the tenderer shall state his reasons in writing for tendering in this manner. The tenderer's attention is drawn to Form B1: Contractor's Establishment on Site, (bound in this Volume), to be completed by the tenderer. If the tenderer should require additional compensation for his obligations under section 1300 (over and above the total tendered for item B13.01) by including such additional compensation in the tendered rates and/or lump sum of items in the Pricing Schedule, these items and the value of such additional compensation shall also be indicated in writing in a letter attached to Form B1.

Payment of the rate per month for subitem 13.01(d) shall include full compensation for all the contractor's obligations relevant to health and safety legislation.

The tendered rate shall apply in the same manner as pay subitem B13.01(c) but shall not form part of the calculation of the restrictions imposed by Condition of Tender F3.8(c) and Form to tender B1: Contractor's Establishment on Site. A contractor who tenders zero for this pay item shall not be relieved of his statutory obligations. A nil

rate offered shall be deemed not as an omission but as deliberate notice that costs have been included in the tendered rates for individual items of work or in the other preliminary and general pay items."

The following paragraph relates to the treatment of all pay items for which the unit of measurement is the month and shall become applicable only for use in calculations of approved extensions of time in terms of the General Conditions of Contract:

"All pay items for which the unit of measurement is "month" are deemed to be based on 23 working days per month."

Add the following at the end of sub-clause (b) of the 11th paragraph:

"... Such limitations to payments shall occur whenever the ratio of time to expenditure varies by more than 10%. For example, if payment for completed scheduled work is 30% of total scheduled work but more than 40% of time has expired, this pay item shall cease to be active until the difference between the relevant ratios is less than 10%.

SECTION B1500: ACCOMMODATION OF TRAFFIC

B1501 SCOPE

Add the following:

"It is a condition of this contract that traffic is accommodated taking into account the provisions of the latest edition of the South African Road Traffic Signs Manual (SARTSM). The latest version for use in the accommodation of traffic is volume 2, chapter 13 of the June 1999 edition. Copies of this publication are available from Government Printers –Tel: (012) 334 4507/8/9 or (012) 3344510 Fax: (012) 323 9574.

This section also covers the provision of additional information signs for motorists and the release of any notices to the media and public."

B1502 GENERAL REQUIREMENTS

B1502 (a) Health and Safety (Read with SANS 1921 - 1: 2004 clause 4.18)

The Works will be constructed in an area inhabited by people including many children. It is a requirement of this contract that the Contractor shall provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his activities, are not exposed to hazards to their health and safety. To this end the Contractor shall assume full responsibility to conform to all the provisions of the Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the OHS Act 1993 Construction Regulations 2003 issued on 18 July 2003 by the Department of Labour.

For the purpose of this contract the Contractor is required to confirm his status as mandatory and employer in his own right for the execution of the contract by entering into an agreement with the Employer in terms of the Occupational Health and Safety Act in the form as included in section C1.2.2.

The rates and prices bided by the Contractor shall be deemed to include all costs for conforming to the requirements of the Act, the Construction Regulations and the Employer's Health and Safety Specification as applicable to this contract.

Should the Contractor fail to comply with the provisions of the Construction Regulations, he will be liable for penalties as provided in the Construction Regulations and in the Employer's Health and Safety Specification.

(a) Safety

Replace the full stop at the end of the first paragraph and continue with the following:

“... flow of traffic, including the prohibition of his, and his subcontractor's, construction plant from disregarding the stop/go accommodation of traffic control facilities. Failure to comply with this requirement shall be taken as a penalty event in terms of B1502(l).”.

Add the following paragraphs:

“The contractor shall be responsible for maintaining the existing road surface both within the works area and the advance warning and termination areas in a safe and trafficable condition for the duration of the contract.

During the non-working hours, or when construction is not taking place on a certain section of road all unnecessary obstructions to the traffic shall be removed and all signs no longer applicable to the situation shall be removed to an approved safe location or effectively covered.

The whole of the site will be handed over to the contractor at the beginning of the contract. The sequence in which various parts of the site may be occupied by the contractor for the execution of the different items of work shall be subject to the requirements of the contract documents regarding, *inter alia*, working hours and the number, spacing and length of the work areas which may be occupied at any particular time.

All open excavations shall be properly demarcated with reflective tape, white drums and any other requirements that the Local Authority has. For safety reasons the contractor may not have more than 200m of trenching open at a specific time, in one working area for one labour team.”

Delete sub-sub-clauses (ii) and (iii) and replace with the following:

- “(ii) Record on neat and dimensioned sketches and submit to the engineer the position and sign reference number, where applicable, of each sign, barricade, delineator, cone, amber flicker light, guardrail and permanent or temporary painted road marking feature. The position of each shall be adequately referenced from the marker boards or other surveyed points on the site of the works.

These records shall also show the date and time at which the recorded traffic accommodation features are certified correct by the traffic safety officer, and shall be signed by the traffic safety officer before being submitted to the engineer.

The records shall similarly account for whatever changes are made in the field. Such changes shall record the position of flagmen and stop/go control men and their associated traffic accommodation equipment wherever they are used.

- (iii) Personally inspect the position and condition of each traffic accommodation feature on the whole site of works twice each day by 9h30 and by 16h30, to record all irregularities discovered and the remedial action taken, and to sign off as correct and submit to the engineer such record sheets by midday of the next working day. The traffic safety officer shall keep a duplicate book for this specific purpose.

The traffic safety officer shall also submit with this report the daily labour returns of flagmen, stop/go and traffic signal control men employed."

Add the following sub-sub-clauses:

- "(ix) The traffic safety officer shall have a direct line of communication at all times with the police and traffic officers responsible for the area within limits of the contract. The provision of the road safety vehicle, driver, labourers and the cost of the cellular telephone shall be deemed to be included in the rates tendered for the contractor's establishment on site.
- (x) Ensure that all obstructions related to the contractor's activities be removed before nightfall where applicable as instructed by the engineer and that the roads are safe for night traffic.
- (xi) The traffic safety officer shall, in addition to the duties listed in paragraph 1502(i), also be responsible for the removal of broken down vehicles off the roadway and implementing actions requested by the traffic authorities with regard to the work to be carried out, be responsible for the erection and maintenance of all traffic signs necessary for the accommodation of traffic.
- (xii) In the advent of an accident the traffic officer shall record in a written report the details of the accident, record the position of all temporary road signs, barricades, delineators, flagmen and any other devices used for traffic accommodation. In addition the report shall include a neat dimensional sketch, photographs, identifiable permanent features, and any other relevant information."

Add the following sub-clauses:

"(j) Site personnel

The contractor shall ensure that all his personnel, excluding those who are permanently office bound, are equipped with reflective safety jackets and that these are worn at all times when working on or near to the travelled way. Any person found not wearing a reflective jacket under these circumstances shall be removed from the site until such time as he is in possession of and wearing a reflective jacket. Reflective safety jackets shall be kept in good condition and any jackets that are, in the opinion of the engineer, ineffective shall be immediately replaced by the contractor.

Add the following:

"Reflective safety jackets shall comply with SANS 50471 as follows:

Class jacket:	Class 2
Background material:	Fluorescent orange-red or fluorescent yellow
Retroreflective performance:	Level 1
Water vapour resistance:	Class 2
Garment type:	Waistcoat or jacket "

(k) Penalty events

Whenever the following events occur, the contractor shall be subjected to penalty conditions expressed in the Appendix to Tender.

(i) Noncompliance with accommodation of traffic specifications

Failure or refusal on the part of the contractor to take the necessary steps to ensure the safety and convenience of the travelling public, accommodation of traffic, plant and personnel in accordance with these specifications or as required by statutory authorities or ordered by the engineer, shall be sufficient cause for the engineer to apply penalties as follows:

A fixed penalty of R5 000,00 per occurrence shall be deducted for each and every occurrence of non-compliance with any of the requirements of section 1500 of the standard specifications and section B1500 of the project specifications.

In addition, a time-related penalty of R500,00 per hour over and above the fixed penalty shall be deducted for non-compliance to rectify any defects in the accommodation of traffic within the allowable time after the engineer has given an instruction to this effect. The engineer's instruction shall state the allowable time, which shall be the time in hours for reinstatement of the defects. Should the contractor fail to adhere to this instruction, the time-related penalty shall be applied from the time the instruction was given.

(a) General requirements and specifications

The following general requirements must be adhered to for the entire contract period:

- (i) When required the contractor shall make use of local traffic authorities to assist in directing traffic.
- (ii) Failure to comply with any of the requirements for the accommodation of traffic, penalties will be imposed as specified in Section B clause B1502(I).
- (iii) The travelling public shall as far as possible have the right of way on public roads and the contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.
- iv) Failure to maintain and clean road signs, warning signs or flicker lights, etc, in a good condition shall constitute ample reason for the engineer to bring works to a stop until the road signs, etc, have been repaired to his satisfaction.

- (v) The contractor's tendered rates for the relevant items in the schedule of quantities shall include full compensation for all possible additional costs which may arise from the above and no claims for extra payment due to inconvenience as a result of the modus operandi will be considered.
- (vi) The contractor may not commence constructional activities before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual.
- (vii) The contractor shall at all times adhere to the limits to closure lengths, spacing any number of closures for different type of work.
- (viii) The contractor and construction vehicles shall at all times adhere to the traffic control facilities (STOP/GO closures). No construction vehicle will be allowed to bypass or evade traffic control facilities at work areas

B1503 TEMPORARY TRAFFIC-CONTROL FACILITIES

Replace the first sentence of the first paragraph with the following:

"The contractor shall provide, erect and maintain the necessary traffic-control devices, road signs, channelisation devices, barricades, warning devices and road markings (hereinafter referred to as traffic-control devices) in accordance with these special provisions and as shown on the drawings and in the SARTSM and remove them when no longer required. It shall be incumbent upon the contractor to see to it that the abovementioned traffic-control devices are present where required at all times and are functioning properly."

Replace the third paragraph with the following:

"The type of construction, spacing and placement of traffic-control devices shall be in accordance with the SARTSM. The recommended arrangements of the traffic control devices illustrated and/or drawings issued by the engineer shall not be departed from without prior approval of the engineer. The arrangements expected to be most commonly used in the contract are given on the tender drawings.

The details shown for spacing and placement of traffic-control facilities may however, be revised at the discretion of the engineer where deemed necessary to accommodate local site geometry and traffic conditions."

(b) Road signs and barricades

Add the following:

"The contractor shall be responsible for the protection and maintenance of all signs, and shall at his own cost replace any that have been damaged, lost, or stolen.

All temporary road signs required to remain in position for some time shall be pole mounted as shown on the drawings. All temporary road signs required to be moved more often shall be mounted on portable supports for the easy moving of signs to temporary positions. The only permitted method of ballasting the sign supports shall consist of durable sandbags filled with sand of adequate mass to prevent signs from being blown over by wind. The cost of the sandbags shall be included in the tendered rates for the various types of temporary road signs.

The covering of permanent road signs, if applicable, shall be by utilizing a hessian bag that shall be pulled over the sign in the form of a hood and fastened to the signposts. Plastic bags or other materials and fastened by means of adhesive tape shall not be permitted. The cost of covering of permanent road signs shall be included in the tendered rates of items B15.01 and B15.10.”

(c) Channelisation devices and barricades

Add the following:

“The use of drums as channelisation devices shall not be permitted. Drums may however be used to set up barriers as provided for in sub-clause 1503(d).

Delineators shall:

- (i) comply with the manufacturing and reflective requirements of the SARTSM and the blades shall be reversible with dimensions as indicated on the drawings;
- (ii) have smooth and round edges and be mounted on a post and base. All components shall be of durable plastic material;
- (iii) have the lower edge of the reflective part of the delineator mounted not lower than 250mm above the road surface;
- (iv) be capable of withstanding the movement of passing vehicles and gusting winds up to 60 km/h in typical working conditions without falling over. To achieve this, the base shall be at least 0,18m² and ballasted by sandbags with sand;
- (v) together with its mounting be designed such that it will collapse in a safe manner under traffic impact.

Traffic cones manufactured in a fluorescent red-orange or red plastic material may be used only at short term lane deviations during daylight. Cones shall not be used on their own, but shall be interspersed with delineators at a ratio not exceeding 3:1. Cones used on all deviations shall be 750mm high. Lane closures which continue into the night time shall be demarcated by delineators only.”

(e) Warning devices

Add the following:

“All construction vehicles and plant used on the works shall be equipped with rotating amber flashing lights and warning boards as specified. All vehicles and plant before being allowed onto the site shall obtain a clearance permit from the engineer.

(i) Vehicle mounted flashing lights

Rotating lights shall have an amber lens of minimum height of 200mm and shall be mounted in such a way as to be highly visible from all directions. The lights on construction vehicles shall not be switched on while vehicles are being operated on unrestricted sections of a public road, but shall be switched on while construction vehicles are operating within the accommodation of traffic area, as the vehicles decelerate to enter a construction area, and as the vehicles accelerate to the general speed when entering the road from a construction area. Lights on plant shall

operate continuously while the plant is working alongside sections of road open to public traffic

All LDV's and cars operating on site shall also be equipped with rotating amber flashing lights which shall be placed so as to be highly visible and operated continuously while the vehicles are manoeuvring in or out of traffic or are travelling or parked alongside roads open to public traffic.

Rotating lights and the "construction vehicle" signs on the contractor's vehicles and plant shall not be paid for separately but shall be included in the rates covering the use of the vehicles.

The contractor shall apply and maintain lights together with temporary mounting brackets, to the approval of the engineer. Vehicles and plant that do not comply with these requirements shall be removed from the site.

(ii) Sign mounted flashing lights

Two amber flashing lights shall be vertically mounted on top of the traffic signs at each end of each traffic accommodation section as shown on the drawings. The lights shall be operated during the hours of darkness."

(f) **Road Markings**

Add the following new paragraphs:

"The contractor will be required to survey all existing road marking prior to commencement of construction or repair work.

Add the following sub-clauses:

"(g) Other traffic control measures ordered by the engineer

The engineer may instruct the contractor to provide any other road sign, reflective tape, etc not measured in standard payitems. Such road signs shall conform to the

requirements of the SARTSM, or specification provided by the engineer. Similarly, in order to ensure that the travelling public is kept fully informed and warned on matters relating to the accommodation of traffic, construction sign posting and the effect of the construction on the free flow of traffic through the site, the engineer may arrange for advertising in the press and/or for other forms of publicity.

(h) **Flagmen**

Flagmen shall be provided where shown on the drawings or required by the specification. During the daytime, at least one flagmen shall be provided at each traffic control point in addition to the STOP/GO sign operator. No flagman shall be on duty for a period of more than 10 hours per day.

Flagmen shall be adequately trained in the standard flagging techniques as described in the SARTSM (refer to figure 13.23 of detail 13.23.1) and be provided with conspicuous clothing such as safety jackets utilizing retro-reflective and/or fluorescent panels in red, yellow and/or white.

Flagmen shall have in their possession, at all times, certification that they have attended and passed an accredited course in flagging techniques before being allowed onto the construction site.

Flags shall be made from bright red or red-orange material and shall be square with a minimum side length of 600mm. The flag shall be attached to a staff at least 1,0m in length.

In terms of lateral clearance and safety, flagmen shall stand on the shoulder of the lane of traffic that is being controlled and under no circumstances shall flagmen be permitted to stand within the traffic lane. In order to obtain maximum visual impact for the travelling public, flagmen shall stand-alone.”

B1504 WIDTH AND LENGTH OF TEMPORARY DEVIATIONS

The entire works must be constructed under traffic with no use being made of temporary deviations. At times traffic will be controlled by “STOP/GO” operations and the road traffic delay due to closures under normal traffic flow conditions shall not exceed 10 minutes without the specific approval of the Engineer.

During all construction operations a mandatory speed limit of 20km/h together with no overtaking signs (R214) will be enforced.

Where delineators are used to channelise the traffic, they shall, at the end of a day’s work, be removed as close as possible to the edge of the roadworks to maximise the overnight lane width. To discourage attempts to overtake in a single lane situation, the maximum lane width shall be 4.0m and the positioning of delineators and barriers shall be adjusted to achieve this.

Traffic management will for this section be executed to the South African Road Traffic Signs Manual – Road Note 13.

B1517 MEASUREMENT AND PAYMENT

Amend item 15.01 to read as follows:

Item Unit

B15.01 Accommodating traffic and maintaining temporary deviations:

(a) On the route.....kilometre (km)

Replace the first paragraph with the following:

“The unit of measurement shall be the kilometre, measured along the centre lines of the road. Accommodation of traffic shall be measured once only, that is no separate payments shall be made for lane and shoulder rehabilitation, slurry, reseal, asphalt overlay, side drains, etc.. Only the net distance of the road shall be measured and overlapping distances during staged rehabilitation shall not be measured. A distinction shall be made between accommodation of traffic on the through road and accommodation of traffic on the cross roads and intersections.

In the second paragraph, replace the comma after “deviations” at the start of the third line with a full stop and delete the remainder of this first sentence. Also delete the

whole of the second sentence, which refers to compensation for the traffic safety officer.

In the third paragraph second sentence, insert a full stop after “use” and delete the remainder of the sentence.”

Item		Unit
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B15.03 Temporary traffic control facilities

Add the following:

Item	Unit
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“(a) Flagmen man-day

“The unit of measurement shall be a full day and night worked by flagmen. A man-day shall be deemed to comprise of three eight hour shifts in a twenty four hour period. Three shifts of eight hours per flagman equates to one man-day. Shorter single portion shifts (6 to 10 hours) shall be measured as a half man-day.”

Amend item 15.03 (h) to read as follows:

“(h) Delineators (TW 401 and TW 402)

(i) Single (600 x 150mm)..... number (No)

The unit of measurement shall be the number of delineators provided, and completely erected.

The tendered rates shall include full compensation for providing and erecting each sign complete. It shall also include moving the signs as may be necessary.

The cost of delineators for traffic accommodation will only be provided once off and the cost of replacing damaged delineators will be for the contractor’s cost. The contractor shall therefore allow in his tendered rates for the replacement of damaged delineators for the period of traffic accommodation on site.

Expenditure under this item shall be made in accordance with the general conditions of contract, sub-clause 13.5, for the supply and installation of any additional signs or other traffic control measure ordered by the engineer in accordance with clause B1503(g).”

SECTION B1600: OVERHAUL

Overhaul material shall be transported material to which overhaul shall apply when hauled in excess of the free-haul distance.

b) replace the paragraph with the following:

Only one type of overhaul will apply to this contract.

Ordinary overhaul shall apply to all overhaul material in respect of haul in excess of 10km, and shall be measured by the product of the volume of material hauled, measured as specified hereafter.

SECTION B1700: CLEARING AND GRUBBING

B1704 MEASUREMENT AND PAYMENT

Add the following item 17.07, 17.08 and 17.09 to read as follows:

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

B17.07 Demolish and spoil material for structures, buildings, etc

- | | |
|---|-------------------|
| (a) 100mm thick un-reinforced concrete | square metre (m2) |
| (b) 150mm thick un-reinforced concrete | square metre (m2) |
| (c) 100mm thick reinforced concrete | square metre (m2) |
| (d) 150mm thick reinforced concrete | square metre (m2) |
| (e) Cast in-situ concrete kerbs (all sizes) | metre (m) |

B17.08 Hiring of Specialized Equipment for cleaning of Hydraulic StructuresProvisional Sum

B17.0 Charges and profit on B12.08.....percentage (%)

SECTION B1800: DAYWORKS

B1801 SCOPE

This section covers the listing of daywork items in accordance with the general conditions of contract sub-clause 13.6 as amended by Particular Condition, for the use in determining payment for work which cannot be quantified in specific units in the Pricing Schedule, or work ordered by the engineer during the construction period which was not foreseen at tender stage and for which no applicable rate exists in the Pricing Schedule.

B1802 ORDERING OF DAYWORK

No daywork shall be undertaken unless written authorisation has been obtained from the engineer.

SECTION 2100 DRAINS

B2218 MEASUREMENT AND PAYMENT

Add the following payment item:

SECTION B2300: CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES AND CONCRETE LINING FOR OPEN DRAINS

B2301 SCOPE

Add the following to this clause:

"This section also covers the replacement of damaged concrete kerbing, channelling and lining."

(b) Prefabricated concrete kerbing and channelling

Add the following:

"A 10 mm wide joint and filler shall be provided every 20 metres through the kerbing and channelling. The colour of the filler shall match the colour of the kerbing.

Curved kerbing of radius less than one metre shall be cast in situ. Units for curved kerbing of radius greater than 1 m up to 4 m shall be of nominal length 0,3 m. Units for curved kerbing of radius greater than 4 m up to 20 m shall be of nominal length 0,5 m. Units for radius exceeding 20 m shall be of nominal length 1 m. Any associated channelling shall also comply with the above requirements."

“(I) Removal of existing kerb and channel

Where shown on the drawings and/or indicated by the engineer, the existing kerb and channel shall be removed and transported to spoil as directed."

B3301 TREATING THE ROADBED

(a) Removing unsuitable material

Add the following to the third paragraph:

"For the purpose of this contract, excavation and removal of in-situ clayey material over areas where the road is in a fill condition, shall be classified as removal of unsuitable material, irrespective of the stability or moisture condition of the in-situ material".

(b) Preparing and compacting the roadbed

Delete the last sentence of the first paragraph "If necessary, roadbed..... depth of compaction" and replace as follows:

"Where demarcated by the engineer, prior to the roadbed being scarified, the excess in situ material forming part of the present roadway, and within the limits of the roadbed, and in close proximity of the layer works, but falling within the limits of the Layerworks, shall be bladed to controlled level in order to achieve the required level and necessary depth of compaction."

(c) Benching

Add the following:

"Benching of fill and pavement layer material is required to be undertaken into the existing fill embankments and pavement layers. No additional payment shall be made over and above the normal pay items applicable to earthworks and pavement layers where benching is required for widening of the existing road formation. Benching shall be undertaken as shown on the drawings.

It is a requirement that benching shall always be started at the bottom of the existing fill progressing to the top of the formation. The dimensions and details of benching are shown on the drawings."

B3306 CUT AND BORROW

(c) Borrow

Replace the first sentence of the second paragraph of this subclause with the following:

"Where insufficient material is available for fill from cut, material will be imported from commercial sources, or stockpiled natural gravels excavated from commercial sources or mines. The contractor shall use only material that conforms to specification."

(e) The temporary stockpiling of materials

Replace the first paragraph with:

"The contractor shall plan his activities so that materials imported from commercial sources can be directly transported to and placed at the designated points.

The temporary stockpiling of material shall not be paid for separately and full compensation shall be deemed to have been included in the rates tendered for the various payment items for work for which the material is to be used."

B3312 MEASUREMENT AND PAYMENT

Add the following:

(3) Overhaul:

"The contractor shall note that, notwithstanding the fact various payment items indicate that haul, overhaul and all associated terms will be paid for separately, this shall not apply to this contract. Payment for haul, overhaul and associated terms will be made as specified in Section B1600."

B 3312 MEASUREMENT AND PAYMENT

REPLACE THE FOLLOWING ITEM:

"Item

Unit

B33.01 Cut and borrow to fill, including free-haul up to 10km

(i) Compacted to 90% MOD. AASHTOcubic metre (m³)

(g) Supply and compact dump rockcubic metre (m³)

(h) Fill from commercial sourcescubic metre (m³)

B33.04 Cut to spoil including free-haul up to 10km

(a) Intermediate excavationcubic metre (m³)

(b) Hard excavation cubic metre.....cubic metre (m³)

SECTION 3400 : PAVEMENT LAYERS OF GRAVEL MATERIALS

B3402 MATERIALS

(a) General

(i) Subbase layers

The subbase layers shall be constructed from material obtained from commercial source. subbase layer shall be stabilized. Stabilisation shall be as directed by the engineer.

Materials used in the subbase layers shall comply with the following requirements prior to the addition of the stabilizing agent:

(1) subbase layer:

- Minimum grading modulus 1,20
- Maximum plasticity index (if layer not stabilised) 6
- Minimum CBR at required density (if layer not stabilised) 4.5
- Maximum size of aggregate 63 mm

Materials used in the subbase layers shall comply with the following requirements after the addition of the stabilizing agent:

- Minimum UCS at specified density 1 200 kPa
- Maximum plasticity index 6

(a) Compaction requirements

The minimum in-situ dry density required for the various layers, in terms of modified AASHTO density, are as follows:

▪ subbase	95%
▪ base	97

B3407 MEASUREMENT AND PAYMENT

REPLACE THE FOLLOWING ITEM:

“Item	Unit
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ADD THE FOLLOWING ITEM:

B34.14 Extra-over Item 34.01 for construction of layers from commercial sources:

(a) Gravel base (chemically/mechanically stabilized material) compacted to:

(i) 97% MOD. AASHTO density base (150 mm thick)cubic metre (m³)

Measurement shall be according to item 34.01 of the standard specifications.

The tendered rate shall include full compensation for:

Procuring hard material, breaking down, placing and compacting the material, including transporting the material for an unlimited haul distance and its removal, disposal and transporting for an unlimited haul distance of all oversize material, and the protection of the layer and the conducting of control tests, all as specified.

The mechanical modification of the untreated layer (crushed dump rock material or gravel material) by adding soil binder or mixing the crushed dump rock with material from another source.

Providing an appropriate crushing and/or screening plant, transporting the plant to site, erecting, commissioning and finally dismantling it, and loading and transporting it away from the site or to the point where it is to be re-erected, regardless of the number of types of material treated.

The crushing and or screening of the mine dump rock, including all labour, plant, fuel, power supply, water, handling, processing, stockpiling, loading, for transportation to the point of final use, and or disposing of any material screened out and discarded.

Conforming to all safety requirements of the mine manager including conditions set by him for working on mine property, the Occupational Health and Safety Act, the Mine Health and Safety Act No 29 of 1996 and Amendment Act No 72 of 1997 and the requirements of the Environmental Management Plan including all incidentals necessary.

SECTION B5600: ROAD SIGNS

B5601 SCOPE

*Replace “South African Road Traffic Signs Manual” in the second paragraph with:
“SADC Road Traffic Signs Manual”*

B5603 MANUFACTURING OF ROAD SIGN BOARDS AND SUPPORTS

(a) Road signboards

Add the following:

“The contractor shall make every effort to ensure that signboards are correct in all respect and before dispatching the boards from the manufacturer’s factory shall provide the engineer with a 100mm x 150mm colour photograph of each sign face for approval of the correctness of the legend. Such approval will not imply final acceptance of the board. If the contractor is in any doubt as to the correctness of the sign detail, the sign designer shall be contacted for verification.”

(ii) Steel profile road signboards

Add the following:

“Chromadek section shall be assembled in accordance with the details of Standard Plans SP-B-12-Sheets 4 and 5 and SP-B-4-Sheets 33E and 34E.

Where the letter or legends cross the horizontal joints of the sign panels, the letter shall be cut on the joint and both ends folded around the radius.

Retro-reflective material to adjoining Chromadek panels on a sign shall be practical visual match of the specified colour.”

B5609 MEASUREMENT AND PAYMENT

Item Unit

Replace the item (a0 with the following

B56.03 Road sign supports (overhead road sign structures excluded)

(a) Steel tubing (dip galvanised Diameter) kilo-gram (kg)

SECTION 5700 : ROAD MARKINGS

B5701 SCOPE

Road marking plans shall be issued during construction

B 5707 APPLYING THE PAINT

(c) *Replace the last paragraph with the following:*

"Permanent road marking work as specified by the engineer shall be carried out within 14 days of opening the road full width to traffic after the completion of the double seal surfacing."

Add the following:

"B5715 ESTABLISHMENT OF PAINTING UNIT

Allowance is made in the schedule of quantities for the re-establishment of the painting unit at designated intervals during the contract period. The engineer will instruct the re-establishing of the painting unit as required."

SECTION 5900: FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS

B 5902 FINISHING THE ROAD AND ROAD RESERVE

Add the following:

"The contractor shall pay special attention to the collection and removal of all waste materials originating from paving and other roadworks activities. Excess aggregate shall not be discarded onto the side-slopes of the road formation. These aggregates, together with all other materials trimmed or excavated from the road shall be collected and removed from the road reserve to the satisfaction of the engineer.

This requirement shall be incorporated in the tendered rates for item 59.01 of the Schedule of Quantities."

SECTION 7300 : CONCRETE BLOCK PAVING FOR ROADS

PART C : PROVISION OF THE TEMPORARY WORKFORCE

PART C PROVISION OF THE TEMPORARY WORKFORCE

CONTENTS

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C1 SCOPE

This Specification covers the provisions and requirements relating to the provision of the temporary workforce.

C2 INTERPRETATIONS

C2.1 Supporting documents

The Bid Rules, Conditions of Contract, Standard and Construction Specifications, Drawings and statutory minimum requirements relating to the employment and remuneration of labour shall *inter alia* be read in conjunction with this Specification.

C2.2 Definitions and abbreviations

For the purposes of this specification, the definitions given in the Conditions of Contract, the Standard Specifications and the Construction Specifications, together with the following additional definitions shall, unless the context dictates otherwise, apply:

- (i) "Key Personnel" means all contracts managers, site agents, materials and survey technicians, trainers, supervisors, foremen, skilled plant operators, artisans and the like, and all other personnel in the permanent employ of the Contractor or Subcontractor who possess special skills and/or who play key roles in the Contractor's or Subcontractor's operation
- (ii) "Project Committee" means a committee consisting of the Employer, the Engineer, the Contractor, (or their nominated representatives) as well as representatives of the temporary workforce, which is convened from time

to time at the discretion of the Engineer, for the purposes of acting as an avenue for effective communication and liaison between all the parties referred to, in all matters pertaining to the Contract.

- (iii) "Subcontractor" means any person or group of persons in association, or firm, or body corporate (whether formally constituted or otherwise) not being the Contractor, to whom specific portions or aspects of the Works are sublet or subcontracted by the Contractor in accordance with the provisions of the Contract
- (iv) "Worker" for the purposes of this Specification means any person, not being one of the Contractor's key personnel, nor any key personnel of any Subcontractor, who is engaged by the Contractor, a Subcontractor or the Employer to participate in the execution of any part of the Contract Works and shall include unskilled labour, semi-skilled and skilled labour, clerical workers and the like
- (v) "Workforce" means the aggregate body comprising of all workers and shall, unless the context dictates otherwise, include the workforces of the Contractor and all Subcontractors
- (vi) "Liaison Officer" means a representative from the temporary workforce, duly elected by them, to act on their behalf and through whom all matters pertaining to the temporary workforce can be channelised.

C2.3 Status

Where any provisions or requirements of this Specification are in conflict with anything elsewhere set out in the Contract, the provisions and requirements of this Specification shall take precedence and prevail.

C3 PERMITTED SOURCES OF TEMPORARY WORKERS

The Contractor shall as far as possible make optimum use of the human resources outside his own workforce and the workforces of all Subcontractors. The temporary workforce which is to be used in the execution of the Works in terms of Part A may consist of the workers of various communities, and shall not be bound to one particular community.

C4 EMPLOYMENT RECORDS TO BE PROVIDED

The Contractor shall maintain accurate and comprehensive records of all workers engaged on the Contract and shall provide the Engineer at monthly intervals from the commencement of the Contract, with interim records substantiating the actual numbers of employment opportunities which have been generated to

date and the amounts actually paid in respect thereof. Such interim records shall be in a format approved by the Engineer.

The Contractor shall, on completion of the Contract, and as a pre-requisite event to the release of any retention money in terms of the Conditions of Contract, provide the Engineer with copies of the Terms of Employment as well as independently audited documentary evidence of the total number of temporary and permanent employment opportunities actually generated during the Contract.

C5 VARIATIONS IN WORKER PRODUCTION RATES

Notwithstanding anything to the contrary as may be stated in or inferred from any other provision of this Contract, the Contractor shall not be entitled to any additional payment or compensation whatever, in respect of any differences as may result between the production rates actually achieved by workers in the course of the execution of the Contract Works and those production rates on which he has based his bid.

C6 TRAINING OF THE TEMPORARY WORKFORCE (EPWP LABOURERS)

Selected members of the workforce are to be provided with structured training in accordance with the provisions of Part D.

The Contractor shall make all necessary allowances in his programme of work to accommodate and facilitate the delivery of such structured training and shall comply fully with the requirements of Part D.

The provision of structured training as described in Part D shall not relieve the Contractor of any of his obligations in terms of the Conditions of Contract and the Contractor shall remain fully liable for the provision, at his own cost, of all training of the workforce, additional to that as provided for in Part D, as may be necessary to achieve the execution and completion of the works strictly in accordance with the provisions of the Contract.

C7 RECRUITMENT AND SELECTION PROCEDURES

The Contractor shall be fully responsible for the recruitment and selection of workers to constitute the temporary workforce (EPWP labourers).

The Contractor shall advise the Engineer in writing of the numbers of each category of temporary worker which he requires, together with the personal attributes which he considers desirable that each category of worker shall possess (taking due cognisance of the provisions of the Contract relating to training).

The Contractor shall record in writing, the details of all persons applying for employment, including *inter alia*:

- (i) Name, address, age and sex
- (ii) Marital status and number of dependants
- (iii) Qualifications and previous work experience (whether substantiated or not)

- (iv) Period since last economically active
- (v) Preference for type of work or task.

The Contractor shall make his selection of workers from amongst the applicants, taking due cognisance of his requirements for the workforce and the provisions of the contract in regard to the provision of training to the workforce and in accordance with the following principles:

- (i) No potential temporary worker shall be precluded from being employed by the Contractor on the execution of the Works, by virtue of his lack of skill in any suitable operation forming part of the Works, unless –
 - all available vacancies have been or can be filled by temporary workers who already possess suitable skills, or
 - the Time for Completion allowed in the Contract, or the remaining portion of the Contract Period (as the case may be) is insufficient to facilitate the creation of the necessary skills.
- (ii) Preference shall be given to the unemployed and single heads of households.
- (iii) The Contractor shall, in so far as is reasonably practicable, give priority to accommodating the applicants' expressed preferences regarding the types of work for which they are selected.
- (iv) The selection process shall not be prejudicial to youth (over the age of fifteen years) and women.

After making his selection, the Contractor shall advise the Engineer thereof, in writing and the Engineer shall, without undue delay, ratify the Contractor's selection.

The provisions of this clause shall apply *mutatis mutandis* in respect of the selection of additional or replacement members of the workforce as may be necessary from time to time during the Contract.

C8 TERMS AND CONDITIONS PERTAINING TO THE EMPLOYMENT OF THE TEMPORARY WORKFORCE (EPWP LABOURERS)

- C8.1** All temporary workers engaged in accordance with the provisions of the Construction Specifications, shall be employed on the terms and conditions of employment as are consistent with those as set out in this Contract.

The Contractor shall implement and adhere strictly to such terms and conditions relating to the employment of the temporary workforce, and subject only to the provisions of this Contract, shall not employ any temporary worker on terms and conditions which are less favourable to the worker or inconsistent with the standards and norms generally applicable to temporary workers in the Civil Engineering Industry and applicable to the particular area.

- C8.2** The Contractor shall pay to all temporary workers engaged in terms of Part A of the Construction Specifications, an amount of R150.00, per day.

C9 LABOUR RELATIONS AND WORKER GRIEVANCE PROCEDURES

The Contractor, as the Employer of the workforce, shall be fully responsible for the establishment and maintenance at his own cost, of satisfactory labour relations on site and the resolution of all grievances of temporary workers as may occur.

The Contractor shall at all times adhere to the accepted norms and standards of labour relations prevailing generally in the Civil Engineering Construction Industry and shall conduct himself in a fair and reasonable manner, within the constraints as may be imposed upon him by the terms of the Contract.

In the event of any temporary worker engaged by the Contractor in terms of the Contract, being aggrieved with regard to his terms of employment, working conditions and training, he shall have the right, at his discretion, to be supported in any inquiry or disciplinary hearing or investigation instituted by the Contractor by one member of the temporary workforce and one member of the Project Committee, which persons shall be nominated by the worker.

In the event of any grievance not being satisfactorily resolved through the application of normal dispute resolution procedures, then either the Contractor or the worker concerned may require that the matter be referred to the Project Committee for further consideration, with a view to facilitate the resolution thereof.

C10 THE SUBCONTRACTORS' WORKFORCES

The provisions of this Part F shall apply *mutatis mutandis* to the workforces employed by all Subcontractors engaged by the Contractor and the Contractor shall be fully responsible for ensuring, at his own cost, that the terms of every subcontract agreement entered into are such as to facilitate the application of these provisions in respect of the workforces of all Subcontractors.

The Contractor shall at his own cost and to the extent necessary, assist and monitor all Subcontractors in the application of the provisions of this Specification, and shall, in terms of the Conditions of Contract, remain fully liable in respect of the acts, omissions and neglects of all Subcontractors, in respect of the application of the provisions of this Specification.

11 MEASUREMENT AND PAYMENT

The Contractor will not be separately reimbursed or compensated in respect of the provision of the workforce and creation of temporary employment opportunities and all the Contractor's costs associated with compliance with the provisions of this part of the Construction Specifications shall, except to the extent provided for in Part G as relevant, be deemed to be included in the rates bided for the various items of work listed in the Bill of Quantities.

PART D PROVISION OF STRUCTURED TRAINING

CONTENTS

D1	SCOPE
D2	INTERPRETATIONS
D3	ENGINEERING SKILLS TRAINING
D4	ENTREPRENEURIAL SKILLS TRAINING
D5	MEASUREMENT AND PAYMENT

D1 SCOPE

This specification covers the requirements for the provision of the following training:

(i) Specified structured training to selected members of the workforce and small, medium and micro enterprises (SMME's) by a selected Subcontractor as appointed by the Employer.

(ii) Additional training deemed necessary by the Contractor, to members of the workforce and small, medium and micro enterprises (SMME's).

D2 INTERPRETATIONS

D2.1 Supporting documents

The Bid Rules, Conditions Of Contract, Standard, Supplementary and Specific Specifications and Construction Specifications and drawings shall *inter alia* be read in conjunction with this specification.

D2.2 Application

The provisions of this specification shall apply in respect of all workers and small, medium and micro enterprises other than the Contractor's key personnel, who are engaged on the execution of the works.

D3 ENGINEERING SKILLS TRAINING

The Contractor shall, from the commencement of the contract, implement a structured training programme comprising of the training delivered by the Selected Subcontractor and any additional training as provided for by the Contractor, in which the various skills required for the execution and completion of the works are imparted to the workers, and where applicable, small, medium and micro enterprises engaged thereon, in a programmed and progressive manner.

Selected workers shall be trained progressively throughout the duration of the contract in the various stages of a particular type of work.

D3.2 Training programme

The skills training programme to be implemented by the Selected Subcontractor shall comply with the following minimum standards:

- a) Be accredited by the Civil Engineering Industry Training Scheme (CEITS) or other institution recognised by the Department of Labour, as being appropriate for application on this project. Accredited training refers to both the trainers as well as to the training materials.
- b) Be delivered by suitably qualified and experienced trainers accredited to do so.

D3.3 In house training

The Contractor shall provide with his bid, full details of any additional accredited and in-house training, viewed to be necessary by the Contractor, which he intends to implement at his own cost. These details shall include the following:

- (i) The name of the accredited training institution and programme
- (ii) The various aspects of each type of training comprised in the programme
- (iii) The manner in which the training is to be delivered
- (iv) The numbers and details of the trainers to be utilized.

Details of such additional skills training shall be attached to Form H of the forms to be completed by the Contractor.

D3.4 Additional training

The Contractor shall be responsible for the provision of the following necessary for the delivery of the specified and additional skills training programme, including the following:

- (i) Sufficient skilled, competent and accredited trainers to deliver the additional training programme to workers in accordance with the training programme
- (ii) A suitably furnished venue
- (iii) Transport of the workers as required
- (iv) Tools, equipment, and teaching aids
- (v) Stationery and all other necessary materials.

D3.5 Selection of candidates

Members of the workforce will be selected by the Engineer, assisted by the Contractor and the Liaison Officer, to receive specific training as approved by the Engineer.

The following will be taken into account in the selection of the workers to receive the specified training:

- (i) Previous experience (if any)
- (ii) Previous courses completed (if any)
- (iii) Module specific requirements.

D3.6 Duration of training

The Contractor shall allow in his programme for the selected members of the workforce to be engaged in the specified training modules.

Provision must also be made by the Contractor for members of the workforce to receive any additional training as provided for by the Contractor.

D3.7 Training hours

All specified skills-related training shall take place only during normal working hours and the Contractor shall ensure that the selected workers are available at the appropriate times to undergo such training.

D3.8 Approval of training

Both the Selected Subcontractor's and the Contractor's additional training programme shall be subject to the approval of the Engineer, and if so instructed by the Engineer, the Contractor shall alter or amend the programme and course content to suit changing conditions on site and all changes in the Contractor's programme of work.

D3.9 Training record

The Contractor shall keep comprehensive records of the training given to each worker involved in training as well as the nature and number of each task executed by the worker and whenever required shall provide copies of such records to the Engineer.

D3.10 Remuneration during training

Workers shall be remunerated in respect of all time spent undergoing the specified training in terms of Clause D03.02, at the minimum specified wage rate for the area of the Works.

D3.11 Use of workers

The Contractor shall, in so far as it is reasonably feasible, take due cognizance of the nature of the works to be executed at any given time and use trained workers on those aspects of the works for which they have been trained.

D4 ENTREPRENEURIAL SKILLS TRAINING

D4.1 Selection of Candidates

Members from selected small, medium and micro enterprises employed by the Contractor as Subcontractors will be entitled to receive a structured training programme, comprising of training delivered by a Selected Subcontractor and any additional training as provided for by the Contractor, the training will comprise both management skills as well as business development skills.

D4.2 Performance and monitoring

The Contractor shall closely monitor the performance of all the Subcontractors in the execution of their contracts and shall identify all such Subcontractors who, in his opinion, display the potential to benefit from structured training as may be provided for elsewhere in the Contract and where required by the Engineer, and shall make recommendations in this regard. The final list of candidates will be decided between the Contractor, the Engineer and the Project Committee.

D4.3 Delivery of training

The Contractor shall assist in facilitating in the delivery of the training, by instructing and motivating the Subcontractor's regarding attendance and participation therein.

D4.4 Programming of work and training

The Contractor shall further make all reasonable efforts to co-ordinate the programming of the Subcontractor's work with that of the delivery of the structured training.

D4.5 Training standards

The entrepreneurial skills training programme to be implemented by the selected Subcontractor shall comply with the following minimum standards:

- (i) Be accredited by the Civil Engineering Industry Training Scheme (CEITS) or other institution recognised by the Department of Labour, as being appropriate for application on this project. Accredited training refers to both the trainers as well as to the training materials.
- (i) Be delivered by suitably qualified and experienced trainers accredited to do so.

D4.6 Certificates

Following completion of the structured training, members of small, medium and micro Subcontractors that have demonstrated understanding of and competence in the training material are to be appropriately certified by the accrediting body.

D4.7 In house training and additional training

The Contractor shall provide with his bid, full details of any additional accredited and in-house training, viewed to be necessary by the Contractor, which he intends to implement at his own cost. These details shall include the following:

- (i) The name of the training institution and programme
- (ii) The various aspects of each type of training comprised in the programme
- (iii) The manner in which the training is to be delivered
- (iv) The numbers and details of the trainers to be utilized.

Details of such additional entrepreneurial training shall be attached to Form H of the forms to be completed by the Contractor.

D4.8 Provision of entrepreneurial training

The Contractor shall be responsible for the provision of the following necessary for the delivery of the entrepreneurial training programme, including the following:

- (i) Sufficient skilled and competent trainers to deliver the additional training programme to trainees in accordance with the training programme
- (ii) A suitably furnished venue
- (iii) Transport of the trainees as required
- (iv) Tools, equipment, and teaching aids
- (v) Stationery and all other necessary materials.

D4.9 Training hours

All specified entrepreneurial training shall take place within normal working hours.

D4.10 Approval of training

Both the Selected Subcontractor's and the Contractor's training programme shall be subject to the approval of the Engineer, and if so instructed by the Engineer shall alter or amend the programme and course content.

D4.11 Training records

The Contractor shall keep comprehensive records of the training given to each Subcontractor involved in training and whenever required shall provide copies of such records to the Engineer. At the successful completion of each course each Subcontractor shall be issued with a certificate indicating the course contents as proof of attendance and completion.

D4.12 Remuneration during training

No remuneration in respect of time spent undergoing specified training in terms of this clause will be made to any of the Subcontractors.

D5 MEASUREMENT AND PAYMENT

D5.1 Basic principles

a) General

Measurement and payment for all work executed in terms of this contract shall be measured and paid for in accordance with the principles set out in Clause B1232 of the Construction Specifications, irrespective of whether the work is executed as an integral part of the provision of training in terms of this specification.

b) Training

The Contractor shall only be reimbursed for the amounts actually paid by the Contractor to the Selected Subcontractors as appointed by the Employer, in execution of the Engineer's written instruction, plus a percentage as bided to cover all his charges and profits.

D5.2 Scheduled items

Payment items are included in the bill of Quantities under Section 1200 for the provision of the specified training by selected Subcontractors only. Any additional training as viewed by the Contractor to be necessary shall be viewed to be included under Section 1300 and shall not be paid for separately.

PART E: DEVELOPMENT OF THE SMME CONTRACTORS AND LOCAL LABOUR.

A value of this contract, excluding escalation and contingencies, must be allocated to the development of the SMME Contractors and Local labour.

This may include but is not limited to:

- The employment and training of local labour;
- Purchasing of materials from local suppliers;
- Renting of local transport;
- Employment of local sub-contractors.
- Employment of local security companies.

The SMME's must be selected through the Metsimaholo Local Municipality Programme.

- i) The EPWP Guidelines will be implemented on all gravel roads projects.
- ii) The contractor must employ local labourers on this contract.
- iii) The contractor is to appoint local sub-contractors (SMMEs) through the Metsimaholo Local Municipality Programme, to undertake the execution of the works that are required in this bid to complete the project.

PART F: PROVISION OF A SITE SAFETY OFFICER

The person that will undertake the OHS Act Compliance Monitoring must have the following qualifications and competency:

- Qualification of SAMTRAC or the National Diploma in Safety Management (NADSAM).
- Be registered with the South African Council for Projects and Construction Management Professionals (SACPCMP) or in a process of registering with SACPCMP and letter confirming that the application is being processed.
- Five years' experience in OHS safety monitoring of civil engineering construction projects.
- Identify the risks and hazards that the workers of the project and the community may be exposed to, and analyse and evaluate the risks and hazards identified based on a documented method.
- Prepare the Fall Protection Plan which includes the outlining of all risks relating to working from fall- risk position, considering the nature of work undertaken, stipulate in writing the procedures and methods to be applied to eliminate the risk and prepare a rescue plan.

PART G : SUPPLEMENT TO THE CONTRACT: SPECIFICATION FOR OCCUPATIONAL HEALTH AND SAFETY

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G1 SCOPE

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

This specification shall be read with Part 5, C5.2: Specification for Occupational Health and Safety, the Occupational Health and Safety Act (Act No. 85 and amendment Act No. 181) 1993, and the corresponding Construction Regulations, 2014, and all other safety codes and specifications referred to in the said Construction Regulations.

In terms of the OHS Act Agreement in Section 9 of the bid document, the status of the Contractor as Mandatary to the Employer is that of an Employer in his own right, responsible to comply with all provisions of OHS Act 1993 and the Construction Regulations, 2014.

This Specification supplements the Metsimaholo Municipality Roads Agency's Specification for Occupational Health and Safety which is contained in Part 5, C5.2 of the Contract documents. In the event of any variation between this section and Part 5 of the Contract, Part 5 shall have precedence.

Part 5 of the Contract and the Contractor's own Safety Plan as well as the Construction Regulations, 2014, shall be displayed on site and made available for inspection by all workers, employees, inspectors and any other persons entering the site of works.

G2 DEFINITIONS

For the purpose of this contract the following shall apply:

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

“Contractor”, wherever used in the contract documents and in this specification, shall have the same meaning as **“Contractor”** as defined in the General Conditions of Contract. For bid purposes, **“Contractor”** shall also mean **“Contractor”**.

In this specification the terms **“Principal Contractor”** and **“Contractor”** are replaced with **“Contractor”** and **“Subcontractor”** respectively.

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

“Engineer” where used in this specification, means the Engineer as defined in the General Conditions of Contract. In terms of the Construction Regulations the Engineer may act as agent on behalf of the Employer (the Client as defined in the Construction Regulations).

G3 BIDS

For bid purposes:

- a) The Contractor shall sign Volume 3: Part 1 Form C1.6. The form contains a declaration that the Contractor is conversant with legislation and documentation pertaining to Occupation Health and Safety (OHS) Act requirements which will be applicable to the contract. The form also includes a declaration that the Contractor has, or will obtain, the necessary knowledge, competence and resources to comply with the OHS Act requirements of the Contract.
- b) The Contractor shall submit with his bid a written proposal describing how he will comply with the OHS Act requirements of the Contract.

The proposal shall specify or describe, as the case may be, at least the following:

- (i) Has the Contractor had previous experience with contracts where the Construction Regulations and either the MLM's OHS specification or another Employer's OHS specification applied? If so, give details of the type of contract.
- (ii) Has the Contractor produced a Health and Safety Plan before. If so, give details of the type of contract.

- (iii) If the Contractor has not had the previous experience or produced a Health and Safety Plan as per (i) and (ii) above, specify whether the Contractor has in-house personnel who are competent to manage and comply with OHS requirements, or whether assistance will be obtained from outside the company.
- (iv) The Contractor's brief remarks about which aspects of Health and Safety he considers to be of particular importance with regard to the Contract, and how these aspects will be addressed.

Note

Failure to submit the required proposal or failure to submit any further information requested by the Employer or the Engineer during bid evaluation will lead to the conclusion that the Contractor is not able to carry out the work under the contract safely in accordance with the Construction Regulations, 2014 and will result in the bid being subject to disqualification.

G4 NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION WORK

The contractor shall, where the contract meets the requirements laid down in Construction Regulation 4 prior to commencement notify the Department of Labour of the intention to carry out construction work and use the form (pro forma included in Volume 3: Part 5 Section C5.2) for the purpose. A copy shall be kept on the OH&S file and a copy shall be forwarded to the Employer for record keeping purposes.

G5 GUIDELINES FOR THE DEVELOPMENT OF A HEALTH & SAFETY PLAN

G5.1 Project Background

In terms of the Construction Regulation 5(1)(b), the Employer is required to compile site specific health and safety specifications for each of its projects and the Contractor, appointed by the Employer in terms of Construction Regulation 5(1)(K), is required to prepare an Occupational Health and Safety Plan. This plan has to be prepared in terms of Construction Regulation 7(1)(a) as well as the Employer's site specific health and safety specifications. In terms of Construction Regulation 5(1)(l), the Employer and the Contractor are required to discuss and negotiate the content of the plan and the Employer must there after finally approve the plan for implementation. Work may only commence after the final approval of Occupational Health and Safety Plan.

G5.2 Framework for an Occupational Health and Safety Plan

G5.2.1 Introduction

The Contractor has to demonstrate to the Employer that he has a suitable and sufficiently documented Occupational Health and Safety Plan as well as the necessary competencies, experience and resources to perform the construction

work safely. The Contractor could be required to submit the following documentation for perusal and verification by the Employer:

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

G5.2..2 Occupational Health and Safety Management Programme

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

G5.2.3 Communication and Management of the Work

- Management structure and responsibilities
- Occupational Health and Safety objectives for the project and arrangements for monitoring and review of Occupational Health and Safety performance

Arrangements for

- Regular liaison between parties on site
- Consultation with the workforce
- The exchange of design information between the Employer, Engineer, supervisors and Subcontractors on site
- Handling design changes during the project
- Selection and control of Subcontractors
- The exchange of Occupational Health and Safety information between all Subcontractors
- Security
- Site induction and on site training
- Facilities and first-aid
- The reporting and investigation of accidents and incidents
- The production and approval of risk assessments and method statements
- Site Occupational Health and Safety rules

- Fire and emergency procedures
- Reporting to the Employer i.e. results of Occupational Health and Safety inspections, incident and incident investigations and committee meetings
- Reporting of incidents to the Department of Labour and Compensation insurer where appropriate

G5.2.4 Arrangements for controlling significant site risks

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

Safety risks

- Services, including temporary electrical installations
- Preventing employees from falling into excavations, from trucks etc.
- Work with, on or near fragile materials
- Control of lifting operations
- The maintenance of plant and equipment
- Poor ground conditions
- Traffic routes and segregation of vehicles and pedestrians
- Storage of hazardous materials
- Dealing with existing unstable structures/land
- Accommodating adjacent land use
- Other significant safety risks as and when identified

Health risks

- Storage and use of hazardous chemical substances
- Dealing with contaminated land or material
- Manual handling
- Reducing noise and vibration
- Provision of adequate lighting
- Ventilation considerations
- Extreme heat and cold temperature considerations
- Dealing with HIV/Aids and other illnesses
- Provision of and maintaining ablution and eating facilities
- Other significant health risks as and when identified

G6 HEALTH AND SAFETY FILE

As required by Construction Regulation 7(1), the contractor and subcontractors shall each keep an OH&S file on site. The Health and Safety File is a file or other permanent record containing information on aspects of the construction project -

which will be necessary to ensure the health and safety of any person who may be affected by the construction work.

The Contractor shall appoint a suitably qualified person to prepare the Health and Safety File and to keep it up to date for the duration of the contract.

The following index is neither exhaustive nor prescriptive but recommended as a guide for the contents of the OH&S file:

- Notification of construction work (Construction Regulation 4) where applicable
- Latest copy of OH&S Act (General Administrative Regulation 4)
- Proof of registration and good standing with COID Insurer (Construction Regulation 5(1)(j))
- OH&S plan agreed with the Employer including the underpinning risk assessment/s and method statements (Construction regulation 7(1))
- Copies of OH&S committee and other relevant minutes
- Designs/drawings (Construction Regulation 7(1)(e))
- A list of subcontractors including copies of the agreements between the parties and the type of work being done by each subcontractor (Construction Regulation 7(1)(f))
- Appointment/designation forms as per sub-sub-clause E1002(a)(i) and (ii).

Registers as follows:

- Accident/Incident register (Annexure 1 of the General Administrative Regulations)
- Accommodation of traffic daily inspection book
-
- OH&S representatives' inspection register
- Asbestos demolition and stripping register
- Bulk mixing plant inspections
- Construction vehicles and mobile plant inspections by controller
- Daily inspection of vehicles, plant and other equipment by the operator/driver/user
- Demolition inspection register
- Designer's inspection of structures record
- Drivers/Operators of Mobile Plant/Construction Vehicles Daily Inspections
- Electrical installations, -equipment and -appliances (including portable electrical tools)
- Excavations inspection
- Explosive actuated fastening device inspection, maintenance, issue and returns register (incl. cartridges and nails)
- Fall protection inspection register

- First aid box contents
- Fire equipment inspection and maintenance
- Temporary works inspections
- Hazardous chemical substances record
- Ladder inspections
- Lifting equipment register
- Materials hoist inspection register
- Machinery safety inspection register (incl. machine guards, lock-outs etc.)
- Scaffolding inspections
- Stacking and storage inspection
- Inspection of cranes
- Inspection of structures
- Inspection of suspended platforms
- Inspection of tunnelling operations
- Inspection of vessels under pressure
- Welding equipment inspections
- Inspection of work conducted on or near water
- Welfare facilities as provided

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

G7 RISK ASSESSMENT

The contractor shall, before the commencement of any construction work or work associated with the aforesaid construction work and during such work, conduct a risk assessment by a competent person and the risk assessment so produced shall form part of the OH&S plan and be implemented and maintained as contemplated in Construction Regulation 9(1). Competence is a factor of training, knowledge, experience and/or appropriate qualifications. Where proof of competence is required by the Regulation, a concise CV must be attached to the appointment letter.

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

The risk assessment shall include, as far as is reasonably practicable, at least:

- the identification of the risks and hazards to which persons may be exposed;

- the analysis and evaluation of the risks and hazards identified, inclusive of a residual risk rating methodology. The method to be used is not prescribed;
- a documented plan of safe work procedures, to mitigate, reduce or control those residual risks that have been identified as unacceptably high, by means of the rating system;
- a monitoring plan;
- a review plan, inclusive of dates to be adhered to; and
- ergonomic related risks are to be analyzed, evaluated and addressed as part of the process.

Based on the risk assessments, the contractor shall develop a set of site-specific OH&S rules that shall be applied to regulate the OH&S aspects of the construction. The risk assessments, together with the site-specific OH&S rules shall be submitted to the Employer before construction on site commences.

All variations to the scope of work shall similarly be subjected to a risk assessment process.

The contractor shall review the hazard identification, risk assessments and standard working procedures at each production planning and progress report meeting as the contract work develops and progresses and each time changes are made to the designs, plans and construction methods and processes. The contractor shall provide the Employer, subcontractors and all other concerned parties with copies of any changes, alterations or amendments as contemplated above.

The Contractor must ensure that all Subcontractors conduct risk assessments for their scope of work as well.

The risk assessment shall be available on site for inspection by inspectors, Employer, Engineer, Subcontractors, employees, trade unions and health and safety committee members, and must be monitored and reviewed periodically by the Contractor.

G8 APPOINTMENT OF EMPLOYEES AND SUBCONTRACTORS

G8.1 Health and Safety plan

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

The Contractor shall appoint every sub-contractor in terms of Construction Regulation 7(1)(c)(v)

G8.2 Health and Safety induction training

The Contractor shall ensure that all employees under his control, including Subcontractors and their employees, undergo a health and safety induction-training course by a competent person before commencement of construction work. No visitor

or other person shall be allowed or permitted to enter the site of the works unless such person has undergone health and safety training pertaining to hazards prevalent on site.

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

G8. OH&S Training Requirements:

(as required by the Construction Regulations and as indicated by the OH&S Specification and the Risk Assessment/s)

- General Induction (Section 8 and 14 Of the Act)
- Site/Job Specific Induction (also visitors) (Section 8 & 9 of the Act)
- Site/Project Manager
- Construction Supervisor
- OH&S Representatives (Section 18 (3) of the Act)
- Training of the Appointees indicated in 3.1.1 & 3.1.2 above
- Operation of Cranes (Driven Machinery Regulations 22))

- Operators and Drivers of Construction Vehicles & Mobile Plant (Construction Regulation 23)
- Basic Fire Prevention & Protection (Environmental Regulations 9 and Construction Regulation 29)
- Basic First Aid (General Safety Regulations 3)
- Storekeeping Methods & Safety Stacking (Construction Regulation 26)
- Emergency, Security and Fire Co-ordinator

G9 APPOINTMENT OF SAFETY PERSONNEL

G9.1 Construction Supervisor

The Contractor shall appoint a full-time **Construction Supervisor** with the duty of supervising the performance of the construction work. He may also have to appoint one or more competent employees to assist the construction supervisor where justified by the scope and complexity of the works.

G9.2 Construction Safety Officer

Subject to the decision by the Inspector of the Department of Labour and taking into consideration the size of the project and the hazards or dangers that can be expected, the Contractor shall appoint in writing a full-time or part-time **Construction Safety Officer**. The Safety Officer shall have the necessary competence and resources to perform his duties diligently.

Provision will be made in the schedule of quantities to cover the cost of a dedicated construction safety officer appointed after award of the contract if so ordered by the Engineer.

G9.3 Health and Safety Representatives

In terms of **Section 17 and 18 of the Act (OHSA 1993)** the Contractor shall appoint a **Health and Safety Representative** whenever he has more than 20 employees in his employ on the works. The Health and Safety Representative must be selected from employees who are employed in a full-time capacity at a specific workplace.

The number of Health and Safety Representatives for a workplace shall be at least one for every 50 employees.

The function of the Health and Safety Representative(s) will be to review the effectiveness of Health and Safety measures, to identify potential hazards and major incidents, to examine causes of incidents (in collaboration with his Employer, the Contractor), to investigate complaints by employees relating to health and safety at work, to make representations to the Employer (Contractor) or inspector on general matters affecting the health and safety of employees, to inspect the workplace, plant, machinery etc. on a regular basis, to participate in consultations with inspectors and to attend meetings of the health and safety committee.

G9.4 Health and Safety Committee

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

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

G9.5 Competent Persons

In accordance with the Construction Regulations the Contractor shall appoint, in writing, **Competent Persons** responsible for supervising construction work for the following work situations that may be expected on the site of the works.

- Risk assessment (Regulation 9);
- Fall protection (Regulation 10);
- Structures (Regulation 11);

- Temporary works (Regulation 10);
- Excavation work (Regulation 13);
- Demolition work (Regulation 14);
- Tunneling (Regulation 15);
- Scaffolding work (Regulation 16);
- Suspended platforms (Regulation 17);
- Rope access work (Regulation 18);
- Material hoists (Regulation 19);
- Bulk mixing plant (Regulation 20);
- Explosive actuated fastening device (Regulation 21);
- Cranes (Regulation 22);
- Construction vehicle and mobile plant (Regulation 23);
- Electrical installation and machinery on construction sites (Regulation 24);
- Use of temporary storage of flammable liquids on construction sites (Regulation 25);
- Water environments (Regulation 26);
- Housekeeping and general safeguarding on construction sites (Regulation 27);
- Stacking and storage on construction sites (Regulation 28);
- Fire precautions on construction sites (Regulation 29); and
- Construction employees' facilities (Regulation 30)

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

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

G10 CONTRACTOR'S RESPONSIBILITIES

Before commencement of work under the Contract, the Contractor shall enter into an agreement with the Employer to confirm his status as mandatary (Employer) for the Contract under consideration.

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

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

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

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

The Contractor and Subcontractor (Regulation 5)

The Contractor is, in terms of the definition in Regulation 2(b), the equivalent of Contractor as defined in the Construction Regulations, and he shall comply with all the provisions of Regulation 5. Any Subcontractor employed by the Contractor must be appointed in writing, setting out the terms of the appointment in respect of health and safety. An independent Subcontractor shall, however, provide and demonstrate to the Contractor a suitable, acceptable and sufficiently documented health and safety plan before commencement of the subcontract. In the absence of such a health and safety plan the Subcontractor shall undertake in writing that he will comply with the Contractor's safety plan, the health and safety specifications of the Employer and the Construction Regulations 2003.

Management and supervision of construction work (Regulation 8)

The Contractor shall appoint the safety and other personnel and employees as required in terms of Regulation 8 and as set out in paragraphs E8 and E9 above. Appointment of those personnel and employees does not relieve the Contractor from any of the obligations under Regulation 7.

Risk assessment for construction work (Regulation 9)

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

No Subcontractor, employee or visitor shall be allowed to enter site of works without prior health and safety induction training, all as specified in Regulation 9.

Fall protection (Regulation 10)

Fall protection, if applicable to this contract shall comply in all respects with Regulation 10 of this Construction Regulations.

Structures (Regulation 11)

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

Contractor shall comply with all aspects of Regulation 11 of the Construction Regulations.

Temporary works (Regulation 12)

The Contractor will be responsible for the adequate design of all temporary work structures by a competent person. All drawings pertaining to temporary work structures shall be kept on site and all equipment and materials used in temporary work structures, shall be carefully examined and checked for suitability by a competent person. A design certificate of the temporary work structures shall be submitted by a Professional Engineer. The provisions of Regulation 12 of the Construction Regulations shall be followed in every detail.

Excavation work (Regulation 13)

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

Supervision by a competent person will not relieve the Contractor from any of his duties and responsibilities under Regulation 13 of the Construction Regulations.

Demolition work (Regulation 14)

Whenever demolition work is included in a contract, the Contractor shall comply with all the requirements of Regulation 14 of the Construction Regulations. The fact that a competent person has to be appointed by the Contractor does not relieve the Contractor from any of his responsibilities in respect of safety of demolition work.

Tunneling (Regulation 15)

The Contractor shall comply with Regulation 15 wherever tunneling of any kind is involved.

Scaffolding (Regulation 16)

The Contractor shall ensure that all the provisions of Regulation 16 of the Construction Regulations are complied with. [Note ; Reference in the Regulations to "Section 44 of the Act" should read "Section 43 of the Act"]

Suspended platforms (Regulation 17)

Wherever suspended platforms will be necessary on any contract, the Contractor shall ensure that copies of the system design issued by a Professional Engineer are submitted to the Engineer for inspection and approval. The Contractor shall appoint competent persons as supervisors and

competent scaffold erectors, operators and inspectors and ensure that all work related to suspended platforms are done in accordance with Regulations 17 of the Construction Regulations.

Rope access work (Regulation 18)

Where boatswain's chains are required on the construction site, the Contractor shall comply with Regulation 18.

Material hoists (Regulation 19)

Wherever applicable, the Contractor shall comply with the provisions of Regulation 19 to the letter.

Bulk mixing plant (Regulation 20)

Wherever applicable, the Contractor shall ensure that all lifting machines, lifting tackle, conveyors, etc. used in the operation of a bulk mixing plant shall comply with, and that all operators, supervisors and employees are strictly held to the provisions of Regulation 20. The Contractor shall ensure that the General Safety Regulations (Government Notice R1031 of 30 May 1986), the Driven Machinery Regulations (Government Notice R295 of 26 February 1988) and the Electrical Installation Regulations (Government Notice R2271 of 11 October 1995) are adhered to by all involved. In terms of the Regulations, records of repairs and maintenance shall be kept on site.

Explosive actuated fastening device (Regulation 21)

The Contractor shall ensure that, wherever explosive actuated fastening devices are required to be used, all safety provisions of Regulation 21 are complied with. It is especially important that warning notices are displayed and the issue and return of cartridges and spent cartridges be recorded in a register to be kept on site.

Cranes (Regulation 22)

Wherever the use of tower cranes becomes necessary, the provisions of Regulations 22 shall be complied with.

Construction vehicles and mobile plant (Regulation 23)

The Contractor shall ensure that all construction vehicles and plant are in good working condition and safe for use, and that they are used in accordance with their design and intended use. Workers or operators who have received appropriate training, all in accordance with all the requirements of Regulation 23, shall only operate the vehicles and plant. All vehicles and plant must be inspected on a daily basis, prior to use, by a competent person and the findings must be recorded in a register to be kept on site.

Electrical installation and machinery on construction sites (Regulation 24)

The Contractor shall comply with the Electrical Installation Regulations (Government Notice R2920 of 23 October 1992) and the Electrical Machinery Regulations (Government Notice R1953 of 12 August 1993). Before commencement of construction, the Contractor shall take adequate steps to

ascertain the presence of, and guard against dangers and hazards due to electrical cables and apparatus under, over or on the site. All temporary electrical installations on the site shall be under the control of a competent person, without relieving the Contractor of his responsibility for the health and safety of all workers and persons on site in terms of Regulation 24.

Use of temporary storage of flammable liquids on construction sites (Regulation 25)

The Contractor shall comply with the provisions of the General Safety Regulations, 2003 and all the provisions of Regulation 25 of the Construction Regulations to sure a safe and hazard-free environment to all workers and other persons on site.

Water environment (Regulation 26)

Where construction work is done over or in close proximity to water, the provisions of Regulation 26 shall apply.

Housekeeping and general safeguarding on Construction sites (Regulation 27)

Housekeeping on all construction sites shall be in accordance with the provisions of the Environmental Regulations for Workplaces, 1987 and all the provisions of Regulation 27 of the Construction Regulations.

Stacking and Storage on Construction sites (Regulation 28)

The provisions for the stacking of articles contained in the General Safety Regulations, 2003 as well as all the provisions of Regulation 28 of the Construction Regulations shall apply.

Fire Precautions on Construction sites (Regulation 29)

The provisions of the Environmental Regulations for Workplaces, 1987 shall apply. In addition, the necessary precautions shall be taken to prevent the incidence of fires, to provide adequate and sufficient fire protection equipment, sirens, escape routes etc. all in accordance with Regulation 29 of the Construction Regulations.

Construction employees' facilities (Regulation 30)

The Contractor shall comply with the construction site provisions as in the Facilities Regulations, 2004 and the provisions of Regulation 30 of the Construction Regulations.

Offences and penalties (Regulation 33)

The Contractor, as Employer for the execution of the contract, shall ensure that all provisions of the Construction Regulations applicable to the contract under consideration are complied with. Any person who contravenes or fails to comply with any provision of regulations 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 and 30, is guilty of an offence and liable upon conviction to a fine or to imprisonment for a maximum of 12 months and, in case of a continuous offence, not exceeding an additional fine of R200 or additional imprisonment of one day for each day on which the offence continues: Provided that the period of such imprisonment will not exceed 90

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

G11 PROJECT / SITE SPECIFIC REQUIREMENTS

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

- Clearing and Grubbing of the Site
- Site Establishment
- Dealing with existing structures
- Location and relocation of existing structures
- Installation and maintenance of temporary construction electrical supply, lighting and equipment
- Health risk arising from neighboring as well as own activities and from the environment e.g. threats by dogs, bees, snakes, lightning etc.
- Accommodation of traffic
- Exposure to noise
- Exposure to vibration
- Exposure to bituminous products
- Protection against dehydration and heat exhaustion
- Protection from wet & cold conditions
- Dealing with HIV/Aids and other diseases
- Use of Portable Electrical Equipment including
 - Angle grinder
 - Electrical drilling machine
- Excavations including
 - Ground / soil conditions
 - Trenching
 - Shoring
 - Drainage of trench
- Foundation excavations for structures
- Use of LP gas torches and appliances
- Loading & offloading of trucks
- Aggregate/sand and other materials delivery
- Manual and mechanical handling
- Lifting and lowering operations
- Driving & operation of construction vehicles and mobile plant including
 - Excavator

- Bomag roller
- Plate compactor
- Front end loader
- Parking of vehicles & mobile plant
- Towing of vehicles & mobile plant
- Use and storage of flammable liquids and other hazardous substances
- Bedding of trench floor
- Installation of pipes in trench
- Backfilling of trench
- Protection against flooding
- Use of explosives
- As discovered by the Contractor's hazard identification exercise
- As discovered from any inspections and audits conducted by the Employer or by the Contractor or any other Contractor on site.
- As discovered from any accident/incident investigation.

G12: ARRANGEMENTS FOR MONITORING AND REVIEW

The Employer will conduct audits for compliance with Construction Regulation 5(1)(o) to ensure that the Contractor has implemented and is maintaining the agreed and approved OH&S Plan.

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

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

TENDER DRAWINGS

The work shall be carried out in accordance with the following drawings which form part of these contract documents:

GENERAL

ROADS:

- 4 CROSS FALL OF 2 % (IF APPLICABLE)

BENCHMARKS			
NAME	Y	X	Z
K51	-36855.027	2975335.865	1484.835
K52	-36846.658	2975334.465	1484.835
K53	-36825.484	2975344.178	1481.054
K54	-36759.584	2975344.947	1481.054
K55	-36779.269	2975388.270	1481.123
K56	-36778.018	2974747.760	1481.119
K57	-46545.996	2973027.560	1486.656
K58	-46545.996	2973086.890	1486.962
K59	-45839.565	2973027.052	1480.598

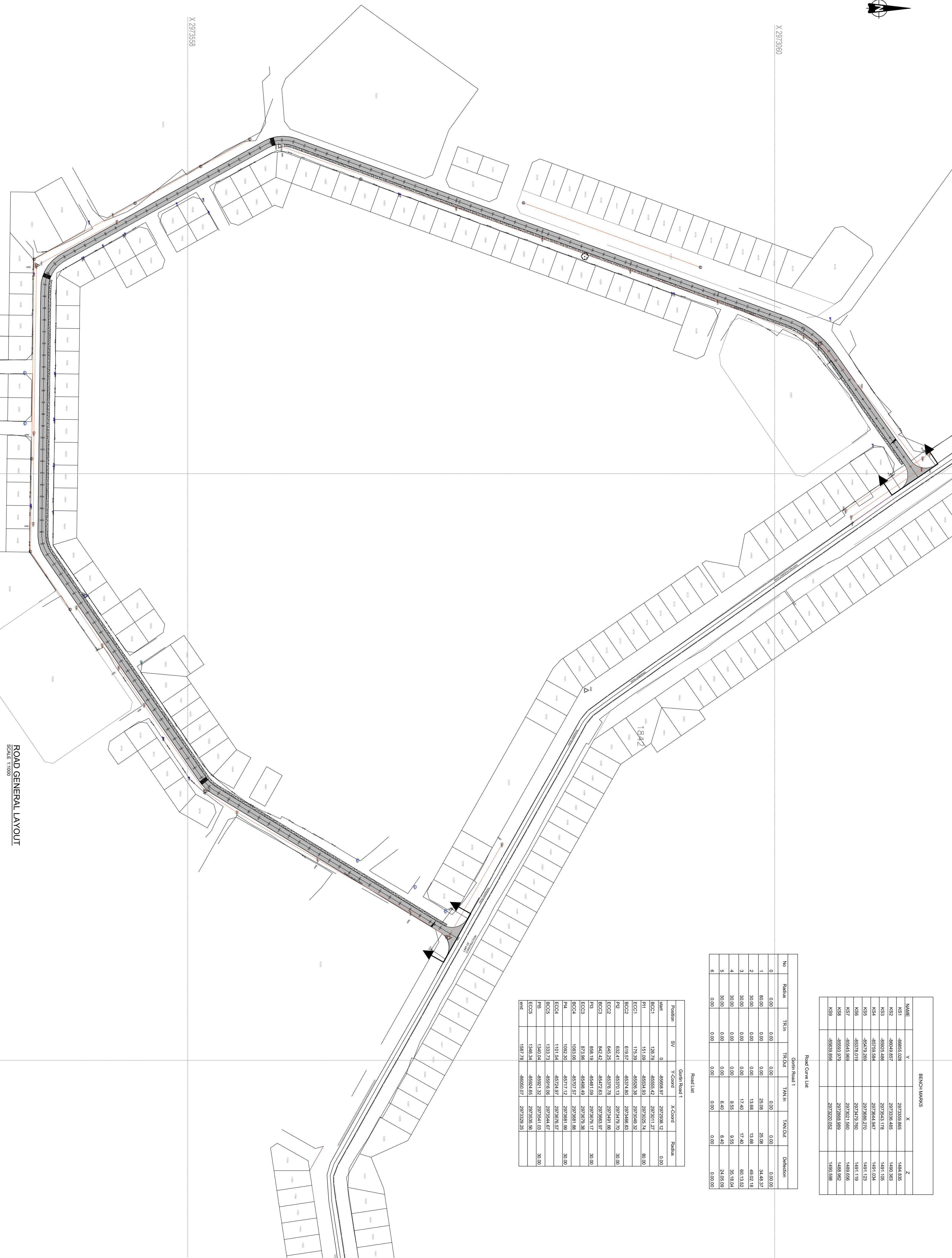
Road Curve List

		Groom round 1				Definition
No	Residue	Tail in	Tail Out	Tail in	Tail Out	
0	0.01	0.00	0.00	0.00	0.01	0.00.00
1	80.00	0.00	0.00	25.08	25.08	34.84.37
2	30.00	0.00	0.00	13.68	13.68	49.02.18
3	30.00	0.00	0.00	17.40	17.40	60.13.52
4	30.00	0.00	0.00	9.55	9.55	35.18.04
5	30.00	0.00	0.00	6.40	6.40	24.05.09
6	0.00	0.00	0.00	0.00	0.00	0.00.00



Road Lis

Position	SV	Y-axis Road 1	X-axis	Radius
Start	0	555658.97	2972938.12	0.00
BC01	128.79	555565.42	2973161.37	
P01	151.69	555583.85	2973125.14	80.00
EC01	173.59	555626.38	2973068.32	
BC02	619.57	555714.98	2973068.63	
P02	632.41	555701.13	2973079.10	30.00
EC02	645.25	555705.78	2973079.66	
BC03	842.42	555702.63	2973063.97	
P03	858.19	555671.89	2973078.17	30.00
EC03	873.65	555649.49	2973078.98	
BC04	1063.96	555707.57	2973081.88	
P04	1092.30	555717.12	2973081.99	30.00
EC04	1101.54	555724.97	2973084.97	
BC05	1333.73	555716.65	2973084.67	
P05	1340.04	555712.32	2973074.11	30.00
EC05	1346.34	555624.65	2973056.96	
	1587.78	555650.57	2973029.55	



SHEET LAYOUT

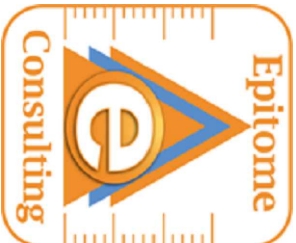
PROJECT STATUS

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METSIMAHOLO LOCAL MUNICIPALITY

PO BOX 80
1747
SASOLBURG
TEL: 016 973 8500


**Metsimaholo
Municipality**

[illegible]



GENERAL

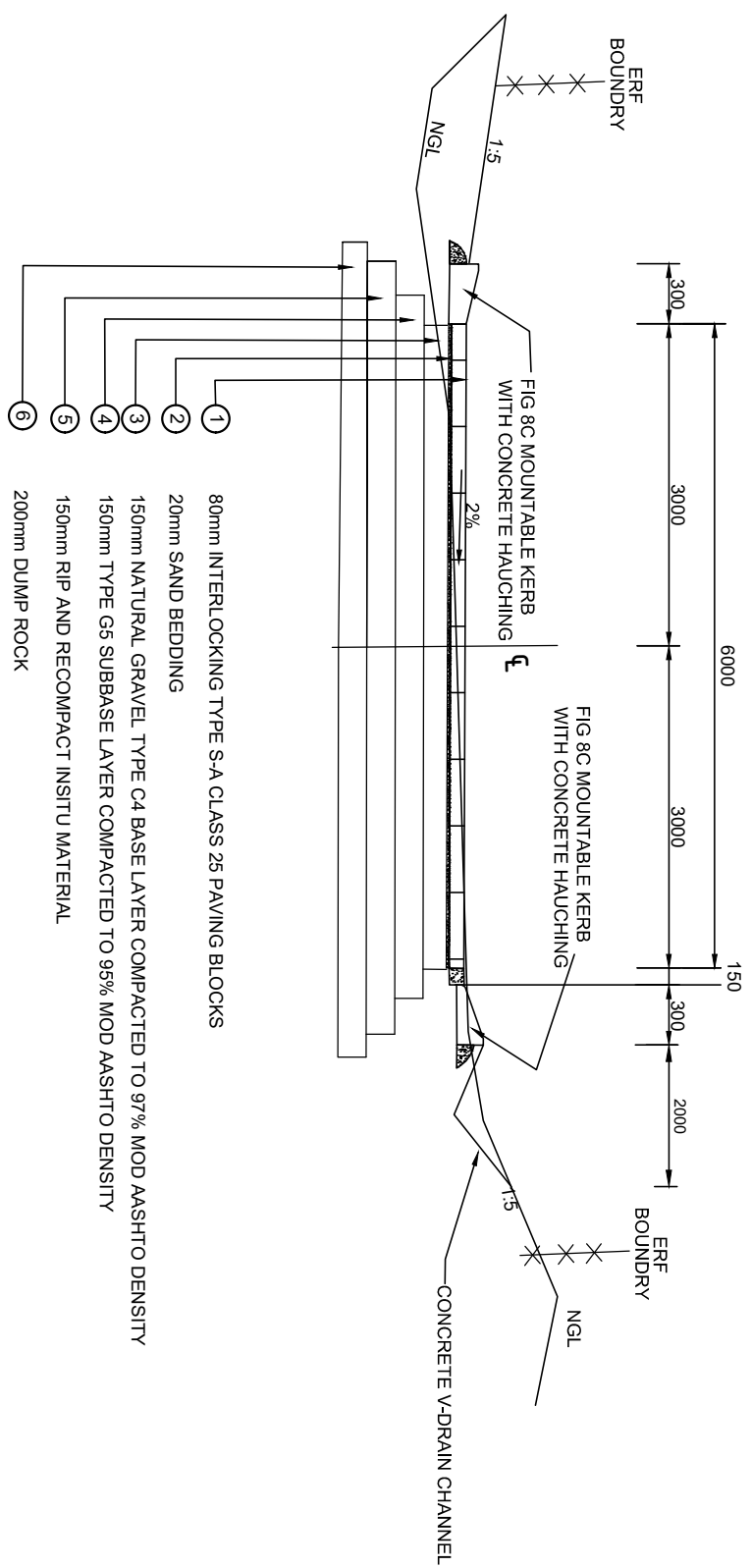
ROADS:
 KEEPING TO BE AS PER STANDARD DETAIL PLANS
 TRAFFIC CONTROL MUST COMPLY WITH THE
 REQUIREMENTS OF THE SOUTH AFRICAN ROAD
 TRAFFIC SIGNS MANUAL (THIRD EDITION).
 VERTICAL AND HORIZONTAL ALIGNMENT TO FOLLOW
 THE EXISTING ROADS, WITH A MINIMUM
 CROSS FALL OF 2 % (IF APPLICABLE)

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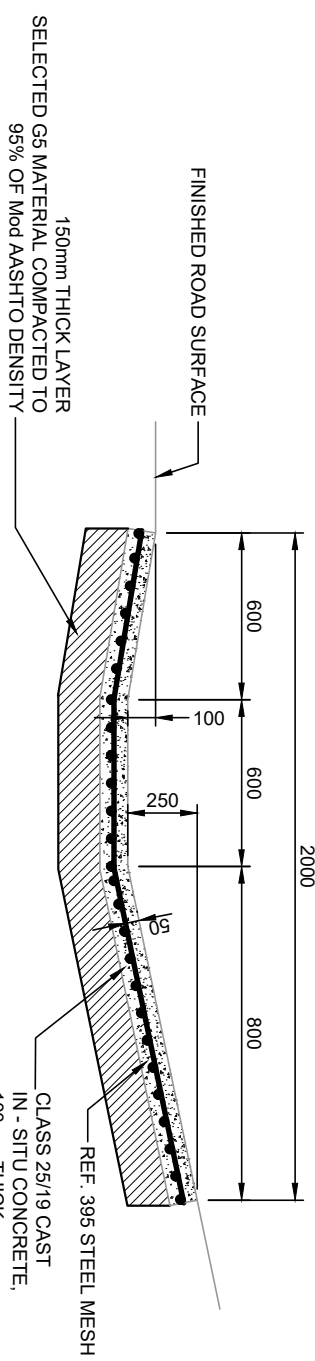
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 THE EXISTING ROADS, WITH A MINIMUM
 CROSS FALL OF 2 % (IF APPLICABLE)



TYPICAL CROSS SECTION

NS



TYPE 3: LARGE SIDE DRAIN ALLOWING ERF ACCESS

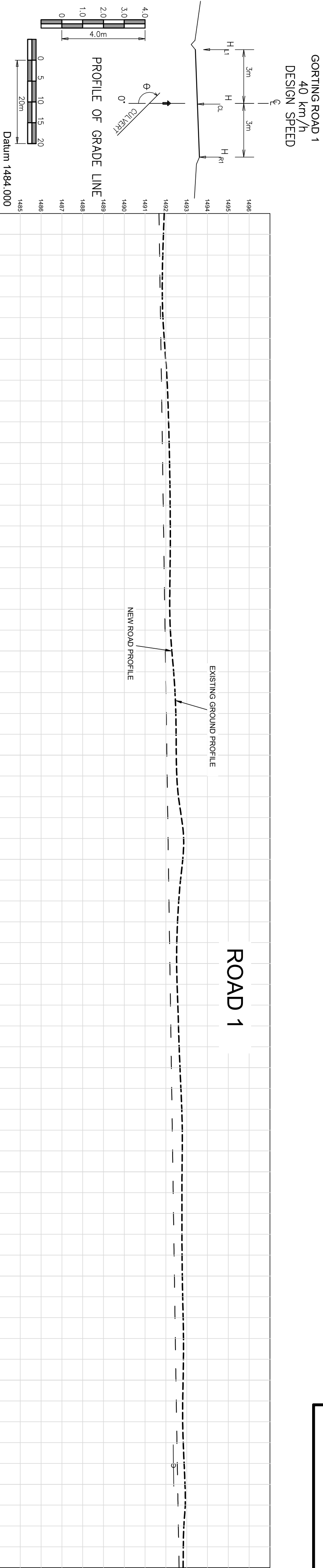
SCALE 1:20

Goal List				
id	Position	Goal Result		Rating
		SV	X-Coord	
BC01	start	0	2979308.12	0.00
BC01	126.73	35555.42	2979101.27	
PI1	151.69	35534.34	2979205.74	80.00
EC11	173.59	35526.38	2979404.32	
BC02	353.74	35374.80	2979466.83	
PI2	692.41	35370.13	2979176.00	30.00
EC02	644.55	35375.78	2979181.66	
BC03	842.42	35412.03	2979363.97	
PI3	883.19	35441.90	2979378.17	30.00
EC03	873.96	35468.48	2979378.38	
BC04	1092.30	35717.57	2979381.99	30.00
PI4	1092.30	35717.57	2979381.99	30.00
EC04	1101.54	35724.47	2979376.57	
BC05	1333.73	35691.26	2979444.67	
PI6	1340.04	35691.32	2979451.03	30.00
EC05	1346.34	35703.55	2979336.58	
PI7	1537.78	35650.07	2979320.25	

NAME	X	Z
K51	48865.028	1484.835
K52	48906.046	1480.363
K53	48956.587	1497.845
K54	48769.884	1494.105
K55	48470.289	1481.123
K56	48478.019	1480.119
K57	48585.869	1484.656
K58	48583.979	1488.962
K59	48580.850	1480.588

No	Germi Road 1					
	Radius	Tr in	Tfr Out	TAN In	TAN Out	Deflection
0	0.00	0.00	0.00	0.00	0.00	0.00.00
1	80.00	0.00	0.00	25.68	25.68	34.48.37
2	30.00	0.00	0.00	19.68	13.68	46.07.18
3	30.00	0.00	0.00	17.40	17.40	60.13.52
4	30.00	0.00	0.00	9.55	9.55	36.18.04
5	30.00	0.00	0.00	6.40	6.40	24.05.09
6	0.00	0.00	0.00	0.00	0.00	0.00.00

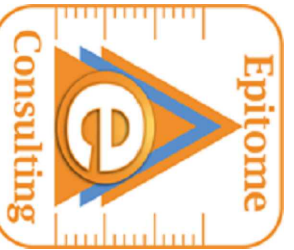
Chaining	Centreline Peg Levels			1489.92	320
	Des Road Levels				
	Left Edge	Centre Line	Right Edge		
Vertical Alignment	Grades	1489.723 1489.669 1489.608			
	Vertical Curves				
Superelevation	2.0000				
	-2.0000				
Horizontal Curves	Direction 173.712				
	618.572 B/C				

[illegible]

CONSULTANTS DETAIL

EPITOME CONSULTING
3 ROSE STREET
KEMPTON PARK
1619

TEL : 011 391 5049
FAX : 086 505 0993
eMAIL: clement@epitome



METSIMAHOLO LOCAL MUNICIPALITY



DESIGNED R. HERMANUS	DATE
DRAWING CHECKED BY CAROL DENNE	DATE
DRAWN D. T. HERMANUS	DATE
Civil Drafting Services D. T. HERMANUS	DATE
DRAWING APPROVED BY PAUL HANNOGER	DATE

CONSTRUCTION OF ROADS AND STORMWATER IN SASOLBURG

ROAD 1 LAYOUT AND LONG SECTION SHEET 2 OF 5

DESCRIPTION OF PROJECT:	CO
TITLE:	RO
CONTRACT NO. :	
















SHEET LAYOUT

PROJECT STATUS

○	○	○	○	●	○	○	○
CONCEPT PRELIMINARY DRAWINGS	PRELIMINARY DRAWINGS	SCHEMATIC DRAWING	THREE VIEWING DRAWING	APPROVED FOR CONSTRUCTION DRAWING	APPROVED FOR CONSTRUCTION DRAWING	APPROVED FOR CONSTRUCTION DRAWING	APPROVED FOR CONSTRUCTION DRAWING
PROJECT EXHIBITOR							
WHAT IS NEW OR SIGNIFICANT				SIGNATURE OF PERMANENT			
INDICATION OF RECORDS				DATE			
REMARKS				DATE			
DRAWING NO.				ORIGINAL SHEET SIZE			
DRAWING NO.				40			
SHEET NO.				SHEET NO.			
A				A			

LEGEND:
PROPOSED ROADS
EXISTING ASPHALT ROADS
PROPOSED STORMWATER PIPELINE
EXISTING PAVED ROAD
PROPERTY FENCE
POWER LINES
GRAVEL ROADS
EXISTING SEWER PIPELINE
PROPOSED VAPORIN CHANNEL
PROPOSED STEEP HUMP

LEGEND:

TRAFFIC LIGHT	
BENCH MARK	
ELECTRICAL POLE	
TELEPHONE POLE	
LIGHT POLE	
MAN HOLE	
METER/VALVE BOX	
ROAD SIGN	
PARKING METER	
POLE	
GATE	
WATER TAP	
GRIND NUT	
FIRE HYDRANT	
TREE	

NOTES AND SPECIFICATIONS

GENERAL

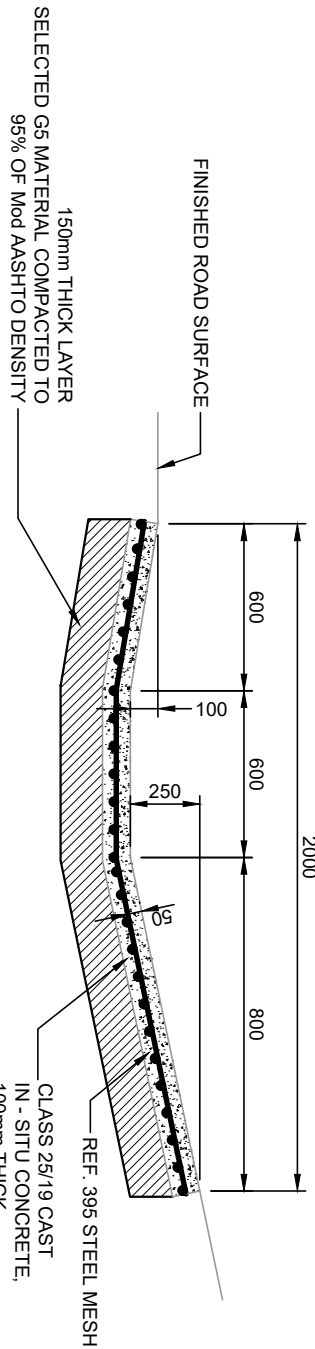
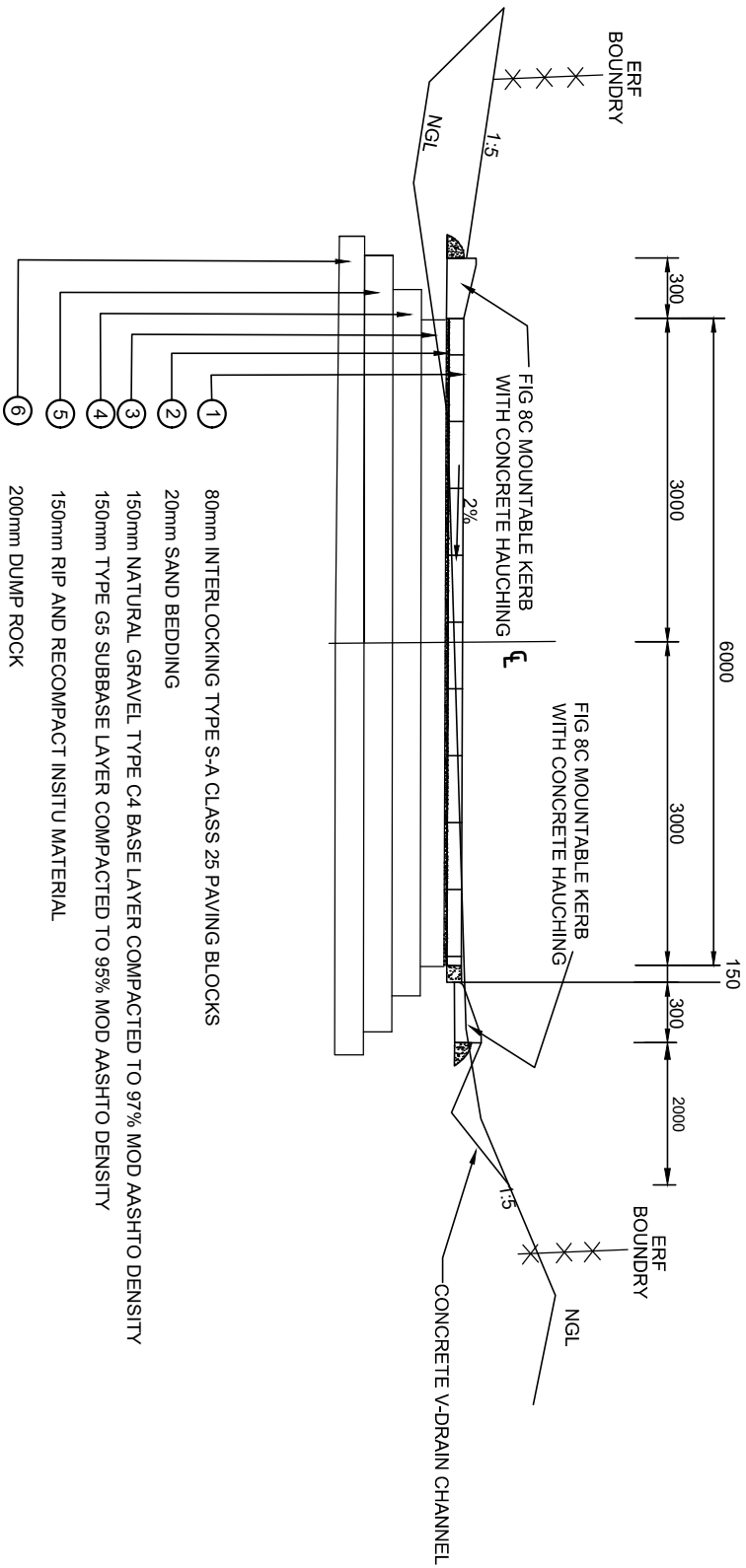
GENERAL

- STORMWATER**
1. MINIMUM PIPE DIAMETER TO BE 1000mm
 2. MINIMUM TALL TO BE 1150.
 3. PIPE BEDDING TO BE CLASS B UNLESS OTHERWISE SPECIFIED.
 4. TALL EXCAVATIONS AND BEDDING MUST BE PROTECTED BY SHIELDING OR BRACING BEFORE LAYING OF ANY PIPES.
 5. CLEAN EXISTING STORMWATER INLETS AND REPAIR WHERE NECESSARY (IF APPLICABLE).
 6. 750 STORMWATER PIPES TO BE PLACED ON THE SIDEWALKS AND 1000 STORMWATER PIPES TO BE UNDER THE ROAD
- ROADS:**
- BEING TO BE AS PER STANDARD DETAIL PLANS REGARDING TO THE ROADWAY. THE REQUIREMENTS OF THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL (THIRD EDITION).
- VERTICAL AND HORIZONTAL ALIGNMENT TO FOLLOW THE EXISTING ROAD WITH A MINIMUM CROSS FALL OF 2 % (IF APPLICABLE).

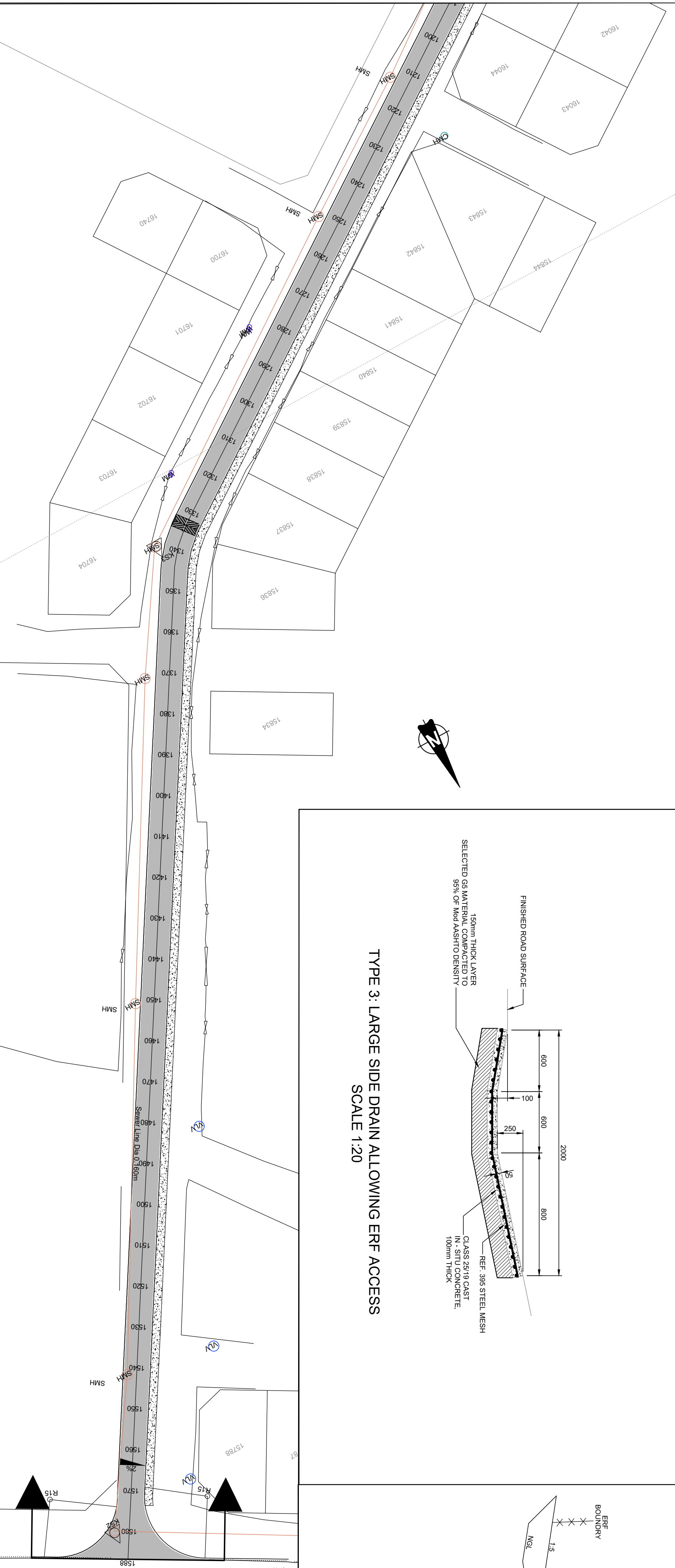
ROADS:

2. TRAFFIC CONTROL MUST COMPLY WITH THE REQUIREMENTS OF THE SOUTH AFRICAN ROAD TRAFFIC SIGNS HANDBOOK (THIRD EDITION).
3. VERTICAL AND HORIZONTAL ALIGNMENT TO FOLLOW THE EXISTING ROADS, WITH A MINIMUM CROSS FALL OF 2 % (IF APPLICABLE)

TYPICAL CROSS SECTION NTS

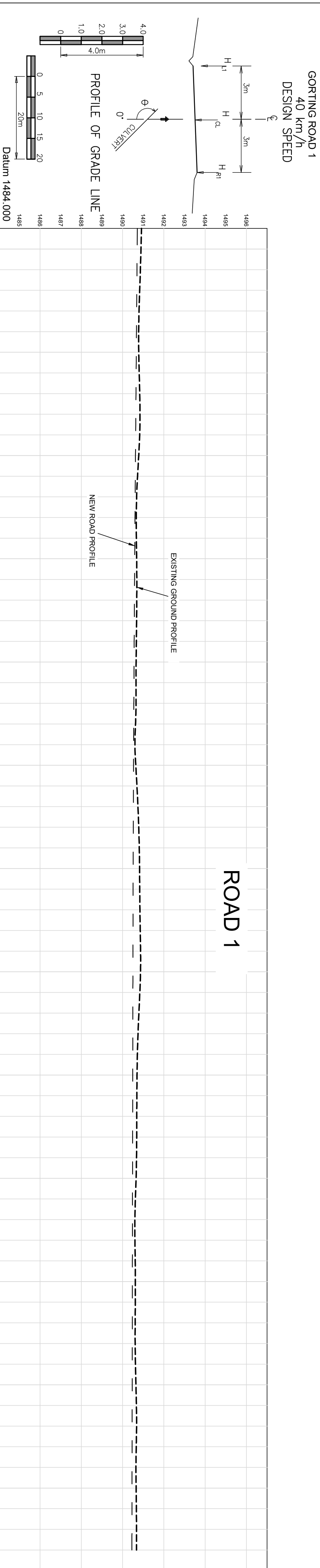


TYPE 3: LARGE SIDE DRAIN ALLOWING ERF ACCESS
SCALE 1:20



ROAD1 LAYOUT SHEET 4 OF 5
SCALE 1:500

SCALE 1:500



Position	SV	Y-Coord	X-Coord	Radius
Start	0	-4856.67	297308.12	0.00
BCD1	126.78	-4856.67	297311.27	
P1	151.90	-4854.03	297305.74	80.00
EC01	173.39	-4650.36	297304.32	
BCD2	671.97	-4651.10	297304.63	
P2	632.41	-4537.13	297341.70	
EC02	645.25	-4516.78	297341.66	
BCD3	842.42	-4547.63	297386.97	
P3	858.19	-4561.09	297393.17	30.00
EC03	873.96	-4558.48	297397.38	
BCD4	1083.96	-4537.07	297381.88	
P4	1092.30	-4517.12	297381.99	30.00
EC04	1101.54	-4574.97	297376.57	
BCD5	1340.73	-4816.06	297354.67	
P5	1330.43	-4892.32	297351.41	30.00
EC05	1346.34	-4804.65	297333.56	
	1487.78	-4850.07	297328.25	

BENCH MARKS

NAME	Y	X	Z
K81	48655.028	297333.865	1444.855
K82	48640.657	297333.485	1438.783
K83	48625.486	297343.178	1441.105
K84	48619.554	297344.947	1444.054
K85	48619.269	297348.270	1441.723
K86	48576.019	297341.760	1441.119
K87	48545.990	297321.560	1448.856
K88	48533.973	297388.989	1448.862
K89	48503.956	297320.052	1440.988

Gortin Road 1

Green Road 1						
No	Radius	TR In	TR Out	TAN In	TAN Out	Deflection
0	0.00	0.99	0.00		0.00	0.00 00
1	60.00	0.90	0.00	25.00	25.00	54.46 57
2	30.00	0.90	0.00	13.68	13.68	46.02 58
3	30.00	0.90	0.00	17.40	17.40	60.13 52
4	30.00	0.90	0.00	9.55	9.55	36.18 04
5	30.00	0.90	0.00	6.40	6.40	24.05 05
6	0.00	0.90	0.00	0.00	0.00	0.00 00

[illegible]

Longsection for 970 to 1290

[illegible]

DESIGNED INTERIMMUNIS	DATE	NAME
DRAWING CHECKED BY CANDICE/NE	DATE	NAME
DRAWN BY SHADWINO	DATE	NAME
CALCULATING SERVICES BY SHADWINO	DATE	NAME
DRAWING APPROVED BY PM/MANAGER	DATE	NAME

CONSTRUCTION OF ROADS AND STORMWATER IN SASOLBURG

DEPARTMENT OF ROAD & TRANSPORT

CONSTRUCTION OF ROADS AND STORMWATER IN SASOLBURG

TITLE

ROAD 1 LAYOUT AND LONG SECTION SHEET 4 OF 5

CONTRACT No.

PROJECT No.

SCALE

DATE

00189

AS SHOWN










FEBRU

SHEET LAYOUT

PROJECT STATUS

- | CONCEPT DRAWING | PRELIMINARY DRAWING | DETAILED DESIGN DRAWING | TENDER DRAWING | APPROVED FOR CONSTRUCTION DRAWING | AS-BUILT DRAWING |
|-----------------------|-----------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

NAME: _____		DATE: _____	
INITIALS AND SIGNATURE: _____		SIGNATURE & PR. NUMBER: _____	
DIRECTOR OF WORKS: _____		DATE: _____	
DRAWINGS: _____		PERSONAL PAPER SIZE: _____	
SCALE: _____		SHEET NO.: _____	
DRAWING NO. _____		SHEET NO. _____	
PROJECT NAME: _____		SHEET NO. _____	
PROJECT NO.: _____		SHEET NO. _____	
PROJECT LOCATION: _____		SHEET NO. _____	
PROJECT DESCRIPTION: _____		SHEET NO. _____	
PROJECT STATUS: _____		SHEET NO. _____	
PROJECT START DATE: _____		SHEET NO. _____	
PROJECT END DATE: _____		SHEET NO. _____	
PROJECT BUDGET: _____		SHEET NO. _____	
PROJECT COST: _____		SHEET NO. _____	
PROJECT PROFIT: _____		SHEET NO. _____	
PROJECT RISK: _____		SHEET NO. _____	
PROJECT CHALLENGES: _____		SHEET NO. _____	
PROJECT SOLUTIONS: _____		SHEET NO. _____	
PROJECT LESSONS LEARNED: _____		SHEET NO. _____	
PROJECT CONTACTS: _____		SHEET NO. _____	
PROJECT REFERENCES: _____		SHEET NO. _____	
PROJECT APPENDICES: _____		SHEET NO. _____	
PROJECT INDEX: _____		SHEET NO. _____	
PROJECT GLOSSARY: _____		SHEET NO. _____	
PROJECT ACRONYMS: _____		SHEET NO. _____	
PROJECT ABBREVIATIONS: _____		SHEET NO. _____	
PROJECT UNITS: _____		SHEET NO. _____	
PROJECT CONVERSIONS: _____		SHEET NO. _____	
PROJECT FORMATS: _____		SHEET NO. _____	
PROJECT STANDARDS: _____		SHEET NO. _____	
PROJECT REGULATIONS: _____		SHEET NO. _____	
PROJECT CODES: _____		SHEET NO. _____	
PROJECT TAGS: _____		SHEET NO. _____	
PROJECT METADATA: _____		SHEET NO. _____	
PROJECT HISTORY: _____		SHEET NO. _____	
PROJECT LOG: _____		SHEET NO. _____	
PROJECT JOURNAL: _____		SHEET NO. _____	
PROJECT DIARY: _____		SHEET NO. _____	
PROJECT MEMO: _____		SHEET NO. _____	
PROJECT REPORT: _____		SHEET NO. _____	
PROJECT SUMMARY: _____		SHEET NO. _____	
PROJECT CONCLUSION: _____		SHEET NO. _____	
PROJECT RECOMMENDATIONS: _____		SHEET NO. _____	
PROJECT ACTION PLAN: _____		SHEET NO. _____	
PROJECT MONITORING: _____		SHEET NO. _____	
PROJECT EVALUATION: _____		SHEET NO. _____	
PROJECT IMPACT: _____		SHEET NO. _____	
PROJECT BENEFITS: _____		SHEET NO. _____	
PROJECT RISKS: _____		SHEET NO. _____	
PROJECT OPPORTUNITIES: _____		SHEET NO. _____	
PROJECT CHALLENGES: _____		SHEET NO. _____	
PROJECT SOLUTIONS: _____		SHEET NO. _____	
PROJECT LESSONS LEARNED: _____		SHEET NO. _____	
PROJECT CONTACTS: _____		SHEET NO. _____	
PROJECT REFERENCES: _____		SHEET NO. _____	
PROJECT APPENDICES: _____		SHEET NO. _____	
PROJECT INDEX: _____		SHEET NO. _____	
PROJECT GLOSSARY: _____		SHEET NO. _____	
PROJECT ACRONYMS: _____		SHEET NO. _____	
PROJECT ABBREVIATIONS: _____		SHEET NO. _____	
PROJECT UNITS: _____		SHEET NO. _____	
PROJECT CONVERSIONS: _____		SHEET NO. _____	
PROJECT FORMATS: _____		SHEET NO. _____	
PROJECT STANDARDS: _____		SHEET NO. _____	
PROJECT REGULATIONS: _____		SHEET NO. _____	
PROJECT CODES: _____		SHEET NO. _____	
PROJECT TAGS: _____		SHEET NO. _____	
PROJECT METADATA: _____		SHEET NO. _____	
PROJECT HISTORY: _____		SHEET NO. _____	
PROJECT LOG: _____		SHEET NO. _____	
PROJECT JOURNAL: _____		SHEET NO. _____	
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PROJECT FORMATS: _____		SHEET NO. _____	
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PROJECT REGULATIONS: _____		SHEET NO. _____	
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PROJECT TAGS: _____		SHEET NO. _____	
PROJECT METADATA: _____		SHEET NO. _____	
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PROJECT ACTION PLAN: _____		SHEET NO. _____	
PROJECT MONITORING: _____		SHEET NO. _____	
PROJECT EVALUATION: _____		SHEET NO. _____	
PROJECT IMPACT: _____		SHEET NO. _____	

LEGEND:	PROPOSED ROADS
	EXISTING ASPHALT ROADS
	PROPOSED STORMWATER PIPELINE
	EXISTING PAVED ROAD
	PROPERTY FENCE
	POWER LINES
	GRAVEL ROADS
	EXISTING SEWER PIPELINE
	PROPOSED V-RAIN CHANNEL
	PROPOSED SPEED HUMP

LEGEND:

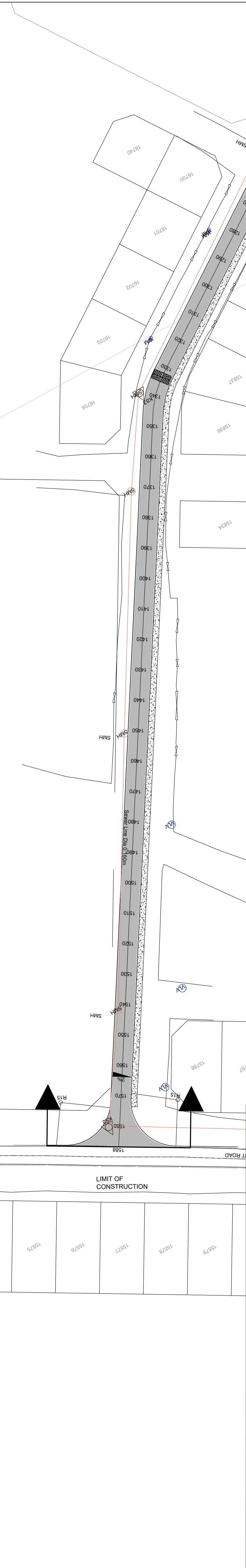
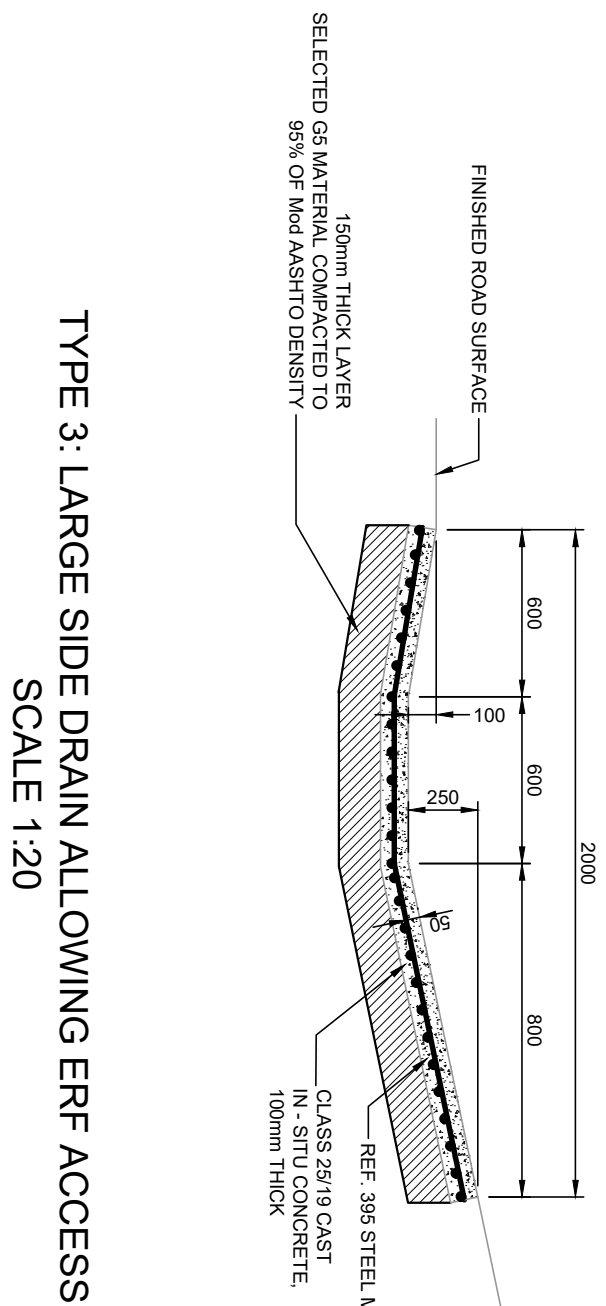
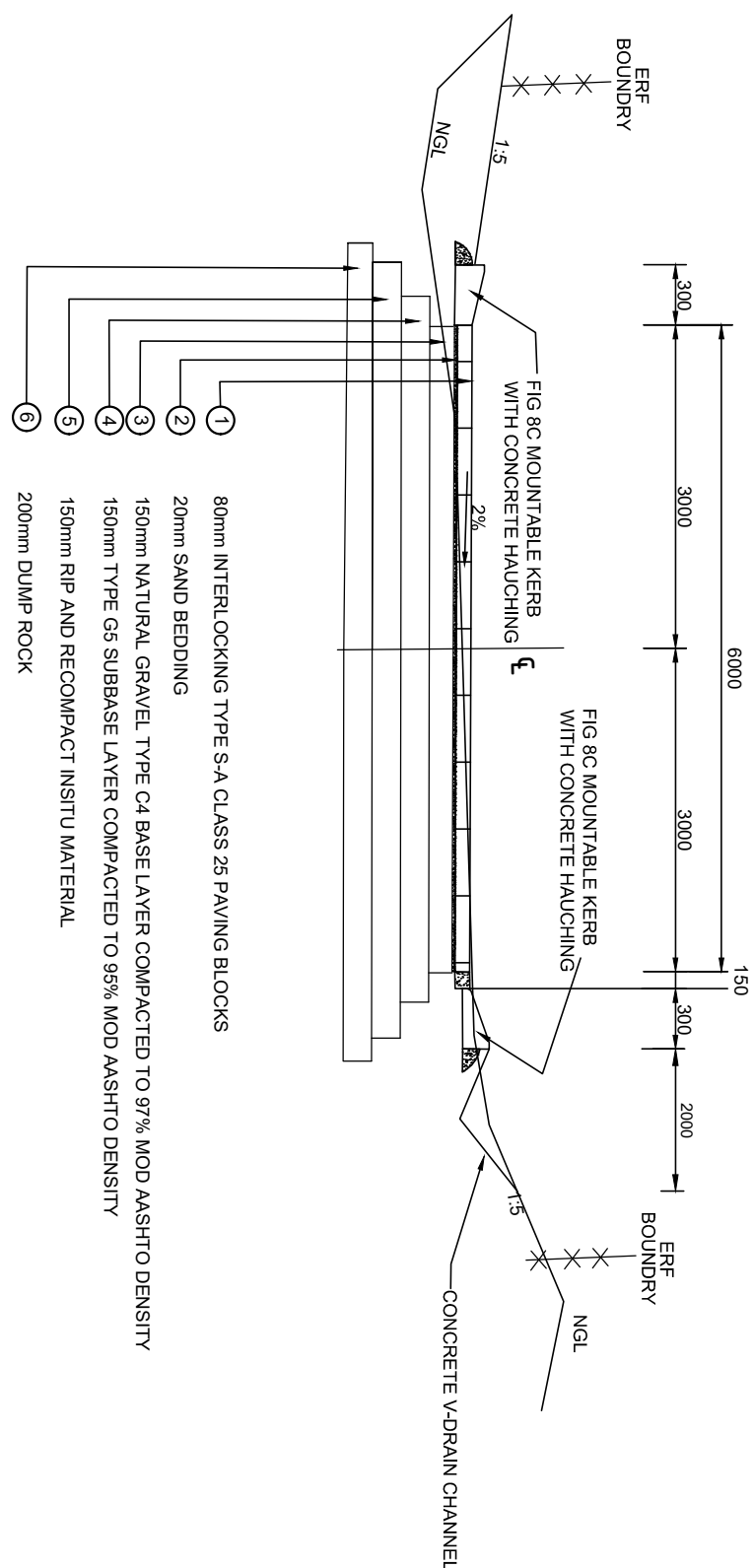
TRAFFIC LIGHT	☉
BENCH MARK	△
ELECTRICAL POLE	⚡
TELEPHONE POLE	☎
LIGHT POLE	☀
MAN HOLE	⊗
METREVAULT BOX	⊙
ROAD SIGN	Ⓢ
PARKING METER	Ⓜ
POLE	○
GATE	⚓
WATER TAP	⚗
GRIND INLET	⚙
FIRE HYDRANT	⚒
TREE	🌳

NOTES AND SPECIFICATIONS

GENERAL

- STORMWATER
1. MINIMUM PIPE DIAMETER TO BE 400mm.
 2. MINIMUM FALL TO BE: 1:50.
 3. PIPE BEDDING TO BE CLASS B UNLESS OTHERWISE SPECIFIED.
 4. ALL EXCAVATIONS AND BEDDING MUST BE REPAIRED TO THE ORIGINAL SURFACE BEFORE LAYING OF ANY PIPES.
 5. CULVERTS MUST BE REPAIRED TO THE ORIGINAL SURFACE BEFORE LAYING OF ANY PIPES.
 6. ALL EXISTING STORMWATER PIPES AND REPAIRS MUST BE REPAIRED TO THE ORIGINAL SURFACE BEFORE LAYING OF ANY PIPES.
 7. ALL STORMWATER PIPES TO BE PLACED ON TO BE UNDER THE ROAD.
 8. ALL STORMWATER PIPES TO BE PLACED ON TO BE UNDER THE ROAD.
 9. ALL STORMWATER PIPES TO BE PLACED ON TO BE UNDER THE ROAD.
 10. ALL STORMWATER PIPES TO BE PLACED ON TO BE UNDER THE ROAD.
- ROADS:
1. TRAFFIC CONTROL MUST COMPLY WITH THE REQUIREMENTS OF THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL (THIRD EDITION).
 2. VERTICAL AND HORIZONTAL ALIGNMENT TO FOLLOW THE EXISTING ROADS, WITH A MINIMUM 4% CROSS FALL OF 2% (IF APPLICABLE).

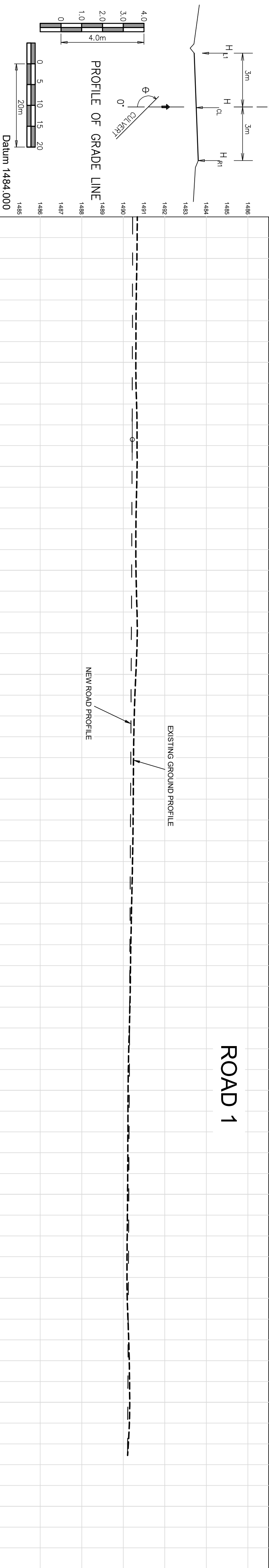
TYPICAL CROSS SECTION



ROAD1 LAYOUT SHEET 5 OF 5

SCALE 1:500

GORTING ROAD 1
40 km/h
DESIGN SPEED



ROAD 1

Superelevation	Horizontal Curves	Vertical Alignment		Centreline Peg Levels	1290	1300	1310	1320	1330	1340	1350	1360	1370	1380	1390	1400	1410	1420	1430	1440	1450	1460	1470	1480	1490	1500	1510	1520	1530	1540	1550	1560	1570	1580	1587.78			
		Grades	Vertical Curves																																			
																																				Des Road Levels		
																																				Left Edge	Centre Line	Right Edge
		0.00 %	1345.553	1490.511	1490.451	1490.391	1490.68	1490.66	1490.61	1490.61	1490.60	1490.67	1490.67	1490.62	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.507	1490.447	1490.387	1490.66	1490.66	1490.61	1490.61	1490.60	1490.67	1490.67	1490.62	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.503	1490.443	1490.383	1490.66	1490.66	1490.61	1490.61	1490.60	1490.67	1490.67	1490.62	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.499	1490.439	1490.379	1490.61	1490.61	1490.61	1490.61	1490.60	1490.67	1490.67	1490.62	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.494	1490.433	1490.373	1490.60	1490.60	1490.60	1490.60	1490.60	1490.67	1490.67	1490.62	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.488	1490.428	1490.368	1490.67	1490.67	1490.67	1490.67	1490.67	1490.67	1490.67	1490.62	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.481	1490.421	1490.361	1490.67	1490.67	1490.67	1490.67	1490.67	1490.67	1490.67	1490.62	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.474	1490.414	1490.354	1490.62	1490.62	1490.62	1490.62	1490.62	1490.62	1490.62	1490.62	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.466	1490.406	1490.346	1490.60	1490.60	1490.60	1490.60	1490.60	1490.60	1490.60	1490.60	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.458	1490.398	1490.338	1490.62	1490.62	1490.62	1490.62	1490.62	1490.62	1490.62	1490.62	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.449	1490.389	1490.329	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70	1490.70			
		0.00 %	1345.553	1490.441	1490.381	1490.321	1490.60	1490.60	1490.60	1490.60	1490.60	1490.60	1490.60	1490.60	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.431	1490.371	1490.311	1490.52	1490.52	1490.52	1490.52	1490.52	1490.52	1490.52	1490.52	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.421	1490.361	1490.301	1490.49	1490.49	1490.49	1490.49	1490.49	1490.49	1490.49	1490.49	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.412	1490.352	1490.292	1490.48	1490.48	1490.48	1490.48	1490.48	1490.48	1490.48	1490.48	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.403	1490.343	1490.283	1490.47	1490.47	1490.47	1490.47	1490.47	1490.47	1490.47	1490.47	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.394	1490.333	1490.273	1490.42	1490.42	1490.42	1490.42	1490.42	1490.42	1490.42	1490.42	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.384	1490.324	1490.264	1490.38	1490.38	1490.38	1490.38	1490.38	1490.38	1490.38	1490.38	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.375	1490.315	1490.255	1490.34	1490.34	1490.34	1490.34	1490.34	1490.34	1490.34	1490.34	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.366	1490.306	1490.246	1490.33	1490.33	1490.33	1490.33	1490.33	1490.33	1490.33	1490.33	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.357	1490.297	1490.236	1490.26	1490.26	1490.26	1490.26	1490.26	1490.26	1490.26	1490.26	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.347	1490.287	1490.227	1490.23	1490.23	1490.23	1490.23	1490.23	1490.23	1490.23	1490.23	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.338	1490.278	1490.218	1490.22	1490.22	1490.22	1490.22	1490.22	1490.22	1490.22	1490.22	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.329	1490.269	1490.209	1490.21	1490.21	1490.21	1490.21	1490.21	1490.21	1490.21	1490.21	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.320	1490.260	1490.199	1490.20	1490.20	1490.20	1490.20	1490.20	1490.20	1490.20	1490.20	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.310	1490.250	1490.190	1490.18	1490.18	1490.18	1490.18	1490.18	1490.18	1490.18	1490.18	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.301	1490.241	1490.181	1490.17	1490.17	1490.17	1490.17	1490.17	1490.17	1490.17	1490.17	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.288	1490.232	1490.176	1490.27	1490.27	1490.27	1490.27	1490.27	1490.27	1490.27	1490.27	1490.70	1490.60	1490.52	1490.49	1490.48	1490.47	1490.42	1490.38	1490.26	1490.34	1490.33	1490.26	1490.23	1490.22	1490.21	1490.20	1490.18	1490.17	1490.27	1490.30	1490.21			
		0.00 %	1345.553	1490.260	1490.222	1490.184	1490.30	1490.30	1490.30																													

Longitudinal by 1500 to 1587

BENCH MARKS

Position	SV	V-Coord	X-Coord	Radius
BM1	0	48656.97	2972938.12	0.00
BM2	126.79	48655.42	2972931.27	0.00
BM3	151.09	48654.83	2972925.74	80.00
BM4	173.39	48653.38	2972920.22	80.00
BM5	619.37	48651.80	2972915.70	30.00
BM6	642.41	48650.78	2972914.86	30.00
BM7	842.42	48647.63	2972963.97	30.00
BM8	864.19	48648.09	2972979.17	30.00
BM9	873.96	48648.49	2972979.36	30.00
BM10	1083.06	48670.57	2972981.86	30.00
BM11	1092.30	48671.12	2972981.99	30.00
BM12	1101.54	48672.97	2972976.57	30.00
BM13	1333.73	48616.06	2973544.67	30.00
BM14	1340.04	48621.32	2973541.03	30.00
BM15	1346.34	48624.63	2973535.58	30.00
BM16	1587.78	48650.07	2973529.25	30.00

ROAD 1

NAME	Y	X	Z
BM1	48656.97	2972938.12	1486.835
BM2	48655.42	2972931.27	1486.953
BM3	48654.83	2972925.74	1487.105
BM4	48653.38	2972920.22	1487.034
BM5	48651.80	2972915.70	1487.123
BM6	48650.78	2972914.86	1487.119
BM7	48647.63	2972963.97	1486.856
BM8	48648.09	2972979.17	1486.982
BM9	48648.49	2972979.36	1486.988
BM10	48670.57	2972981.86	1487.052
BM11	48671.12	2972981.99	1487.058
BM12	48672.97	2972976.57	1486.982
BM13	48616.06	2973544.67	1486.982
BM14	48621.32	2973541.03	1486.982
BM15	48624.63	2973535.58	1486.982
BM16	48650.07	2973529.25	1486.988

No	Radius	TAN In	TAN Out	TAN In	TAN Out	Deflection
0	0.00	0.00	0.00	0.00	0.00	0.00.00
1	80.00	0.00	0.00	25.08	25.08	34.48.37
2	30.00	0.00	0.00	13.68	13.68	48.02.18
3	30.00	0.00	0.00	17.40	17.40	60.13.52
4	30.00	0.00	0.00	9.55	9.55	35.18.04
5	30.00	0.00	0.00	6.40	6.40	24.05.09
6	0.00	0.00	0.00	0.00	0.00	0.00.00

SHEET LAYOUT

PROJECT STATUS

AMENDMENTS

NO	DATE	APPROVED	DESCRIPTION	PAR
			DETAIL DESIGN	

CONSULTANTS DETAIL
EPTOME CONSULTING
3 ROSE STREET
KEMPION PARK
1619

TEL : 011 391 5049
FAX : 086 505 0993
EMAIL: demen@eptomconsulting.co.za

METSIMAHOLO LOCAL MUNICIPALITY
PO BOX 60
SASOLBURG
1947
TEL: 018 973 8300

Metsimholo Municipality

CONTRACT No.: 00198-RT-LAY-05

PROJECT No.: 00198-RT-LAY-05

SCALE: AS SHOWN

DATE: FEBRUARY 2023

DESIGNER: 00198-RT-LAY-05

CHECKED: 00198-RT-LAY-05

APPROVED: 00198-RT-LAY-05

SHEET NO.: 00198-RT-LAY-05

SHEET: 00198-RT-LAY-05



NOTES AND SPECIFICATIONS

GENERAL

- STORMWATER**
1. MINIMUM PIPE DIAMETER TO BE 600mm.
 2. MINIMUM FALL TO BE 1:150
 3. PIPE BEDDING TO BE CLASS B UNLESS OTHERWISE SPECIFIED.
 4. ALL EXCAVATIONS AND BEDDING MUST BE BEFORE LAYING OF ANY PIPES.
 5. CLEAN EXISTING STORMWATER INLETS AND REPAIR/REPLACE AS NECESSARY (IF APPLICABLE).
 6. 750 STORMWATER PIPES TO BE PLACED ON TO BE UNDER THE ROAD
- ROADS:**
- KERBINGS TO BE AS PER STANDARD DETAIL PLANS
2. TRAFFIC CONTROL MUST COMPLY WITH THE REQUIREMENTS OF THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL, (THIRD EDITION).
 3. VERTICAL AND HORIZONTAL ALIGNMENT TO FOLLOW THE EXISTING ROADS WITH A MINIMUM 4% CROSS FALL OF 2% (IF APPLICABLE)

LEGEND:

TRAFFIC LIGHT

BENCHMARK

ELECTRICAL POLE

TELEPHONE POLE

LIGHT POLE

MAN HOLE

METER/VALVE BOX

ROAD SIGN

PARKING METER

POLE

GATE

WATER TAP

GRID INLET

FIRE HYDRANT

TREE

EXISTING ASPHALT

EXISTING GRAVEL

PROPOSED ASPHALT

PROPOSED GRAVEL

EXISTING PAVED ROAD

PROPOSED STORMWATER

PIPELINE

PROPERTY FENCE

POWER LINES

GRAVEL ROADS

EXISTING SEWER

PIPELINE

PROPOSED V-DRAIN

CHANNEL

PROPOSED SPEED LIMIT

TRAFFIC LIGHT

BENCHMARK

ELECTRICAL POLE

TELEPHONE POLE

LIGHT POLE

MAN HOLE

METER/VALVE BOX

ROAD SIGN

PARKING METER

POLE

GATE

WATER TAP

GRID INLET

FIRE HYDRANT

TREE

LEGEND:

EXISTING ASPHALT

EXISTING GRAVEL

PROPOSED ASPHALT

PROPOSED GRAVEL

EXISTING PAVED ROAD

PROPOSED STORMWATER

PIPELINE

PROPERTY FENCE

POWER LINES

GRAVEL ROADS

EXISTING SEWER

PIPELINE

PROPOSED V-DRAIN

CHANNEL

PROPOSED SPEED LIMIT

TRAFFIC LIGHT

BENCHMARK

ELECTRICAL POLE

TELEPHONE POLE

LIGHT POLE

MAN HOLE

METER/VALVE BOX

ROAD SIGN

PARKING METER

POLE

GATE

WATER TAP

GRID INLET

FIRE HYDRANT

TREE

17903

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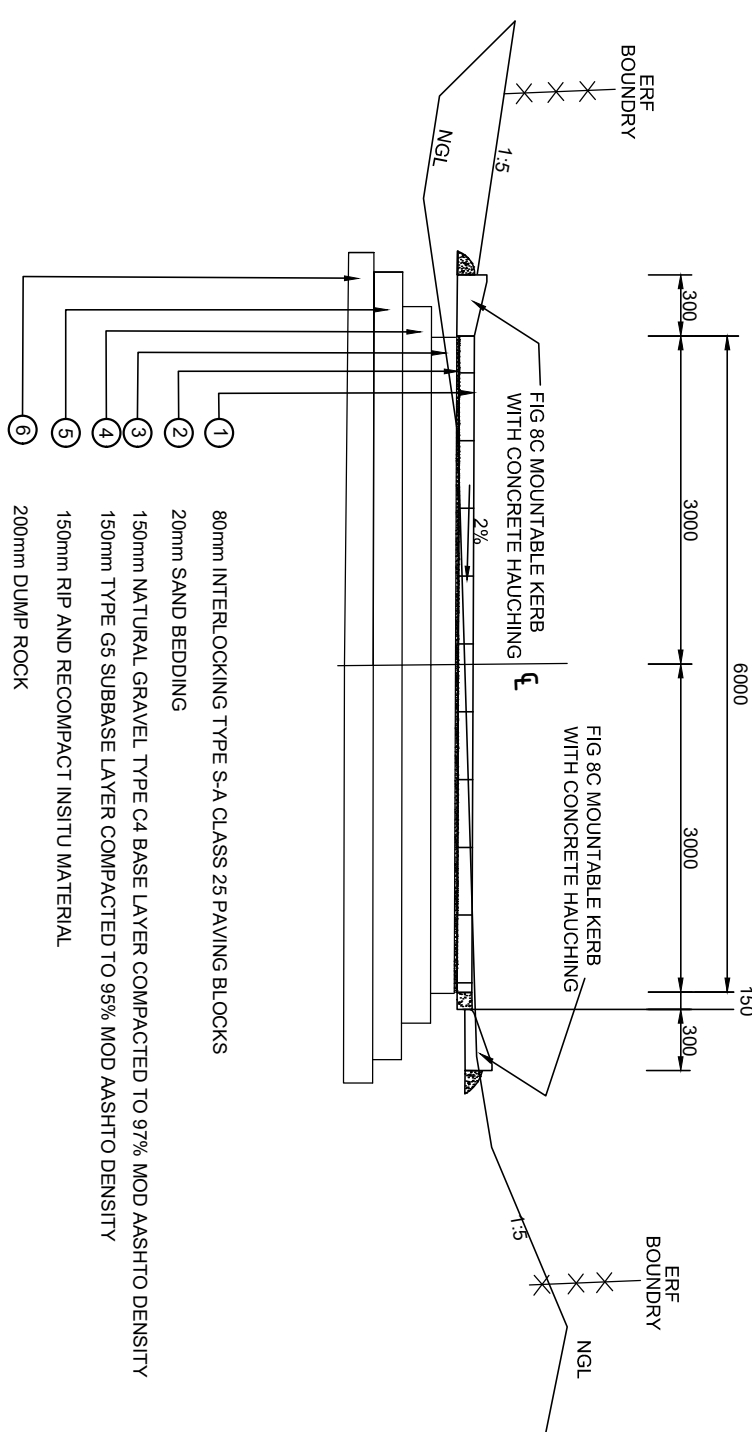
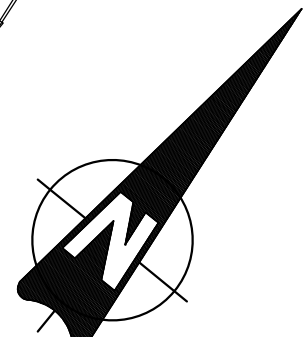
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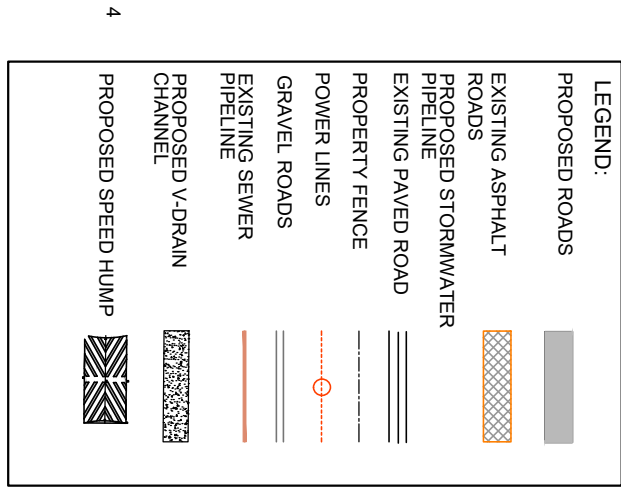
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BENCH MARKS			
NAME	X	Y	Z
KS10	-8694.342	297783.961	1483.393
KS11	-87015.066	297406.310	1482.805
KS12	-87028.335	297428.734	1487.899
KS13	-87116.301	297495.229	1481.924
KS14	-87268.377	297506.991	1479.975
KS15	-87589.714	297493.714	1477.264
KS16	-87856.966	297503.991	1474.211



BENCH MARKS			
NAME	X	Y	Z
KS10	-8694.342	297783.961	1483.393
KS11	-87015.066	297406.310	1482.805
KS12	-87028.335	297428.734	1487.899
KS13	-87116.301	297495.229	1481.924
KS14	-87268.377	297506.991	1479.975
KS15	-87589.714	297493.714	1477.264
KS16	-87856.966	297503.991	1474.211

[illegible][illegible]

NOTES AND SPECIFICATIONS

GENERAL

GENERAL

1. MINIMUM PIPE DIAMETER TO BE 600mm.
2. MINIMUM FALL TO BE 1:150.
3. PIPE BEDDING TO BE CLASS B UNLESS OTHERWISE SPECIFIED.
4. ALL EXCAVATIONS AND BEDDING MUST BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE LAYING OF ANY PIPES.
5. CLEAN EXISTING STORMWATER INLETS AND REPAIR WHERE NECESSARY (IF APPLICABLE).
6. 750 STORMWATER PIPES TO BE PLACED ON THE SIDEWALKS AND 1000 STORMWATER PIPES TO BE UNDER THE ROAD
















ROADS:

- 1 KERBING TO BE AS PER STANDARD DETAIL PLANS
- 2 TRAFFIC CONTROL MUST COMPLY WITH THE REQUIREMENTS OF THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL (THIRD EDITION).
- 3 VERTICAL AND HORIZONTAL ALIGNMENT TO FOLLOW THE EXISTING ROADS, WITH A MINIMUM
- 4 CROSS FALL OF 2 % (IF APPLICABLE)










TYPICAL CROSS SECTION NTS

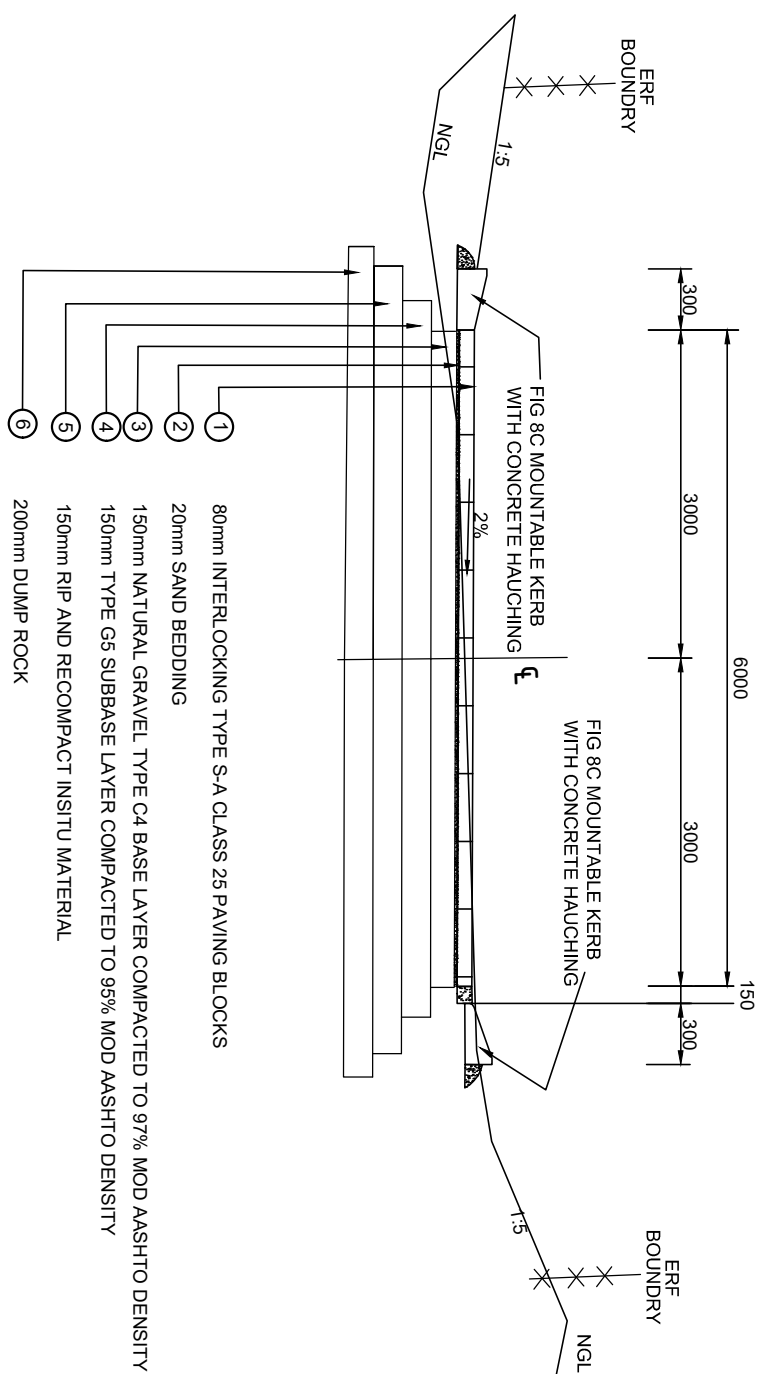
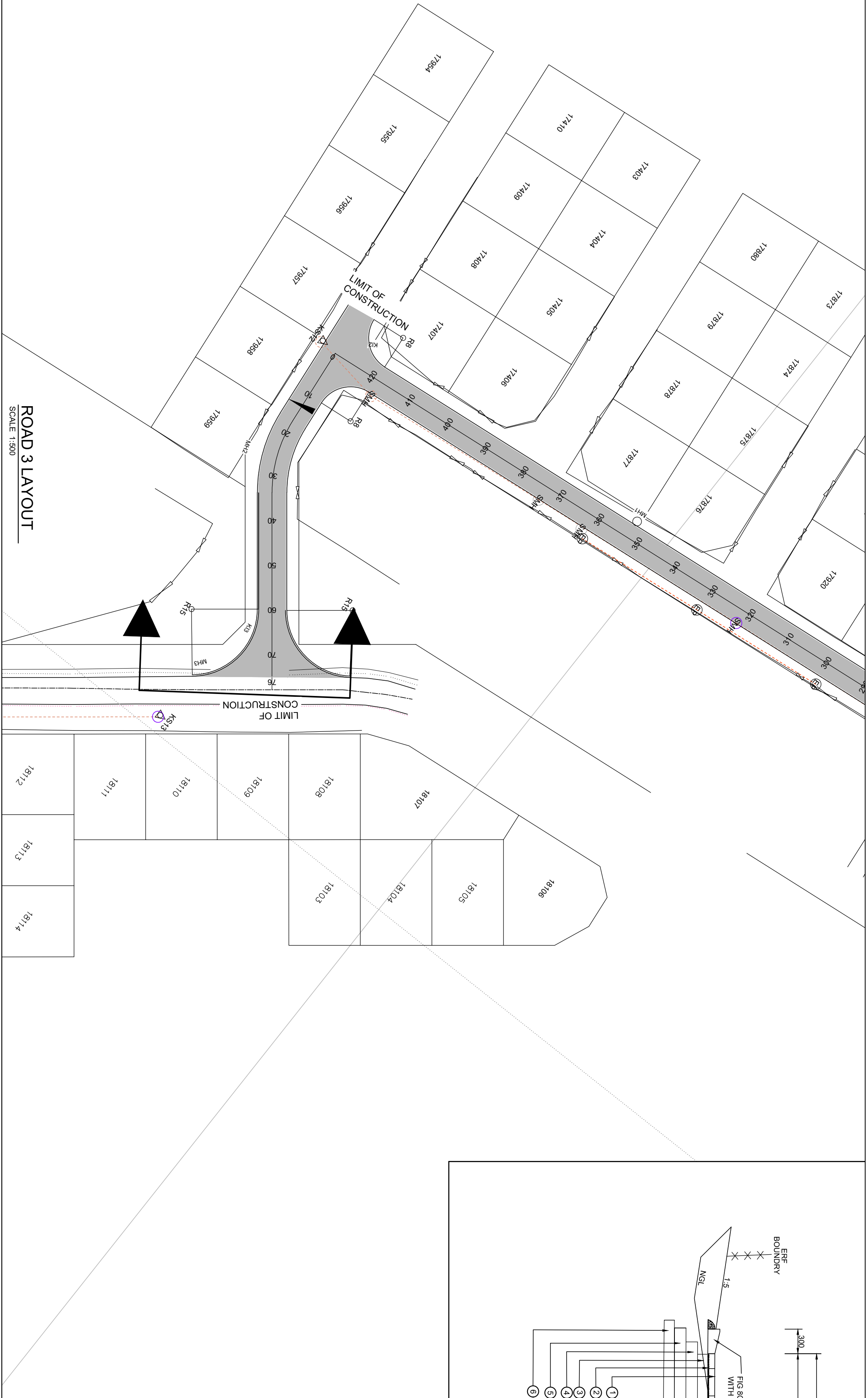
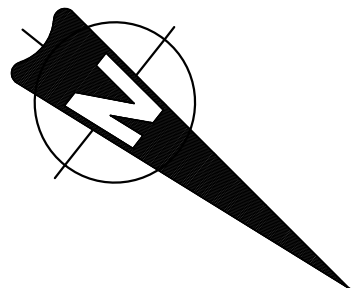
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LEGEND:

- | | |
|---|-----------------|
|  | TRAFFIC LIGHT |
|  | BENCH MARK |
|  | ELECTRICAL POLE |
|  | TELEPHONE POLE |
|  | LIGHT POLE |
|  | MAN HOLE |
|  | METER/WAVE BOX |
|  | ROAD SIGN |
|  | PARKING METER |
|  | POLE |
|  | GATE |
|  | WATER TAP |
|  | GRID INLET |
|  | FIRE HYDRANT |
|  | TREE |

LEGEND:

- | | |
|---|---------------------------------|
|  | EXISTING ASPHALT
ROADS |
|  | PROPOSED STORMWATER
PIPELINE |
|  | EXISTING PAVED ROAD |
|  | PROPERTY FENCE |
|  | POWER LINES |
|  | GRAVEL ROADS |
|  | EXISTING SEWER
PIPELINE |
|  | PROPOSED V-DRAIN
CHANNEL |
|  | PROPOSED SPEED HUMP |



BENCH MARKS			
NAME	Y	X	Z
18054.4	2974728.61	2974924.79	1483.808
18054.4	-87028.61	2974924.79	1483.808
18054.4	-87028.61	2974924.79	1483.808
18054.4	-87028.61	2974924.79	1483.808
18054.4	-87028.61	2974924.79	1483.808
18054.4	-87028.61	2974924.79	1483.808
18054.4	-87028.61	2974924.79	1483.808
18054.4	-87028.61	2974924.79	1483.808
18054.4	-87028.61	2974924.79	1483.808
18054.4	-87028.61	2974924.79	1483.808

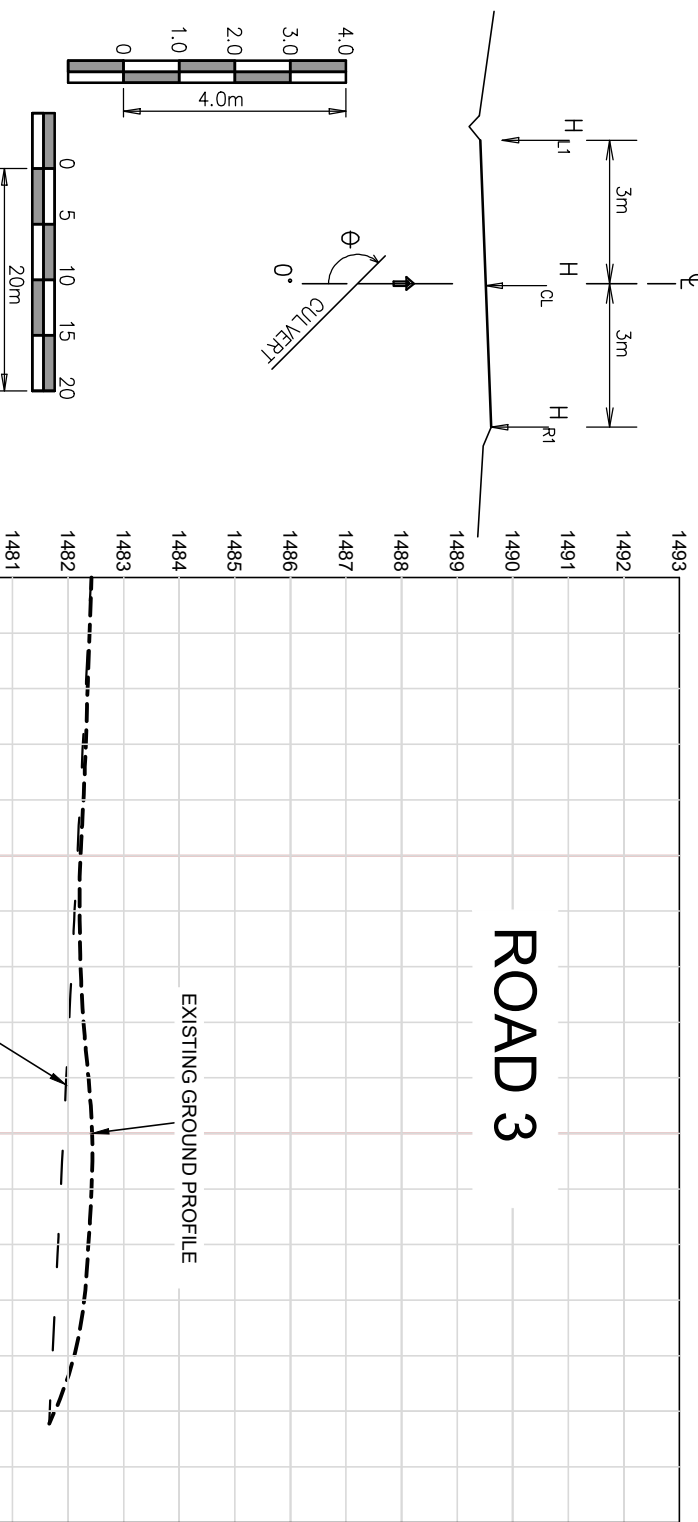
LEGEND:	
TRAFFIC LIGHT	▲
BENCH MARK	●
ELECTRICAL POLE	⊗
TELEPHONE POLE	⊗
LIGHT POLE	⊗
MAN HOLE	⊗
METER VALVE BOX	⊗
ROAD SIGN	⊗
PARKING METER	⊗
POLE	⊗
GATE	⊗
WATER TAP	⊗
GRID INLET	⊗
FIRE HYDRANT	⊗
TREE	⊗
LEGEND:	
PROPOSED ROADS	—
EXISTING ASPHALT ROADS	—
PROPOSED STORMWATER	—
EXISTING PAVED ROAD	—
PROPERTY FENCE	—
POWER LINES	—
GRAVEL ROADS	—
EXISTING SEWER	—
PROPOSED V-DRAIN CHANNEL	—
PROPOSED SPEED HUMP	—

NOTES AND SPECIFICATIONS

GENERAL

1. MINIMUM PIPE DIAMETER TO BE 600mm
2. MINIMUM FALL TO BE 1:80
3. PIPE BEDDING TO BE CLASS B UNLESS OTHERWISE SPECIFIED
4. ALL EXCAVATIONS AND BEDDING MUST BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE LAYING OF ANY PIPES
5. CLEAN EXISTING STORMWATER INLETS AND REPAIR WHERE NECESSARY (IF APPLICABLE)
6. 750 STORMWATER PIPES TO BE PLACED ON THE SIDEWALKS AND 1000 STORMWATER PIPES TO BE UNDER THE ROAD
- ROADS TO BE AS PER STANDARD DETAIL PLANS
- TRAFFIC CONTROL MUST COMPLY WITH THE TRAFFIC SIGNS MANUAL (THIRD EDITION)
3. VERTICAL AND HORIZONTAL ALIGNMENT TO FOLLOW THE EXISTING ROADS, WITH A MINIMUM 4% CROSS FALL OF 2 % (IF APPLICABLE)

ROAD 3



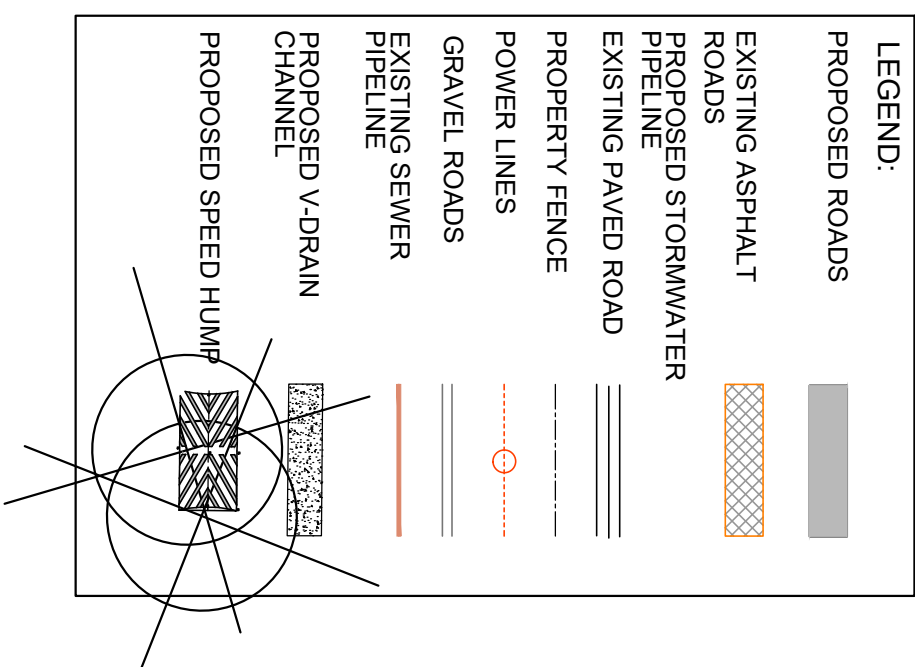
Vertical Alignment	
Grades	Vertical Curves
Des Road Levels	Vertical Curves
Left Edge	Vertical Curves
Centre Line	Vertical Curves
Right Edge	Vertical Curves
1482.440	1482.415
1482.312	1482.319
1482.184	1482.248
1482.057	1482.177
1481.928	1482.106
1481.800	1481.956
1481.671	1481.846
1481.543	1481.735
1481.415	1481.608
1481.287	1481.480
1481.159	1481.352
1481.031	1481.224
1480.903	1481.096
1480.775	1480.968
1480.647	1480.840
1480.519	1480.712
1480.391	1480.584
1480.263	1480.456
1480.135	1480.328
1480.007	1480.200
1479.879	1479.072
1479.751	1478.944
1479.623	1478.816
1479.495	1478.688
1479.367	1478.560
1479.239	1478.432
1479.111	1478.304
1478.983	1478.176
1478.855	1478.048
1478.727	1477.920
1478.599	1477.792
1478.471	1477.664
1478.343	1477.536
1478.215	1477.408
1478.087	1477.280
1477.959	1477.152
1477.831	1477.024
1477.703	1476.896
1477.575	1476.768
1477.447	1476.640
1477.319	1476.512
1477.191	1476.384
1477.063	1476.256
1476.935	1476.128
1476.807	1475.000
1476.679	1474.872
1476.551	1474.744
1476.423	1474.616
1476.295	1474.488
1476.167	1474.360
1476.039	1474.232
1475.911	1474.104
1475.783	1473.976
1475.655	1473.848
1475.527	1473.720
1475.399	1473.592
1475.271	1473.464
1475.143	1473.336
1475.015	1473.208
1474.887	1473.080
1474.759	1472.952
1474.631	1472.824
1474.503	1472.696
1474.375	1472.568
1474.247	1472.440
1474.119	1472.312
1473.991	1472.184
1473.863	1472.056
1473.735	1471.928
1473.607	1471.800
1473.479	1471.672
1473.351	1471.544
1473.223	1471.416
1473.095	1471.288
1472.967	1471.160
1472.839	1471.032
1472.711	1470.904
1472.583	1470.776
1472.455	1470.648
1472.327	1470.520
1472.199	1470.392
1472.071	1470.264
1471.943	1470.136
1471.815	1470.008
1471.687	1469.880
1471.559	1469.752
1471.431	1469.624
1471.303	1469.496
1471.175	1469.368
1471.047	1469.240
1470.919	1469.112
1470.791	1468.984
1470.663	1468.856
1470.535	1468.728
1470.407	1468.600
1470.279	1468.472
1470.151	1468.344
1470.023	1468.216
1469.895	1468.088
1469.767	1467.960
1469.639	1467.832
1469.511	1467.704
1469.383	1467.576
1469.255	1467.448
1469.127	1467.320
1468.999	1467.192
1468.871	1467.064
1468.743	1466.936
1468.615	1466.808
1468.487	1466.680
1468.359	1466.552
1468.231	1466.424
1468.103	1466.296
1467.975	1466.168
1467.847	1466.040
1467.719	1465.912
1467.591	1465.784
1467.463	1465.656
1467.335	1465.528
1467.207	1465.400
1467.079	1465.272
1466.951	1465.144
1466.823	1465.016
1466.695	1464.888
1466.567	1464.760
1466.439	1464.632
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1466.183	1464.376
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1465.927	1464.120
1465.799	1463.992
1465.671	1463.864
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1463.367	1461.560
1463.239	1461.432
1463.111	1461.304
1462.983	1461.176
1462.855	1461.048
1462.727	1460.920
1462.599	1460.792
1462.471	1460.664
1462.343	1460.536
1462.215	1460.408
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1460.807	1459.000
1460.679	1458.872
1460.551	1458.744
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1460.295	1458.488
1460.167	1458.360
1460.039	1458.232
1459.911	1458.104
1459.783	1457.976
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1459.399	1457.592
1459.271	1457.464
1459.143	1457.336
1459.015	1457.208
1458.887	1457.080
1458.759	1456.952
1458.631	1456.824
1458.503	1456.696
1458.375	1456.568
1458.247	1456.440
1458.119	1456.312
1457.991	1456.184
1457.863	1456.056
1457.735	1455.928
1457.607	1455.800
1457.479	1455.672
1457.351	1455.544
1457.223	1455.416
1457.095	1455.288
1456.967	1455.160
1456.839	1455.032
1456.711	1454.904
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1456.455	1454.648
1456.327	1454.520
1456.199	1454.392
1456.071	1454.264
1455.943	1454.136
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1455.559	1453.752
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1454.791	1452.984
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1452.999	1451.192
1452.871	1451.064
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1452.615	1450.808
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1451.975	1450.168
1451.847	1450.040
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1450.311	1448.504
1450.183	1448.376
1450.055	1448.248
1449.927	1448.120
1449.799	1447.992
1449.671	1447.864
1449.543	1447.736
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1449.159	1447.352
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1448.775	1446.968
1448.647	1446.840
1448.519	1446.712
1448.391	1446.584
1448.263	1446.456
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1448.007	1446.200
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1446.983	1445.176
1446.855	1445.048
1446.727	1444.920
1446.599	1444.792
1446.471	1444.664
1446.343	1444.536
1446.215	1444.408
1446.087	1444.280
1445.959	1444.152
1445.831	1444.024
1445.703	1443.896
1445.575	1443.768
1445.447	1443.640
1445.319	1443.512
1445.191	1443.384
1445.063	1443.256
1444.935	1443.128
1444.807	1443.000
1444.679	1442.872
1444.551	1442.744
1444.423	1442.616
1444.295	1442.488
1444.167	1442.360
1444.039	1442.232
1443.911	1442.104
1443.783	1441.976
1443.655	1441.848
1443.527	1441.720
1443.399	1441.592
1443.271	1441.464
1443.143	1441.336
1443.015	1441.208
1442.887	1441.080
1442.759	1440.952
1442.631	1440.824
1442.503	1440.696
1442.375	1440.568
1442.247	1440.440
1442.119	1440.312
1441.991	1440.184
1441.863	1440.056
1441.735	1439.928
1441.607	1439.800
1441.479	1439.672
1441.351	1439.544
1441.223	1439.416
1441.095	1439.288
1440.967	1439.160
1440.839	1439.032
1440.711	1438.904
1440.583	1438.776
1440.455	1438.648
1440.327	1438.520
1440.199	1438.392
1440.071	1438.264
1439.943	1438.136
1439.815	1438.008
1439.687	1437.880
1439.559	1437.752
1439.431	1437.624</

NOTES AND SPECIFICATIONS

GENERAL


LEGEND:

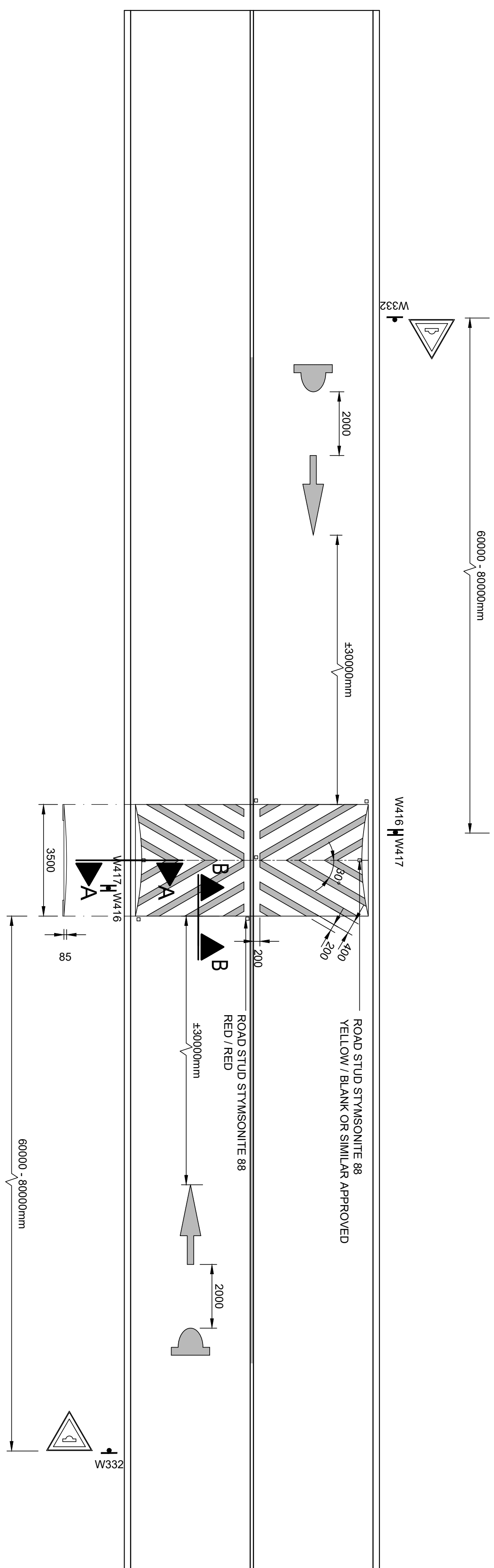
●	TRAFFIC LIGHT
△	BENCH MARK
⊗	ELECTRICAL POLE
⊙	TELEPHONE POLE
⊕	LIGHT POLE
⊖	MAN-HOLE
⊗	METTERVALVE BOX
⊙	ROAD SIGN
⊕	PARKING METER
⊖	POLE
⊗	CAGE
⊙	WATER TAP
⊕	GRIND MILET
⊖	FIRE HYDRANT
⊗	TREE



SHEET LAYOUT

PROJECT STATUS

DRAWING NO. 60199-DTL-01	REVISIONS	SIGNATURE	DATE	SHEET NO. 40	SHEET		<input type="checkbox"/> TOP <input type="checkbox"/> ELEVATION <input type="checkbox"/> DRAWING	<input type="checkbox"/> FRONT <input type="checkbox"/> ELEVATION <input type="checkbox"/> DRAWING	<input type="checkbox"/> SECTION <input type="checkbox"/> ELEVATION <input type="checkbox"/> DRAWING	<input type="checkbox"/> PLAN <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> DRAWING	<input type="checkbox"/> DETAIL <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> DRAWING
							PROJECT FEATURES TITLE AND PURPOSE INSPECTOR OF WORKS DATE				



NOTES

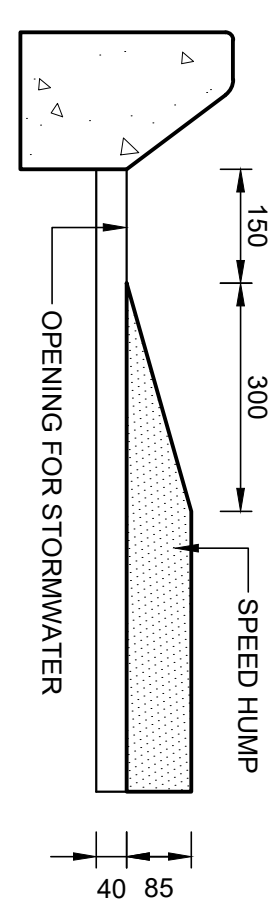
CONSTRUCTION METHOD

1. SETTING OUT OF HUMPS - FEW DAYS BEFORE CONSTRUCTION
2. SAW CUTS ONE TO TWO DAYS BEFORE CONSTRUCTION.

ON CONSTRUCTION DAY:

3. REMOVE 80mm PAVING BLOCK STRIPS.
4. START ERECTING ROAD SIGNS AND PAINT WARNING ROAD MARKING.
5. PLACE THE PAVING IN STRIPS AND COMPACT WITH TWO PASSES WITHOUT VIBRATOR.
6. PLACE TEMPLATES - BOTH SIDES OF ONE LANE AT A TIME.
7. REMOVE TEMPLATES AND COMPACT WITHOUT VIBRATOR (THREE PASSES).
8. MEASURE PROFILE AND RECTIFY IF NECESSARY.
9. FINAL COMPACTION WITH THREE TO FOUR PASSES WITH VIBRATOR.
10. PAINT SPEED HUMP THE NEXT DAY.

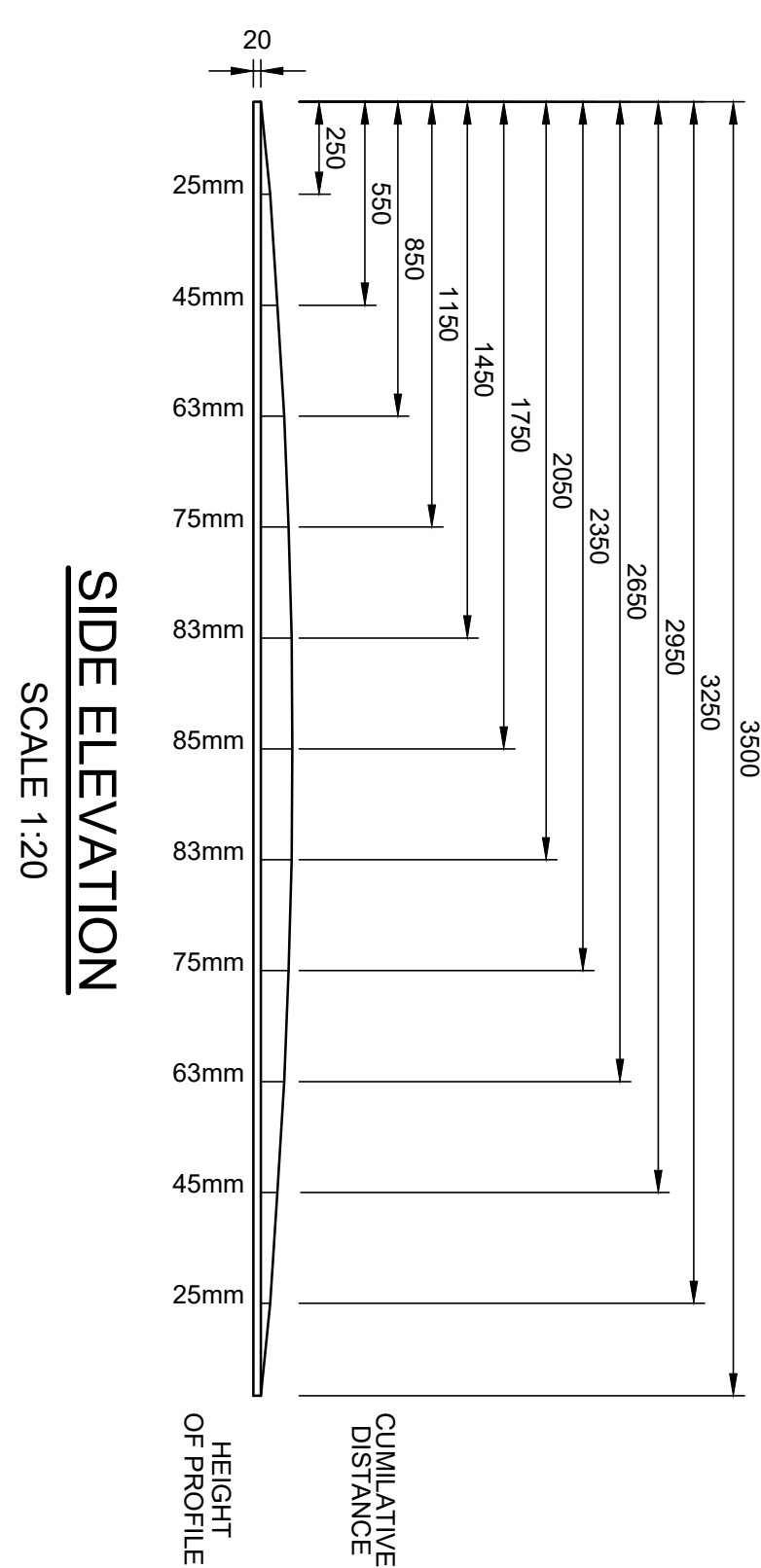
NOTE:
THE TRAFFIC ENGINEERING AND
OPERATION SECTION MUST
ALWAYS BE CONSULTED TO
ASSIST WITH THE SETTING OUT
OF SPEED HUMPS.



SECTION A-A:

CONSTRUCTION DETAIL OF SPEED HUMP

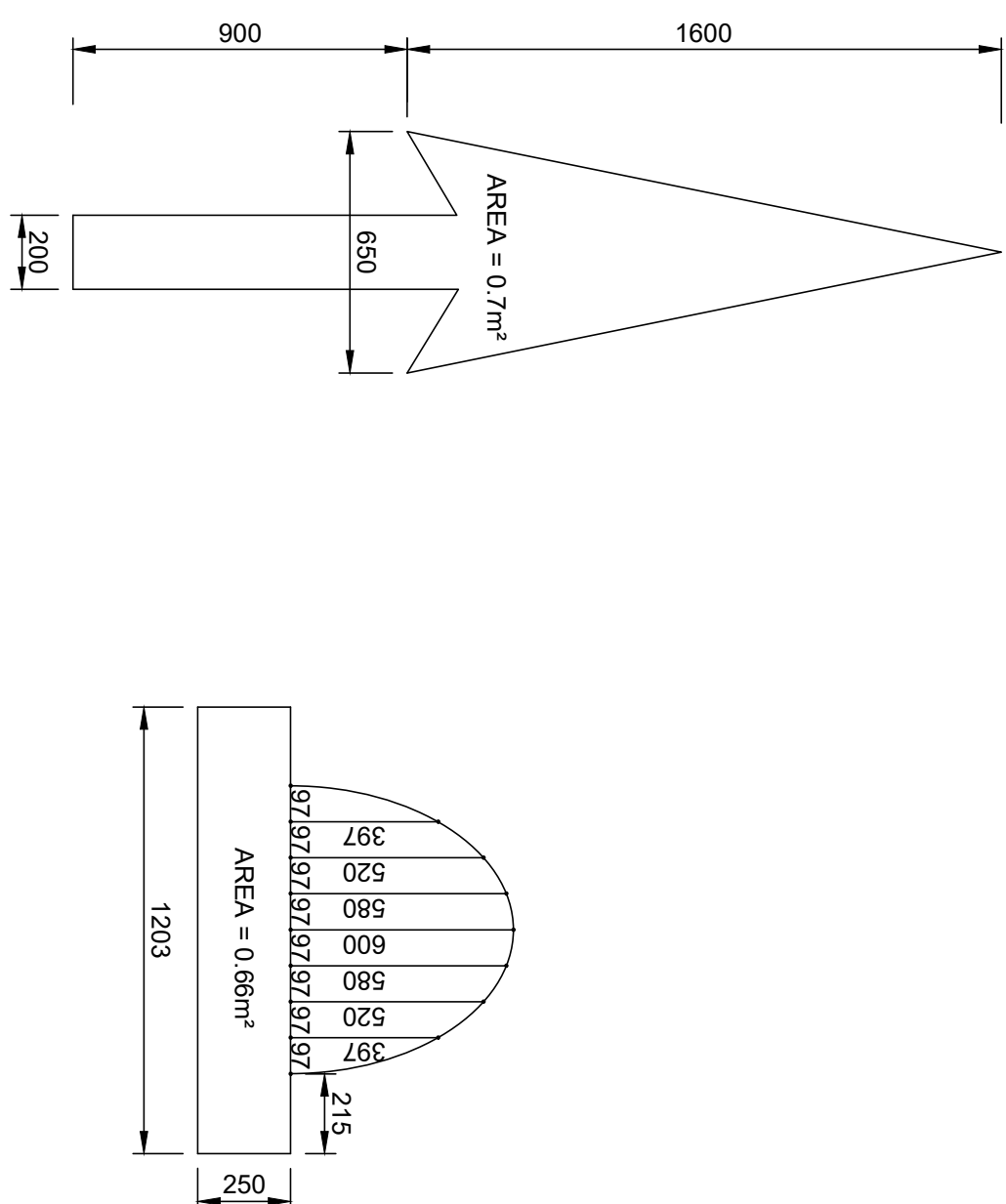
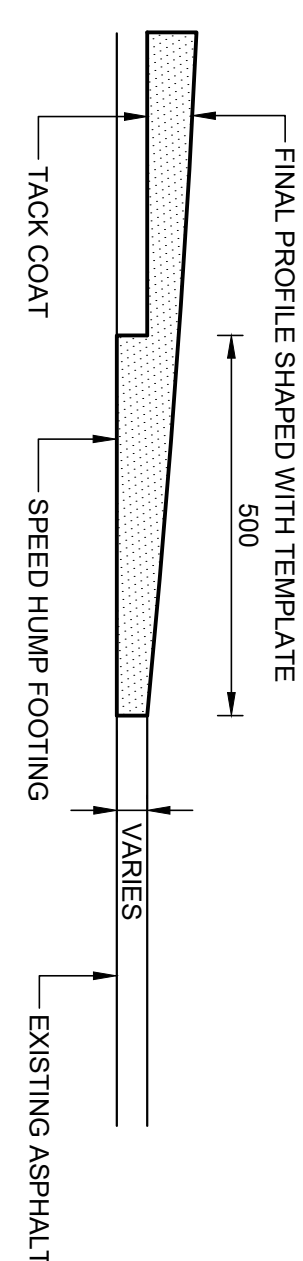
SCALE 1:10



SECTION B-B:

CONSTRUCTION DETAIL OF SPEED HUMPS

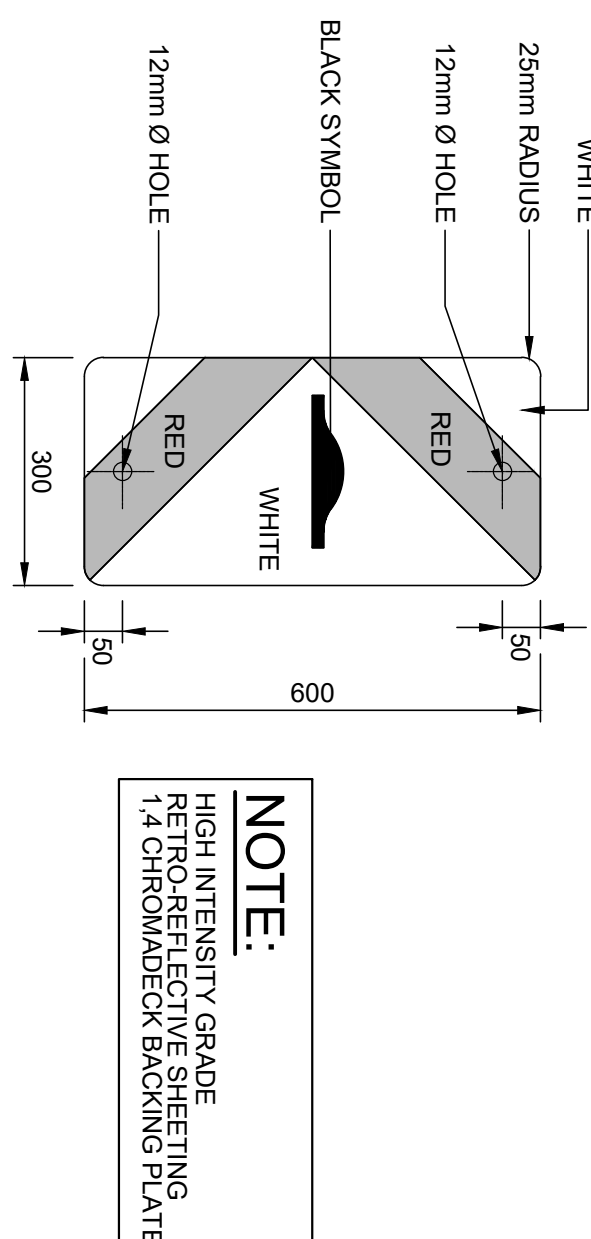
SCALE 1:10



DANGER PLATE SPEEDHUMP (RIGHT)

W417

SCALE 1:10



PRELIMINARY DESIGN	DETAILED DESIGN	TENDER DRAWING	APPROVED CONTRACT
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

[illegible][illegible]