

MAKHADO MUNICIPALITY



CONTRACT NO. 26 of 2025

**UPGRADING OF MADOMBIDZHA (50/50),
RAMANTSHA TO RAVELE ACCESS ROAD – PHASE 1**

TENDER DOCUMENT

CIDB GRADING: 8CE or higher

NAME OF TENDERER	:
TENDER AMOUNT	:
PREPARED FOR: MAKHADO LOCAL MUNICIPALITY Private Bag X2596 MAKHADO 0920 Tel: 015 519 3000 Fax: 015 516 6145 	PREPARED BY: AGC CONSULTING ENGINEERS CC PO Box 267 Bendor Park POLOKWANE 0713 Tel: 015 296 2789 Email: agcconsultingengineers@gmail.com 



**Municipal
Infrastructure
Grant**

MAKHADO LOCAL MUNICIPALITY



CONTRACT NO. 26 of 2025

**UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD –
PHASE 1**

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MAKHADO MUNICIPALITY



**CONTRACT NO. 26 of 2025: UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA
TO RAVELE ACCESS ROAD – PHASE 1**

T1.2 TENDER DATA

T 1.2.1

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

MAKHADO LOCAL MUNICIPALITY							
TENDER NOTICE							
<p>All suitable service providers are hereby invited to bid for the above-mentioned project. Bidders are requested to bid as per specification attached to the bid documents that will be obtainable 10 April 2025 at non-refundable amount of R600.00 per document at the Procurement Office No. B043 Ground Floor, 83 Krogh Street, Civic Center, Makhado or can be downloaded from e-tender portal for free https://etenders.treasury.gov.za/content/advertised-tender or www.makhado.gov.za</p>							
BID NO:	DESCRIPTION	EVALUATION CRITERIA	COMPULSORY BRIEFING SESSION	SPECIAL REQUIREMENT	TECHNICAL ENQUIRIES	REFERENCE AND NOTICE NO.	CLOSING DATE AND TIME
24 of 2025	Upgrading of Road leading to Mavhoyi FET College	80/20 preference points with functionality	16 April 2025 at 11:00pm at Biaba (Nzhelele) at the intersection of Viva filling station	<ul style="list-style-type: none"> CIDB Grading 06CE or higher Attach three year audited financial statement (only those who are required by the law to submit) 	Acting Director technical services : Ms LA Thulare or Mr V mugeri at 0155193000	Ref: 8/3/2/2080 Notice no: 38/2025	09 May 2025 at 12:00pm
25 of 2025	Upgrading of Tshino access road	90/10 preference points with functionality	17 April 2025 at 12:00pm at Tshino next to Vuwani business and lifestyle centre	<ul style="list-style-type: none"> CIDB Grading 08CE or higher Attach three year audited financial statement (only those who are required by the law to submit) 	Acting Director technical services : Ms LA Thulare or Mr V mugeri at 0155193000	Ref: 8/3/2/2081 Notice no: 39/2025	09 May 2025 at 12:00pm
26 of 2025	Upgrading of Madombidzha (50/50), Ramantsha to Ravele road phase 1	90/10 preference points with functionality	18 April 2025 at 11:00pm at Madombidzha 50/50	<ul style="list-style-type: none"> CIDB Grading 8CE or higher Attach three year audited financial statement (only those who are required by the law to submit) 	Acting Director technical services : Ms LA Thulare or Mr V mugeri at 0155193000	Ref: 8/3/2/2082 Notice no: 40/2025	09 May 2025 at 12:00pm
27 of 2025	Panel of civil contractors for Rehabilitation and resealing of road, emergency potholes patching within Makhado local municipality for the period of three years	80/20 preferential points		CIDB Grading 3CE or higher	Acting Director technical services : Ms LA Thulare or Mr MG Raleshuku at 0155193000	Ref: 8/3/2/ 2083 Notice no: 41/2025	09 May 2025 at 12:00pm

The Municipality is not bound to accept the lowest or any bid and reserves the right to accept any part of a bid. Bids must remain valid for a period of ninety (90) days after closing date of submission thereof. Submitted tenders will be evaluated as per above mentioned table.

Bids which are late, incomplete, unsigned, or submitted in pencil or by telegraph or facsimile or electronically by e-mail, or not having the following documents attached for evaluation or not complying with the tender specifications, will not be evaluated, and will be disqualified:

- Valid Tax compliance status pin issued by SARS
- A copy of company registration documents (CK)
- Certified copy/copies of company owner(s) ID book(s), not older than three (03) months certification.
- Attach proof of payment for municipal rates not owing for more than (03) months or formal lease agreement for rental premises or letter from the traditional authority in cases of non-ratable areas. (Attach for both entity and directors of the company)
- Copy of central supplier database (CSD) report.

NB:

- All Service Provider doing business with Makhado municipality are required to register on the CSD (Central Supplier Database).
- A copy of a certified copy will not be accepted.

All procurement enquiries should be directed to Ms. P Mudau or Mr M Ramabulana at Tel no. (015) 519 3044/3024

Civic Centre
83 Krogh Street
MAKHADO

MR KM NEMANAME
MUNICIPAL MANAGER

T 1.2.2

Contractor


Witness 1

Witness 2

Employer


Witness 1

Witness 2



MAKHADO

LOCAL MUNICIPALITY



ERRATUM NOTICE

TENDER NO:26 OF 2025 UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ROAD PHASE 1

Makhado Local Municipality is hereby issuing an erratum for an advert which appeared in Sowetan newspaper dated **01 April 2024** erratum has been issued to the compulsory briefing session for the following bid.

Tender no: 26 Of 2025 upgrading of Madombidzha (50/50), Ramantsha to Ravele Road Phase 1

- **The compulsory briefing session meeting scheduled 18 April 2025 at 11: 00pm** at Madombidzha 50/50 has changed to **16 April 2025 at 14: 30pm** at Madombidzha 50/50.
- **The closing date: 09 MAY 2025 at 12:00pm**

Civic Centre, 83 Krogh Street, MAKHADO
Notice No. 40 /2025
File No. 8/3/2/ 2082

MR. KM NEMANAME
MUNICIPAL MANAGER

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement (Feb 2008) as published in Government Gazette No: 30692, Board Notice 9 of 2008 of 1 February 2008. (See www.cidb.org.za).

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

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

Clause Number	
F.1.1	The Employer is: MAKHADO LOCAL MUNICIPALITY Private Bag X2596 Makhado 0920
F.1.2	The Tender documents issued by the Employer comprise the following documents: THE TENDER Part T1: Tendering Procedures T1.1 Tender Notice and invitation to tender T1.2 Tender Data Part T2 : Returnable Documents T2.1 List of Returnable documents T2.2 Returnable schedules

T 1.2.3

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

	THE CONTRACT Part C1: Agreements and Contract Data C1.1 Form of offer and acceptance C1.2 Contract Data C1.3 Performance guarantee C1.4 Adjudicator's Contract Part C2: Pricing Data C2.1 Pricing Instructions C2.2 Bill of Quantities Part C3: Scope of Work C3 Scope of Work Part C4: Site Information C4 Site Information	
F1.3	Interpretation 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 tender conditions.	
F.1.4	The Employer's Agent is:	
	AGC Consulting Engineers Tel: 015 296 2789 Fax: 086 613 6213	P.O Box 267 Bendor Park Polokwane 0713
F.1.5.1	Reject or accept The Employer may 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 a cancellation and rejection but will give written reasons for such action upon written request to do so.	
F.2.1	Eligibility Only those tenderers who satisfy the following criteria are eligible to submit tenders:	

T 1.2.5

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

F.2.2	<p>Only those Tenderers who are registered with the CIDB with 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) or 25 (7A) of the Construction Industry Development Regulations, for a 8CE or higher class construction work, are eligible to have their tenders evaluated.</p> <p>Joint Ventures are eligible to submit tenders provided that:</p> <ol style="list-style-type: none"> 1. every member of the joint venture is registered with the CIDB; 2. the lead partner has a Contractor grading designation in the 7CE or higher class of construction work; and 3. 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 a 8CE or higher class of construction work or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations.
F.2.3	<p>Compensation of tendering</p> <p>Accept that the Employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer satisfy requirements.</p>
F.2.4	<p>Check documents</p> <p>Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.</p>
F.2.5	<p>Confidentiality and copyright</p> <p>Treat as confidential 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.</p>
F.2.6	<p>Reference documents</p> <p>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.</p>
F2.7	<p>Acknowledge Addenda</p> <p>Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary, apply for an extension of the closing time stated in the tender data, in order to take the addenda into account.</p>

T 1.2.5

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

F.2.8	The arrangements for a compulsory site meeting are:
	<div> Date: 16 April 2025 at Madombizha 50/50 Time: 14h30 </div>
F.2.9	Pricing the tender R 600.00
F.2.10	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 by tipex or the use of masking fluid or the use of erasable ink are prohibited.
F2.13.3	Tender offer communicated on paper shall be submitted as an original.
F.2.13.5	The Employer's address for delivery of Tender offers and identification details to be shown on each Tender offer package are: CONTRACT NO. 26 Of 2025: UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD – PHASE 1 Closing date and time: Closing date: 09 May 2025 Closing Time: 12:00pm Location of Tender box: Makhado Local Municipality Office Private Bag X2596 Makhado 0920
F.2.13.9	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.
F.2.14	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.
F2.15	The closing time for submission of tender offers is as mentioned in F.2.13.5 above and as stated in the Tender Notice and Invitation to Tender.
F.2.16	The Tender offer validity period is 90 Days.
F.2.18	The tenderer shall, when requested by the Employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the Labour-Intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements.
F2.20	The tenderer is required to submit a Performance Guarantee from an approved insurer within 14 days from the appointment. A format is included in Part C1.3 of this document. The tenderer is to submit to the employer 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.

T 1.2.7

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

F.2.23	<p>The tenderer is required to submit with his tender:</p> <p>(1) Valid Tax compliance status pin issued by SARS; and</p> <p>(2) A copy of company registration documents (CK); and</p> <p>(3) Certified copy/copies of company owner(s) ID book(s), not older than three (3) months certification; and</p> <p>(4) Attach proof of payment for municipal rates not owing for more than three (3) months or a formal lease agreement for rental premises or a letter from the traditional authority in cases of non-ratable areas. (attach for both entity and directors of the company)</p> <p>(5) Copy of central suppliers database (CSD) report</p> <p>(3) In the case of Joint Venture – the Joint Venture Agreement.</p>
F.3.4	<p>The time and location for opening of the Tender offers are:</p> <p>Closing date: 09 May 2025 Closing Time: 12:00 pm</p> <p>Location: Makhado Municipal Offices</p>
F3.5	<p>Two-envelope System</p> <p>A two-envelope procedure will NOT be followed.</p>
F3.6	<p>Non-disclosure</p> <p>After the opening of the Tender offers, no information relating to the clarification, determination of responsiveness, evaluation and comparison of Tender offers and recommendations concerning the award of the Tender shall be disclosed to any other Bidder or persons not concerned with such process until the award of the Tender has been announced by MAKHADO LOCAL MUNICIPALITY.</p>
F3.9	<p>Arithmetical errors, omissions and discrepancies</p> <p>MAKHADO LOCAL MUNICIPALITY is to check BID offers for arithmetical errors in the following manner:</p> <p>a) Where there is a discrepancy between the amounts in words and amounts in figures, the amount in words shall govern.</p> <p>b) 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 item 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 line-item total as quoted shall govern, and the unit rate shall be corrected.</p> <p>c) 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 govern, and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.</p> <p>Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of the arithmetical error in the manner described above.</p>

T 1.2.7

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

F.3.11.2	<p>The procedure for the evaluation of responsive tenders is Method 2.</p> <p>The financial offer will be scored using Formula 2 (option 1) in Table F1 where the value of W1 is:</p> <p>1) 90 where the financial value inclusive of VAT of all responsive tenders received have a value in excess of R 50 000 000.</p>
F.3.18	The number of paper copies of the signed contract to be provided by the Employer is one.

	<p>BID Award</p> <p>MAKHADO LOCAL MUNICIPALITY requires bidders to perform work of high quality as set out in this bid.</p> <p>The lowest tender will not necessarily be accepted, and MAKHADO LOCAL MUNICIPALITY reserves the right to accept a tender either as a whole or in part, has the right to award the bid to more than one bidder, or not accept any bid.</p> <p>The additional conditions of the Tender are:</p> <ol style="list-style-type: none"> MAKHADO LOCAL MUNICIPALITY may also request that the Tenderer provide written evidence that his financial, labour and resources are adequate for carrying out the project. MAKHADO LOCAL MUNICIPALITY reserves the right to appoint a firm of chartered accountants and auditors and / or execute any other financial investigations on the financial resources of any Tenderer. The Tenderer shall provide all reasonable assistance in such investigations. MAKHADO LOCAL MUNICIPALITY reserves the right to appoint a different Contractor for each project. The Tenderer shall be required to complete the form of offer (C1.1) and the Bill of Quantities (C2.2) for each project.
	<p>The tenderer is to note that the following Additional Relevant Documents attached into Part 5 of this document will form part of this contract:</p> <ol style="list-style-type: none"> Ministerial Determination No.4: Extended Public Works Programmes.

T 1.2.8

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

EVALUATION CRITERIA

The bids will be evaluated in two stages. The first stage will check whether the bidders have submitted all documents as requested on the advert. Although functionality does not form part of the final tender points scoring for award purpose, tenderer will be assessed for responsiveness and functionality first and if the tender is not responsive or meet the minimum functionality score, the tenderer will be eliminated and not considered further for second stage of evaluation.

The second stage of the evaluation will be based on Price (90) and preference points for B-BBEE status level of contribution (10).

Detailed points scoring for functionality are as follows:

COMPETENCE ACHIEVEMENT/FUNCTIONALITY

SCHEDULE TABLE A1: REPUTATION AND REFERENCES

TARGETED GOALS Name reference with contact details (Previous 5 years, Projects involving Road and Stormwater)		Max Points to be Scored	Points Claimed by Tenderer	Allocated Points
1	Project 1	8		
2	Project 2	8		
3	Project 3	8		
4	Project 4	8		
5	Project 5	8		
Sub-Total: Reputation and References		40		

The bidder should clearly demonstrate company experience on similar projects and past performance in Roads and Stormwater Construction.

NB: Appointment letters indicating the project value, completion certificates of completed projects and reference letters with contactable references and client official stamp must be attached a per the above score card.

- Roads and Stormwater Construction completed within the municipality environment, RAL and SANRAL.
- Completed road-related projects within the past 5 years.
- 8 points will be awarded for each project (minimum of 5 Projects required) as per requirements above to a maximum of 40 points.
 - **8CE: 8 points**
 - **7CE: 6 points**
 - **6CE: 4 points**
 - **5CE: 3 points**
 - **4CE: 2 points**
 - **3CE: 1 point**

T 1.2.9

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

NOTE:

- Projects that **DO NOT** meet the requirements as mentioned above **WILL NOT BE ACCEPTED**.
- Project where the contractor was a sub-contractor will **NOT** get any points.
- **ONLY** Completed Projects will score points.

TABLE A2: FINANCIAL REFERENCES

	TARGETED GOALS	Tendered Goal	Points Claimed by Tenderer	Allocated Points
1	Tenderer submitted banking details proof attached	2		
2	Bank rating of “C” or better	5		
3	Registered financial Institution’s full details as guarantor in the amount of 10% as specified for surety purpose shall be submitted	3		
	Sub-Total: Financial References	10		

TABLE A3: EXPERIENCE AND QUALIFICATION OF KEY STAFF

Table A3.1 Experience

	TARGETED GOALS	Points Allocation	Points Claimed by Tenderer	Allocated Points
1	Contract Manager: 10 years Experience in Roads Projects	>10 yrs=5 6-9 yrs=3 3-5 yrs=2 1-2yrs=1		
2	Site Agent: 08 years post registration Experience in Roads Projects	>8 yrs=5 5-7 yrs=3 3-4 yrs=2 1-2yrs=1		
3	Foreman: 5 years in Roads Projects	>5 yrs=3 4 yrs=1.5 3 yrs=1 1-2yrs=0.5		
4	Health and Safety Officer: 5 years post registration Experience as OHS in Civil Engineering Construction	>5 yrs=2 4 yrs=1 3 yrs=0.5 1-2yrs=0.25		
	Sub-Total: Experience	15		

T 1.2.10

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

NOTE: Project organogram should be attached. Curriculum vitae with detailed experience and contact details should be attached to the tender document for verification by the consultants.

Table A3.2 Qualifications

TARGETED GOALS		Tendered Goal	Points Claimed by Tenderer	Allocated Points
1	Contract Manager: Civil Engineering or construction management <ul style="list-style-type: none"> Must be ECSA registered (2 Points) 	ECSA Reg = 2 BSc / BTech = 3 PrCPM = 2		
	<ul style="list-style-type: none"> BSc/BTech: Civil Engineering Degree (3 Points) 	ND = 1 N6 = 0		
2	Site Agent: Civil Engineering or construction management or project management <ul style="list-style-type: none"> Minimum National Diploma: Civil Engineering Degree (2 Points) Must be SACPCMP / ECSA registered (2 Points) NQF Level 5 Labour Intensive Construction Certificate (1 Points) 	SACPCMP / ECSA Reg = 2 BSc/B-Tech = 2 NQF 5 LIC Cert = 1		
3	General Foreman <ul style="list-style-type: none"> Minimum NDip: Civil Engineering (3 Points) NQF 5 / N6 (1 Point) (Maximum points is 3)	ND = 3 NQF5 / N6 = 1		
4	Health and Safety Officer 5 years of experience as OHS in Road projects <ul style="list-style-type: none"> Minimum National Diploma (Safety management) and Registered with SACPCMP as CHSO (2 points) 	ND & SACPCMP = 2 Points ND=0		
Sub-Total: Qualifications		15		

T 1.2.11

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

TABLE A4: PLANT AND EQUIPMENT

TARGETED GOALS	Tendered Goal	Points Claimed by Tenderer	Allocated Points
1. Grader: No (1)	3		
2. TLB: No (2)	2		
3. Excavators: No (2)	4		
4. Water Cart: No (2) (16 000 litre)	2		
5. 10 m ³ Tipper Trucks: No (6)	6		
6. Vibratory Roller 12 ton:No (1)	1		
7. Pad Foot Roller 8 ton: No (1)	1		
8. LDV: No (2)	1		
Sub-Total: Plant and Equipment	20		

Note: Tenderers should attach certified proof of ownership certificate for the plant mentioned above if they own such plant. In case of hired plant, tenderers will be required to attach a letter of undertaking by the hiring firm indicating that they will provide the tenderer with such plant should the tenderer becomes a successful bidder. The hiring company should also provide proof of ownership for such plants (For hiring, tenderers will only receive 50% of the full points for Plant and Equipment).

T 1.2.12

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

TABLE A5: SUMMARY

DESCRIPTION	Maximum Points to be Allocated	Points Claimed by Tenderer	Allocated Points
REPUTATION AND REFERENCE OF THE COMPANY: TABLE A1	40		
FINANCIAL REFERENCES: TABLE A2	10		
EXPERIENCE OF KEY STAFF: TABLE A3.1	15		
QUALIFICATION OF KEY STAFF: TABLE A3.2	15		
PLANT AND EQUIPMENT: TABLE A4	20		
TOTAL	100		

Minimum functionality requirements of seventy percent (70%) or 70 points required for further evaluation.

The 90/10-point scoring system will be used on second stage of evaluation.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

MAKHADO LOCAL MUNICIPALITY**CONTRACT NO: 26 of 2025****UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD – PHASE 1****T2.1 LIST OF RETURNABLE DOCUMENTS**

The Tenderer must complete the following returnable Schedules:

Returnable Schedules are required for Tender evaluation purposes

Form A	Compulsory Enterprise Questionnaire
Form B	Record of Addenda to Tender Documents
Form C	Authority for Signatory
Form D	Preference Schedule
Form E	Schedule of Previous Experience
Form F	Schedule of Current Projects
Form G	Declaration of good standing regarding tax & Original Tax Clearance Certificate
Form I	Proposed Key Personnel
Form J	Schedule of Plant and Equipment
Form K	Schedule of Proposed Sub-Contractors
Form L	Financial References

Returnable Documents that will be incorporated into the contract

C1.1	Offer Portion of Form of Offer and Acceptance
C1.2	Contract Data (Part 2)
C1.3	Form of Guarantee
C2.2	Bill of Quantities

T2.1.1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MAKHADO LOCAL MUNICIPALITY



CONTRACT NO. 26 of 2025

**UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD –
PHASE 1**

T2.2 RETURNABLE DOCUMENTS

RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

FORM A COMPULSORY ENTERPRISE QUESTIONNAIRE

In the case of a Joint Venture – This questionnaire is to be completed and submitted in respect of each partner.

1. **Name of Enterprise:**
2. **VAT Registration number, if any:**
3. **CIDB Registration number:**
4. **Particulars of sole proprietors and partners in partnership:**

Name	Identity Number	Personal Income Tax Number

* Complete only if sole proprietor or partnership and attach separate page if more than 4 partners.

5. **Particulars of companies and close corporations:**

Company Registration Number:

Close Corporation Number:

Tax reference Number:

T2.2.1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

6. Record in the service of the state:

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

a member of any municipal council

a member of any provincial legislature

a member of the National Assembly or the National Council of Province

a member of the board of Directors of any Municipal entity

an official of any municipality or municipal entity

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)

a member of an accounting authority of any national or provincial public entity

an employee of Parliament or a provincial legislature

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

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

Name of Tenderer:

Date:

Signature :

Position:

Full name of signatory:

T2.2.2

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ATTACH THE FOLLOWING DOCUMENTS HERETO

1. For Closed Corporations

 CK1 or CK2 as applicable (Founding Statement)
2. For Companies

 Shareholders register
3. For Joint Venture Agreements

 Copy of the Joint Venture Agreement between all the parties, as well as the documents in (1) or (2) of each Joint Venture member.

T2.2.3

<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

FORM B RECORD OF ADDENDA TO TENDER DOCUMENTS

We confirm that the following communication received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

	Date	Title of Details

Name of Tenderer:

Date:

Signature :

Position:

Full name of signatory:

T2.2.4

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM C AUTHORITY OF SIGNATORY

Details of the person responsible for the tender process:

Name :

Contact number :

Office address :

Signatories for close corporations and companies shall confirm their authority by attaching to this form a **duly signed and dated original or certified copy on the Company Letterhead** of the relevant resolution of their members or their board of directors, as the case may be.

PRO-FORMA FOR COMPANIES AND CLOSE CORPORATIONS:

"By resolution of the board of directors passed on (date).....

Mr

has been duly authorized to sign all documents in connection with the Tender for Contract Numberand any Contract which may arise there from on behalf of

(BLOCK CAPITALS)

SIGNED ON BEHALF OF THE COMPANY

IN HIS CAPACITY AS

DATE
:

FULL NAMES OF SIGNATORY

AS WITNESSES: 1.

2.

T2.2.5

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PRO-FORMA FOR JOINT VENTURES:**Certificate of Authority for Joint Ventures**

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorise Mr/Ms, authorised signatory of the company, acting in the capacity of lead partner, to sign all documents in connection with the tender offer an any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead Partner: CIDB Reg No:		Signature: Name: Designation:
 CIDB Reg No:		Signature: Name: Designation:
 CIDB Reg No:		Signature: Name: Designation:
 CIDB Reg No:		Signature: Name: Designation:
 CIDB Reg No:		Signature: Name: Designation:

T2.2.6

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**ATTACH HERETO THE DULY SIGNED AND DATED
ORIGINAL OR CERTIFIED COPY OF THE AUTHORITY OF
SIGNATORY ON COMPANY LETTERHEAD**

T2.2.7

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

--

Witness 2

FORM D PREFERENCE SCHEDULE

Acceptable Tenders will be evaluated using a system that awards points on the basis of Tender price and the meeting of specific goals. **Failure on the part of a Tenderer to sign this form will be interpreted to mean that point preference is not being claimed.**

The acceptable Tenderer obtaining the highest number of points will be awarded the contract. For Tenders with a Tender amount equal to or below R 50 000 000 a maximum of 80 points is allocated for price and a maximum of 20 points for meeting specific goals, which may include HDI equity, SMME status, job creation and local (South African) content. For Tenders with a Tender amount above R 50 000 000 a maximum of 90 points is allocated for price and a maximum of 10 points for meeting specific goals.

The points for the meeting of specific goals may only be awarded to an enterprise which is a legal entity, registered as an income taxpayer with the South African Revenue Services, and which is an independent and operating enterprise which performs commercially useful functions as set out below. Points can be denied where an enterprise subcontracts more than 30% of the value of the contract (excluding SMME's and emerging contractors and materials) at the time of award, exclusive of all VAT, allowances for contingencies, escalation and provisional sums, to other entities.

DEFINITIONS

“Acceptable Tender” means any Tender which, in all respects, complies with the conditions of the Tender and specifications as set out in the Tender document, including conditions as specified in the Preferential Procurement Policy Framework Act (Act 5 of 2000) and related legislation.

“Council” refers to the **MAKHADO LOCAL MUNICIPALITY**.

“Equity ownership” refers to the percentage ownership and control, exercised by individuals within an enterprise.

“HDI equity ownership” refers to the percentage of an enterprise, which is owned by individuals, or in the case of a company, the percentage of shares that are owned by individuals meeting the requirements of the definition of an HDI.

“Historically disadvantaged individuals (HDIs)” means all South African citizens –

- (i) Who had no franchise in national elections prior to the introduction of the 1983 and 1993 constitutions (Referred to as Previously Disadvantaged Individuals (PDIs) in this document?)
- (ii) Women
- (iii) Disabled persons.

“SMME’s” (small, medium and micro enterprises) refers to separate and distinct business entities, including co-operative enterprises and NGOs, managed by one owner or more, as defined in the National Small Business (Act 102 of 1996).

T2.2.8

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Tenders are adjudicated in terms of BM Supply Chain Management Policy, and the following framework is provided as a guideline in this regard.

1. Technical adjudication and General Criteria

- Tenders will be adjudicated in terms of inter alia:
- Compliance with Tender conditions
- Technical specifications

If the Tender does not comply with the Tender conditions, the Tender may be rejected. If technical specifications are not met, the Tender may also be rejected.

With regard to the above, certain actions or errors are unacceptable, and warrants **REJECTION OF THE TENDER**, for example:

- Invalid Tax Compliance Status PIN Letter. (**Only valid tax compliance status PIN letters** must be attached to the Tender Document).
- Pages to be completed are removed from the Tender document, and have therefore not been submitted.
- Failure to complete the schedule of quantities as required (e.g. only lump sums provided).
- Scratching out without initialing next to the amended rates or information.
- Writing over / painting out rates / the use of tippex or any erasable ink, eg. pencil.
- Failure to attend compulsory clarification meetings and site inspections.
- The Tender has not been properly signed by a party having the authority to do so, according to the **Form 2.2.2 – “Authority for Signatory”**
- No authority for signatory submitted.
- Particulars required in respect of the Tender have not been provided – non-compliance of Tender requirements and/or specifications.
- The Tenderer’s attempts to influence, or has in fact influenced the evaluation and/or awarding of the contract.
- The Tender has been submitted after the relevant closing date and time
- Each page of the Contract portion of this Tender document (Part C1 – C4) must be initiated by the authorised person in order for the document to constitute a proper Contract between the Employer (MLM) and the undersigned.
- If any municipal rates and taxes or municipal service charges owed by that Tendered or any of its directors to the municipality, or to any other municipality or municipal entity, are in arrears for more than three months.
- If any tenderer who during the last five years has failed to perform satisfactorily on a previous contract with the municipality or any other organ of state after written notice was given to that tenderer that performance was unsatisfactory.

T2.2.9

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

2. Size of enterprise and current workload

Evaluation of the Tenderer's position in terms of:

- Previous and expected current annual turnover
- Current contractual obligations
- Capacity to execute the contract

3. Staffing profile

Evaluation of the Tenderer's position in terms of:

- Staff available for this contract being Tendered for
- Qualifications and experience of key staff to be utilised on this contract

4. Previous experience

Evaluation of the Tenderer's position in terms of his previous experience. Emphasis will be placed on the following:

- Experience in the relevant technical field
- Experience of contracts of similar size
- Some or all of the references will be contacted to obtain their input.

5. Financial ability to execute the contract:

Evaluation of the Tenderer's financial ability to execute the contract. Emphasis will be placed on the following:

- Letter of intent to provide the required performance guarantee.
- Contacting the Tender's bank manager to assess the Tenderer's financial ability to execute the contract and the Tendered hereby grants his consent for this purpose.

6. Good standing with SA Revenue Services

- Determine whether a valid tax compliance status PIN letter has been submitted.
- The Tenderer must affix a valid tax compliance status PIN letter

If the Tender does **not** meet the requirements contained in the MLM Procurement Policy, and the mentioned framework, it will be rejected by the Council, and may not subsequently be made acceptable by correction or withdrawal of the non-conforming deviation or reservation.

T2.2.10

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

7. Penalties

The MAKHADO LOCAL MUNICIPALITY will if upon investigation it is found that a preference in terms of the Act and these regulations has been obtained on a fraudulent basis, or any specified goals are not attained in the performance of the contract, on discretion of the Departmental Head, one or more of the following penalties will be imposed:

- Cancel the contract and recover all losses or damages incurred or sustained from the tenderer.
- Impose a financial penalty of twice the theoretical financial preference associated with the claim, which was made in the Tender.
- Restrict the contractor, its shareholders and directors from obtaining any business from the all Government Institution and would be registered under the National Treasurer Data base of Restricted Suppliers for a period of 5 years or More.

8. HDI Status

- Preference points stipulated in respect of a tender include preference points for equity ownership by HDIs.
- The equity ownership must be equated to the percentage of an enterprise or business owned by individuals or, in respect of a company, the percentage of a company's shares that are owned by individuals, who are actively involved in the management of the enterprise or business and exercise control over the enterprise, commensurate with their degree of ownership at the closing date of the tender.
- In the event that the percentage of ownership changes after the closing date of the tender, the tenderer must notify the Council accordingly and such tenderer will not be eligible for any preference points. Preference points may not be claimed in respect of individuals who are not actively involved in the management of an enterprise or business and who do not exercise control over an enterprise or business commensurate with their degree of ownership.

Claims made for equity ownership by an HDI must be considered according to the following criteria:

- Equity within private companies must be based on the percentage of equity ownership;
- A Consortium or Joint Venture may, based on the percentage of the contract value managed or executed by their HDI members, be entitled to equity ownership in respect of an HDI.
- The number of points scored for a Consortium or Joint Venture must be added to the number of points scored for achieving specified goals.
- A person awarded a contract as a result of preference for contracting with, or providing equity ownership to, an HDI, may not subcontract more than 30% of the value of the contract to a person who is not an HDI or does not qualify for such preference.

T2.2.11

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The following is applicable to calculate points for price
in respect of tenders with a value
above R 50 000,000-01 (VAT incl).

90	Potential points for price
5	100% Black ownership (attach CSD detail report)
3	Woman Ownership (attach CSD detail report or Certified copy of Smart ID)
2	Disability (Attach Disability letter from a doctor)

I/we apply on behalf of my/our firm for a preference based on:

NON-JOINT VENTURES

	HDI		Disability	
	No franchise in national elections (black persons)	Women		
	African, Coloured, Indian			
Equity ownership percentage				
For office use only: Number of preference points awarded by employer				
	Total:			

JOINT VENTURES

Name	Position occupied in Enterprise	Identity number	Citizenship	HDI Status (Y/N)	Date of Ownership	% Owned by HDI's	% Owned by Women
TOTAL						a	b

T2.2.12

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

NOTE

Where owners are themselves, a company or partnership, identify the ownership of the holding firm.

In the case of joint ventures equity ownership for each of the JV members are determined as above, and the combined HDI ownership is then calculated as follows: -

Joint venture members	a % Contribution to the JV	b % HDI ownership	c=a * b/100 % HDI contribution
Total HDI contribution			

	HDI		Locality
	No franchise in national elections (black persons)	Women	
	African, Coloured, Indian		
The percentage of the contract value managed or executed by their HDI members.			
For office use only: Number of preference points awarded by employer			
	Total:		

5. Tender preferences claimed:

I / we apply on behalf of my / our firm for the following preference(s) and by claiming a preference confirm that all claims for equity ownership are in respect of individuals who are actively involved in the management of the enterprise or business:

Category of preference	Percentage of maximum tender evaluation points provided for in the Preferential Procurement Policy Framework Act (Act 5 of 2000)	Preference claimed for Category of Preference (Y=yes)
HDI (African, Coloured, Indian) equity ownership		
HDI (women) equity ownership		
Locality		

T2.2.13

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

Signature:

Name:

Duly authorised to sign on behalf of:

Telephone:

Fax:

Date:

T2.2.15

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM G DECLARATION OF GOOD STANDING REGARDING TAX**SOUTH AFRICAN REVENUE SERVICES**

Tender No:

Closing Date:

DECLARATION OF GOOD STANDING REGARDING TAX**PARTICULARS**

1. Name of Taxpayer/Tenderer:

2. Trade Name:

3. Identification Number: (If applicable) 4. Company / Close Corporation registration number: 5. Income Tax reference number: 6. VAT registration number: (If applicable) 7. PAYE employer's registration number: (If applicable) 8. Monetary value of Bid: **DECLARATION**

I, the undersigned, the above taxpayer/Bidder, hereby declare that my Income Tax, Pay-As-You-Earn (PAYE) and Value-Added-Tax (VAT) obligations of the above-mentioned taxpayer, which include the rendition of returns and payment of the relevant taxes:

(i) Have been satisfied in terms of the relevant Acts; or

(ii) That suitable arrangements have been made with the Receiver of Revenue to satisfy them. *

.....
SIGNATURE.....
CAPACITY.....
DATE**PLEASE NOTE: ***

The declaration (ii) cannot be made unless formal arrangements have been made with the Receiver of Revenue with regard to any outstanding revenue/outstanding tax returns.

T2.2.18

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ATTACH VALID TAX COMPLIANCE STATUS PIN LETTER

THE LETTER MUST NOT BE EXPIRED

T2.2.19

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM I PROPOSED KEY PERSONNEL

Please list all the personnel that you intend to appoint on this contract. Attach Organogram detailing the Company and Site Management Structure, Curriculum Vitae (CV's) of all relevant Site Management Personnel as required for this tender and the required Certified Qualification Certificates for all the relevant personnel. **This information is material to the award of the Contract.**

DESCRIPTION	<u>Name</u> of Full time member	Staff to be appointed on this contract	
		No of Full Time employment	No of Part Time employment
Contracts Manager			
Site Agent			
General Foreman			
Foreman			
CHSO			
Land Surveyor			
Quantity Surveyor			
Materials Technician			
Clerk			
Supervisor			
Team Leader			
Skilled Labour			
Semi-skilled Labour			
Unskilled Labour			

Name of Tenderer:

Date:

Signature:

Full name of signatory:

T2.2.20

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM J SCHEDULE OF PLANT AND EQUIPMENT

Attach Proof of Ownership (Registration certificates and valid Natis licensing documents or invoices for plant which are not liable for registration and/or licensing), or Letter of intent to hire plant from Plant Hiring Suppliers with the above-mentioned proof of ownership. **This information is material to the award of the Contract.**

1. TRENCH EXCAVATION	NUMBER OF UNITS OWNED BY CONTRACTOR	NUMBER OF UNITS ALLOCATED TO THIS CONTRACT	
		OWNED	HIRED
2. EARTH MOVING EQUIPMENT			
3. CONSTRUCTION EQUIPMENT			
4. TRANSPORT			

Name of Tenderer:

Date:

Signature:

Full name of signatory:

T2.2.21

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

[illegible]

Date:

Full name of signatory:

11/11/2019

FORM L FINANCIAL REFERENCES**FINANCIAL STATEMENTS**

Attach a copy of the latest set of audited or independently reviewed financial statements for the past 3 financial years together with Directors and Auditors or Accountants report for consideration by the Employer.

DETAILS OF TENDERERS BANKING INFORMATION

Attach a valid Bank Rating Letter and a valid letter of intent from a registered financial services provider to provide 10% Performance Guarantee of the Tender Amount with specific reference to this tender with all required details for tender evaluations purposes. **This information is material to the award of the Contract.**

I/We hereby authorise the Employer/Employer's Agent to approach all or any of the following banks for the purposes of obtaining a financial reference:

BANK NAME:									
ACCOUNT NAME: (e.g. ABC Civil Construction cc)									
ACCOUNT TYPE: (e.g. Savings, Cheque etc)									
ACCOUNT NO:									
ADDRESS OF BANK:									
CONTACT PERSON:									
TEL. NO. OF BANK / CONTACT:									
How long has this account been in existence:	<table border="1"> <tr> <td>0-6 months</td> <td></td> </tr> <tr> <td>7-12 months</td> <td></td> </tr> <tr> <td>13-24 months</td> <td></td> </tr> <tr> <td>More than 24 months</td> <td></td> </tr> </table> (Tick which is appropriate)	0-6 months		7-12 months		13-24 months		More than 24 months	
0-6 months									
7-12 months									
13-24 months									
More than 24 months									

Name of Tenderer:

Date:

Signature:

Full name of signatory:

Bank Stamp

T2.2.23

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

MAKHADO LOCAL MUNICIPALITY



CONTRACT NO. 26 of 2025

**UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD –
PHASE 1**

<p>T2.2.2.1 RATES FOR SPECIAL MATERIALS</p>
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T2.2.2.1

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

T2.2.2.1 RATES FOR SPECIAL MATERIALS

Only bitumen products will be dealt with as a special material in terms of subclause 6.8.3 of the General Conditions of Contract(GCC). All bitumen products, as indicated in the contract data must be stated in the list below.

The rates and prices for the special materials shall be furnished by the contractor, which rates and prices shall exclude VAT but shall include all other obligatory taxes and levies.

The Base month is **March 2025**

Special Materials	Unit *	Rates or Prices for the Base Month

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

When called upon to do so, the contractor shall substantiate the above rates or prices with acceptable documentary evidence from the applicable refinery supplying the bitumen.

Signed on behalf of the tender:.....

T2.2.2.2

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MAKHADO LOCAL MUNICIPALITY



CONTRACT NO. 26 of 2025

**UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD –
PHASE 1**

T2.3 MBD FORMS

T2.3

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MAKHADO LOCAL MUNICIPALITY



CONTRACT NO. 26 of 2025

**UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD –
PHASE 1**

T2.3 MBD FORMS

1. Failure to fully complete and sign the relevant returnable documents shall render such a tender offer unresponsive.
2. Bidders shall note that their signatures appended to each returnable form represents a declaration that they vouch for the accuracy and correctness of the information provided, including the information provided by candidates proposed for the specified key positions.
3. Notwithstanding any check or audit conducted by or on behalf of the Employer, the information provided in the returnable documents is accepted in good faith and as justification for entering into a contract with a Bidder. If subsequently any information is found to be incorrect such discovery shall be taken as wilful misrepresentation by that Bidder to induce the contract. In such event the Employer has the discretionary right to terminate the contract.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



MBD 1

INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF MAKHADO LOCAL MUNICIPALITY

BID NUMBER: **26 of 2025** CLOSING DATE: **09 May 2025** CLOSING TIME: **12:00 pm**
DESCRIPTION: *UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD*

The successful bidder will be required to fill in and sign a written Contract Form (MBD 7).

BID DOCUMENTS MAY BE POSTED TO:

OR

DEPOSITED IN THE BID BOX SITUATED AT:

Civic Centre, 83 Krogh Street, Makhado 0920

Bidders should ensure that bids are delivered timeously to the correct address. If the bid is late, it will not be accepted for consideration.

The bid box is generally open 7h00 to 16h00 a day, 7 days a week.

TENDERS TO REACH MAKHADO LOCAL MUNICIPALITY BEFORE CLOSING DATE AND TIME

ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS – (NOT TO BE RE-TYPED)

THIS BID IS SUBJECT TO THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT

THIS BID WILL BE EVALUATED AND ADJUDICATED ACCORDING TO THE FOLLOWING CRITERIA:

1. Relevant specifications
2. Value for money
3. Capability to execute the contract
4. PPPFA & associated regulations

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

NB: NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE (see definition on MBD 4 attached)

**THE FOLLOWING PARTICULARS MUST BE FURNISHED
(FAILURE TO DO SO MAY RESULT IN YOUR BID BEING DISQUALIFIED)**

NAME OF BIDDER

POSTAL ADDRESS

STREET ADDRESS

TELEPHONE NUMBER CODE.....NUMBER.....

CELLPHONE NUMBER

FACSIMILE NUMBER CODE NUMBER.....

VAT REGISTRATION NUMBER

HAS AN ORIGINAL TAX CLEARANCE CERTIFICATE BEEN ATTACHED (MBD 2)?
YES/NO

ARE YOU THE ACCREDITED REPRESENTATIVE?
IN SOUTH AFRICA FOR THE GOODS/SERVICES OFFERED BY YOU?
YES/NO

(IF YES ENCLOSE PROOF)

SIGNATURE OF BIDDER

DATE

CAPACITY UNDER WHICH THIS BID IS SIGNED

TOTAL BID PRICE..... TOTAL NUMBER OF ITEMS OFFERED

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

Municipality / Municipal Entity: Makhado Local Municipality
Department: Technical
Contact Person: Thulare L
Tel: 015 519 3109
Fax: 015 516 1195

ANY ENQUIRIES REGARDING SUPPLY CHAIN INFORMATION MAY BE DIRECTED TO:

Contact Person: Ms P Mudau
Tel: 015 519 3044/3024

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

TAX CLEARANCE REQUIREMENTS

IT IS A CONDITION OF BIDDING THAT -

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**APPLICATION FOR TAX CLEARANCE CERTIFICATE
(IN RESPECT OF BIDDERS)**

1. Name of taxpayer / bidder:
2. Trade name:
3. Identification number:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4. Company / Close Corporation registration number:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5. Income tax reference number:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6. VAT registration number (if applicable):

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7. PAYE employer's registration number (if applicable):

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Signature of contact person requiring Tax Clearance Certificate:

Name:

Telephone number: Code..... Number:

Address:

.....

.....

DATE: 20____ / ____ / ____

PLEASE NOTE THAT THE COMMISSIONER FOR THE SOUTH AFRICAN REVENUE SERVICE (SARS) WILL NOT EXERCISE HIS DISCRETIONARY POWERS IN FAVOUR OF ANY PERSON WITH REGARD TO ANY INTEREST, PENALTIES AND / OR ADDITIONAL TAX LEVIABLE DUE TO THE LATE- OR UNDERPAYMENT OF TAXES, DUTIES OR LEVIES OR THE RENDITION RETURNS BY ANY PERSON AS A RESULT OF ANY SYSTEM NOT BEING YEAR 2000 COMPLIANT.

[MBD 2]

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

MBD 3.1

**PRICING SCHEDULE – NON-FIRM PRICES
(PURCHASES)**

NOTE: PRICE ADJUSTMENTS WILL BE ALLOWED AT THE PERIODS AND TIMES SPECIFIED IN THE BIDDING DOCUMENTS.

IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT

Name of Bidder.....	Bid
number.....	
Closing Time	Closing Date

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

ITEM NO.	QUANTITY	DESCRIPTION	BID PRICE IN RSA CURRENCY (INCLUDING VAT)
-------------	----------	-------------	--

- Required by:

- At:

- Brand and model

-

- Country of origin.....

- Does offer comply with specification? * YES/NO

- If not to specification, indicate deviation(s)

- Period required for delivery

- Delivery: *Firm/not firm

- *Delete if not applicable

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

MBD 3.2

PRICE ADJUSTMENTS

A NON-FIRM PRICES SUBJECT TO ESCALATION

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

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

Where:

- | | | |
|---------------|---|---|
| Pa | = | The new escalated price to be calculated. |
| (1-V) Pt | = | 85% of the original bid price. Note that Pt must always be the original bid price and not an escalated price. |
| D1, D2.. | = | Each factor of the bid price eg. labour, transport, clothing, footwear, etc. The total of the various factors D1,D2...etc. must add up to 100%. |
| R1t, R2t..... | = | Index figure obtained from new index (depends on the number of factors used). |
| R1o, R2o | = | Index figure at time of bidding. |
| VPt | = | 15% of the original bid price. This portion of the bid price remains firm i.e. it is not subject to any price escalations. |

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

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

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

FACTOR (D1, D2 etc. eg. Labour, transport etc.)	PERCENTAGE OF BID PRICE

<small>Contractor</small>	<small>Witness 1</small>	<small>Witness 2</small>	<small>Employer</small>	<small>Witness 1</small>	<small>Witness 2</small>

MBD 3.2


B PRICES SUBJECT TO RATE OF EXCHANGE VARIATIONS


1. Please furnish full particulars of your financial institution, state the currencies used in the conversion of the prices of the items to South African currency, which portion of the price is subject to rate of exchange variations and the amounts remitted abroad.


PARTICULARS OF FINANCIAL INSTITUTION	ITEM NO	PRICE	CURRENCY	RATE	PORTION OF PRICE SUBJECT TO ROE	AMOUNT IN FOREIGN CURRENCY REMITTED ABROAD
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		


2. Adjustments for rate of exchange variations during the contract period will be calculated by using the average monthly exchange rates as issued by your commercial bank for the periods indicated hereunder: (Proof from bank required)


AVERAGE MONTHLY EXCHANGE RATES FOR THE PERIOD:	DATE DOCUMENTATION MUST BE SUBMITTED TO THIS OFFICE	DATE FROM WHICH NEW CALCULATED PRICES WILL BECOME EFFECTIVE	DATE UNTIL WHICH NEW CALCULATED PRICE WILL BE EFFECTIVE



Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

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**

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

3.14.1 If yes, furnish particulars:

.....
.....

4. Full details of directors / trustees / members / shareholders.

Full Name	Identity Number	State Employee Number

.....
Signature

.....
Date

.....
Capacity

.....
Name of Bidder

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MBD 5

DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (VAT INCLUDED)

For all procurement expected to exceed R10 million (VAT 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.

.....
.....

YES / NO

2 Do you have any outstanding undisputed commitments for municipal services towards a municipality or any other service provider in respect of which payment is overdue for more than 30 days?

2.1 If no, this serves to certify that the bidder has no undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days.

2.2 If yes, provide particulars.

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

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

<div></div> <div>Contractor</div>	<div></div> <div>Witness 1</div>	<div></div> <div>Witness 2</div>	<div></div> <div>Employer</div>	<div></div> <div>Witness 1</div>	<div></div> <div>Witness 2</div>
-----------------------------------	----------------------------------	----------------------------------	---------------------------------	----------------------------------	----------------------------------

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	90
SPECIFIC GOALS	10
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

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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:

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

Where

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

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

3.2.1. POINTS AWARDED FOR PRICE

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

$$\begin{array}{ccc} 80/20 & \text{or} & 90/10 \\ P_s = 80 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right) & \text{or} & P_s = 90 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right) \end{array}$$

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.)

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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)
100% Black ownership (attach CSD detail report)	05	N/A		N/A
Woman Ownership (attach CSD detail report or Certified copy of Smart ID)	03	N/A		N/A
Disability (Attach Disability letter from a Doctor)	02	N/A		N/A

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 –

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- (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:	.....

MBD 7.2

CONTRACT FORM - RENDERING OF SERVICES

THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SERVICE PROVIDER (PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SERVICE

<small>Contractor</small>	<small>Witness 1</small>	<small>Witness 2</small>	<small>Employer</small>	<small>Witness 1</small>	<small>Witness 2</small>

PROVIDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.

PART 1 (TO BE FILLED IN BY THE SERVICE PROVIDER)

1. I hereby undertake to render services described in the attached bidding documents to **Makhado Municipality** in accordance with the requirements and task directives / proposals specifications stipulated **Bid No. 26 of 2005**. at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the Purchaser during the validity period indicated and calculated from the closing date of the bid.
2. The following documents shall be deemed to form and be read and construed as part of this agreement:
 - (i) Bidding documents, viz
 - Invitation to bid;
 - Tax clearance certificate;
 - Pricing schedule(s);
 - Filled in task directive/proposal;
 - Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2011;
 - Declaration of interest;
 - Declaration of Bidder's past SCM practices;
 - Certificate of Independent Bid Determination;
 - Special Conditions of Contract;
 - (ii) General Conditions of Contract; and
 - (iii) Other (specify)
3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the services specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.
4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfillment of this contract.
5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.
6. I confirm that I am duly authorised to sign this contract.

NAME (PRINT)

CAPACITY

SIGNATURE

NAME OF FIRM

DATE

WITNESSES

1

2

DATE:

MBD 7.2

CONTRACT FORM - RENDERING OF SERVICES

PART 2 (TO BE FILLED IN BY THE PURCHASER)

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

1. I **KENT MBAVHALELO NEMANAME** in my capacity as **MUNICIPAL MANAGER** accept your bid under reference number..... dated for the rendering of services indicated hereunder and/or further specified in the annexure(s).
2. An official order indicating service delivery instructions is forthcoming.
3. I undertake to make payment for the services rendered in accordance with the terms and conditions of the contract, within 30 (thirty) days after receipt of an invoice.

DESCRIPTION OF SERVICE	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)
			N/A	

4. I confirm that I am duly authorised to sign this contract.

SIGNED AT **MAKHADO** ON

NAME (PRINT) **MR KENT MBAVHALELO NEMANAME**

SIGNATURE

OFFICIAL STAMP

WITNESSES

1

2

DATE:

MBD 8

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

- 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	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied). The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

Item	Question	Yes	No
4.2.1	If so, furnish particulars:		

<div style="border: 1px solid black; height: 25px; width: 100%;"></div> Contractor	<div style="border: 1px solid black; height: 25px; width: 100%;"></div> Witness 1	<div style="border: 1px solid black; height: 25px; width: 100%;"></div> Witness 2	<div style="border: 1px solid black; height: 25px; width: 100%;"></div> Employer	<div style="border: 1px solid black; height: 25px; width: 100%;"></div> Witness 1	<div style="border: 1px solid black; height: 25px; width: 100%;"></div> Witness 2
---	--	--	---	--	--

4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <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.

.....
Contractor

.....
Witness 1

.....
Witness 2

.....
Employer

.....
Witness 1

.....
Witness 2

- 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 *per 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. take all reasonable steps to prevent such abuse;
 - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
- 4 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.

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

(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
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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

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.

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.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MAKHADO LOCAL MUNICIPALITY



CONTRACT NO: 26 of 2022

**UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD –
PHASE 1**

C. THE CONTRACT

Part C1: Agreements and Contract Data

- C1.1 Form of Offer and Acceptance
- C1.2 Contract Data
- C1.3 Form of Guarantee
- C1.4 OHS

Part C2: Pricing Data

- C2.1 Pricing Instructions
- C2.2 Bills of quantities

Part C3: Scope of Work

- C3 Scope of Work

Part C4: Site Information

- C4 Site Information

Part C5 : Additional Documentation

- C5 Additional Documentation

C1

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Contractor

--

Witness 1

--

Witness 2

--

Employer

--

Witness 1

--

Witness 2

MAKHADO LOCAL MUNICIPALITY



CONTRACT NO. 26 of 2025

**UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD –
PHASE 1**

C1 AGREEMENTS AND CONTRACT DATA

- C1.1 Form of Offer and Acceptance
- C1.2 Contract Data
- C1.3 Form of Guarantee
- C1.4 Agreement in Terms of the Occupational Health and Safety Act, 1993 (ACT NO 85 OF 1993)

C1.1

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Contractor

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Witness 1

--

Witness 2

--

Employer

--

Witness 1

--

Witness 2

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:

UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD – PHASE 1

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

By the representative of the Tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS

.....
..... Rand (in words); R (in figures).

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

Signature(s)	<hr/>	<hr/>
Name(s)	<hr/>	<hr/>
Capacity	<hr/>	<hr/>
For the tenderer	<hr/>	
	(Name and address of organisation)	
Witness	<hr/>	<hr/>
	Name	Signature Date

C1.2

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

ACCEPTANCE

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the Tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the Tenderer's Offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the contract are contained in:

- Part 1 Agreements and Contract Data (which includes this Agreement)
- Part 2 Pricing Data
- Part 3 Scope of Work
- Part 4 Site information
- Part 5 Additional Documentation

and drawings and documents or parts thereof, which may be incorporated by reference into Parts 1 to 4 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorised representative(s) of both parties.

The Tenderer shall within two weeks after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data at or just after the date this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

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

Signature(s) _____

Name(s) _____

Capacity _____

For the tenderer _____
(Name and address of organisation)

Witness _____
Name Signature Date

C1.3

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE OF DEVIATIONS

Notes:

1. 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 Conditions of Tender.
2. A Tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid become the subject of agreements reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here.
3. 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.
4. 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

C1.4

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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:

Signatures (s) _____

Name(s) _____

Capacity _____

(Name and address of Organisation)

Witness _____
Name Signature Date

FOR THE EMPLOYER

Signatures (s) _____

Name(s) _____

Capacity _____

(Name and address of Organisation)

Witness _____
Name Signature Date

C1.5

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C1.2 CONTRACT DATA

PART 1: DATA PROVIDED BY THE EMPLOYER

CONDITIONS OF CONTRACT

This Contract will be based on the “General Conditions of Contract for Construction Works General Conditions of Contract 2015 (GCC 2015, Third Edition).

Documents can be ordered from SAICE who can be contacted through their website www.saice.org.za.
Physical address: SAICE House, Block 9, Thorn hill Office Park, Bekker Street, Midrand, Johannesburg.
Telephone number: (011) 805 5947.

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

SPECIAL CONDITIONS OF CONTRACT

These Special Conditions of Contract (SCC) form an integral part of the Contract. The Special Conditions of Contract 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 "SCC" followed in each case by the number of the applicable clause or subclause 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.


PART 1: Data provided by the Employer


Clause	Data
SCC 1.4	The Name of the Employer is MAKHADO LOCAL MUNICIPALITY The address of the Employer is: Civic Centre 83 Krogh Street Makhado 0920 Telephone: 015 519 3000 Fax: 015 516 1195


C1.6



Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

SCC3.4	The name of the Employer's Agent is AGC Consulting Engineers CC The address of the Employer's Agent is: 3A Pierre Street Bendor Park Polokwane 0699 Telephone: 015 296 2789 Facsimile : 086 613 6213
SCC3.5	The Employer's Agent is required in terms of his appointment with the Employer to obtain the following specific approvals from the Employer: 1. Approval of extension of time 2. Approval of additional costs 3. Approval of variation orders 4. Approval for the utilization of any contingencies 5. Approval of Health and Safety Plan
SCC5.3.1.1	The required approved documentation before the commencement of Work are as follows: 1. Health and Safety File (Refer to Clause 4.3) 2. Programme of works (Refer to Clause 5.6) 3. Cashflow forecast (Refer to Clause 5.3.1.2) 4. Performance Guarantee (Refer to Clause 6.2) 5. Contractor All Risk Insurance (Refer to Clause 8.6) 6. Organogram, Curriculum Vitae (CV) and Qualifications of the key personnel. (Refer to Clause 5.3.1.3) 7. Letter of Acceptance (Refer to Clause 5.3.1.4) 8. Other Documents as specified in the contract.
SCC3.6	The health and safety Plan shall be delivered and approved by the Employer's Agent before the site handover/commencement date.
SCC 5.8.2 SCC 5.8.3	The special non-working days are the official builder's holiday plus all statutory public holidays. The year-end break commences on the second Friday of December and the first Monday of the subsequent year.
SCC6.2.4	The time to deliver the Deed of Guarantee is 14 days.
SCC6.2.5	The Form of Guarantee is to contain the wording of the proforma document included in the General Conditions of the Contract (Pro-forma included in section C1.3 to this document).
SCC6.2.6	The liability of the guarantee shall be 10 %.
SCC5.4	The Contractor shall commence executing the Works within 14 days from the Commencement Date.
SCC5.5	The Contractor shall deliver his programme of work within 14 days.
SCC8.6.1.2	The value of the materials supplied by the Employer to be included in the insurance sum is nil.
SCC8.6.1.3	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is nil.
SCC8.6.1.4	Professional fees not included in the contract price is nil
SCC8.6.1.5	The limit of indemnity for liability insurance required should not be less than the contract amount.
SCC8.6.1.6	The following additional and valid insurances are required: CAR & SASRIA
SCC5.3.4	The Works shall be completed within 12 months including special non-working days .
SCC5.6	The works programme is to be delivered within fourteen (14) days of the Commencement Date taken as the date of Site handover.

C1.7

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCC5.13.3	The penalty for failing to complete the work is R 3000.00 per calendar day including special non-working days.
SCC6.10.2.1	The percentage advance on materials not yet built into the Permanent Works is 80 % .
SCC6.10.3.1	The percentage retention on the amounts due to the Contractor is 10 % .
SCC6.10.3.2	The limit of retention money is 10 % of the contract value.

C1.8

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCC6.8.2.1

The value of payment certificates is to be adjusted in accordance with the contract price Adjustment Schedule, Where

The value of “ x “ is 0.150

The values of the co-efficient are :

$$(1 - x) \left(\frac{aLt}{Lo} + \frac{bPt}{Po} + \frac{CMt}{Mo} + \frac{dFt}{Fo} \right)$$

Projects predominantly:

New road Construction (Roads general)	Rehabilitation	Concrete works(Major structures only)
---	----------------	--

a =	0.20	0.20	0.15
b =	0.40	0.35	0.20
c =	0.25	0.35	0.55
d =	0.15	0.10	0.10

“L” is the “Labour index” and shall be the “ Consumer Price Index “ for the urban area nearest to the site as specified by the Engineer in the appendix to the Tender and as published in the Statistical News Release, Po141, Table A of statistics South Africa.

“P” is the “Plant Index” and shall be the “Civil Engineering Plant Index” as published in the Statistical News released P0142.1 Table 4

“M” is the “Material Index” and shall be the Civil Engineering Material Index” as published in the statistical news Released P0142.1 Table 6

“F” is the “Fuel Index “ and shall be the diesel at wholesale level Coast /Witwatersrand Index as published in the statistical News released P0142.1 table 1

The suffix “ o” denotes the basic indices applicable to the base month, which shall be the month prior to the month in which the closing date for the tender falls.

The suffix ‘t’ denotes the current indices applicable to the month in which the last day of the period falls to which the relevant payment certificates.

If any index relevant to any particular certificate is not known at the time when the certificate is prepared, the employer’s agent shall estimate the value of such index.

Any correction, which may be necessary when the correct indices become known, shall be made by the Employer’s Agent in subsequent payment certificates. The urban area nearest the site is **Louis Trichardt**.

The base month is **April 2025** (The month prior to the month in which the closing date of the tender falls).

C1.9

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCC6.8.3.1	<p>The following are special materials:</p> <p>Bitumen extracted from petroleum-based products and used on site, including that used in asphalt, irrespective of whether it is produced and/or placed by the contractor or an approved sub-contractor.</p> <p>The rates and prices for the special materials shall be furnished by the contractor, which rates and prices ex refinery with the base date specified under 49.4 and shall exclude VAT but shall include all other obligatory taxes and levies on the basis specified in the contract price adjustment schedule (Paragraph 4(i) and 4(ii))</p>
SCC5.14.5.2.1	The Defects Liability Period is 12 months from the date of the Certificate of Completion.
SCC5.16.3.1	The latent defect Period is 10 Years.

C1.10

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCC 5.12.1.12

The additional clauses to the General Conditions of Contract are:

Extensions of time in respect of clause 42 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 10 mm or more has been recorded.

Nn = Average number of days in the relevant calendar month, as derived from existing rainfall records, on which a rainfall of 20mm or more has been recorded for the calendar month.

Rw = Actual average rainfall in mm recorded for the calendar month under consideration.

Rn = Average rainfall in mm for the calendar month as derived from existing rainfall records as stated in the Site Information.

For purposes of the Contract Nn, Rn, X and Y shall have those values assigned to them in the South African Weather Service's rainfall records of the nearest station to the site.

If V is negative and its absolute value exceeds Nn, then V shall be taken as equal to minus Nn.

The total extension of time shall be the algebraic sum of all monthly totals for the period under consideration, but if the total is negative the time for completion shall not be reduced due to subnormal rainfall. Extensions of time for part of a month shall be calculated using pro rata values of Nn and Rn.

This formula does not take into account flood damage which could cause further or concurrent delays and will be treated separately as far as extension of time is concerned.

The factor (Nw – Nn) shall be considered to represent a fair allowance for variations from the average in the number of days during which rainfall exceeds 10 mm. The factor (Rw-Rn) shall be considered to represent a fair allowance for variations from the average in the number of days during which the rainfall did not exceed 10 mm but wet conditions prevented or disrupted work.

For the purpose of applying the formula, accurate rain gauging shall be taken at a suitable point on the Site and the Contractor shall at his own expense, take all necessary precautions to ensure that rain gauges cannot be interfered with by unauthorized persons.

C1.11

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCC 5.12.1.14	A delay caused by inclement weather conditions will be regarded as a delay only if, in the opinion of the Employer's Agent, 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 days indicated. Extension of time during working days will be granted to the degree to which actual delays, as defined above, exceed the number of "n" workings days.
SCC 5.14.3.3	The contractor agrees to complete all remaining tasks and deliverables within 28 days following the issuance of the practical completion certificate. This includes addressing any outstanding issues, finalizing all work, and ensuring that all contractual obligations are met to the satisfaction of the Employer's Agent for issuance of the completion certificate. Failure to meet this deadline will result in the practical completion certificate being revoked and penalties as stipulated in the contract will be applied accordingly.
SCC10.4.1.1	Dispute resolution is to first take place by means of an amicable settlement. The venue of all dispute resolution/determination shall be Makhado Local Municipality offices in Louis Trichardt.
SCC10.4.2.1	If amicable settlement is unsuccessful, the dispute shall be resolved by adjudication.
SCC10.5.2.1	The number of Adjudication Board Members to be Appointed is one (1).
SCC10.7.4	Final dispute determination shall be by arbitration

PART 1: DATA PROVIDED BY THE CONTRACTOR

The Contractor is advised to read the General Conditions of Contract for Construction Works General Conditions of Contract 2015 (GCC 2015, Third Edition), published by the South African Institution of Civil Engineering, in order to understand the implications of this Data which is required to be completed.

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

C1.12

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C1.3 FORM OF GUARANTEE

FORM OF GUARANTEE

CONTRACT NO. 26 of 2025

**UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD –
PHASE**

C1.13

Contractor

Page 10

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WHEREAS

at
(Hereinafter referred to as "the Employer")

entered into, on the Day of202..., at

a Contract with

at
(Hereinafter called "The Contractor")

for the construction of

AND WHEREAS it is provided by such Contract that the Contractor shall provide the Employer with security by way of surety ship 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 security;

NOW THEREFORE WE,
do hereby guarantee and bind ourselves jointly and severally as Sureties and Co-Principal Debtors to the Employer under renunciation of the benefits of division and exclusion 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 authorised and/or contemplated by the terms of the said contract, and/or to agree to any modifications, variations, alterations, directions or extensions of the Due 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 Due Completion Date which the Employer may make, give, concede or agree to under the said Contract.
2. The Employer shall be entitled, without reference to us, to release any securities held by it, and to give time to or compound or make any other arrangement with the Contractor.
3. 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.
4. Our total liability hereunder shall not exceed the sum of (R.....).
5. We hereby choose domicilium citandi et executandi for all purposes arising hereof at

C1.14

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

.....

IN WITNESS WHEREOF this guarantee has been executed by us at on
this..... day of 202....

As witnesses:

1.	.....	Signature
2.	.....	Duly authorised to sign on behalf of
		Address
	
	

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

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

THIS AGREEMENT made at

on this the day of in the year

C1.15

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

between **MAKHADO LOCAL MUNICIPALITY** (hereinafter called "**the Employer**") of the one part,
herein represented by

in his capacity as _____

and

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

in his capacity as _____

WHEREAS the Employer is desirous that certain works be constructed, viz **CONTRACT NO. 33 of 2022: UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD – PHASE 1** and has accepted a Bid by the Mandatory for the construction, completion and maintenance of such Works and whereas the Employer and the Mandatory have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Mandatory with the provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993);

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

- 1 The Mandatory shall execute the work in accordance with the Contract Documents pertaining to this Contract.
- 2 This Agreement shall hold well from its Commencement Date, which shall be the date of a written notice from the Employer or Engineer requiring him to commence the execution of the Works, to either
 - (a) the date of the Final Approval Certificate issued in terms of Clause 5.16.1 of the General Conditions of Contract (hereinafter referred to as "the GCC"),
 - (b) the date of termination of the Contract in terms of Clauses 9.1 of the GCC.
- 3 The Mandatory declares himself to be conversant with the following:
 - (a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of The Act:
 - (i) Section 8 : General duties of employers to their employees;
 - (ii) Section 9 : General duties of employers and self-employed persons to persons other than employees;
 - (iii) Section 37 : Acts or omissions by employees or mandatories, and
 - (iv) Subsection 37(2) relating to the purpose and meaning of this Agreement.

C1.16

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- (b) The procedures and safety rules of the Employer as pertaining to the Mandatory and to all his subcontractors.
- 4 In addition to the requirements of Clause 8 of the GCC and all relevant requirements of the above-mentioned Volume 3, the Mandatory agrees to execute all the Works forming part of this Contract and to operate and utilise all machinery, plant and equipment in accordance with the Act.
- 5 The Mandatory is responsible for the compliance with the Act by all his subcontractors, whether or not selected and/or approved by the Employer.
- 6 **The Mandatory warrants that all his and his subcontractors' workmen are covered in terms of the Compensation for Occupational Injuries and Diseases Act, 1993 which cover shall remain in force whilst any such workmen are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.**
- 7 The Mandatory undertakes to ensure that he and/or subcontractors and/or their respective employers will at all times comply with the following conditions:
- (a) The Mandatory shall assume the responsibility in terms of Section 16.1 of the Occupational Health and Safety Act. The Mandatory shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Mandatory obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.
- (b) All incidents referred to in the Occupational Health and Safety Act shall be reported by the Mandatory to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.
- (c) The Employer hereby obtains an interest in the issue of any formal inquiry conducted in terms of section 32 of the Occupational Health and Safety Act into any incident involving the Mandatory and/or his employees and/or his subcontractors.

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

SIGNED FOR AND ON BEHALF OF THE EMPLOYER:

WITNESS 1

NAME 1
(IN CAPITALS)

SIGNED FOR AND ON BEHALF OF THE MANDATORY:

WITNESS 1

C1.17

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

NAME
(IN CAPITALS)

1

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

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

An example is given below:

"By resolution of the Board of Directors passed at a meeting held on _____
20.....,

Mr/Ms _____ whose
signature

appears below, has been duly authorised to sign the AGREEMENT in terms of THE
OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT 85 of 1993) on behalf of _____

SIGNED ON BEHALF OF THE COMPANY : _____

IN HIS/HER CAPACITY AS : _____

DATE : _____

SIGNATURE OF SIGNATORY : _____

WITNESS 1

NAME 1
(IN CAPITALS)

C1.19

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MAKHADO LOCAL MUNICIPALITY



CONTRACT NO. 26 of 2022

UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD –
PHASE 1

C2 PRICING DATA

- C2.1 Pricing Instructions
- C2.2 Bill of Quantities

MAKHADO LOCAL MUNICIPALITY
 BID NO.: 26 OF 2025
 UPGRADING OF MADOMBIDZHA (50/50), RAMANSTHA TO RAVELE ROAD PHASE 1
 BILL OF QUANTITIES

SECTION 1200

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1200	GENERAL REQUIREMENTS AND PROVISIONS				
B12.01	Provision for Community Liason Officer, Students and Project Steering Committee				
	(i) Payment of community liason officer (R6000.00 per month)	Prov Sum	1,00	96 000,00	R 96 000,00
	(ii) Payment of 4 students (R5000.00 per month)	Prov Sum	1,00	240 000,00	R 240 000,00
	(iii) Payment of Steering Committee R 250 per seating per member	Prov Sum	1,00	24 000,00	R 24 000,00
	(iv) Handling costs and profit in respect of B12.01(i), (ii) and (iii) above	%	R 360 000,00		
B12.02	Structured Training (as specified in part D of the project specification)				
	(a) Engineering Skills	-	Prov	Sum	R 200 000,00
	(b) Entrepreneurial Skills	-	Prov	Sum	R 75 000,00
	(c) Generic Skills	-	Prov	Sum	R 25 000,00
	(d) Provision of training venue (only if required)	-	Prov	Sum	R 10 000,00
	(e) Handling costs and profit in respect of sub-items (a), (b), (c) and (d) above	%	R 310 000,00		
B12.03	The Contractor's Obligations In Respect of Local Labourers				
	(a) Provision for Medical Examination for Local Labourers	L/Sum	1,00		
B12.05	Protection, removal, relocation and replacement of Utility services.				
	(a) Utility services				
	(i) Protection, removal, relocation and replacement of existing services.	PC Sum	1,00	650 000,00	R 650 000,00
	(ii) Handling costs and profit in respect of sub-items (a) (i) above	%	R 650 000,00		
B12/C1.1	Contractor's initial obligation in respect of the OHS Act and Construction Regulations including compliance to COVID19 regulations	L/Sum	1,00		
B12/C1.2	Contractor's Time related Obligations in respect of the OHS Act and Construction Regulations including compliance to COVID19 regulations	Month	12,00		
B12/C1.3	Submission of Health and Safety File	L/Sum	1,00		
B12/C1.4	Provision of Local Labourer's PPE				
	(a) Local Labourer's PPE	No	50,00		
12/22.26L	Hand excavation to determine the positions of existing services	m³	100,00		
B12.07	Provision of construction water				
	(a) Contractor to make provision for all inclusive cost for construction water including drilling and equipping of borehole/s and/or the cost of other source/s, and the maintenance thereof	L/Sum	1,00		
B12.08	Supply, transport to site and erect contract sign boards as per drawing	No	2		
1200	TOTAL CARRIED TO SUMMARY				

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BILL OF QUANTITIES

SECTION 1300

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1300	<u>CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS</u>				
B13.01	The Contractor's general obligations:				
	(a) Fixed obligations	Lump Sum	1		
	(b) Value-related obligations	Lump Sum	1		
	(c) Time-related obligations	month	12		
1300	TOTAL CARRIED TO SUMMARY				

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SECTION 1400

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1400	<u>HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL</u>				
14.01	Office and laboratory accommodation:				
	(a) Offices (interior floor space only)	m ²	90		
	(e) Ablution units	m ²	40		
14.02	Office and laboratory furniture:				
	(a) Chairs	Number	30		
	(b) Desks, complete with drawers and locks	Number	2		
	(c) Conference tables (to set up to 20 persons)	Number	1		
	(d) White boards	m ²	10		
14.03	Office and laboratory fittings, installations and equipment:				
	(a) Items measured by number:				
	(i) 220/250 volt power points	Number	3		
	(ii) Double 80 watt fluorescent-light fittings	Number	2		
	(iii) Wash-hand basins complete with taps and drains	Number	1		
	(iv) Fire extinguishers, 9,0 kg all purpose dry powder type, complete, mounted on wall with brackets	Number	2		
	(v) Air-conditioning units with, 2,2 kW minimum capacity, mounted and with own power connection	Number	2		
	(vi) General-purpose steel cupboards with shelves	Number	1		
	(vii) Refrigerators (200 l min)	Number	1		
	(viii) Uninterrupted power supply	Number	1		
	(iv) General-purpose steel cupboards with shelves	Number	1		
1400	TOTAL CARRIED FORWARD				

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SECTION 1400

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	BROUGHT FORWARD				
14.04	Car-ports	Number	3		
14.07	Rented, hotel and other accommodation:				
	(a) Provisional Sum for providing rented housing, hotel or other accommodation as described in Subsubclause 1403(c)(ii)	Prov Sum	1,00	120 000,00	R 120 000,00
	(b) Handling costs and profit in respect of subitem 14.07(a)	%	R 120 000,00		
B14.11	Telecommunications System				
	(a) Supply (1) Cellular Phone	Lump Sum	1		
	(b) Costs of calls by Engineer	Prov Sum	1	30 000,00	R 30 000,00
	(c) Handling costs and profit in respect of subsubitem 14.11 (b) above	%	R 30 000,00		
	(d) Provision of Laptop for the use of Engineer.	Prov sum	1	45 000,00	R 45 000,00
	(e) Handling costs and profit in respect of subsubitem 14.11 (d) above	%	R 45 000,00		
B14.12	Services				
	(a) Services at office and laboratories				
	(i) Fixed costs	Lump Sum	1		
	(ii) Running costs	Month	12		
	(iii) Provision of Photostat facilities	Month	12		
1400	TOTAL CARRIED TO SUMMARY				

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SECTION 1500

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1500	<u>ACCOMMODATION OF TRAFFIC</u>				
15.01	Accommodating traffic and maintaining temporary deviations	km	5,50		
15.02	Earthworks for temporary deviations:				
	(a) Shaping of temporary deviations	km	5,50		
	(b) Cut and borrow to fill	m³	540,00		
	(c) Cut to spoil	m³	540,00		
B15.03	Temporary traffic-control facilities:				
	(a) Flagmen	man-day	1 056,00		
	(b) Portable STOP and GO-RY signs	number	4,00		
	(e) Road signs, R- and TR-series, (size indicated)	number	30,00		
	(f) Road signs, TW-series, (size indicated)	number	30,00		
	(g) Road signs, STW-, DTG-, TGS- and TG-series (excluding delineators and barricades)	m²	20,00		
	(h) Delineators (DTG50J):				
	(i) Single	number	100,00		
	(ii) Mounted back to back	number	100,00		
	(j) Traffic cones 600mm	number	100,00		
	(n) Other traffic control provisions ordered by the engineers				
	(i) Provision of other traffic control measures	Prov Sum	1,00	20 000,00	R 20 000,00
	(ii) Handling costs and profit in respect of sub item B15,03 (n)(i)	%	20 000,00		
	(o) Other signs or facilities				
	(i) Provision of other traffic control measures	Prov Sum	1,00	10 000,00	R 10 000,00
	(ii) Handling costs and profit in respect of sub item B15,03 (o)(i)	%	10 000,00		
15.04	Relocation of traffic-control facilities	Lump	1,00		
15.05	Gravelling and repair of temporary deviations and existing gravel shoulders used as temporary deviations:				
	(a) Temporary deviations	m³	2 475,00		
15.06	Watering of temporary deviations and existing gravel shoulders used as temporary deviations:	kilolitre	9 504,00		
15.07	Blading by road grader of:				
	(a) Temporary deviations	km-pass	66,0		
	(b) Existing roads used as temporary deviations	km-pass	33,0		
1500	TOTAL CARRIED TO SUMMARY				

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SECTION 1500

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	BROUGHT FORWARD				
B15.10	Accommodation of traffic where the road is constructed in half-width	km	1,00		
B15.12	Temporary culverts:				
	a) Provision and laying of temporary prefabricated culverts complete	m	3,00		
	c) Eventual removal of prefabricated culverts	m	3,00		
B15.14	Provision of safety equipment for the engineer and visitors				
	(a) Safety jackets	Prov Sum	1,00	10 000,00	R 10 000,00
	(c) Handling costs and profit in respect of sub item B15.14 (a)	%	10 000,00		
1500	TOTAL CARRIED TO SUMMARY				

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SECTION 1600

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1600	<u>OVERHAUL</u>				
16.01	Overhaul on material hauled in excess of of a free-haul distance of 0.5km, for haul up to or through 1.0km (restricted overhaul)	m ³	22 138,00		
16.02	Overhaul on material in excess of 1.0 km (ordinary overhaul)	m ³ -km	119 213,00		
1600	TOTAL CARRIED TO SUMMARY				

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SECTION 1700

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1700	<u>CLEARING AND GRUBBING</u>				
17.01	Clearing and grubbing	ha	10,0		
17.02	Removal and grubbing of large trees and tree stumps				
	(a) Girth exceeding 1 m up to and including 2m	No	1		
	(b) Girth exceeding 2m up to and including 3m	No	5		
	(d) Girth exceeding 4m up to and including 5m	No	1		
17.04	Cleaning and grubbing at inlets and outlets of hydraulic structures	m ³	30		
1700	TOTAL CARRIED TO SUMMARY				

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SECTION 1800

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1800	<u>DAYWORKS</u>				
18.01	Labourers:				
	(i) Unskilled	h	45		
	(ii) Semi-skilled	h	45		
	(iii) Skilled	h	45		
	(iv) Foreman	h	45		
18.03	Plant				
	(a) Tipper trucks:				
	(i) 3 - 5 ton	h	45		
	(ii) 5.1 - 10 ton	h	45		
	(b) Loader (0,5m³)	h	45		
	(c) Grader (CAT 140G or similar)	h	45		
	(d) LDV	km	100		
	(e) 4 ton Flatbed Truck	km	100		
	(f) Compaction rollers:				
	(i) Vibratory roller	h	45		
	(ii) Tamping roller	h	45		
	(iii) Grid roller	h	45		
	(g) Hand controlled compactors				
	(i) Pedestrian roller (Bomag BW90)	h	45		
	(ii) Vibratory plate	h	45		
	(iii) Rammers	h	45		
	(h) Water truck (min. 10000litre)	h	45		
	(i) Dozer (D7 or similar)	h	45		
1800	TOTAL CARRIED TO SUMMARY				

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BILL OF QUANTITIES

SECTION 2100

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2100	<u>DRAINS</u>				
LI 21.01	Excavation for open drains:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0 m up to 1,5 m	m³	1 255		
	(ii) Exceeding 1,5m and up to 3,0m	m³	125.0		
	(iii) Exceeding 3,0m and up to 4,5m	m³	12.0		
	(b) Extra over subitem 21.01(a) for excavation in hard material, irrespective of depth	m³	125		
LI 21.02	Clearing and shaping existing open drains	m³	60		
LI 21.03	Excavation for sub-soil drainage systems:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0 m up to 1,5 m	m³	216		
	(b) Extra over subitem 21.03(a) for excavation in hard material, irrespective of depth	m³	20		
21.04	Impermeable backfill to subsoil drainage systems	m³	43		
21.05	Banks and dykes	m³	30		
21.06	Natural permeable material in sub-soil drainage systems (crushed stones).				
	(b) Crushed stone obtained from commercial sources.				
	(2) Coarse-graded -19mm surfacing stone.	m³	32		
21.07	Natural permeable material in subsoil drainage systems (sand)				
	(b) Sand from commercial sources				
	(1) Coarse Grade	m³	54		
21.08	Pipes in subsoil drainage systems:				
	(b) Unplasticised PVC pipes and fittings, normal duty complete with couplings				
	(2) 150mm internal dia. Perforated.	m	360		
2100	TOTAL CARRIED TO FORWARD				

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SECTION 2100

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	BROUGHT FORWARD				
21.09	Polyethylene sheeting 0.15mm tick, or similar, approved material, for lining subsoil drainage systems.	m ²	1 080		
21.10	Synthetic-fibre filter fabric (Grade A2 or equivalent)	m ²	900		
21.12	Concrete/brick work outlet structures,manhole boxes junction boxes and cleaning eyes for sub-soil drainage systems:				
	(a) Outlet structures	No	10		
	(c) Junction boxes	No	10		
	(d) Cleaning eyes	No	5		
21.13	Concrete caps for sub-soil drain pipes	No	5		
21.15	Overhaul for material hauled in excess of 1.0km free-haul (normal overhaul).	m ³ -km	800		
21.17	Test flushing of pipe subsoil drains	m	360		
21.19	Selected backfill material under concrete-lined side drains compacted to 93% of modified AASHTO density.	m ³	400		
2100	TOTAL CARRIED TO SUMMARY				

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BILL OF QUANTITIES

SECTION 2200

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2200	<u>PREFABRICATED CULVERTS</u>				
22.01	Excavation:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0 m up to 1,5 m	m³	2 920		
	(b) Extra over subitem 22.01(a) for excavation in hard material, irrespective of depth	m³	145		
22.02	Backfilling:				
	(a) Using the excavated material	m³	2 745		
	(c) Extra over subitems 22.02(a) and (b) for soil cement backfilling containing 2% cement	m³	137		
22.03	Concrete pipe culverts:				
	(c) On class C bedding:*				
	Class 100D				
	1 450 diam	m	10		
	2 600 diam	m	27		
	3 750 diam	m	27		
	4 900 diam	m	10		
	5 1200 diam	m	10		
22.05	Portal Culverts Type rectangular (RP)				
	(b) Without prefabricated floor slabs				
	1 900 x 900mm Class 150S	m	103		
	2 1200 x 900mm Class 150S	m	10		
	3 1200 x1200mm Class 150S	m	10		
	4 1500 x1200mm Class 100S	m	10		
	5 1500 x 1500mm Class 100S	m	10		
	6 1800 x1500mm Class 75s	m	10		
	7 2400 x1200mm Class 75s	m	10		
B22.07	Cast in situ concrete and formwork:				
	(a) In class A bedding, screeds and the encasing for pipes, including formwork				
	(1) Class 15/19	m³	7,00		
	(b) In floor slabs for portal or rectangular culverts, including formwork and class U2 surface finish				
	(1) Class 25/19	m³	36,00		
	(c) In inlet and outlet structures, skewed ends, catchpits, manholes, kerbinlets, thrust and anchor blocks, excluding formwork but including class U2 surface finish				
	(2) Class 25/19				
	(d) Formwork of concrete under subitem 22.07(c) above	m²	36,00		
	(1) Vertical formwork for F1 surface finish	m²	180,00		
2200	TOTAL CARRIED FORWARD				

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SECTION 2200

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	BROUGHT FORWARD				
B22.08	Concrete backfill for culverts (a) Class 20/19	m ³	4,00		
B22.10	Steel reinforcement (a) Mild steel bars (b) High-tensile steel bars (c) Welded steel fabric Ref 395	t t m ²	2,00 4,00 100,00		
22.12	Removing of existing concrete				
	(a) Plain concrete	m ³	10		
	(b) Reinforced concrete	m ³	10		
22.14	Removing and stacking of existing:				
	(a) Prefabricated culvert boxes of various sizes	m	20		
	(b) Round stormwater pipes in various diameters	m	20		
B22.17	Manholes, catchpits, precast inlet and outlet structures complete:				
	(a) Manholes Dwg.				
	(i) Type 1	No	4,0		
	(ii) Type 2	No	4,0		
	(iii) Construct complete as per Dwg.	No	4,0		
	(c) Precast inlet and outlet structures Dwg.				
	(i) Butt-End Kerbinlet - Type 1	No	4,0		
	(ii) Kerbinlet - Type 1	No	4,0		
	(iii) Kerbinlet - Type 2	No	4,0		
	(d) Extra over or less than subitem 22.17(a) for variations in the depths of manholes from standard depth designed for tendering purposes Dwg.				
	(i) Type 1	m	2,0		
	(ii) Type 2	m	2,0		
	(f) Extra over or less than subitem 22.17(c) for variations in the depths of catchpits from standard depth Dwg.				
	(i) Butt-End Kerbinlet - Type 1	m	2,0		
	(ii) Kerbinlet - Type 1	m	2,0		
	(iii) Kerbinlet - Type 2	m	2,0		
2200	TOTAL CARRIED FORWARD				

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SECTION 2200

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	BROUGHT FORWARD				
22.23	Service ducts				
	(a) Ordinary pipes				
	(b) Unplasticised PVC Pipes				
	(i) 110mm diameter	m	120		
	(ii) 150mm diameter	m	60		
B22.25	Overhaul on excavated material carted to spoil,backfill material (but excluding Portland cement in the case of soil cement, existing structures demolished and removed to spoil, and removing and relaying, and removing and stacking existing prefabricated culverts ,for haul in excess of the free-haul distance.	m ³ -km	160		
B22.26	Hand excavation to determine the positions of exisiting services.	m ³	50		
B22.29	(c) Encasing of service duct in 1:12 cement soil mixture (75mm min. all round)	m	15		
2200	TOTAL CARRIED FORWARD TO SUMMARY				

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SECTION 2300

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2300	<u>CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS</u>				
B23.01	Concrete kerbing:				
	(a) Prefabricated mountable kerb, SABS 927				
	(i) fig 8c, as shown on the Drawings	m	11 200,00		
	(ii) fig 8b, as shown on the Drawings	m	400,0		
	(iii) fig 3, as shown on the Drawings	m	500,0		
	(b) Transition kerb, 30 Mpa	m			
	(c) Edge beam, 25 Mpa (200mm deep x 200mm wide)	m³	62,0		
23.04	Cast in situ concrete chutes (measured by components):				
	(a) Concrete				
	(1) Class 20/19	m³	40,0		
	(b) Formwork				
	(1) F1 Surface finish	m²	30		
	(2) F2 Surface finish	m²	30		
23.07	Trimming of excavations for concrete-lined opened drains:				
	(a) In soft material	m²	5 500		
	(b) In hard material	m²	550		
23.08	Concrete lining for open drains:				
	(a) Cast in situ concrete lining (Class 25/19, V and trapezoidal drain)	m³	361		
	(b) Class U2 surface finish to cast in situ concrete (V and trapezoidal drain)	m²	3 000		
23.09	Formwork to cast in situ concrete lining for open drains (class F2 surface finish):				
	(a) To sides with formwork on the internal face only	m²	361		
	(b) To sides with formwork on both internal and external faces (each face measured)	m²	50		
	(c) To ends of slabs	m²	200		
23.10	Sealed joints in concrete linings of open drains (Polysulphide sealants)	m	275,00		
23.11	Concrete screed or backfill below chutes				
	(b) Class 20/19	m³	4,00		
23.12	Steel reinforcement				
	(c) Welded steel fabric ref 193	kg	6000,00		
23.13	Polyethylene sheeting (0,15 mm thick) for concrete-lined open drains	m²	3000,00		
2300	TOTAL CARRIED FORWARD TO SUMMARY				

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SECTION 3100

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3100	<u>BORROW MATERIALS</u>				
31.01	Excess overburden	m ³	2500,00		
31.03	Finishing-off borrow areas in:				
	(a) Hard material	ha	1		
	(b) Intermediate material	ha	1		
	(c) Soft material	ha	1		
B31.04	Compensation to landowners:				
	(a) Prime cost sum for compensation to landowners	PC sum	1	100 000,00	R 100 000,00
	(b) Handling cost and profit in respect of sub-item B31.04(a) above	%	100 000		
B31.05	Fencing of borrow pit	km	1		
3200	TOTAL CARRIED TO SUMMARY				

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SECTION 3200

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3200	<u>SELECTION, STOCKPILING AND BREAKING-DOWN THE MATERIAL FROM BORROW PITS, CUTTINGS AND EXISTING PAVEMENT LAYERS, AND PLACING AND COMPACTING THE GRAVEL LAYERS</u>				
32.06	Stockpiling of material	m³	13 200		
3200	TOTAL CARRIED TO SUMMARY				

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SECTION 3300

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3300	<u>MASS EARTHWORKS</u>				
B33.01	Cut and borrow to fill, including free-haul up to 0,5 km:				
	(a) Material in compacted layer thicknesses of 200 mm and less:				
	(i) Compacted to 90% of modified AASHTO density	m ³	26 400		
	(c) Rock fill obtained from commercial source	m ³	1 763		
33.03	Extra over item 33.01 for excavating and breaking down material in:				
	(a) Intermediate excavation	m ³	3 960		
	(b) Hard rock excavation	m ³	1 320		
	(c) Boulder Excavation class A	m ³	660		
	(d) Boulder Excavation class B	m ³	660		
33.04	Cut to spoil, including free-haul up to 0,5 km. Material obtained from:				
	(a) Soft excavation	m ³	19 250		
33.07	Removal of unsuitable material (including free-haul of 0,5 km):				
	(b) In layer thicknesses exceeding 200 mm:				
	(i) Stable material	m ³	963		
	(ii) Unstable material	m ³	963		
	(iii) Hard material	m ³	963		
33.10	Roadbed preparation and the compaction of material:				
	(a) Compaction to 90% of modified AASHTO density	m ³	8 063		
33.13	Finishing-off cut and fill slopes				
	(a) Cut slopes	m ²	1 580		
	(b) Fill slopes	m ²	1 200		
B33.20	Reshaping the road formation with material obtained from the road reserve and compacted to 90% of modified AASTHO density	m ³	1 100		
3300	TOTAL CARRIED TO SUMMARY				

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BILL OF QUANTITIES

SECTION 3400

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3400	<u>PAVEMENT LAYERS OF GRAVEL MATERIAL</u>				
B34.01	Pavement layers constructed from gravel taken cut or borrow including free-haul up to 1.0km:				
	(a) Gravel Lower Selected layer compacted to:				
	(i) 93% of modified AASHTO density for a compacted G7 layer thickness of 150 mm	m ³	7 700		
	(a) Gravel Upper Selected layer compacted to:				
	(ii) 95% of modified AASHTO density for a compacted G6 layer thickness of 150 mm	m ³	7 300		
	(d) Gravel subbase (chemical stabilized material) compacted to:				
	(iii) 98% of modified AASHTO density for a compacted C4 layer thickness of 150 mm (C4)	m ³	3 400		
	(g) Gravel shoulders compacted to:				
	(ii) 95% of modified AASHTO density for a compacted G6 layer thickness of 150 mm	m ³	3 317		
B34.14	Pavement layers constructed from G5 gravel from commercial source including all haul	m ³	3 500		
34/16.02	Overhaul on material hauled in excess of 1,0km (ordinary haul)	m ³ -km	21 717		
3400	TOTAL CARRIED TO SUMMARY				

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SECTION 3500

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3500	<u>STABILIZATION</u>				
35.01	Chemical stabilization extra over unstabilized compacted layers:				
	(a) Subbase layer, 150mm thick	m ³	3 400		
35.02	Chemical stabilizing agent:				
	(a) Ordinary portland cement	t	247		
	(c) Road lime	t	3		
35.04	Provision and application of water for curing	kl	2 614		
3500	TOTAL CARRIED TO SUMMARY				

MAKHADO LOCAL MUNICIPALITY

BID NO.: 26 OF 2025

UPGRADING OF MADOMBIDZHA (50/50), RAMANSTHA TO RAVELE ROAD PHASE 1

BILL OF QUANTITIES

SECTION 3600

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3600	<u>CRUSHED-STONE BASE</u>				
36.01	Crushed-stone base				
	(e) Constructed from type G3 natural material obtained from commercial sources (nominal maximum size of stone - 37.5mm) and compacted to:				
	(i) 98% of modified AASHTO density (150mm thick)	m ³	400,00		
3600	TOTAL CARRIED FORWARD TO SUMMARY				

MAKHADO LOCAL MUNICIPALITY

BID NO.: 26 OF 2025

UPGRADING OF MADOMBIDZHA (50/50), RAMANSTHA TO RAVELE ROAD PHASE 1

BILL OF QUANTITIES

SECTION 4100

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
4100	<u>PRIME COAT</u>				
41.01	Prime coat:				
	(a) Quick drying RTH 1/4P tar prime	litre	3000,00		
	(b) MC-30 cut-back bitumen	litre	200		
41.02	Aggregate for blinding	m ²	10,00		
4100	TOTAL CARRIED TO SUMMARY				

MAKHADO LOCAL MUNICIPALITY

BID NO.: 26 OF 2025

UPGRADING OF MADOMBIDZHA (50/50), RAMANSTHA TO RAVELE ROAD PHASE 1

BILL OF QUANTITIES

SECTION 4200

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
4200	ASPHALT BASE AND SURFACING				
42.02	Asphalt surfacing (30mm thickness, 50/70 penetration grade asphalt, medium grade)				
	(a) Continuously graded	m ²	3000		
42.04	Tack coat of 30% stable grade emulsion	l	1650		
42.05	Binder variations:				
	(a) Modified bitumen-rubber binder	t	1		
	(b) 50/70 penetration grade bitumen	t	1		
42.06	Variations in active filler content:				
	(a) Cement	t	1		
	(b) Lime	t	1		
B42.08	100mm cores in asphalt paving	No	6		
42.10	Asphalt layer constructed for rehabilitation purposes in accordance with the provisions of sub-clause 4213(f)(ii) or 4213(f)(iii):				
	(b) Surfacing or overlay constructed with new asphalt (30mm thickness, 60/70 penetration grade asphalt, medium grade)				
	(i) Continuously graded	ton	10		
B42.21	Speed humps (As per drawing number AGC-CIV-PD-TD-012)	No	2		
4200	TOTAL CARRIED TO SUMMARY				

MAKHADO LOCAL MUNICIPALITY

BID NO.: 26 OF 2025

UPGRADING OF MADOMBIDZHA (50/50), RAMANSTHA TO RAVELE ROAD PHASE 1

BILL OF QUANTITIES

SECTION 5100

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5100	<u>PITCHING, STONework AND PROTECTION AGAINST EROSION</u>				
LI 51.01	Stone pitching:				
	(b) Grouted stone pitching 150 mm thickness	m ²	200		
5100	TOTAL CARRIED TO SUMMARY				

MAKHADO LOCAL MUNICIPALITY
BID NO.: 26 OF 2025
UPGRADING OF MADOMBIDZHA (50/50), RAMANSTHA TO RAVELE ROAD PHASE 1
BILL OF QUANTITIES
SECTION 5200

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5200	<u>GABIONS</u>				
LI 52.01	Foundation trench excavation and backfilling				
	(b) In all other classes of material.	m ³	450		
LI 52.02	Surface preparation for bedding the gabions	m ²	1 300		
B/LI 52.03	Gabions:				
	(a) Galvanised gabion boxes with cells of 1000mm x 1000mm formed by diaphragms using mesh with a nominal size of 80mm manufactured from galvanized wire with a nominal diameter of 2.7mm with diaphragms spaced 1.0m intervals				
	(i) 1.0m x 1.0m x 1.0m	m ³	300		
	(b) Galvanised gabions mattresses with cells of 1000mm x 1000mm formed by diaphragms using mesh with a nominal size of 80mm manufactured from galvanized wire with a nominal diameter of 2.7mm with diaphragms spaced 1.0m intervals				
	(i) 0.3 x 2.0m x 6.0m	m ³	300		
52.04	Filter Fabric				
	(a) Grade U24 or approved equivalent	m ²	1 600		
5200	TOTAL CARRIED TO SUMMARY				

MAKHADO LOCAL MUNICIPALITY

BID NO.: 26 OF 2025

UPGRADING OF MADOMBIDZHA (50/50), RAMANSTHA TO RAVELE ROAD PHASE 1

BILL OF QUANTITIES

SECTION 5400

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5400	<u>GUARDRAILS</u>				
54.01	Guardrails on timber posts:				
	(a) Galvanized	m	800		
54.03	Extra over item 54.01,54.02 for horizontally curved guardrails factory bent to radius of less than 45m	m	80		
54.04	End treatment				
	(a) End wings	No	8		
	(b) End treatments in accordance with the Drawings where single guardrail sections are used	No	8		
54.06	Reflective plates	No	50		
5400	TOTAL CARRIED TO SUMMARY				

MAKHADO LOCAL MUNICIPALITY

BID NO.: 26 OF 2025

UPGRADING OF MADOMBIDZHA (50/50), RAMANSTHA TO RAVELE ROAD PHASE 1

BILL OF QUANTITIES

SECTION 5500

ITEM NO	LI DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5500	<u>FENCING</u>				
B55.10	Removal and re-erection of boundary walls or fencing complete including new material:				
	(a) Wire fencing	km	1,00		
	(b) Brick wall	km	1,00		
	(c) Pallisade	km	1,00		
5500	TOTAL CARRIED TO SUMMARY				

MAKHADO LOCAL MUNICIPALITY

BID NO.: 26 OF 2025

UPGRADING OF MADOMBIDZHA (50/50), RAMANSTHA TO RAVELE ROAD PHASE 1

BILL OF QUANTITIES

SECTION 5600

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5600	<u>ROAD SIGNS</u>				
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 or approved equivalent)				
	(i) Area not exceeding 2m ²	m ²	36,00		
	(ii) Area exceeding 2m ² but not 10 m ²	m ²	36,00		
	(d) Prepainted galvanized steel profiles (200mm high chromadek or approved equivalent)				
	(ii) Area exceeding 2m ² but not 10 m ²	m ²	20,00		
B56.02	Extra over B56.01 for using:				
	(a) Background of retro-reflective material:				
	(i) Class III	m ²	70,00		
	(b) Lettering, symbols, numbers, arrows, emblems				
	(ii) Class III	m ²	20,00		
	(iii) Class IV Micro-Prismatic	m ²	20,00		
56.03	Road sign supports (overhead road sign structures excluded)				
	(a) Steel tubing				
	(i) 75mm D Section 2mm wall thickness	t	1,00		
	(ii) 100mm D Section 4mm wall thickness	t	1,00		
	(b) Timber				
	(i) 100 - 125 mm	m	200,00		
	(ii) 125 - 150 mm	m	100,00		
	(iii) 150 - 175 mm	m	50,00		
56.05	Excavating and backfilling for road sign supports (not applicable to kilometre posts)	m ³	10		
56.06	Extra over item 56.05 for cemented treated soil backfill	m ³	3		
56.07	Extra over item 56.05 for rock excavation	m ³	4		
B56.10	Danger Plates at Culverts / Structures	No	30		
5600	TOTAL CARRIED TO SUMMARY				

MAKHADO LOCAL MUNICIPALITY

BID NO.: 26 OF 2025

UPGRADING OF MADOMBIDZHA (50/50), RAMANSTHA TO RAVELE ROAD PHASE 1

BILL OF QUANTITIES

SECTION 5700

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5700	ROAD MARKINGS				
57.02	Retro-reflective road marking paint:				
	(a) White lines(broken or unbroken)				
	(i) 100mm wide	km	5,50		
	(ii) 200mm wide	km	1,00		
	(b) Yellow lines (broken or unbroken):				
	(i) 100mm wide	km	11,00		
	(c) Red lines (broken or unbroken):				
	(i) 100mm wide	km	1,00		
	(d) White lettering and symbols	m²	275,00		
	(e) Yellow lettering and symbols	m²	150,00		
57.04	Variations in rate of application:				
	(a) White paint	litre	1,00		
	(b) Yellow paint	litre	1,00		
	(c) Red paint	litre	1,00		
	(d) Retro-reflective beads	kg	1,00		
B57.05	Road studs, Stimsonite omni-directional metal base with shank.				
	(a) Aluminium (Red / Red)	No	50,00		
	(b) Aluminium (Red / White)	No	50,00		
	(c) Aluminium (Red / Yellow)	No	50,00		
57.06	Setting out and pre-marking the lines (excluding traffic island markings lettering and symbols)	km	16,50		
5700	TOTAL CARRIED TO SUMMARY				

MAKHADO LOCAL MUNICIPALITY

BID NO.: 26 OF 2025

UPGRADING OF MADOMBIDZHA (50/50), RAMANSTHA TO RAVELE ROAD PHASE 1

BILL OF QUANTITIES

SECTION 5900

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5900	<u>FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS</u>				
B59.01	Finishing the road and road reserve: (b) Single-carriageway road	km	5,50		
5900	TOTAL CARRIED TO SUMMARY				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
7300	CONCRETE BLOCK PAVING FOR ROADS				
73.01	Concrete block paving (interlocking grey type S-A block paving with 20mm river sand base)				
	(a) 80mm	m ²	39860,00		
	(b) 60mm	m ²	3600,00		
B73.01	60mm Concrete block paving (interlocking terracotta type S-A block paving with 20mm river sand base)	m ²	1900,00		
73.02	Cast in situ concrete edge and intermediate beam, Class 30/19	m ³	60,00		
B73.03	Provision of herbicide and ant poison	m ²	45360		
B73.04	Speed humps (As per drawing number AGC-CIV-PD-RDLS-042)	No	8		
B73.05	Supply and install concrete Bus Stop Shelter complete	No	10		
7300	TOTAL CARRIED TO SUMMARY				

MAKHADO LOCAL MUNICIPALITY
BID NO.: 26 OF 2025
UPGRADING OF MADOMBIDZHA (50/50), RAMANSTHA TO RAVELE ROAD PHASE 1
BILL OF QUANTITIES

SECTION 8100

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
8100	<u>TESTING MATERIALS AND WORKMANSHIP</u>				
81.02	Other special tests requested by the Engineer:				
	(a) Cost of testing	Prov Sum	1,00	350000,00	R 350 000,00
	(b) Handling costs and profit in respect of sub-item (a) above	%	350 000		
8100	TOTAL CARRIED TO SUMMARY				

MAKHADO LOCAL MUNICIPALITY
BID NO.: 26 OF 2025
UPGRADING OF MADOMBIDZHA (50/50), RAMANSTHA TO RAVELE ROAD PHASE 1
BILL OF QUANTITIES
SCHEDULE E

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
B1000	<u>ENVIRONMENTAL MANAGEMENT PLAN</u>				
B100.01	Penalty for unnecessary removal or damage to trees for the following diameter sizes:				
	(a) 2 600mm girth or less	No		-5000,00	Rate Only
	(b) Greater than 2 600mm, but less than 6 180mm girth	No		-6000,00	Rate Only
	(c) Greater than 6 180mm girth	No		-10000,00	Rate Only
B100.02	Penalty for serious violations:				
	(a) Hazardous chemical/oil spill and/or dumping in non-approved sites	No		-10000,00	Rate Only
	(b) General damage to sensitive environments	No		-5000,00	Rate Only
	(c) Damage to cultural and historical sites	No		-5000,00	Rate Only
	(d) Pollution of water sources	No		-10000,00	Rate Only
	(e) Unauthorised blasting activities	No		-5000,00	Rate Only
	(f) Uncontrolled/unmanaged erosion per incident, depending on environment impacts, plus rehabilitation at contractor's cost	No		-1000,00	Rate Only
	(g) Damage to sensitive vegetation within "no-go" areas of vegetation damaged, plus rehabilitation thereof at contractors cost	No		-1000,00	Rate Only
B100.03	Penalty for less serious violations:				
	(a) Littering on site	No		-1000,00	Rate Only
	(b) Lighting of illegal fires on site	No		-1000,00	Rate Only
	(c) Persistent or un-repaired fuel and oil leaks	No		-1000,00	Rate Only
	(d) Any person related to the contractor's operations found within the designated "no-go" areas	No		-500,00	Rate Only
	(e) Any vehicles or equipment related to the Contractor's operations found within the designated "no-go" areas	No		-500,00	Rate Only
	(f) Excess dust or excess noise emanating from site	No		-500,00	Rate Only
	(g) Dumping of milled material in side drains or on grassed areas]	No		-500,00	Rate Only
	(h) Possession or use of intoxicating substances on site	No		-500,00	Rate Only
	(i) Any vehicles being driven in excess of designated speed limits	No		-500,00	Rate Only
	(j) Removal and/or damage to flora or cultural or heritage objects on site, and/or killing of wildlife	No		-500,00	Rate Only
	(k) Illegal hunting	No		-500,00	Rate Only
	(l) Urination and defecation anywhere except in designated areas	No		-500,00	Rate Only
B1000	TOTAL CARRIED TO SUMMARY				

MAKHADO LOCAL MUNICIPALITY
 BID NO.:
 UPGRADING OF MADOMBIDZHA (50/50), RAMANSTHA TO RAVELE ACCESS ROAD
 BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

1200	GENERAL REQUIREMENTS AND PROVISIONS	R
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	R
1400	HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNE	R
1500	ACCOMMODATION OF TRAFFIC	R
1600	OVERHAUL	R
1700	CLEARING AND GRUBBING	R
1800	DAYWORKS	R
2100	DRAINS	R
2200	PREFABRICATED CULVERTS	R
2300	CONCRETE KERBING, CONCRETE CHANNELING, CHUTES AND DOWNPIPES AND CONCRETE LINING FOR OPEN DRAINS	R
3100	BORROW MATERIALS	R
3200	SELECTION, STOCKPILING AND BREAKING-DOWN THE MATERIAL FROM BORROW PITS, CUTTINGS AND EXISTING PAVEMENT LAYERS, AND PLACING AND COMPACTING THE GRAVEL LAYERS	R
3300	MASS EARTHWORKS	R
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL	R
3500	STABILIZATION	R
3600	CRUSHED STONE BASE	R
4100	PRIME COAT	R
4500	ASPHALT LAYER SURFACING	R
5100	PITCHING, STONEMWORK AND PROTECTION AGAINST EROSION	R
5200	GABIONS	R
5500	FENCING	R
5400	GUARDRAILS	R
5600	ROAD SIGNS	R
5700	ROAD MARKINGS	R
5900	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	R
7300	CONCRETE PAVING BLOCKS	R
8100	TESTING MATERIAL AND WORKMANSHIP TREATING OLD ROADS	R
B1000	ENVIRONMENTAL MANAGEMENT PLAN - SCHEDULE E	R

TOTAL R _____

CALCULATION OF TENDER SUM

SUMMARY OF SCHEDULE OF QUANTITIES TOTAL..... R

ADD CONTINGENCIES

The sum provided here is under the sole control of the
 Engineer and may be deducted in whole or in part. (The Tenderer
 must add 10% of the total of schedule of quantities) R

ADD CPA (5%)

Must add 5% of the total of schedule of quantities) R

SUBTOTAL R

ADD VALUE-ADDED TAX (VAT)

The tenderer shall add 15% of subtotal for VAT R

TOTAL CARRIED TO FORM OF OFFER

R

MAKHADO LOCAL MUNICIPALITY



CONTRACT NO. 26 of 2025

UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD – PHASE 1

C3 SCOPE OF WORK

All definitions, interpretations and general provisions for the General Conditions of Contract for Construction Work (2015) (3rd edition) are applicable.

C 3.1 DESCRIPTIONS OF WORKS

C3.1.1 Brief Project Description

The project aims to upgrade the existing gravel roads to paved standards. The existing internal roads to be constructed are approximately 5.5km of gravel surface. The gravel surface of the roads is not in a good and safe condition.

The roads start at Madombidza (50/50) next to Phadziri Coaches depot. The roads to be upgraded links the following schools and a cemetery in the area:

- Tshikwarani Senior Primary School
- Tshilwavhusuku Junior Primary School
- Litshovhu Secondary School
- Khavhatondiwe Academy

The roads at Madombidzha, Ramantsha and Ravele village are classified as collector and rural roads. These roads make up the main road network in the area. It is an important moderate level service. The current traffic counts are very low, and indications are that these will significantly increase after these roads are upgraded.

C3.1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.1.2 Overview of the Works

The work entails the upgrading of access road from gravel to interlocking concrete paving standard.

C3.1.3 Extend of the Works

The work to be carried out by the Tenderer under this contract comprises mainly of the following:

General:

- Establishment of camps and plant on site
- Provision of offices and laboratories

Earthworks:

- Excavation of existing layer works
- Construct a 150mm insitu roadbed
- Construct 150mm natural gravel (G7) lower selected layer
- Construct 150mm natural gravel (G6) upper selected layer
- Construction of C4 subbase to increase structural capacity; and
- Construction of G3 Base course layer for intersections

Ancillary Works:

- Installation of 80mm interlocking concrete paving for the roads
- 60mm concrete block paving of 1.5m width for sidewalks
- 30mm Asphalt Surfacing on Intersections
- Roads marking
- Installation of Road signs
- Gabions

Drainage:

- The construction of stormwater pipes and box culverts including KI and manholes.
- Subsoil drains.

C3.2

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.1.3 Location of the Works

The project will be implemented at Madombidzha, Ramantsha and Ravele Village. Madombidzha is situated about 15 km Southwest of Louis Trichardt. The village forms part of Ward 6, Ward 22 and Ward 23 of MLM within Vhembe District Municipality in the Limpopo Province.

C3.1.4 Construction program

It is specifically brought to the notice of the Contractor that time is critical on this project, and the construction period will be a major factor in the award of the tender.

Tenderers shall submit with their tender a **preliminary programme** for the construction of the Works under this contract to suit their proposed method of executing the Works. The programme shall be sufficiently detailed to differentiate between the various activities so that the contract may be properly evaluated.

C3.1.5 Change in works

The Employer's Agent may, from time to time by order in writing without in any way vitiating the Contract or giving to the Contractor any claim for additional payment, require the Contractor to proceed with the execution of the works in such order as in his opinion may be necessary, and may alter the order of or suspend any part of the Works at such time and times as he may deem desirable and the Contractor shall not, after receiving such written order, proceed with work ordered to be suspended until he shall receive a written order to do so from the Employer's Agent. Where the work must of necessity be carried out in conjunction with work of other Contractors, or with that of the Employer, it shall be co-ordinated and arranged in such a manner as to interfere as little as possible with the progress of such other work so as to offer every reasonable facility to other Contractors or to employees of the Employer.

C3.2 ENGINEERING

C3.2.1 Design services and activity matrix

Description	Responsibility
Design of Works	Employer's Agent
Concept, feasibility and overall process	Employer / Employer's Agent
Basic Employer's Agenting and detail layouts to tender stage	Employer's Agent
Final Design of Works	Employer's Agent
Approval of Final Design for construction stage	Employer
Preparation of tender documentation & adverts	Employer's Agent
Appointment of soil test / topographical surveyors	Employer / Employer's Agent
Appointment of sub-contractors	Contractor
Supervision	Employer's Agent
Preparation of as-built drawings	Contractor / Employer's Agent
Completion certificate	Employer's Agent / Client / Contractor

C3.3

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

C3.2.2 Drawings

The Employer’s Agent will provide the Contractor with one full set of drawings, which will be used exclusively for the recording of as built information by the Contractor.

Only dimensions, positions, levels, co-ordinates etc. that change from the original values, will be required to be entered on these drawings. These drawings, fully marked up, will be handed to the Employer’s Agent at the issue of the Certificate of completion, which will not be issued until the as-built information has been received.

The applicable drawings mentioned above are attached at the end of this section (C3 – Scope of Work).

C3.3 PROCUREMENT

The Tenderers notice is drawn to the fact that the awarding of this tender will be in terms of the Supply Chain Management Policy of the MAKHADO LOCAL MUNICIPALITY and The Standard Conditions of Tender as contained in Annexure F of the September 2005 edition of the CIDB Standard for Uniformity in Construction Procurement

C3.4 SUB-CONTRACTING

No work may be sub-contracted to another party unless approval is given by the Employer’s Agent in writing. The Contractor is to submit to the Employer’s Agent in writing a request for appointment of a particular sub-contractor. Accompanying this request is to be the full detail of the sub-contractor, including:

- Previous experience
- Work which is to be sub-contracted to him/her
- Approximate value of the work to be sub-contracted

Before the Employer’s Agent issues any certificate that includes any payment in respect of work done or goods supplied by any sub-contractor appointed in accordance with the provisions of the General Conditions of Contract for Construction works (2015), he shall be entitled to call upon the Contractor to furnish reasonable proof that all payments (less retention moneys) included in previous certificates in respect of the work or goods of such sub-contractors have been made or discharged by the Contractor, in default of which, unless the Contractor:

- ✓ Informs the Employer’s Agent in writing that he has reasonable cause for withholding or refusing such payment; and
- ✓ Submits to the Employer’s Agent reasonable proof that he has so informed such sub-contractor in writing.

C3.5 CONSTRUCTION

C3.5.2 Plant and materials

All materials shall comply with the requirements of the South African Bureau of Standards, and shall bear the official standardization mark. Where SABS standard does not exist for a certain material, or a material does not bear the official standardization mark, the Employer's Agents approval of such material must be gained before use thereof.

C3.5.3 Construction Equipment

All equipment on site shall be in a good working order, and is to be in such a condition that it can achieve production rates which are typical of the industry standards.

Should any equipment, in the opinion of the Employer's Agent, be substandard or breaks down frequently to such an extent that it affects the progress on the project, the Employer's Agent may instruct the Contractor to replace such equipment.

C 3.5.4 Existing Services

The Contractor shall so carry out all his operations as not to encroach on, or interfere with, trespass on, or damage adjoining lands, building properties, roads, structures, places and things in the vicinity of the Works, and he shall free and relieve the Employer of any liability that may be incurred in consequence of his failure to do so.

The services existing on the site will be either shown on the drawings or pointed out on site by the Employer's Agent and / or the Employer. No excavation work will commence unless a representative of the Employer and/or the Employer's Agent have been requested to point out existing services in the area under construction. Written confirmation of services that have been pointed out by the Employer is to be obtained by the Contractor.

All existing services on the site may not be shown on the drawings or be visible on the site. The Employer's Agent may order excavation by hand in order to search for and expose services. An item has been included in the Schedule of Quantities to cover the cost of such work if so ordered by the Employer's Agent. Where a service is damaged because of the Contractors negligence he shall be liable for the cost involved in the repair of the services and any other consequent cost that may arise due to the interruption of the damaged services.

No excavation is to take place until a representative from the Employer's Agent and / or the Employer has been contacted and he has pointed out the existing services to the Contractor and confirmed it in writing. The same shall apply to all Telkom services in the area.

C3.5.5 Site Establishment

▪ Source of Water Supply

The Contractor is to arrange with the Local Authority for water and be responsible for the costs of water for construction purposes.

▪ Sources of power supply

The Contractor is to arrange with the Local Authority for a connection. The Contractor will be responsible for the costs of electricity consumed as well as the connection costs.

▪ Location of camp and depot

The Contractor shall make arrangement of the Contractors camp during the site inspection.

▪ Sanitary facilities

The Contractor is to provide the necessary sanitary facilities at his camp, all of which will be governed by the requirements of the Local Authority. The contractor shall pay all sanitary fees and charges due. The facilities are, however, to be kept in a clean and hygienic condition, to the satisfaction of the Employer’s Agent. All sanitary facilities are to conform to the by-laws of the Local Authority.

▪ Temporary offices

The Contractor is required to provide a specific office space for the Employer’s Agent, in order to perform administrative functions when necessary.

Neither housing nor shelters will be provided for the contractor’s employees, and the Contractor shall make his own arrangements to house his employees and transport them to the Site.

▪ Laboratory facilities

The use of commercial laboratories will be allowed, but the laboratory to be used is subject to the approval of the Employer’s Agent and they must be SANAS accredited.

▪ Name Boards

Two name boards shall be provided in positions as ordered by the Employer’s Agent. The Employer’s Agent will provide the lettering required once the tender is awarded.

C3.6

<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

▪ Survey assistant and equipment

The Contractor will however make 2 survey assistants available to the Employer’s Agent as and when required, as well as the theodolite and/or level plus accessories. All equipment would need a calibration certificate.

C3.5.6 Site Usage

▪ Ground and access to the works

The Contractor shall where necessary on or adjacent to roads which carry traffic, provide all the necessary barricades and signs in accordance with the stipulations of the South African Road Traffic Signs Manual, and in strict accordance with the requirements of the Protective Services of the MAKHADO LOCAL MUNICIPALITY.

The Contractor shall further ensure that all public roads that are used for access to the site are kept free of debris at all times. The Contractor shall also take adequate measures to ensure that dust is kept to an acceptable level. The term acceptable is to be deemed as acceptable to the Employer’s Agent.

▪ Care, damage and protection

The Contractor shall at his own cost make full provision for all watching and lighting necessary for the protection of all persons, animals, vehicles, etc., from injury by reason of the Works. He shall provide ample warning signs, guard rails, etc., around open excavations, stacks of materials, excavated material, debris or the like, and he shall be held liable for all claims made upon himself or upon the Employer by reason of his neglect of all such precautions and provisions.

During the periods of construction of the Works and the repair of defects, the Contractor shall, at his own cost, to the satisfaction of the Employer’s Agent and the relevant Authority, take sufficient and adequate measures to avoid interrupting the use of all roads, footpaths, water courses, drains, pipes, telephones, electric wires and cables, premises, places and works, public or private, which may in any way be interfered with by the operations; and shall also afterwards permanently restore all structures and everything which may have been temporarily displaced or otherwise interfered with, all to the satisfaction of the Employer’s Agent and the relevant Authority, without extra charge beyond the Contract price.

▪ Survey beacons

The Contractor shall take care to safeguard any permanent survey beacons such as erf boundary pegs and reference beacons. Should the Contractor disturb any such pegs and beacons, he shall have them replaced at his own cost by a registered Land Surveyor. The Contractor is to provide the Employer’s Agent with written confirmation from the Land Surveyor that he has replaced the relevant beacons.

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

The Contractor's attention is drawn to article 35(i) of the Land Surveying Act No. 9 of 1927 (as amended) in this regard.

▪ Blasting

As the construction takes place within a built up area, extreme care is to be taken during any blasting operations. No blasting shall be permitted without prior written consent from the Employer's Agent. Written as well as verbal notice will be given to all house owners in the affected area 24 hours prior to the blast being set off, and the contractor is to do a survey of all the houses (internal and external) in the area prior to blasting.

A full daily report of all blasting operations (in duplicate) is to be completed by the Contractor.

This report shall inter alia contain the following information:

- Date and time of each blast
- Number of holes
- Charge per hole
- Use of relays, etc.

This report is to be submitted to the Employer's Agent on a weekly basis, and is to be countersigned by the Employer's Agent.

The contractor is to be noted that he is not to use or permit any person to use an explosive powered tool, unless—

- (a) it is provided with a protective guard around the muzzle end, which effectively confines any flying fragments or particles; and
- (b) the firing mechanism is so designed that the explosive powered tool will not function unless—
 - (i) it is held against the surface with a force of at least twice its weight; and
 - (ii) the angle of inclination of the barrel to the work surface is not more than 15 degrees from a right angle:

▪ Protection of existing vegetation

Before any tree is cut down and removed from the site, the Contractor shall confirm the necessity of such action with the Employer's Agent or his Representative.

▪ Access to individual erven

Access to all public and private property must be maintained at all times. Where excavations cross the access point to any property, the Contractor is to make sure that

C3.8

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access be properly done for vehicles to pass.

The Employer's Agent must approve the method of providing access before any excavation commences.

▪ Use of construction vehicles and equipment

The contractor shall ensure that all construction vehicles and mobile plants—

- (a) are of an acceptable design and construction;
- (b) are maintained in a good working order;
- (c) are used in accordance with their design and the intention for which they were designed, having due regard to safety and health;
- (d) are operated by workers who-
 - (i) have received appropriate training and been certified competent and been authorised to operate such machinery; and
 - (ii) are physically and psychologically fit to operate such construction vehicles and mobile plant by being in possession of a medical certificate of fitness;
- (e) arrangements to guard against the dangers relating to the movement of vehicles and plant, in order to ensure their continued safe operation;
- (f) are prevented from falling into excavations, water or any other area lower than the working surface by installing adequate edge protection, which may include guardrails and crash barriers;
- (g) where appropriate, are fitted with structures designed to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn;
- (h) are equipped with an electrically operated acoustic signaling device and a reversing alarm; and
- (i) are on a daily basis inspected prior to use, by a competent person who has been appointed in writing and the findings of such inspection is recorded in a register.
- (j) no person rides or be required or permitted to ride on any construction vehicle or mobile plant otherwise than in a safe place provided thereon for that purpose;
- (k) every construction site is organised in such a way that, as far as is reasonably practicable, pedestrians and vehicles can move safely and without risks to health;
- (l) the traffic routes are suitable for the persons using them, sufficient in number, in suitable positions and of sufficient size;
- (m) every traffic route is, where necessary indicated by suitable signs for reasons of health or safety;
- (n) bulldozers, scrapers, loaders, and other similar mobile plant are, when being repaired or when not in use, fully lowered or blocked with controls in a neutral position, motors stopped and brakes set;
- (o) whenever visibility conditions warrant additional lighting, all mobile plant are equipped with at least two headlights and two taillights when in operation;
- (p) when workers are working on or adjacent to public roads, reflective indicators

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are provided and worn by the workers.

3.6 **MANAGEMENT**

C3.6.1 Management of the Works

▪ Planning and programme

The Contractor shall deliver to the Employer’s Agent within **14** days, calculated from the commencement date, a realistic programme showing the order of procedure, the duration of activities making up the programme and method which he proposes to use in carrying out the Works in order to meet the due completion date for this project.

The tenderer is to note that the penalty for failing to complete the works is **R 3000.00** per calendar day including non-special days .

▪ Setting out of the works

Generally the positions of the works have been fixed on the plans according to the existing stand boundaries. The Employer’s Agent is to approve all setting out prior to commencement of excavation.

▪ Excavation of works & safety

The contractor shall ensure that all excavation work is carried out under the supervision of a competent person who is been appointed in writing. The Contractor will evaluate, as far as is reasonably practicable, the stability of the ground before excavation works begin and he/she shall not permit any person to work in an excavation which has not been adequately shored or braced.

The Contractor will cause convenient and safe means of access to every excavation area in which person are required to work and such access hall not be further than 6m from the point where any worker within the excavation is working.

The Contractor must ascertain as far as is reasonably practicable the location and nature of electricity, water, gas or other similar services which may in any way be affected by the work to be performed, and shall before the commencement of excavation work that may affect any such service, take the steps that may be necessary to render the circumstances safe for all persons involved;

The Principal Contractor shall cause every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered, to be:

- (i) adequately protected by a barrier or fence of at least one metre in height and as close to the excavation as is practicable; and

- (ii) provided with warning illuminants or any other clearly visible boundary indicators at night or when visibility is poor;

The Principal Contractor shall cause warning signs to be positioned next to an excavation within which persons are working or carrying out inspections or tests.

▪ Inspection by Employer’s Agent

No stage of construction shall be proceeded with until the Employer’s Agent or his representative has examined and approved the previous stage. If any work is covered or hidden from view before the Employer’s Agent has inspected same, the Contractor shall at his own cost open the covered work for inspection. The Contractor shall also be responsible for making good any work damaged by such uncovering.

▪ Employment of local labour

It is a specific criterion of this project that the contractor should as far as possible adhere to RDP principles, and to meet these principles the following procedures will be followed:

All labour is to be sourced from the MAKHADO Local Municipal area of jurisdiction and the Contractor may only bring in key personnel from outside this area. The fixed rate for the appointment of local labour will be **R 220 per day**. This will be payable by the Contractor on monthly basis.

Key personnel would typically include the Contracts Manager, Site Agent, and Supervisor for each discipline, and operators of plant.

A Monthly labour report on all local labour i.e. payments and labour days should be submitted to the Employer’s Agent at the end of each month in order for the Employer’s Agent to submit a report to the Employer.

None of the Works shall be executed except between sunrise and sunset on Monday to Saturday, inclusive, of any week, and none of the Works shall be executed on any special non-working days stated in the Contract Data, unless:

- ✓ The Employer’s Agent’s permission in writing is obtained, subject to such conditions as may be laid down by the Employer’s Agent; or
- ✓ Provision is specifically made for it in the Contract; or
- ✓ Work is unavoidable or necessary for the saving of life or property or for the safety of the Works.

▪ Site Meetings

Regular meetings will be held between all relevant parties to establish the progress and / or delays and problems that might occur on site. Any problems of delays will be addressed

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

accordingly and the Contractor will receive proper instructions with reference to this matter.

▪ Communication

Employer's Agent: **AGC Consulting Engineers**

Contact Person for the Employer's Agent: **Mr Adam Chauke**

Contact No: **015 296 2789**

Employer: **Makhado Local Municipality**

Contact Person for the Employer: **Ms Livhuwani Thulare**

Contact No: **015 519 3000**

▪ Daily Records

Daily records of resources (equipment and people employed) must be kept and must be available on site at all times. These records will include i.e. site instruction book, site diary, site visit register, contractual documentation and minutes of all project meetings. Labour information should be kept updated at all times.

▪ Compliance with applicable laws

The Contractor shall, in performance of the Contract, comply with all applicable laws, regulations and statutory provisions and agreements, and shall in particular, on the request of the Employer's Agent, provide proof that he has complied therewith with regard to amongst others:

- ✓ Wages and conditions of work; and
- ✓ Safety

▪ Payment Certificates

As consideration for the construction, completion and defects correction of the Works, the Employer shall pay the Contractor in terms of the provisions of the Contract.

▪ Clearance of site

On completion of the Works, the Contractor shall clear away and remove from the site all Construction Equipment, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and the works clean and in a safe condition. All streams and watercourses (where applicable) shall be cleaned and restored to the condition as at the commencement of the Works. If the Contractor does not, within a reasonable time, comply with this requirement, the Employer may have the site cleared and recover the cost thereof from the Contractor.

▪ Termination of Contract

If application is made for the sequestration of the Contractor's estate, or if the Contractor

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publishes a notice of surrender of his estate or presents a petition for the acceptance of the surrender of his estate as insolvent, or makes a compromise with his creditors, or assigns in favour of his creditors, or agrees to carry out the Contract under the supervision of a committee representing his creditors, or (being a company) goes into liquidation, whether provisionally or finally (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or if the contractor assigns the contract without having first obtained the Employer’s consent in writing, or if execution is levied on his goods or if the Employer’s Agent certifies reference to this Clause, that in his opinion the Contractor:

- ✓ Has abandoned the contract; or
- ✓ Without reasonable excuse has failed to commence the Works in terms of Clause 10 of the General Conditions of Contract for Construction Works (2015), or has suspended the progress of the Works for fourteen (14) days after receiving from the Employer’s Agent written notice to proceed or
- ✓ Has failed to proceed with the Works with due diligence; or
- ✓ Has failed to remove materials from the site or to pull down and replace work within fourteen (14) days after receiving from the Employer’s Agent written notice that the said materials or work have been condemned and rejected by the Employer’s Agent in terms of these conditions; or
- ✓ Is not executing the Works in accordance with the Contract, or is neglecting to carry out his obligations under the Contract; or
- ✓ Has, to the detriment of good workmanship or in defiance of the Employer’s Agent’s instruction to the contrary, sublet any part of the Contract; or
- ✓ Has assigned the Contract or any part thereof without the Employer’s consent in writing; or
- ✓ The contractor or anyone on his behalf or in his employ would pay, offer or offer as payment to any person in the employ of the Employer a gratuity or reward or commission; or
- ✓ The contractor furnished inaccurate information in the Schedules forming part of this Contract.

Then the Employer may, after giving fourteen (14) days’ notice in writing to the Contractor, terminate the Contract and order the Contractor to vacate the Site and to hand it over to the Employer, and the Employer may then enter upon the site and the Works and expel the Contractor there from without thereby affecting the rights and powers conferred on the Employer of the Employer’s Agent by the Contract, and the Employer may himself complete the Works or may employ another contractor to complete the Works, and the Employer or such other contractor may use for such completion so much of the construction equipment, temporary works and materials bought onto the site by the Contractor as the Employer may think proper, and the Employer may at any time sell any of the said construction equipment, temporary works and unused materials and apply the proceeds of sale toward payment of any sums that may be due or become due to the Employer by the Contractor under the Contract. In such circumstances the Contractor shall forthwith vacate the site and shall not be entitle to remain on the site on the grounds that he is entitled to do so on a right of retention until amounts due to him have been paid, neither will the contractor be entitled to any further payments of this Contract.

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C3.7 HEALTH AND SAFETY

▪ Health & Safety Issues

All work is to be carried out in accordance with the Occupational Health and Safety Act and Regulations (Act 85 of 1993) (a copy of which must be kept on site), the Explosive Material Act of (Act 26 of 1956), the Minerals Act of 1991, and the Factories Machinery and Building Work Act (No 22 of 1941).

The Contractor's notice is drawn to the stipulations of the Construction Regulations 2003, a regulation of the Health and Safety Act 1993 (Gov Notice No R1010 of 18 July 2003). The construction regulation will be applied vigorously on the project.

The Contractor to be appointed must have made provision for the cost of health and safety measures during the construction process. The contractor must have the necessary skills, competencies and resources to carry out the work safely. A proper Safety Plan is to be submitted by the Contractor and a copy thereof is to be made available to all applicable appointed labourers and permanent workers on this project.

The Contractor is to ensure that the legal compliance for the Health and Safety issues are in place. Audits will be carried out to ensure that the Contractor is registered and in good standing with the Workmen's Compensation fund and that the Contractor has affected insurance indemnifying the Employer against penalties levied upon the Employer due to the acts of omissions of the Contractor in failing to comply with the provisions of the OHS regulations 2003. A compliance audit will also be carried out to ensure that the Contractor has appointed a full-time competent person in writing to deal with the issues of the OHS and that a risk assessment has been conducted and a copy of the Safety plan is on site before any work commences.

Operational audits will be carried out on the following important issues:

- ✓ That the Safety Plan is on site at all times
- ✓ That the Contractor's Safety file is on site at all times
- ✓ That the Safety Officer is on site at all times
- ✓ That Safety meetings are conducted as per the Safety Plan
- ✓ That employees are working under safe conditions
- ✓ That the public is not placed in danger
- ✓ That there is no harm to the environment

▪ Accommodation of traffic

It is expected of the Contractor to ensure that the free flow of traffic is possible throughout the construction period.

C3.14

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

The Contractor is to provide all necessary barricades, signs and lighting in accordance with the stipulations of the South African Road Signs Traffic Manual, and the Protective Services of the MAKHADO LOCAL MUNICIPALITY. All work is to be to the satisfaction of the Employer’s Agent.

▪ Reporting of accidents

In addition to any statutory regulations, the Contractor shall, as soon as practicable, report to the Employer’s Agent every occurrence on the Works or the site causing damage to property of injury or death of persons. If required by the Employer’s Agent, the Contractor will submit a report in writing to the Employer’s Agent within 48 hours of such requirement setting out full details of the occurrence. The Employer’s Agent shall have the right to make any enquiries either on the site or elsewhere as to the cause and results any such occurrence and the Contractor shall make available to the Employer’s Agent the necessary facilities for carrying out such enquiries.

PROJECT SPECIFICATIONS

C3.2 PART B: MATTERS RELATING TO THE STANDARD SPECIFICATIONS

B1 PROJECT SPECIFICATIONS REFERRING TO THE STANDARD SPECIFICATIONS AND ADDITIONAL SPECIFICATIONS

In certain clauses the standard specifications allow a choice to be specified in the project specifications between alternative materials or construction methods, 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 part of the project specifications. It also contains some additional specifications required for this particular contract.

The number of each clause and each payment item in this part 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 number of a new clause or a new payment item that does not form part of a clause or a payment item in the standard specifications and is included here, is also prefixed by B 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.

B2 SECTION 1100: DEFINITIONS AND TERMS

B1156 LABOUR-OPTIMISING CONSTRUCTION

ADD THE FOLLOWING NEW CLAUSE:

The cost-effective employment of as great a portion of labour as is practically and technically feasible to produce a standard of construction as required by the Specifications, thus the economic substitution of plant and mechanical equipment in favour of available labour using hand tools, on condition that this method is not more expensive than the conventional construction practices.

The number of each payment item in the schedule of quantities for the above clause will consist of the Prefix L1 forward by a number corresponding to the number of the relevant Clause or Payment Item in the Standard Specifications.

B3. SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS

B1201 WORKMANSHIP AND QUALITY CONTROL

Add the following to the third paragraph:

“The Employer’s Agent shall, however, undertake acceptance control tests for the judgement of workmanship and quality, without accepting any obligations vested with the contractor in terms of the contract with specific reference to quality of materials and workmanship. Such acceptance control

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test done by the Employer’s Agent shall not relieve the contractor of his obligations to maintaining his own quality control system.”

Add the following at the end of this clause:

"The Employer’s Agent shall, for the purpose of acceptance control on products and workmanship, assess test results and measurements in accordance with the provisions of section 8300 of the standard specifications. Where small quantities of work are involved, a lot shall mean a full day's production for a specific item of work subject to acceptance control testing."

B1204 PROGRAMME OF WORK

(a) General requirements

Amend the word “network” in the fourth line of the first paragraph to read as “bar (Gantt) chart”.

Add the following after the third paragraph:

“The bar-chart programme to be provided by the contractor shall show the various activities in such detail as may be required by the Employer’s Agent. Progress in terms of the programme shall be updated monthly by the contractor in accordance with the progress made by the contractor.

In compiling the programme of work, the contractor shall indicate and make due allowance for the following, as specified elsewhere in the contract documents:

The requirements regarding the accommodation of traffic and areas that may be occupied at any time for construction purposes (as indicated on the drawings and specified in Section 1500 of the specifications)

Requirements regarding the training of labourers and Emerging Contractors (EC’s).

The requirements for work to be undertaken by labourers and work to be undertaken by EC’s.

(b) Programme of construction work

Amend the word “network” in the fourth line of the second paragraph to read as “bar (Gantt) chart”.

Add the following Item:

B12.01 MEASUREMENT AND PAYMENT

“ADD NEW ITEMS”

1200: General Requirements and Provisions

B12.01	(i) Payment of Community Liaison Officer	Provisional Sum (Prov. Sum)
	(ii) Payment of 4 students	Prov Sum
	(iii) Payment of Steering Committee	Prov Sum
	(iv) Handling costs and profit in respect of 12.01(i) (ii) (ii) above	(%)

The provisional sum allowed in Item B12.01 (i), (ii), (iii), and (iv) for the payment as indicated and the percentage allowed under Item B1201(v) shall include full commission for all obligations, overheads, administration charges and incidental Items of cost necessary.

C3.17

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Witness 2

Add the following Item:

COMMUNITY LIASON OFFICER (CLO)

The Contractor or his appointed agent will appoint a Community Liaison Officer (CLO) after consultation with the Project Co-ordinating Committee, the Employer’s Agent and the Employer. The Contractor shall direct all his liaison efforts with the local communities through the appointed officer. The Contractor shall, however, accept the appointed officer as part of his management personnel.

(a) Duties of the Community Liaison Officer

The Community Liaison Officer’s duties will be:

- (i) To be available on site daily between the hours of 07:00 and 17:00 and at other times as the need arises.
- (ii) To determine, in consultation with the Contractor, the needs of the temporary labour for relevant skills training. He/She will be responsible for the identification of suitable trainees and will attend one of each of the training sessions.
- (iii) To communicate daily with the Contractor and the Employer’s Agent to determine the labour requirements with regard to numbers and skill, to facilitate in labour disputes and to assist in their resolution.
- (iv) To assist in and facilitate in the recruitment of suitable temporary labour and the establishment of a “labour desk”.
- (v) To attend all meetings in which the community and/or labour are present or are required to be represented.
- (vi) To assist in the identification, and screening of labourers from the community in accordance with the Contractor’s requirements.
- (vii) To inform temporary labour of their conditions of temporary employment and to inform temporary labourers as early as possible when their period of employment will be terminated.
- (viii) To attend disciplinary proceedings to ensure that hearings are fair and reasonable.
- (ix) To keep a daily written record of his interviews and community liaison.
- (x) To attend monthly site meetings to report on labour and EPWP matters.

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

(xi)All such other duties as agreed upon between all parties concerned.

(b) Period of employment of the Community Liaison Officer

The period of employment of the Community Liaison Officer shall be as decided upon jointly by the Contractor, Employer’s Agent and Employer

CIVIL ENGINEERING STUDENTS

The Contractor or his appointed agent will appoint Two Civil Engineering Students after consultation with the Project Co-ordinating Committee, the Employer’s Agent and the Employer. The Contractor shall, however, accept the appointed student as part of his management personnel.

Two student are required who has pursued studies in Civil Engineering with a focus on road infrastructure and development. The candidate must have completed either a N6 qualification, a Diploma, or a degree in the relevant field at a university or technical institution. Applicants should be actively looking for training opportunities or assistance in attaining their qualification through practical experience.

Roles and Responsibilities:

- Be available on-site daily between 07:00 and 17:00, and at other times as needed.
- Assist in design and planning of road infrastructure.
- Conduct site inspections to ensure compliance with engineering standards and safety regulations.
- Support in materials testing and quality assurance for construction projects.
- Participate in technical assessments and documentation of project progress.
- Engage with community representatives to address concerns related to road projects.
- Maintain records and reports on engineering activities and findings.
- Facilitate and support training efforts for temporary labour regarding road-related engineering concepts.
- Attend site meetings to report on civil engineering progress and challenges.

ENVIROMENTAL STUDENT

The Contractor or his appointed agent will appoint One Environmental Student after consultation with the Project Co-ordinating Committee, the Employer’s Agent and the Employer. The Contractor shall, however, accept the appointed student as part of his management personnel.

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

One student is required who has pursued studies in Environmental Science with a focus on road-related environmental impact. The candidate must have completed an N6 qualification, a Diploma, or a degree in the relevant field at a university or technical institution. Applicants should be actively looking for training opportunities or assistance in attaining their qualification through practical experience.

Roles and Responsibilities:

- Be available on-site daily between 07:00 and 17:00, and at other times as needed.
- Assist in environmental impact assessments related to road infrastructure projects.
- Conduct site inspections to monitor compliance with environmental regulations.
- Support in mitigation planning to reduce environmental risks.
- Engage in waste management and sustainability practices.
- Liaise with community representatives to address environmental concerns.
- Maintain records and reports on environmental activities and findings.
- Ensure compliance with environmental legislation and best practices.

OHS STUDENT

The Contractor or his appointed agent will appoint One Occupational Health and Safety Student after consultation with the Project Co-ordinating Committee, the Employer’s Agent and the Employer. The Contractor shall, however, accept the appointed student as part of his management personnel.

One student is required student who has completed studies in Safety Management or a related qualification at a tertiary institution. The candidate must be registered with SACPCMP and must have completed a Diploma or Degree in Construction Health And Safety. The candidate must be actively looking for training opportunities or assistance in attaining their professional registration through practical experience in road infrastructure projects.


Roles and Responsibilities:

- Be available on-site daily between 07:00 and 17:00, and at other times as required.
- Conduct site inspections to ensure compliance with health and safety regulations.
- Assist in risk assessments and hazard identification related to road construction.
- Monitor and enforce safety protocols to prevent workplace incidents.
- Support in the development and implementation of health and safety training programs.
- Maintain accurate records of incidents, inspections, and compliance reports.


C3.20



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Witness 1


Witness 2


Employer


Witness 1


Witness 2

- Liaise with contractors, engineers, and community representatives to address safety concerns.
- Participate in emergency response planning and accident investigations.
- Attend site meetings to provide health and safety updates and recommendation to the safety Officer

Add the following pay items

The project must include provisions for the training of civil engineering, Environmental and OHS students. The contractor is responsible for providing practical training opportunities for these students, including hands-on experience, mentorship, and skill development. The training program should aim to enhance the students' knowledge and practical skills in civil engineering, Environmental and OHS aligning with the project's objectives. The contractor must ensure that the students are adequately supervised, their work is integrated into the project in a meaningful way, and that their training does not interfere with the progress and safety of the project.

Add the following new payment item:

B12.02 STRUCTURED TRAINING

As part of this project, comprehensive accredited training in engineering, entrepreneurial and generic skills will be provided. In addition, for any work or services required, three quotations will be obtained and submitted to the Employer’s Agent for approval.

Add the following new payment item:

B12.03 THE CONTRACTOR’S OBLIGATION IN RESPECT OF LOCAL LABOURS

The medical testing requirements specified in this payment item are exclusively applicable to the local labour force. As part of these requirements, all local labourers must undergo both an entrance examination and an exit examination. The entry and exit medical surveillance for the tenderer’s own imported personnel including key staff and labour should be priced elsewhere separately.

Add the following new payment item:

B12.05 Protection, removal, relocation and replacement of utility services

ADD THE FOLLOWING NEW PARAGRAPH:

“Before work commences”, the Contractor if required, shall contact all private owners or public authorities controlling services to allow them to protect, move or relocate a service as required, or to confirm that all such work has been completed.

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

No payment will be made for inconvenience to the contractor due to services crossing the site or any authority working on such services, nor will delays caused by such workings be accepted as a basis for claiming an extension of time for completing the works”.

Add the following sub clause:

"(h) No concrete kerbing or concrete drains directly adjoining the bituminous surfacing shall be constructed prior to the completion of the bituminous surfacing."

Add the following new payment items:

B12/C1.1 CONTRACTOR’S INITIAL OBLIGATION IN RESPECT OF THE OHS ACT AND CONSTRUCTION REGULATION INCLUDING COMPLAINE TO COVID 19 REGULATION

All initial costs, including but not limited to materials, labour, and equipment, must be included in the project's total cost estimate. The contractor is required to comply with this requirement and ensure that no additional or unforeseen initial costs are incurred beyond the agreed-upon estimate. Any deviations must be pre-approved by the project Employer’s Agent.

B12/C1.2 CONTRACTOR’S TIME RELATED OBLIGATION IN RESPECT OF THE OHS ACT AND CONSTRUCTION REGULATION INCLUDING COMPLAINE TO COVID 19 REGULATION

The project cost must include all time-related obligations, such as project management, scheduling, and any time-sensitive tasks. The contractor is required to comply with this requirement and ensure that all time-related obligations are accounted for within the project's total cost estimate. Any deviations or changes to the schedule must be pre-approved by the project Employer’s Agent.

“The Contractor shall be required to comply with the Occupational Health and Safety Act, 1993: Construction Regulations, 2003 as promulgated in Government Gazette No 25207 and Regulation Gazette No 7721 of 18 July 2003. Non-compliance with these regulations, in any way whatsoever, will be adequate reason for suspending the works.

The proposed type of work, materials to be used and hazards likely to be encountered on this Contract, and which cover the Employers’ health and safety specifications (subclause 4(1) of the regulations, are detailed in the Project Specifications, Schedule of Quantity and Drawings.

The Contractor shall in terms of subclause 5(1) provide a comprehensive health and safety plan detailing his proposed compliance with the regulations, for approval by the Employer.

The Contractor shall at all times be responsible for full compliance with the approved plan as well as the Construction Regulations.

No extra over or additional payment shall be made to compensate the Contractor for compliance with these Regulations, and compensation shall be included in the rates tendered for the applicable items of work.”

B12/C1.3 SUBMISSION OF HEALTH AND SAFETY FILE

The contractor is required to submit a comprehensive safety file that covers all aspects of the safety requirements outlined for this project. No activities or work on-site may commence until the safety file has been submitted and approved by the Employer’s Agent/Employer. The safety file must include, but is not limited to, the following:

C3.22

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- Risk assessments
- Safety plans
- Emergency response procedures
- Employee training records
- Medical Certificates

The contractor must ensure that the safety file is complete and accurate. Any delays in the submission or approval of the safety file will be the responsibility of the contractor.

Add the following new payment item:

Item	Unit
B12/C1.4 Provision of Local Labourer's PPE	

(a) Local Labourer's PPE	No
--------------------------------------	-----------

This provision is only for Local Labour. The contractor is required to supply Personal Protective Equipment (PPE) to all local labourers. The PPE must be of good quality and in accordance with the standards set by the Construction Health and Safety Act. In the event that any PPE becomes damaged or worn out, it must be promptly replaced to ensure the safety and wellness of all workers. Provision of PPE for contractor's own personnel should be provided elsewhere as required

The tender rate shall include compensation for two full sets of PPE as required by the Construction Health and Safety latest Policies.

Add the following new payment item:

Item	Unit
B12.07 Provision for construction water	

(a) Contractor to make provision for all inclusive cost for construction water including drilling and equipping of borehole/s and/or the cost of other source/s and the maintenance thereof	L/Sum
---	--------------

Contractor is to make provision for the all-inclusive cost for construction water including drilling and equipping of borehole/s and / or the cost of other sources, and the maintenance thereof to be provided by the contractor for construction water purposes.

The tendered rate shall include full compensation to ensure that all water sourced for construction purposes undergoes comprehensive testing by a SANS-accredited laboratory to confirm its

C3.23

<div></div> <div>Contractor</div>	<div></div> <div>Witness 1</div>	<div></div> <div>Witness 2</div>	<div></div> <div>Employer</div>	<div></div> <div>Witness 1</div>	<div></div> <div>Witness 2</div>
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suitability for use and all cost for application and the use of the water from the relevant authorities. The testing shall include analysis of chemical composition, pH levels, and potential contaminants that may affect the integrity of construction materials.

The bidder should be aware that water quality plays a critical role in material performance, particularly in cement hydration, concrete strength, and durability. Water containing excessive impurities, such as chlorides, sulphates, or organic matter, may compromise the bonding properties of cement and lead to structural weaknesses. Therefore, the Contractor shall take necessary corrective actions, including water treatment or alternative sourcing, to ensure compliance with required standards for safe and effective construction.

Add the following new payment item

B12.08 SUPPLY, TRANSPORT TO SITE AND ERECT CONTRACT SIGN BOARD AS PER DRAWINGS (NOTICES, SIGNS AND ADVERTISEMENTS)

The contractor is responsible for the supply, transport, erection and maintenance of the contract signboard. Compensation will be provided for this service to be done at the location specified by the Employer’s Agent or the Employer. The signboard must meet the specified standards and requirements as outlined in the project documentation.

REPLACE THE FOURTH PARAGRAPH WITH THE FOLLOWING:

“The sign-boards shall be painted with the legend in English”.

B1209 THE SETTING-OUT OF THE WORK AND PROTECTION OF BEACONS

Add the following:

“The contractor shall be responsible for the true and proper setting out of the Works and for the correctness of the position, levels, dimensions and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labour in connection therewith.”

The Contractor shall take care that property beacons, trigonometrical survey beacons or setting-out beacons are not displaced or destroyed without the consent of the Employer’s Agent. Property beacons and trigonometrical survey beacons that have been displaced or destroyed shall be replaced by a registered land surveyor, who shall certify such replacement.

The cost of replacing all beacons displaced or destroyed during the course of the Contract without the consent of the Employer’s Agent shall be borne by the Contractor.”

1210 PAYMENT

(c) Rates to be inclusive

Add the following:

“VAT shall be excluded from the rates and provided for as a lump sum in the Summary of Bill of Quantities”.

(e) Materials on the site

C3.24

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Add the following:

"In addition, the Employer's Agent may at his sole discretion also allow payments under "Materials on Site" in respect of any construction materials if stored off-site providing that:

- (a) The site selected for this purpose is approved by the Employer's Agent
- (b) Such land is physically separated from any production plant or operation
- (c) Only materials for use under this contract is stockpiled on such land
- (d) The contractor has provided proof of an agreement with the owner of such land that the owner has no claim whatsoever on any materials stockpiled on such land
- (e) Materials obtained by the contractor for or on behalf of emerging subcontractors (SMME's) shall remain the responsibility of the contractor after payment has been made in respect of materials on site."

B1215 EXTENSION OF TIME RESULTING FROM ABNORMAL RAINFALL

Add the following after the first paragraph of this clause:

"For the purposes of this contract, extension of time resulting from abnormal rainfall or other forms of inclement weather shall be determined according to the requirements of Method ii (critical-path method)."

Method (ii) (Critical path method)

Delete "(based on a five-day working week)" in the fifth and sixth lines of the second paragraph of the description of this method.

Delete the last sentence of the second paragraph of the description of this method and replace with the following:

"The value of "n" shall be taken as **two (2) working days** per calendar month.
If normal rainy or inclement weather, resulting in delays, occurs for less than **two (2) working days** in any calendar month, the difference between the **two (2) working days** and the actual number of working days on which normal rainy or inclement weather occurred, shall be ignored and not accumulated for the duration of the contract period for the purposes of determining an extension of time due to normal rainy weather, nor due to any other reason.
Items of work on the critical path of the programme of work which are subject to climatic limitations, shall also be considered for extension of time if such items of work are delayed by e.g. cold weather, high winds or other inclement weather conditions.
In this regard, reference shall be made to weather limitations specified for the application of various bituminous products. However, for months during which seal-work cannot be undertaken in terms of the specifications, no extension of time shall be claimed for.

RAINFALL RECORDS IN MAKHADO

C3.25

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

month	1	2	3	4	5	6	7	8	9	10	11	12
mm	126	140	81	27	17	4	8	6	21	38	79	53
°C	26.0	25.1	24.2	21.6	19.4	16.9	16.8	18.5	21.0	22.6	24.2	25.7
°C (min)	20.4	19.9	19.1	15.9	12.3	9.3	9.4	11.1	14.1	16.3	18.4	19.9
°C (max)	31.6	30.3	29.3	27.4	26.5	24.5	24.3	26.0	28.0	29.0	30.1	31.5
°F	78.8	77.2	75.6	70.9	66.9	62.4	62.2	65.3	69.8	72.7	75.6	78.3
°F (min)	68.7	67.8	66.4	60.6	54.1	48.7	48.9	52.0	57.4	61.3	65.1	67.8
°F (max)	88.9	86.5	84.7	81.3	79.7	76.1	75.7	78.8	82.4	84.2	86.2	88.7

B1227: MONTHLY SITE MEETINGS

ADD THE FOLLOWING:

The Contractor or his authorized representative attending these meetings shall be a person who is empowered to take contractually binding decisions.

B1229: CEMENT

Where reference is made in this specification or the Standard Specifications to the cement specifications, e.g. SABS 471: Portland cement and rapid hardening Portland cement, it shall be replaced with the new specification:

SABS EN 197-1: Cement-composition, specifications and conformity criteria Part 1: Common cements.

CEMENT TYPE	CEM 1			CEM II A - M	CEM II A - S	CEM II B - S	CEM II A - L	CEM II A – V	CEM II B – V	CEM III A
CEMENT GRADE	52,5	42,5R	42,5				32,5			
Alpha	Rapid Hard	-	Portland Cement	-	-	-	All Purpose Cement	All Purpose Cement	Building Cement	-
Alpha Swaziland	-	-	-	-	-	-	-	-	Multi Purpose Cement	-
Lafarge	Duracas t	-	Duratech	Powercr ete	-	-	-	-	Buildcrete 32,5	-
NPC	-	Eagle Super	-	-	Eagle Plus/ Premiu m	Eagle Plus	-	-	-	Eagle Pro
PPC	Rapo	Rapo	OPC	-	-	-	Surebuild	Surebuild	Surecrete	-
PPC Botswana	-	-	-	-	-	-	-	Surebuild	Botcern	-

C3.26


Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

Slagment	-	-	-	-	-	-	-	-	-	Geotech 50*
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* This product is intended for road stabilisation purposes only. It is generally only available in bulk.

** Note that all products listed above bear the SABS mark. Information correct in October 2001.

SECTION 1300 : CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

B 1301: THE CONTRACTOR'S GENERAL OBLIGATIONS

ADD "as well as all costs related to conforming to the requirements of the latest Construction Regulations" AFTER THE FOURTH LINE.

Item	Unit
B13.01 The Contractor's general obligations:	
(a) Fixed obligations	Lump Sum
(b) Value-related obligations	Lump Sum
(c) Time-related obligations	month

Add the following to the payment item:

The Contractor shall be responsible for ensuring continuous security coverage on site and at the site office, providing a 24-hour security presence to safeguard personnel, equipment, documents and all other aspect as may be required. The appointed security personnel shall maintain a detailed log of all individuals entering and exiting the premises, including time of arrival and departure. The Contractor must ensure that sufficient security personnel are adequately trained, equipped, and positioned to prevent unauthorized access and mitigate potential security risks. The Security Personnel or Company should be registered with the relevant body.

Regarding whom would monitor the entries and exits, the security personnel stationed at the site would typically be responsible for logging movements. Additionally, oversight may be provided by any of the delegated contractor’s key personnel, and / or Employer’s Agent and / or the Employer’s Representative to ensure compliance with security protocols.

SECTION 1400 :HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL

B1402: OFFICES AND LABORATORIES

(a) General

ADD THE FOLLOWING:

“All offices and laboratories shall be supplied with approved burglar proofing”

ADD THE FOLLOWING SUB-CLAUSE:

“(h) Telecommunication System

One (1) cellular phone shall be provided for the use of the Employer’s Agent and his staff. The system shall be compatible with an existing system in the area.

“Item	Unit
-------	------

B14.11 Telecommunication System Supply

- (a) Supply one (1) cellular phone Lump Sum (L/S)
- (b) Cost of calls by Engineer Prime Cost Sum (PC Sum)
- (c) Handling cost and profit in respect of sub-clause 14.11 (b) above...Perc (%)
- (d) Provision of Laptop for the use of Engineer Month
- (e) Handling cost and profit in respect of sub-clause 14.11 (d) above...Perc (%)

The tendered rates shall include full compensation for the supply of units. The rates shall include for all costs of any agreement with the Cellular Services used. The cost of the calls will be paid on invoice from the Cellular Services and also the tendered rates for sub-item B14.11(d) shall include full commission for all obligation, overheads, administration charges and incidental items of cost necessary.

B1403 HOUSING

B14.12 Services

REPLACE THE FULL STOP AT THE END OF THE FIRST SENTENCE OF SUB-SUBCLAUSE (c) (ii) WITH A COMMA AND ADD “and for all services connected with such accommodation”.

B1404 TESTING

ADD THE FOLLOWING SUB-CLAUSE

C3.28

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

“(e) Testing of materials

The Contractor shall arrange with an approved laboratory to carry out sufficient tests on a regular basis as agreed between him and the Employer’s Agent to determine whether the degree of compaction, and, where applicable, the quality of materials used, and any other necessary tests as required, comply with the specifications and shall submit the results of these tests to the Employer’s Agent in the approved form and within the time frame as prescribed and approved by the Employer’s Agent.

SECTION 1500 : ACCOMMODATION OF TRAFFIC

B 1503 TEMPORARY TRAFFIC-CONTROL FACILITIES

ADD THE FOLLOWING AFTER THE FIRST PARAGRAPH:

"All temporary road signs, devices, sequences, layouts and spacings shall comply with the requirements of the Road Traffic Act, 1996 (Act 93 of 1996), the National Road Traffic Regulations, 2000, the South African Road Traffic Signs Manual, the requirements of the relevant road authority and the drawings. All temporary traffic control facilities shall also comply with the guidelines set in SA Road Traffic Signs Manual, Volume 2, Chapter 13: Roadworks Signing, (SARTSM, June 1999, obtainable from the Government Printer, Pretoria)".

(c) Channelization devices and barricades

ADD THE FOLLOWING:

"Drums shall not be used as channelization devices.
TW 401 and TW 402 delineators shall comply with the following requirements:

- (i) It shall be manufactured from a flexible material and shall comply with SABS 1555. The blade portion of the delineator shall be positively affixed to a base unit which in turn shall be stable on its own or be stabilized by means of sandbags when used on the road.
- (ii) The blade shall be retro-reflectorised, with class I yellow sheeting on the side facing oncoming traffic.
- (iii) It shall be nominally 1 000 mm high x 250 mm wide and the bottom edge of the delineator shall not be more than 200 mm above the road surface.
- (iv) It shall be subject to the approval of the Employer’s Agent.

The maximum spacing between centres of delineators shall be as shown on the Drawings or as directed by the Employer’s Agent."

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

B15.03 Temporary traffic-control facilities:

(b) Portable STOP and GO-RY signs	number
(e) Road signs, R- and TR-series, (size indicated)	number
(f) Road signs, TW-series, (size indicated)	number
(g) Road signs, STW-, DTG-, TGS- and TG-series (excluding delineators and barricades)	m ²
(h) Delineators (DTG50J):	
(i) Single	number
(ii) Mounted back-to-back	number
(j) Traffic cones 600mm	number

Add the following to the general payment item:

Only erected temporary traffic control facilities will be compensated

ADD THE FOLLOWING CLAUSE:

B15.14 PROVISION OF TRAFFIC SAFETY EQUIPMENT FOR THE ENGINEER AND VISITORS

The contractor is responsible for supplying the Employer’s Agent’s representative with Safety Equipment such as Safety Jackets. Additionally, the Employer’s Agent representative and all site visitors must wear reflective vests to ensure visibility and safety while on-site. The contractor must ensure that these safety items are of good quality and comply with relevant safety standards.

Item	Unit
B15.10 Accommodation of Traffic where the road is constructed in half widths	
..... kilometer (km)	

“DELETE THE FIRST PARAGRAPH AND ADD THE FOLLOWING”

The unit measurement for accommodating traffic where the road is constructed in half widths shall be kilometer measured along the centre line of the road. No payment will be made for the newly constructed section of road.

Item	Unit
B15.12 Temporary culverts	
(a) Provision and laying of temporary prefabricated culverts complete	m
(c) Eventual removal of prefabricated culverts	m

C3.30

<div></div> <div>Contractor</div>	<div></div> <div>Witness 1</div>	<div></div> <div>Witness 2</div>	<div></div> <div>Employer</div>	<div></div> <div>Witness 1</div>	<div></div> <div>Witness 2</div>
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Replace the words “state size, type” to “any size deemed necessary by the Employer’s Agent according to the crossing required on the temporary deviation.”

B 1517 MEARSUREMENT AND PAYMENT

"B 1518 RETRO-REFLECTIVE MATERIAL

Retro-reflective material for temporary signs shall comply with the requirements of SABS 1519-1 for weathered material. Tests shall be carried out with a field retro-reflectometer and the testing procedure and classification are described in Clause B 8118. The values of the Coefficient of Retro-Reflection shall be at least 60% of the values indicated in Table B8118/1."

SECTION 1800: DAYWORK SCHEDULE

Note: This is a new section added to the Standard Specifications.

ADD THE FOLLOWING:

B1801 SCOPE

This section covers the listing of daywork items for use in determining payment for work which cannot be quantified in specific pay item “units” in the bill of quantities or work ordered by the Employer’s Agent during the construction period which was not foreseen at tender stage for which no applicable rate exists in the schedule or for work of a special or different character warranting special payment as decided by the Employer’s Agent.

SECTION B1802 ORDERING OF DAYWORK

No daywork shall be undertaken unless specific written authorisation is obtained from the Employer’s Agent.

B1803 MEASUREMENT AND PAYMENT

The Employer’s Agent may order the following daywork items:

ITEM	DESCRIPTION	UNIT
B18.01	Labourers:	
	(i) Unskilled	Hour (h)
	(ii) Semi-skilled	Hour (h)
	(iii) Skilled	Hour (h)
	Foreman	Hour (h)
B18.03	Tipper trucks:	
	(i) 3 – 5 ton	Hour (h)
	(ii) 5,1 – 10 ton	Hour (h)
	Loader (0,5m³)	Hour (h)
	Grader (CAT 140G or similar)	Hour (h)
	LDV	Hour (h)

C3.31



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

	4 ton Flatbed truck	Hour(h)
	Compaction Rollers:	Hour (h)
	(i) Vibrator roller	Hour(h)
	(ii) Tamping roller	Hour(h)
	(iii) Grid roller	Hour(h)
	(iv) Pneumatic roller	Hour(h)
	Hand Controlled Compactors	
	(i) Pedestrian roller (Bomag BW90)	Hour(h)
	(ii) Vibratory plate	Hour(h)
	(iii) Rammers	Hour(h)
	Water truck (min 10000 l)	Hour(h)
	(i) Dozer (D7 or similar)	Hour(h)

C3.32

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The unit of measurement shall be the actual number of hours worked by labourers or foremen or an item of plant.

The tendered rates shall include full compensation for all cost items including overheads, head-office expenses and profits as described in subclause 40(3) of the general conditions of contract and shall be subject to contract price adjustment as provided for in the contract.

The mark-ups on daywork items in accordance with the Appendix to the Tender shall not be applicable on daywork items listed in the bill of quantities in terms of the above specifications. In the event of new daywork rates being requested for items not appearing in the bill of quantities, then the provisions of the general conditions of contract and the Appendix to the Tender shall apply.

Prior to the commencement of any work by the labourers described under item B18.01, the contractor must obtain written consent from the Employer's Agent regarding the classification and composition of all labourers in terms of "unskilled" and "skilled" labourers required for the work as ordered by the Employer's Agent."

SECTION 2200 PREFABRICATED CULVERT

B2218: MEASUREMENTS AND PAYMENT

ADMEND THE FOLLOWING PAYMENT ITEM

Item	Unit
B22.07(f) Formwork for joints in cast in situ concrete invert slabs	
(i)Transverse construction joints (type indicated)	square metre (m ²)
(ii)Longitudinal joints (as per drawing)	metre (m)

Measurement and payment shall be as specified in item 22.07 of the standard specifications with the exception that formwork for construction joints in cast in situ invert slabs in trench conditions as indicated on the drawings, shall be measured and paid for in accordance with section 6200 of the standard specifications. No payment shall be made for formwork to the outside edges of invert slabs (closest to excavated face)."

Add the following to pay item 22.08:

"In addition to the requirements for measuring concrete backfill to rectangular culverts as specified for item 22.08, the following shall apply:

Concrete backfill shall be measured to the actual dimensions of the precast units, i.e. actual volumes between ribs and haunches shall be taken into account. For the purpose of calculating concrete backfill quantities, the horizontal dimensions of the concrete backfill on the outside of the culvert(s) (closest to the excavated face), shall be taken as 100mm maximum irrespective of what type or make of precast portal is used or the actual width of the excavation. The width of the concrete backfill between portals in the case of multiple culverts, shall be taken as 80mm for precast units with a leg height of 1500mm and 100mm for precast units with a leg height exceeding 1500mm. The vertical dimensions, in both cases, shall be equal to the height of the portal".

ADMEND THE FOLLOWING PAYMENT ITEM

Item

Unit

B22.10 Steel reinforcement

Welded steel fabric Ref 395

m²

The tender unit should be amended from kg to m²

ADD THE FOLLOWING PAYMENT ITEM

B22.17 Manholes, catchpits, precast inlet and outlet structures complete:

(a) Manholes

(f) Extra over or less than subitem 22.17(c) for variations in the depths of catchpits from standard depth

(i) Butt-End Kerbinlet - Type 1

m

(ii) Kerbinlet - Type 1

m

(iii) Kerbinlet - Type 2

m

ADMEND THE FOLLOWING PAYMENT ITEM

Item

Unit

22.25 Overhaul on excavated material carted to spoil, backfill material (but excluding Portland cement in the case of soil cement, existing structures demolished and removed to spoil, and removing and relaying, and removing and stacking existing prefabricated culverts,for haul in excess of the free-haul distance.

m3-km

AMMEND AS FOLLOWS:

B22.25 OVERHAUL ON EXCAVATED MATERIALS

The tender rate should be for the overhaul of excavated material carted to spoil, as well as backfill material (excluding Portland cement in the case of soil cement). This includes existing structures that are demolished and removed to spoil, as well as the removal, relaying, and stacking of existing prefabricated culverts. The overhaul requirement applies to haul in excess of the free-haul distance. All activities must comply with the specified standards and requirements as outlined in the project documentation.

Add the following:

Item

Unit

B22.26

C3.34

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Extra over subitem B22.01(a) for excavation by hand using hand tool cubic metre (m3)

Measurement shall be as specified for pay item 22.01 of the standard specifications. The bided rate shall include full compensation for carrying out the excavations by hand where circumstances prevent the use of mechanical excavators.

ADD THE FOLLOWING NEW PAYMENT ITEM

B22.29 (c) ENCASING OF SERVICE DUCTS.....

The tendered rate should for ensuring the proper protection of service ducts. In the event that a service duct is found to be shallow, the contractor must encase the service ducts to provide adequate protection and prevent any potential damage. The encasement must meet the specified standards and requirements as outlined in the project documentation.

B2210 LAYING AND BEDDING OF PREFABRICATED CULVERTS

Replace with the following:

"In accordance with the drawings, transverse construction joints are required in cast in situ concrete invert slabs for portal culverts. In addition, longitudinal construction joints as shown on the drawings between the invert slabs of each of the barrels of multiple culverts are required. Allowance for measurement and payment for a Class F1 surface finish and soft board in these joints is made in the schedule of quantities. No payment shall be made for formwork on the outside edges of inverted slabs (closest to the excavated face). All culverts (precast as well as in situ) shall be constructed with an in situ reinforced concrete floor laid on a 75mm concrete screed".

Delete subclause B.2210 (b) (ii): "Prefabricated floor slabs."

B.2211 BACKFILLING OF PREFABRICATED CULVERTS

Change the last sentence in the fourth paragraph to read "90% or 93% as shown on the drawings or as directed by the Employer's Agent."

B2217: INLET AND OUTLET STRUCTURES, CATCHPITS AND MANHOLES

Add the following:

"The type of surface finish for in situ concrete in the culverts shall be as indicated on the drawings. Generally, all exposed faces shall be of Class F2 formwork and faces covered by backfill shall be Class F1. The top of parapet walls and wingwalls shall be finished to a Class U2 surface finish."

(h) Prefabricated inlet and outlet structures

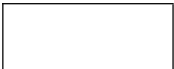
Add the following:

"The use of precast concrete inlets and outlets as described in clause 2212(h), shall not be allowed under any circumstances. Cast in situ concrete wingwall type inlets and outlets shall be constructed as indicated on the drawings and shall be in accordance with section 6000 of the Standard Specifications. Allowance for measurement and payment for wingwall type inlets and outlets is

C3.35

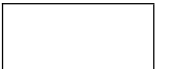

Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

made in the schedule in this section.”

2300 CONCRETE KERBING, CONCRETE CHANNELING, CHUTES AND DOWNPIPES AND CONCRETE LINING FOR OPEN DRAINS

2307 MEASUREMENT AND PAYMENT

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

B23.01 Concrete kerbing (Class of concrete indicated for in-situ concrete)

(a) Description of type with reference to drawing

- | | |
|---------------------------------------|---|
| (i) fig 8c, as shown on the Drawings | m |
| (ii) fig 8b, as shown on the Drawings | m |
| (iii) fig 3, as shown on the Drawings | m |

Amend the payment item as follows:

Replace the words “Class of concrete indicated for in-situ concrete” with “Prefabricated Kerb which is SANS approved “

Add the following new payment item:

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

B23.01 Concrete kerbing (Class of concrete indicated for in-situ concrete)

- | | |
|---------------------|---|
| (a) Transition kerb | m |
|---------------------|---|

Transition kerbs should be Class 30/19 cast in-situ for all kerb types connecting to the prefabricated kerbs.

Add the following new payment items

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

B23.01 Concrete kerbing (Class of concrete indicated for in-situ concrete)

- | | |
|---|----------------|
| (ii) Edge beam (200mm deep x 200 wide mm) | m ³ |
|---|----------------|

The tendered rate for each cubic meter shall include compensation for the formwork and finishing around the edge beam.

B10. SECTION 3100: BORROW MATERIALS

B3102 NEGOTIATIONS WITH OWNERS AND AUTHORITIES

RENUMBER THE EXISTING SUB-CLAUSE (c) AS SUB-CLAUSE (d) AND ADD THE FOLLOWING SUB-CLAUSE (c):

“Should borrow pits located on the ground not owned by the Employer be required during the contract, all negotiations and compensation will be arranged by the Contractor. Before the Contractor enters private property for the purpose of opening borrow pits, constructing access roads, temporarily occupying certain land or inspecting relevant areas, he shall notify the Employer’s Agent well in advance of such action being undertaken. If any negotiations with landowners are required, the Contractor will enter into such negotiations and obtain the necessary permissions”.

B3104 OPENING AND WORKING BORROW PITS AND HAUL ROADS

(d) Excavating borrow material

ADD THE FOLLOWING:

“The Contractor shall at all times ensure that the removal of the material is carried out in such a manner that the stability of the exposed faces is not prejudiced, and safe working conditions are maintained”.

Add the following new payment item:

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

B31.04 Compensation to landowners

(a) Prime cost sum for compensation to land owners	PC Sum
--	--------

The contractor should provide written evidence and proof of records for approval and reimbursement for compensation to landowners and any other aspect relating to reimbursement of costs.

B31.05 FENCING OF BORROW PIT

The contractor is responsible for the fencing of the borrow pit to ensure the safety of the public and livestock. The fencing must be robust, secure, and comply with relevant safety standards. Additionally, clear warning signs must be placed around the borrow pit to alert and prevent unauthorized access. The contractor must regularly inspect and maintain the fencing to ensure its effectiveness throughout the duration of the project.

SECTION 3300: MASS EARTHWORKS

B 3307 FILLS

ADD THE FOLLOWING SUB-CLAUSE:

“(k) Preparation of formation of existing road

(i) General

“Re-shaping” means performing minor earthworks and grading so that the final cross-section of the road complies with the typical cross-section for the type of road specified and the vertical alignment complies with the information provided by the Employer’s Agent.

The Contractor shall supply the Employer’s Agent with a full set of cross-sections before commencing any construction activities in the road reserve.

(ii) Earthworks

The re-shaped formation shall be constructed true to line, level and cross-section as shown on the drawings or as directed by the Employer’s Agent.

The re-shaping process shall in general be carried out using material obtained from within the road reserve which is moved laterally and placed in the road formation. It is not the intention that material be moved longitudinally along the road over any significant distant during this process.

After re-shaping the road formation with material from within the road reserve and prior to any material being imported from borrow pits, the Contractor shall supply the Employer’s Agent with a set of cross-sections at the same positions as the original cross–sections for the purpose of calculating quantities.

Unsuitable or excess material from the road prism shall be removed and disposed of to spoil. Any shortfall in material shall be made up by importing suitable material.

Material in the road formation shall be placed, watered, mixed and compacted to a minimum of 90% of modified AASHTO density for gravel, or 95% for non plastic sand where >20% passes through the 0,075mm sieve, or 100% for sand where <20% passes through the 0.075mm sieve.

The Contractor’s attention is specifically drawn to the requirement that only material approved by the Employer’s Agent may be used to bring the road up to the specified new formation (sub-base) level. To obtain better material characteristics in the fill, wearing course material from the existing road formation may be mixed with material obtained from the adjacent road reserve.

After the road has been brought up to the specified new formation level, whether the material was imported, moved laterally in the road reserve or the existing profile was only re-shaped, a full set of cross-sections, on the same positions as the original set, shall be supplied to the Employer’s Agent. The Employer’s Agent must approve the new levels, profile and alignment before any importation of

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

wearing course material shall be permitted.

During the re-shaping process, the roadside drains and cut and fill slopes shall be trimmed and finished true to line, level and cross-section. No additional payment will be made for trimming and finishing of cut and fill slopes”.

B3311 QUALITY OF MATERIALS AND WORKMANSHIP

The contractor should provide the Employer’s Agent with a detailed Quality Control Plan, method statement and any other required document for approval by the Employer’s Agent before proceeding with any work. The contractor should also do routine inspections and conduct routine quality control tests to determine whether the quality of materials and workmanship provided comply with the requirements of this section at the contractor’s own cost. The test results for all the required tests should be provided for approval by the Employer’s Agent within the time frame as prescribed and approved by the Employer’s Agent.

B3312 MEASUREMENT AND PAYMENT

Item	Unit
B33.01 Cut and borrow to fill, including free-haul up to 0,5km	
a) (i) Material in compacted layer thickness of 200mm and less	m ³

ADD THE FOLLOWING TO THE PAYMENT PARAGRAPH:

The tendered rates shall also include full compensation for trimming and finishing-off the road side drains and cut and fill slopes true to line, level and cross-section.

Item	Unit
B33.01 c) Rockfill obtained from commercial source	m ³

ADD THE FOLLOWING TO THE PAYMENT PARAGRAPH:

The tendered rates shall also include full compensation for provision of rockfill material from commercial source and construction complete for approval by the Employer’s Agent of the layer/s according to the Employer’s Agent’s instruction as per requirements.

ADD THE FOLLOWING ITEM:

Item	Unit
B33.20 Reshaping the road formation with material obtained from the road reserve and compaction to 90% of modified AASHTO density	cubic meter (m³)

The unit of measurement is the cubic metre of material computed by the method of average end areas from levelled cross-sections taken along the ground line after clearing, with the final cross-sections, before the importation of materials from borrow pits, superimposed thereon at intervals not exceeding 20m along the centre line of the road.

The tendered rate shall include full compensation for the work involved in reshaping the road to the correct profile and cross-section, benching, terracing, selecting material from the road prism, watering,

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<div></div> <div>Contractor</div>	<div></div> <div>Witness 1</div>	<div></div> <div>Witness 2</div>	<div></div> <div>Employer</div>	<div></div> <div>Witness 1</div>	<div></div> <div>Witness 2</div>
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mixing and compacting to a minimum of 90% of modified AASHTO density for gravel material, or 95% for non-plastic sand where >20% passes through the 0,075mm sieve, or 100% for sand where <20% passes through the 0,075mm sieve, and for trimming and finishing of the roadside drains and cut and fill slopes.

Roadbed preparation will be paid under item 33.10”.

C3.40

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SECTION 3400 : PAVEMENT LAYERS OF GRAVEL MATERIAL

B 3401 SCOPE

ADD THE FOLLOWING:

“This section also covers the reprocessing or replacement of existing pavement layers over part of or over the full road width.

B3403 CONSTRUCTION

ADD THE FOLLOWING SUB-CLAUSE:

“(f) Temporary stockpiling of material

The Contractor shall plan his activities so that materials excavated from borrow areas and cuttings can be directly transported to and placed at the designated points.

The temporary stockpiling of material will not be paid for separately unless instructed by the Employer’s Agent, and full compensation will be deemed to have been included in the rates tendered for the various payment items for work in which the material is to be used”.

ADD THE FOLLOWING:

B3406 QUALITY OF MATERIALS AND WORKMANSHIP

The contractor should provide the Employer’s Agent with a detailed Quality Control Plan, method statement and any other required document for approval by the Employer’s Agent before proceeding with any work. The contractor should also do routine inspections and conduct routine quality control tests to determine whether the quality of materials and workmanship provided comply with the requirements of this section at the contractor’s own cost. The test results for all the required tests should be provided for approval by the Employer’s Agent within the time frame as prescribed and approved by the Employer’s Agent.


3407 MEASUREMENT AND PAYMENT


Add the following to the payment items:


Item	Unit
B34.01 Pavement layers constructed from gravel taken from cut or borrow Including free-haul up to 1,0km	m ³
(d) (iii) Gravel subbase (chemically stabilized material) compacted to 98% of modified AASHTO density for C4 layer thickness of 150mm	m ³


C3.41



Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

Add the following new payment item:

Item	Unit
B34.01 Pavement layers constructed from G5 gravel from Commercial source including all haul	m ³

The tendered rate shall include full compensation for provision of material from commercial source including all haul and construction complete for approval by the Employer’s Agent of the G5 gravel layer according to the Employer’s Agent’s instruction as per requirements.

SECTION 4200 : ASPHALT BASE AND SURFACING

B42.08 100mm cores in asphalt paving

REPLACE THE SECOND PARAGRAPH WITH THE FOLLOWING:

“Test results and measurements will be assessed in accordance with the provisions of section 8300”.

Add the following new payment item:

B42.21 Speed humps (As per attached drawing)

The contractor would be responsible for the construction of the speed hump in accordance with the provided drawings. Compensation will be provided for the total completion of the speed hump, including all necessary labour and materials. The construction must meet the specified standards and requirements as outlined in the project documentation.

SECTION 5200: GABIONS

B.5201 SCOPE

Add the following paragraph.

“This section also covers the removal, dismantling and stacking of existing gabion work, and the reuse of these materials where authorised by the Employer’s Agent.”

B /LI 52.03 GABIONS

- (a) Assembly

Delete and substitute with:

- (c) Assembly, erection and stretching
- (i) Assembly

“Prior to assembly, the gabion material shall be opened out flat on the ground and stretched to remove

any kinks and bends. The gabion boxes shall then be assembled individually by raising the sides, ends and diaphragms ensuring that all creases are in the correct position and that the tops of all four sides are even. The four corners of the gabion boxes shall be laced first followed by the edges of internal diaphragms to the sides. In all cases, lacing shall commence at the top of the box by twisting the end of the lacing wire around the selvages. It shall then be passed around two edges being joined, through each mesh in turn and securely tied off at the bottom. The ends of all lacing wire shall be turned to the inside of the box on completion of each lacing operation.

(ii) Erection

Only assembled boxes, or groups of boxes, shall be positioned in the structure. The side, or end, from which work is to proceed, shall be secured to either completed work or by rods or stakes driven into the ground at the corners. These must be secured and reach at least to the top of the gabion box. Further gabions shall then be positioned in the structure as required, each being securely laced to the preceding one at all corners and diaphragm points.

(iii) Stretching

On completion of the erection of a suitable length of gabion, the gabion boxes shall be stretched using a wire strainer or winch of at least one ton capacity firmly secured to the free end of the assembled gabion boxes. Whilst under tension the gabion boxes shall be securely laced along edges (top, bottom and sides) and at diaphragm points, to all adjacent boxes and shall thereafter be filled."

(b) Rock filling

Add the following new sub-sub-clause:

(iii) General

"Filling shall be carried out only whilst gabion boxes are under tension. Filling material shall consist of rock of size not less than 120mm and not greater than 250mm so placed to produce a neat face and line with a minimum of voids. Internal horizontal bracing wire shall be provided at 500mm vertical centres or such spacing to ensure a ratio of four to every 1m3 of filling. These bracing wires shall be wrapped around two mesh wires and extended from front to back so positioned to ensure a neat face and line free of excessive bulges and depressions. Gabion boxes shall be filled in stages and horizontal bracing wires inserted as filling is brought up. Similar bracing wires used vertically shall be provided in 0,5mm deep gabions at 330mm horizontal centres where waterfalls directly onto gabions or where a neat face is required.

Tension on the gabion boxes shall be released only when sufficiently full to prevent the mesh from slackening. Gabion boxes shall be overfilled by 20 to 50mm above their tops to allow subsequent settlement of the filling."

Add the following new sub-clauses:

(c) Final wiring

"Closing and wiring down of lids shall proceed as soon as possible after filling operations and certainly in the likelihood of storms or floods during construction. The wiring down shall consist of wrapping around wire at such intervals as required or specified. Lids shall be stretched tight over the filling with bars and wired down securely through each mesh along all edges, ends and diaphragms. The ends of

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

all tying and bracing wires shall be turned into the gabion box on completion of all lacing operations. Tightness of mesh, well packed filling and secure lacing is essential in all structures.”

(f) Removal, dismantling and stacking of gabions

“Existing gabions, either damaged or not, that require to be removed or moved to a new location shall be dismantled. Material not required for re-assembly or unsuitable for re-use shall be neatly stacked at approved locations in accordance with the Employer’s Agent’s instructions. Payment will be made only for gabions removed in accordance with the written instruction of the Employer’s Agent.

Where gabions require moving, or as declared suitable by the Employer’s Agent are re-usable, the contractor shall re-use all the material, plus supply such new materials as may be required to re-assemble the gabion again to the standard specification for new gabions.”

5500 FENCING

ADD THE FOLLOWING NEW PAYMENT ITEM:

Item	Unit
B55.10 Removal and re-erection of boundary walls or fencing complete	
including new material:	
(a) Wire fencing	km
(b) Brick wall	km
(c) Palisade	km

The tender rate should be for the removal and re-erection of boundary walls or fencing, including the provision of new materials including gates as required for approval by the Employer’s Agent. Pricing should be provided for the completed removal and re-establishing of the different fences in accordance with the project specifications. Additionally, the contractor must obtain a "happy letter" or written confirmation of satisfaction from the respective landowners or relevant entities after completion of re-erection.

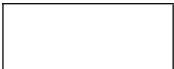
SECTION 5600: ROAD SIGNS

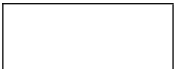
ADMEND THE FOLLOWING ITEM

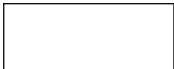
<u>Item</u>	<u>Unit</u>
<u>B56.02 Extra over B56.01 for using</u>	
((a) Background of retro-reflective material:	
(i) Class III	m ²
(b) Lettering, symbols, numbers, arrows, emblems	
(ii) Class III	m ²
(iii) Class IV Micro-Prismatic)	m ²

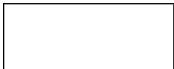
C3.44

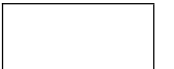

Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

The tender rates provided by the contractor shall included full compensation for supply, installation, and maintenance of Class III or Class IV (Micro Prismatic) road signs as defined under the relevant traffic engineering standards and specifications. These rates shall include all associated costs, including materials, labour, transportation, and any other necessary expenses to fulfil the scope of work outlined in this contract.

B5603 MANUFACTURING OF ROAD SIGN BOARDS AND SUPPORTS

- (a) Road sign boards
 - (i) Steel plate road sign boards

ADD THE FOLLOWING AS THE FOURTH PARAGRAPH:

"Steel plate used to manufacture guidance signs shall be pre-punched by means of an automated process with 5 mm holes in a rectangular grid pattern not exceeding 150 mm c/c".

Item	unit
B56.10 Danger Plates at Culverts / Structures	No

The unit of measurement for the of Danger Plate installed complete is number.

The bidder's rate shall include full compensation for supplying all material including the plates mounted back-to-back, steel poles, consumables and installation including excavation and soil-crete backfilling of the complete Danger Plate.

5700 ROAD MARKINGS

AMMEND THE FOLLOWING PAY ITEMS:

Item	Unit
B57.05 Road studs, Stimsonite omni-directional metal base with shank.	
(a) Aluminium (Red / Red)	No
(b) Aluminium (Red / White)	No
(c) Aluminium (Red / Yellow)	No

The bidder's rate shall include full compensation for supplying all material and installation complete of the Road studs. The unit of measurement is for the Number of Road studs not for the km installed along the road.

5900: FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS

Unit	Item
B59.01	Finishing the road and road reserve:
	km

ADD THE FOLLOWING AS THE FOURTH PARAGRAPH:

“The contractor shall pay special attention to the collection and removal of all waste materials originating from the construction activities. All materials trimmed or excavated from the road shall be collected and removed from the road reserve to the satisfaction of the Employer’s Agent.

This requirement shall be deemed to be incorporated in the tendered rates for item 59.01 of the bill of quantities or such other items as the contractor may decide upon.

The Employer’s Agent may order additional finishing of the road reserve which will entail the collection and disposal of all material including loose rocks.

SECTION 7300 : CONCRETE BLOCK PAVING FOR ROADS

ADD THE FOLLOWING ITEM TO THE PAYMENT ITEMS:

Item		Unit
B73.01	60mm Concrete block paving (interlocking terracotta type S-A block paving with 20mm river sand base)	m ²

The contractor is responsible for the construction complete of the paving in accordance with the required latest standards for approval by the Employer’s Agent.

Bidder’s rate to include full compensation for the supply and installation, including all necessary transportation to site, labour and materials.

Amend the following payment item:

Item		Unit
73.03	Provision of approved herbicide and ant poison	
(a)	Provision of materials	prime cost sum

Amend as follows:

B73.03	Provision of approved herbicide and ant poison	m²
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Payment for providing poison and herbicide in this respect shall be made in accordance with the provision of the conditions of contract, but in addition, the tendered rate for cost and profit shall include full compensation for applying the chemicals as specified.

Add the following payment item:

Item		Unit
B73.04	Speed humps (As per Attached Drawing)	No

The tendered rate to include full compensation for the complete construction of the speed hump, including all necessary labour and materials for approval by the Employer’s Agent.

The bidders should contact the following patent holder for details of the S – Kerb for the approaches and other relevant costs pertaining to the complete construction of the speed humps:

C3.46

<div></div> <div>Contractor</div>	<div></div> <div>Witness 1</div>	<div></div> <div>Witness 2</div>	<div></div> <div>Employer</div>	<div></div> <div>Witness 1</div>	<div></div> <div>Witness 2</div>
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Mr Jaco Fourie - 082 264 4184.

The bidders should contact the patent holder for the purpose of pricing and procurement of the material.

The construction must meet the specified standards and requirements.

Add the following payment item:

Item		Unit
B73.05	Supply and install concrete Bus Stop Shelter complete	No

The contractor shall construct the bus shelter complete, including all prefabricated material from Rocla or similar and all other related costs, for approval by the Employer’s Agent.

The tendered rate shall include full compensation for the complete construction of a full bus stop shelter as required, including all necessary transportation, materials and labour. The construction must meet the specified standards and requirements as outlined in the project documentation.

C3.47

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

PROJECT SPECIFICATIONS

C 3.3 PART C PROVISION OF THE TEMPORARY WORKFORCE

CONTENTS

C 01	SCOPE
C 02	INTERPRETATIONS
C 03	PERMITTED SOURCES OF TEMPORARY WORKERS
C 04	EMPLOYMENT RECORDS TO BE PROVIDED
C 05	VARIATIONS IN WORKER PRODUCTION RATES
C 06	TRAINING OF THE TEMPORARY WORKFORCE
C 07	RECRUITMENT AND SELECTION PROCEDURES
C 08	TERMS AND CONDITIONS PERTAINING TO THE EMPLOYMENT OF THE TEMPORARY WORKFORCE
C 09	LABOUR RELATIONS AND WORKER GRIEVANCE PROCEDURES
C 10	THE SUBCONTRACTORS' WORKFORCES
C 11	MEASUREMENT AND PAYMENT

C 01 SCOPE

This Specification covers the provisions and requirements relating to the provision of the temporary workforce.

C 02 INTERPRETATIONS

C 02.01 Supporting documents

The Tender Rules, Conditions of Contract, Standard and Project Specifications, Drawings and statutory minimum requirements relating to the employment and remuneration of labour shall *inter alia* be read in conjunction with this Specification.

C 02.02 Definitions and abbreviations

For the purposes of this specification, the definitions given in the Conditions of Contract, the Standard Specifications and the Project Specifications, together with the following additional definitions shall, unless the context dictates otherwise, apply:

- (a) "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 posses special skills and/or who play key roles in the Contractor's or Subcontractor's operation
- (b) "Project Committee" means a committee consisting of the Employer, the Employer's Agent, 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 Employer's Agent, 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
- (c) "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
- (d) "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
- (e) "Workforce" means the aggregate body comprising all workers and shall, unless the context dictates otherwise, include the workforces of the Contractor and all Subcontractors
- (f) "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 channelized.

C 02.03 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.

C 03 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.

C 04 EMPLOYMENT RECORDS TO BE PROVIDED

(a)The Contractor shall maintain accurate and comprehensive records of all workers engaged on the Contract and shall provide the Employer's Agent 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 Employer's Agent.

(b)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 Employer's Agent 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.

C 05 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 tender.

C 06 TRAINING OF THE TEMPORARY WORKFORCE

- (a) Selected members of the workforce are to be provided with structured training in accordance with the provisions of Part D.
- (b) 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.
- (c) 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.

C 07 RECRUITMENT AND SELECTION PROCEDURES

C 07.01 the Contractor shall be fully responsible for the recruitment and selection of workers to constitute the temporary workforce.

C 07.02 The Contractor shall advise the Employer's Agent 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).

C 07.03 The Contractor shall, at his own cost, take all necessary actions to advertise within the communities comprising the personnel resources, the fact that temporary employment opportunities exist and the time and place where recruiting will occur.

C 07.04 The Contractor shall record in writing, the details of all persons applying for employment, including *inter alia*:

- (a) Name, address, age and sex
- (b) Marital status and number of dependants
- (c) Qualifications and previous work experience (whether substantiated or not)
- (d) Period since last economically active
- (e) Preference for type of work or task.

C 07.05 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:

(a) 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 -

(i) All available vacancies have been or can be filled by temporary workers who already possess suitable skills, or

(i) 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.

(b) Preference shall be given to the unemployed and single heads of households.

(c) 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.

(d) The selection process shall not be prejudicial to youth (over the age of fifteen years) and women.

C 07.06 After making his selection, the Contractor shall advise the Employer's Agent thereof, in writing and the Employer's Agent shall, without undue delay, ratify the Contractor's selection.

C 07.07 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.

C 07.08 The Contractor shall, after selecting his temporary workforce, arrange at his own cost for the

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

appointment of the Liaison Officer as representative of the workforce to act on their behalf with regards to all matters pertaining to the workforce."

C 08 TERMS AND CONDITIONS PERTAINING TO THE EMPLOYMENT OF THE TEMPORARY WORKFORCE

C 08.01 All temporary workers engaged in accordance with the provisions of Part A of the Project 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 Employer’s Agenting Industry and applicable to the particular area.

C 09 LABOUR RELATIONS AND WORKER GRIEVANCE PROCEDURES

C 09.01 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.

C 09.02 The Contractor shall at all times adhere to the accepted norms and standards of labour relations prevailing generally in the Civil Employer’s Agenting 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.

C 09.03 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 in terms of Subclause C 09.02 above, by one member of the temporary workforce and one member of the Project Committee, which persons shall be nominated by the worker.

C 09.04 In the event of any grievance not being satisfactorily resolved through the application of normal dispute resolution procedures in accordance with Subclauses C 09.02 and C 09.03, 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.

C 10 THE SUBCONTRACTORS' WORKFORCES

C 10.01 The provisions of this Part C 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.

C 10.02 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.

C 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 Project Specifications shall, except to the extent provided for in Part D as relevant, be deemed to be included in the rates tendered for the various items of work listed in the Schedule of Quantities.

C3.53

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

C3.4.3 PROJECT SPECIFICATIONS: ADDITIONAL SPECIFICATIONS

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ANNEXURE 1: MEASURING INJURY EXPERIENCE

ANNEXURE 2: EXECUTIVE SHE RISK MANAGEMENT REPORT

ANNEXURE 3: LIST OF RISK ASSESSMENTS

C3.4.3.1.1 Introduction

In terms of the Construction Regulation 4(1) (a) of the Occupational Health and Safety Act, No. 85 of 1993, Limpopo Department of Road and Transport, as the Client, is required to compile a Health & Safety Specification for any intended project and provide such specification to any prospective tenderer.

The Client's further duties are as in C3.5.1.3.1.1. below and in the Construction Regulations, 2003.

This specification has as objective to ensure that Principal Contractors entering into a Contract with the Limpopo Department of Road and Transport achieve an acceptable level of OH&S performance. This document forms an integral part of the Contract and Principal and other Contractors should make it part of any Contracts that they may have with Contractors and/or Suppliers.

Compliance with this document does not absolve the Principal Contractor from complying with minimum legal requirements and the Principal Contractor remains responsible for the health & safety of his employees and those of his Mandataries.

C3.4.3.1.2 Scope

Development of a health & safety specification that addresses all aspects of occupational health and safety as affected by the abovementioned contract work.

The specification will provide the requirements that Principal Contractors and other Contractors will have to comply with in order to reduce the risks associated with the abovementioned contract work that may lead to incidents causing injury and/or ill health, to a level as low as reasonably practicable.

C3.4.3.1.3 General Occupational Health & Safety Provisions

(a) Hazard Identification & Risk Assessment (Construction Regulation 7)

(i) Risk Assessments

Annexure 3 contains a list of Risk Assessment headings that have been identified by RAL as possibly applicable to the abovementioned contract work. It is, by no means, exhaustive and is offered as an assistant to Contractors intending to tender.


Based on the Risk Assessments, the Principal Contractor must develop a set of site-specific OH&S rules that will be applied to regulate the OH&S aspects of the construction.


The Risk Assessments, together with the site-specific OH&S rules must be submitted to the RAL before mobilisation on site commences.


Despite the Risk Assessments listed in Annexure 3, the Principal Contractor is required to conduct a baseline Risk Assessment and the aforesaid listed Risk Assessments must be incorporated into the


C3.54



Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

base-line Risk Assessment. The baseline Risk Assessment must further include the Standard Working procedures (SWP) and the applicable Method Statements based on the Risk Assessments
All out-of-scope work must be associated with a Risk Assessment.

(ii) Review of Risk Assessments

The Principal Contractor is to review the Hazard Identification, Risk Assessments and SWP's 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 Principal Contractor must provide the Client, other Contractors and all other concerned-parties with copies of any changes, alterations or amendments as contemplated in above.

(b) Legal Requirements

All Contractors entering into a Contract with the MLM shall, as a minimum, comply with the

- Occupational Health & Safety Act and Regulations (Act 85 of 1993). A current, up-to-date copy of the OHS Act must be available on site at all times
- Compensation for Occupational Injuries & Diseases Act (Act 130 of 1993). The principal Contractor will be required to submit a letter of Registration and "good standing" from the Compensation Insurer before being awarded the Contract. A current, up-to-date copy of the COID Act must be available on site at all times.
- Where work is being carried out on mines' premises the Contractor will have to comply with the Mine Health & Safety Act and Regulations (Act. 29 of 1996) and any other OH&S requirements that the mine may specify. A current, up-to-date copy of the OHS Act must be available on site at all times.

(c) Structure and Responsibilities

(i) Overall Supervision and Responsibility for OH&S

(ii) It is a requirement that the Principal Contractor, when he appoints Contractors (Sub-contractors) in terms of Construction Regulations 5(3), (5), (9), (10) and (12) he includes an OHS Act Section 37(2) agreement: "Agreement with Mandatary" in his agreement with such Contractors.

(iii) Any OH&S Act (85/1993), Section 16(2) appointee/s as detailed in his/her/their respective appointment forms

(iii) Further (Specific) Supervision Responsibilities for OH&S

The Contractor shall appoint designated competent employees and/or other competent persons as required by the Act and Regulations. Below is a list of identified appointments and may be used to select the appropriate appointments for the current contract:

Ref. Section/Regulation in OHS Act

Batch Plant Supervisor	(Construction Regulation 6(1))
Construction Vehicles/Mobile Plant/Machinery Supervisor	(Construction Regulation 21)
Demolition Supervisor	(Construction Regulation 12)
Drivers/Operators of Construction Vehicles/Plant	(Construction Regulation 21)
Electrical Installation and Appliances Inspector	(Construction Regulation 22)
Emergency/Security/Fire Coordinator	(Construction Regulation 27)
Excavation Supervisor	(Construction Regulation 11)
Explosive Powered Tool Supervisor	(Construction Regulation 19)
Fall Protection Supervisor	(Construction Regulation 8)
First Aider	(General Safety Regulation 3)
Fire Equipment Inspector	(Construction Regulation 27)
Formwork & Support work Supervisor	(Construction Regulation 10)
Hazardous Chemical Substances Supervisor	(HCS Regulations)
Incident Investigator	(General Admin Regulation 29)
Ladder Inspector	(General Safety Regulation 13A)
Lifting Equipment Inspector	(Construction Regulation 20)
Materials Hoist Inspector	(Construction Regulation 17)
OH&S Committee	(OHS Act Section 19)
OH&S Officer	(Construction Regulation 6(6))
OH&S Representatives	(OHS Act Section 17)

C3.55

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Person Responsible for Machinery	(General Machinery Regulation 2)
Scaffolding Supervisor	(Construction Regulation 14)
Stacking & Storage Supervisor	(Construction Regulation 26)
Structures Supervisor	(Construction Regulation 9)
Suspended Platform Supervisor	(Construction Regulation 15)
Tunneling Supervisor	(Construction Regulation 13)
Vessels under Pressure Supervisor	(Vessels under Pressure Regulations)
Working on/next to Water Supervisor	(Construction Regulation 24)
Welding Supervisor	(General Safety Regulation 9)

The appointments must be in writing and the responsibilities clearly stated together with the period for which the appointment is made. This information must be communicated and agreed with the appointees. Copies of appointments must be submitted to the MLM together with concise CV's of the appointees. All appointments must be officially approved by MLM. Any changes in appointees or appointments must be communicated to MLM forthwith.

The Principal Contractor must, furthermore, provide MLM with an organogram of all Contractors that he/she has appointed or intends to appoint and keep this list updated on a weekly basis.

In addition MLM may require that a Traffic Safety Officer be appointed for any project.

(iii) Designation of OH&S Representatives (Section 18 of the OHS Act) OH&S Representatives have to be designated in writing and the designation must include the area of responsibility of the person and term of the designation.

(iv) Duties and Functions of the OH&S Representatives (Section 19 of the OHS Act) The Principal Contractor must ensure that the designated OH&S Representatives conduct a minimum monthly inspection of their respective areas of responsibility using a checklist and report thereon to the Principal Contractor

OH&S representatives must be included in accident/incident investigations

OH&S representatives must attend all OH&S committee meetings.

(v) Appointment of OH&S Committee (Section 20 of the OHS Act)

The Principal Contractor must establish an OH&S Committee consisting of all the designated OH&S Representatives together with a number of management representatives that are not allowed to exceed the number of OH&S representatives on the committee and a representative of the Client who shall act as the chairman without a vote. The members of the OH&S committee must be appointed in writing.

The OH&S Committee must meet minimum monthly and consider, at least, the following Agenda:

1. Opening & Welcome
2. Present/Apologies/Absent
3. Minutes of previous Meeting
4. Matters Arising from the previous Minutes
5. OH&S Reps Reports
6. Incident Reports & Investigations
7. Incident/Injury Statistics
8. Other Matters
9. Endorsement of Registers and other statutory documents by a representative of the Principal Contractor
10. Close/Next Meeting

(d) Administrative Controls and the Occupational Health & Safety File

(i) The OH&S File (Construction Regulation 5 (7))

As required by Construction Regulation 5(7), the Principal Contractor and other Contractors will each keep an OH&S File on site containing the following documents as a minimum:

- * Notification of Construction Work (Construction Regulation 3.)
- * Copy of OH&S Act (updated) (General Administrative Regulation 4.)
- * Proof of Registration and good standing with a COID Insurer (Construction Regulation 4 (g))
- * OH&S Programme agreed with the Client including the underpinning Risk Assessment/s & Method Statements (Construction regulation 5 (1))

- * Copies of OH&S Committee and other relevant Minutes
- * Designs/drawings (Construction Regulation 5 (8))
- * A list of Contractors (Sub-Contractors) including copies of the agreements between the parties and the type of work being done by each Contractor (Construction Regulation 9)

* Appointment/Designation forms as per (a)(i) & (ii) above.

* Registers as follows:

* Accident/Incident Register (Annexure 1 of the General Administrative Regulations)

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

- * OH&S Representatives Inspection Register
- * Asbestos Demolition & Stripping Register
- * Batch Plant Inspections
- * Construction Vehicles & 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
- * Electrical Installations, -Equipment & -Appliances (including Portable Electrical Tools)
- * Excavations Inspection
- * Explosive Powered Tool Inspection, Maintenance, Issue & Returns Register (incl. cartridges & nails)
- * Fall Protection Inspection Register
- * First Aid Box Contents
- * Fire Equipment Inspection & Maintenance
- * Formwork & Support work 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 & Storage Inspection
- * 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
- * All other applicable records

MAKHADO MUNICIPALITY would appoint will conduct an audit on the OH&S file of the Principal Contractor from time-to-time.

(e) OH&S Goals & Objectives & Arrangements for Monitoring & Review of OH&S Performance

The Principal Contractor is required to maintain a CIFR of at least 8 (See Annexure 1. to this document: "Measuring Injury Experience) and report on this to MLM on a monthly basis

(f) Notification of Construction Work (Construction Regulation 3.)

The Principal Contractor must, where the Contract meets the requirements laid down in Construction Regulation 3, within 5 working days, notify the Department of Labour of the intention to carry out construction work and use the form (Annexure A in the Construction Regulations) for the purpose. A copy must be held on the OH&S File and a copy must be forwarded to MLM for record keeping purposes.

(g) Training, Awareness and Competence

The contents and syllabi of all training required by the Act and Regulations are to be included in the Principal Contractor's OH&S Plan.

(i) General Induction Training

All members of Contractor's Site management as well as all the persons appointed as responsible for OH&S in terms of the Construction and other Regulations will be required to attend a general induction session by the Client

All employees of the principal and other Contractors to be in possession of proof of General Induction training.

(ii) Site Specific Induction Training

The Principal Contractor will be required to develop Contract work project specific induction training based on the Risk Assessments for the Contract work and train all employees and other Contractors and their employees in this.

All employees of the principal and other Contractors to be in possession of proof of Site Specific OH&S Induction training at all times.

(iii) Other Training

All operators, drivers and users of construction vehicles, mobile plant and other equipment to be in possession of valid proof of training.

All employees in jobs requiring training in terms of the Act and Regulations to be in possession of valid proof of training as follows:

OH&S Training Requirements: (as required by the Construction Regulations and as indicated by the OH&S Specification & the Risk Assessment/s):

* General Induction (Section 8 of the Act)

C3.57

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- * Site/Job Specific Induction (also visitors) (Sections 8 & 9 of the Act)
- * Site/Project Manager
- * Construction Supervisor
- * OH&S Representatives (Section 18 (3) of the Act)
- * Training of the Appointees indicated above
- * Operators & Drivers of Construction Vehicles & Mobile Plant (Construction Regulation 21)
- * Basic Fire Prevention & Protection (Environmental Regulations 9 and Construction regulation 27)
- * Basic First Aid (General Safety Regulations 3)
- * Storekeeping Methods & Safe Stacking (Construction Regulation 26)
- * Emergency, Security and Fire Co-coordinator

(iv) Awareness & Promotion

The Principal Contractor is required to have a promotion and awareness scheme in place to create an OH&S culture in employees. The following are some of the methods that may be used:

Toolbox Talks

OH&S Posters

Videos

Competitions

Suggestion schemes

Participative activities such as OH&S Safety circles.

(v) Competence

The Principal Contractor shall ensure that his and other Contractor's personnel appointed are competent and that all training required to do the work safely and without risk to health, has been completed before work commences

The Principal Contractor shall ensure that follow-up and refresher training is conducted as the contract work progresses and the work situation changes.

Records of all training must be kept on the OH&S File for auditing purposes.

(h) Consultation, Communication and Liaison

OH&S Liaison between the Client, the principal Contractor, the other Contractors, the Designer and other concerned parties will be through the OH&S committee as contemplated in above.

In addition to the above, communication may be directly to the Client or his appointed Agent, verbally or in writing, as and when the need arises.

Consultation with the workforce on OH&S matters will be through their Supervisors, OH&S Representatives, the OH&S committee and their elected Trade Union Representatives, if any.

The Principal Contractor will be responsible for the dissemination of all relevant OH&S information to the other Contractors e.g. design changes agreed with the Client and the Designer, instructions by the Client and/or his/her agent, exchange of information between Contractors, the reporting of hazardous/dangerous conditions/situations etc.

The Principal Contractor will be required to do Site Safety Walks with MLM at least on a basis to be determined between the two parties.

The principal and other Contractors will be required to conduct Toolbox Talks with their employees on a weekly basis and records of these must be kept on the OH&S File. Employees must acknowledge the receipt of Toolbox Talks which record must, likewise, be kept on the OH&S File.

The Principal Contractors most senior manager on site will be required to attend all ELM OH&S meetings and a list of dates, times and venues will be provided to the Principal Contractor by ELM.

(i) Checking, Reporting and Corrective Actions

(i) Monthly Audit by Client (Construction Regulation 1(d))

WLM will be conducting a Monthly Audit to comply with Construction Regulation 4(1)(d) to ensure that the principal Contractor has implemented and is maintaining the agreed and approved OH&S Plan.

(ii) Other Audits and Inspections by ELM:

MLM reserves the right to conduct other ad hoc audits and inspections as deemed necessary. This will include Site Safety Walks.

(iii) Conducting an Audit

A representative of the Principal Contractor must accompany ELM on all Audits and Inspections and may conduct his/her own audit/inspection at the same time. Each party will, however, take responsibility for the results of his/her own audit/inspection results.

(iv) Contractor's Audits and Inspections

The Principal Contractor is to conduct his own monthly internal audits to verify compliance with his own OH&S Management system as well as of with this specification.

(v) Inspections by OH&S Representative's and other Appointees

C3.58

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

OH&S Representatives must conduct weekly inspections of their areas of responsibility and report thereon to their foreman or supervisor whilst other appointees must conduct inspections and report thereon as specified in their appointments e.g. vehicle, plant and machinery drivers, operators and users must conduct daily inspections before start-up.

(vi) Recording and Review of Inspection Results

All the results of the abovementioned inspections to be in writing, reviewed at OH&S committee meetings, endorsed by the chairman of the meeting and placed on the OH&S File.

(vii) Reporting of Inspection Results

The Principal Contractor is required to provide the Client with a monthly report in the format as per the attached Annexure 2: "SHE Risk Management Report"

(j) Incident Reporting and Investigation

Reporting of Accidents and Incidents (Section 24 and General Administrative Regulation 8 of the OHS Act)

The Principal Contractor must report all incidents where an employee is injured on duty to the extent that he/she:

- * dies
- * becomes unconscious
- * loses a limb or part of a limb
- * is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed

OR where:

- * a major incident occurred
- * the health or safety of any person was endangered
- * where a dangerous substance was spilled
- * the uncontrolled release of any substance under pressure took place
- * machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects
- * machinery ran out of control

To provide MLM with copies in two days and to the Provincial Director of the Department of Labour within seven days (Section 24 of the Act & General Administrative Regulation 8.) EXCEPT that, where a person has died, has become unconscious for any reason or has lost a limb or part of a limb or may die or suffer a permanent physical defect, the incident must be reported to both WLM and the Provincial Director of the Department of Labour forthwith by telephone, telefax or E-mail.

The Principal Contractor is required to provide WLM with copies of all statutory reports required in terms of the Act within 7 days of the incident occurring.

The Principal Contractor is required to provide MLM with copies of all internal and external accident/incident investigation reports including the reports contemplated below within 7 days of the incident occurring.

Accident and Incident Investigation (General Administrative Regulation 9)

The Principal Contractor is responsible for the investigation of all accidents/incidents where employees and non-employees were injured to the extent that he/she/they had to be referred for medical treatment by a doctor, hospital or clinic

The results of the investigation to be entered into the Accident/Incident Register listed in above.

The Principal Contractor is responsible for the investigation of all minor and non-injury incidents as described in Section 24 (1) (b) & (c) of the Act and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.

The Principal Contractor is responsible for the investigation of all road traffic accidents and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.

The MLM reserves the right to hold its own investigation into an incident or call for an independent external investigation.

Operational Control

(a) Emergency Preparedness, Contingency Planning and Response

The Principal Contractor must appoint a competent person to act as Emergency Controller/Coordinator.

C3.59

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The Principal Contractor must conduct an emergency identification exercise and establish what emergencies could possibly develop. He/she must then develop detailed contingency plans and emergency procedures, taking into account any emergency plan that WLM may have in place.

The Principal Contractor and the other Contractors must hold regular practice drills of contingency plans and emergency procedures to test them and familiarise employees with them.

(b) First Aid (General Safety Regulation 3)

The Principal Contractor must provide First Aid equipment (including a stretcher) and have qualified First Aider/s as required by General Safety Regulation 3 of the OHS Act.

The Contingency Plan of the Principal Contractor must include the arrangements for speedily and timeously transporting injured/ill person/s to a medical facility or of getting emergency medical aid to person/s that may require it.

The Principal Contractor must have firm arrangements with his other Contractors in place regarding the responsibility of the other Contractors injured/ill employees

(c) Security

The Principal Contractor must establish site access rules and implement and maintain these throughout the construction period. Access control must include the rule that non-employees will not be allowed on site unaccompanied.

The Principal Contractor must develop a set of Security rules and procedures and maintain these throughout the construction period

(d) Fall Protection (Working in Elevated Positions (Construction regulation 8.))

A pre-emptive Risk Assessment will be required for any work to be carried out above two metres from the ground or any floor level and will be classified as "Work in Elevated Positions".

As far as is practicable, any person working in an elevated position will work from a platform, ladder or other device that is at least as safe as if he/she is working at ground level and whilst working in this position be wearing a single belt with lanyard that will be worn to prevent the person falling from the platform, ladder or other device utilised. This safety belt will be, as far as is possible, secured to a point away from the edge over which the person might fall and the lanyard must be of such a length that the person will not be able to move over the edge. Alternatively, any platform, slab, deck or surface forming an edge over which a person may fall may be fitted with guard rails at two different heights as prescribed in SABS 085: Code of Practice for the Design, Erection, Use and Inspection of Access Scaffolding. Where the requirement in is not practicable, the person will be provided with a full body harness that will be worn and attached above the wearer's head at all times and the lanyard must be fitted with a shock absorbing device OR the person must be attached to an approved, by MLM, fall arrest system.

Where the requirements are not practicable, a suitable catch net must be erected.

Workers working in elevated positions must be trained to do this safely and without risk to health

Where work on roofs is carried out, the Risk Assessment must take into account the possibility of persons falling through fragile material. Skylights and openings in the roof.

Measurement and Payment

Payment for the contractor's obligations in respect of the Occupational Health and Safety act and Construction Regulations shall be made through three payment items described below. The three payment items together shall include full compensation for all personnel (including a dedicated full time Construction Safety Officer), cost and incidentals in respect of compliance with the enforcement of the Health and Safety Specifications, which shall include for the compilation, presentation, implementation and maintenance of the Health and Safety Plan as contemplated. In tendering rates for the three items the contractor shall ensure that the sum of the amounts for the three items shall not be less than one percent (1%) of the Tender Amount.

Item	Unit
C1.1 Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	Lump Sum

The full amount will be paid in one instalment only once:-

- (a) The contractor has notified the Provincial Director of the Department of Labour in writing of the project.
- (b) The contractor has made the required initial appointments of employees and sub-contractors.
- (c) The client has approved the contractor's Health and Safety Plan.
- (d) The contractor has set up his Health and Safety File.

C3.60

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Item	Unit
C1.2 Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations	Month

The tendered monthly amount shall represent full compensation for that part of the contractor's general obligations in terms of the Occupational Health and Safety Act and the Construction Regulations which are mainly a function of time. This includes inter alia payment of all costs for the appointment of all staff contemplated in the construction regulations and the transport of employees on site. Payment will be monthly only after payment for Item C1.1 has been made.

Item	Unit
C1.3 Submission of the Health and Safety File	Lump Sum

The tendered lump sum shall represent full compensation for the contractor meeting all his obligations in respect of the Occupational Health and Safety Act and the Construction Regulations and for the preparation and submission of his Health and Safety File complete as envisaged on this specification to the Client's satisfaction.

This amount will be paid only once the contractor has met all his obligations in respect of the Occupational Health and Safety Act and the Construction Regulations and has submitted his Health and Safety File complete as envisaged on this specification to the Client's satisfaction.

Project/Site Specific Requirements
See Annexure 3

- Annexure 1: Measuring Injury Experience
- Annexure 2: SHE Risk Management Report
- Annexure 3. List of Risk Assessments

ANNEXURE 1: MEASURING INJURY EXPERIENCE

Injury experience has traditionally been measured by the use of a disabling injury frequency rate, the so-called "DIFR". The DIFR is calculated by multiplying the number of disabling injuries by 1 million and dividing by the number of man-hours worked.

Lately the DIFR has been replaced internationally with a DIIR: disabling injury incidence rate. The only difference between the two rates are that the 10 million in the calculation is replaced with 200 000. (200 000 purported to be the number of hours and average person works in a lifetime.)

The use of the two rates above has proved to be somewhat problematical as they are open to manipulation and disabling injuries are often "hidden" by returning the injured employee to the workplace so as not to lose a shift and therefore having to register a disabling injury.

The Construction Industry recently decided to promote the use of a new frequency rate based on the number of compensation injury claims as these are more difficult to hide or manipulate because the reporting of compensable injuries is a legal requirement.

The industry is hoping that adoption of this new measurement of injury experience will enable the industry to monitor itself as far as work related injuries are concerned.

Below follows an explanation of this new rating system.

COMPENSATION INCIDENCE FREQUENCY RATE (CIFR)
FORMULA

No. of Compensation Claims X 200 000 /
*220 man hours X No. of Employees

DEFINITIONS

No. of Compensation

Claims: The number of claims lodged with the COID insurer for the period under review

200 000: The fixed factor to align the rate with other rates used internationally

Manhours Worked

Include: * Hourly Paid Employees
* Sub-contractors (No. of Employees X *220 each)
* Staff (No. of Employees X *220 hours each)

220 manhours: The *average number of hours worked by one employee in one month in the Construction industry.

C3.61

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

* Overtime, absence on leave or sick leave, unrecorded after hours time worked by senior and middle management factored into this average.

No. of Employees: The actual or average number of employees employed
for the period under review.

2002/03CIFRSystem

ANNEXURE 2: EXECUTIVE SHE RISK MANAGEMENT REPORT

The SAFCEC OH&S committee recently developed the following report in an attempt to standardise on reporting and assist contractors in obtaining a clear picture of their SHE Risk Management performance. It is hoped that clients will also accept this standardised report. Your comments/suggestions for improvement is invited.

EXAMPLE ONLY: ALL INFORMATION IS FICTITIOUS

XYZ construction

*SHE RISK MANAGEMENT REPORT

PERIOD JANUARY TO MARCH 2002

*(SHE = Safety, Health & Environment)

1. Introduction

We hope that this new format of quarterly SHE Risk Management reporting will provide a clear picture of the company's performance as far as occupational health & safety is concerned.

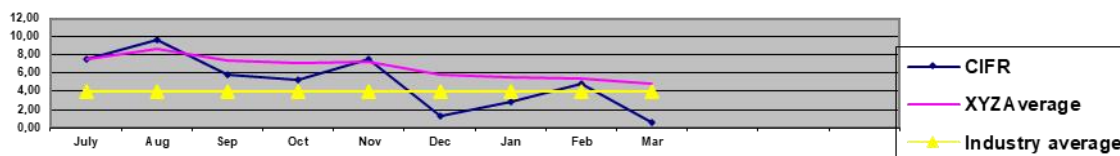
The first quarter of 2002 generally reflected an improvement in injury experience and shows a decline in the number of injuries. Although Building was the only division where there was an increase in compensation claims, figures are still well down from the average 2001 figures. A sub-contractor experienced one fatality.

All divisions are eagerly awaiting the final implementation in May of the new electronic SHE Management system that will make the tools to implement the SHE programme available to all management and supervisory staff.

2. Incident Statistics

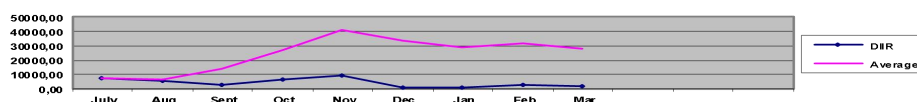
Compensation Incident Frequency Rate (CIFR)

$\text{CIFR} = \frac{\text{Total No. of Claims against the Workmen's Compensation Fund} \times 200\,000}{\text{Manhours worked}}$



2.2. Disabling Injury Incidence Rate (DIIR)

$\text{DIIR} = \frac{\text{No. Disabling Injuries} \times 200\,000}{\text{Manhours worked}}$



2.3. Other Major Incidents

Three other major incidents were experienced in the period under review:

A major trench collapsed at Job. 00123: XYZ Head Office, Bochum: No personnel injured, extensive damage to foundations: 3 days delay.

A concrete dumper ran away when its brakes failed. It smashed into the glass façade of the building on Job 00332: McDonalds, Polokwane. The driver jumped off and was not injured. Cost of damage to façade: R45 000.

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

A storage hut on Job 00567: BP Petrol Station, Swartruggens was demolished by fire when the night watchman made a fire inside the storage hut which contained concrete vibrators and levelling machines. Cost of replacing the hut and machines: R30 000

RISK AREAS

The following items of concern need priority consideration by management:

- 3.1. New employees must undergo pre-employment medical examinations to:
 protect XYZ from claims at a later stage
 ensure that only healthy persons are employed
 prevent injuries and illness in the workplace
 enhance XYZ image

Vehicle drivers and plant operators must be instructed to inspect their vehicles daily before start-up using the prescribed checklists to ensure that these are safe to operate and in good condition.

AUDITS

Three SHE audits were conducted in February and March:

- | | | | |
|------|------------|----------------------|-----------------------|
| 4.1. | Job 00432: | Gillooly's Mall | Compliance: 56%(*) |
| | Job 00786: | Cullinan Head Office | Compliance: 83%(****) |
| | Job 00589: | Cleveland Station | Compliance: 76%(***) |

5. TRAINING

One hundred and forty-two employees, representing 7% of employees, attended nine training courses. *Our objective is to train 5,5% of employees quarterly.

Month	No. of Employees Trained	Course	Source
January	26 15 3	Induction OH&S Reps Crane Drivers	Internal Consultant External
February	23 17	Induction OH&S Reps	Internal Consultant
March	43 9 3 3	Induction OH&S Reps Bomag Rollers First Aiders	Internal Consultant Supplier St. John's

6. LEGAL ISSUES

- 6.1. An inspector of the Department of Labour issued an improvement notice on Job 00987: Gillooly's Mall. The notice requires that all scaffolding comply with the SABS standards for the Erection and Maintenance of Access Scaffolding (SABS 085). This is currently being attended to and the inspector will return on 15 April 2002 to ascertain if the notice has been complied with.

OCCUPATIONAL AIND OTHER HEALTH MATTERS

HIV Aids

The proposed SAFCEC clinic will soon be operational and we will then be able to send our employees who have tested positive to the clinic for counselling and eventual treatment when necessary

The mobile clinic saw and tested fifty employee volunteers at 3 sites this month. Eighteen of them tested positive.

Tuberculosis

The mobile clinic will be calling at Gillooly's Mall and Cleveland Station on 15 and 16 October respectively to screen employees for TB.

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Noise

All suspected noise pollution areas have been tested and the results are awaited. Employees working in areas testing over 85dBA will be issued with suitable hearing protectors.

9. ENVIRONMENTAL MEASURES

Inspectors from the Botswana Department of the Environment visited Djwaneng and inspected the site and yard. They gave it a “clean bill of health” and advised that we should increase the dust control measures by spraying roads three times per day instead of the present twice per day.

10. ACHIEVEMENTS/AWARDS

The client at Djwaneng (Job 00786) awarded the XYZ site first position in the housekeeping competition conducted bi-monthly by the client’s SHE managers. The project manager and his team are to be congratulated for this sterling effort.

Job 0987: Refurbishment of Pretoria Main Railway Station has just completed 1million compensation claim free days. This was no easy achievement if we consider the conditions being worked under after the extensive fire that caused major damage.

SHE Risk Manager

2002.09.27

ANNEXURE 3: LIST OF RISK ASSESSMENTS

- * Clearing & Grubbing of the Area/Site
- * Site Establishment including:
 - Office/s
 - Secure/safe storage for materials, plant & equipment
 - Ablutions
 - Sheltered eating area
 - Maintenance workshop
 - Vehicle access to the site
- * Dealing with existing structures
- * Location of existing services
- * Installation and maintenance of temporary construction electrical supply, lighting and equipment
- * Adjacent land uses/surrounding property exposures
- * Boundary and access control/Public Liability Exposures (NB: the Employer is also responsible for the OH&S of non-employees affected by his/her work activities.)
- * Health risks arising from neighbouring as well as own activities and from the environment e.g. threats by dogs, bees, snakes, lightning etc.
- * Exposure to noise
- * Exposure to vibration
- * 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
 - Skill saw
- * Excavations including
 - Ground/soil conditions
 - Trenching
 - Shoring
 - Drainage of trench
- * Welding including
 - Arc Welding
 - Gas welding
 - Flame cutting
 - Use of LP gas torches and appliances
- * Loading & offloading of trucks

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

- * Aggregate/sand and other materials delivery
- * Manual and mechanical handling
- * Lifting and lowering operations
- * Driving & operation of construction vehicles and mobile plant including
 - Trenching machine
 - Excavator
 - Bomag roller
 - Plate compactor
 - Front end loader
 - Mobile cranes and the ancillary lifting tackle
 - Parking of vehicles & mobile plant
 - Towing of vehicles & mobile plant
- * Use and storage of flammable liquids and other hazardous substances
- * Layering and bedding
- * Installation of pipes in trenches
- * Pressure testing of pipelines
- * Backfilling of trenches
- * Protection against flooding
- * Gabion work
- * Use of explosives
- * Protection from overhead power lines
- * As discovered by the Principal Contractor's hazard identification exercise
- * As discovered from any inspections and audits conducted by the Client or by the Principal Contractor or any other Contractor on site
- * As discovered from any accident/incident investigation.

C3.4.3.2	ENVIRONMENTAL MANAGEMENT PLAN
CONTENTS	
C3.4.3.2.1	SCOPE
C3.4.3.2.2	DEFINITIONS
C3.4.3.2.3	IDENTIFICATION OF ENVIRONMENTAL ASPECTS AND IMPACTS
C3.4.3.2.4	LEGAL REQUIREMENTS
C3.4.3.2.5	ADMINISTRATION OF ENVIRONMENTAL OBLIGATIONS
C3.4.3.2.6	TRAINING
C3.4.3.2.7	ACTIVITIES/ASPECTS CAUSING IMPACTS
C3.4.3.2.8	ENVIRONMENTAL MANAGEMENT OF CONSTRUCTION ACTIVITIES
C3.4.3.2.9	RECORD KEEPING
C3.4.3.2.10	COMPLIANCE AND PENALTIES
C3.4.3.2.11	MEASUREMENT AND PAYMENT

SCOPE

This environmental management programme (EMP) sets out the methods by which proper environmental controls are to be implemented by the contractor. The duration over which the contractor’s controls shall be in place cover the construction period of the project as well as the limited time after contract completion defined by the General Conditions of Contract, and the project specifications, as the defects notification period (maintenance period).

The provisions of this EMP are binding on the contractor during the life of the contract. They are to be read in conjunction with all the documents that comprise the suite of documents for this contract. In the event that any conflict occurs between the terms of the EMP and the project specifications or Record of Decision, the terms herein shall be subordinate.

The EMP is a dynamic document subject to similar influences and changes as are brought by variations to the provisions of the project specification. Any substantial changes shall be submitted to the Roads Agency Limpopo in writing for approval.

The EMP identifies the following:

- Construction activities that will impact on the environment.
- Specifications with which the contractor shall comply in order to protect the environment from the identified impacts.
- Actions that shall be taken in the event of non-compliance.

DEFINITIONS

Alien Vegetation: alien vegetation is defined as undesirable plant growth which shall include, but not be limited to, all declared category 1 and 2 listed invader species as set out in the Conservation of Agricultural Resources Act (CARA) regulations. Other vegetation deemed to be alien shall be those plant species that show the potential to occupy in number, any area within the defined construction area and which are declared to be undesirable.

Construction Activity: a construction activity is any action taken by the contractor, his subcontractors, suppliers or personnel during the construction process as defined in the South African National Roads Agency Limited and National Roads Act, 1998 (Act No. 7, 1998)

Environment: environment means the surroundings within which humans exist and that could be made up of -

- the land, water and atmosphere of the earth;
- micro-organisms, plant and animal life;
- any part or combination of (i) and (ii) and the interrelationships among and between them; and
- the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being.

Environmental Aspect: an environmental aspect is any component of a contractor's construction activity that is likely to interact with the environment.

Environmental Impact: an impact or environmental impact is the change to the environment, whether desirable or undesirable, that will result from the effect of a construction activity. An impact may be the direct or indirect consequence of a construction activity.

Record of Decision: a record of decision is a written statement from the Limpopo Department of Economic Development, Environment and Tourism, that records its approval of a planned undertaking to improve, upgrade or rehabilitate a section of road and the mitigating measures required to prevent or reduce the effects of environmental impacts during the life of a contract.

Road Reserve: the road reserve is a corridor of land, defined by co-ordinates and proclamation, within which the road, including access intersections or interchanges, is situated. A road reserve may, or may not, be bounded by a fence.

Road Width: for the purposes of the EMP, the road width is defined as the area within the road reserve i.e. fence line to fence line, but also includes all areas beyond the road reserve that are affected by the continuous presence of the road, e.g. a reach of a water course.

IDENTIFICATION OF ENVIRONMENTAL ASPECTS AND IMPACTS

The contractor shall identify likely aspects before commencing with any construction activity. Examples of environment aspects include:

- waste generation
- stormwater discharge
- emission of pollutants into the atmosphere
- chemical use operations
- energy use operations
- water use operations
- use of natural resources
- noise generation

Thereafter the contractor shall programme his work in such a way that each cause and effect of a construction activity is also identified and the activity planned so as to prevent any impact from happening. If prevention is not practicable, or in the event of mishap or misapplication, the contractor shall provide plans and measures for the engineer's approval, which will limit and contain the magnitude, duration and intensity of the impact. The contractor shall demonstrate that he/she is capable of carrying out any repair and reinstatement of the damaged environment. These requirements shall be concurrent with the time constraints to produce an approved construction programme according to subclause 8.3 as amended by Particular Condition of the general conditions of contract and clause B1204 of these project specifications.

Listed below are some environmental impacts that could adversely alter an aspect of the environment through usual construction activities:

- Pollution of atmosphere, soil or water
- Destruction or removal of fauna and flora and effect on biological diversity
- Deformation of the landscape
- Soil erosion
- Destruction of historical/heritage sites
- Effect on the built environment
- Effect on agricultural land and wetlands

General good construction practice will play an important role in avoiding the occurrence of an Impact. The contractor's attention is drawn, in this regard, to C1008. Environmental Management of Construction Activities

LEGAL REQUIREMENTS

a) General

Construction will be according to the best industry practices, as identified in the project documents. This EMP, which forms an integral part of the contract documents, informs the contractor as to his duties in the fulfilment of the project objectives, with particular reference to the prevention and mitigation of environmental impacts caused by construction activities associated with the project. The contractor should note that obligations imposed by the EMP are legally binding in terms of environmental statutory legislation and in terms of the additional conditions to the general conditions of contract that pertain to this project. In the event that any rights

C3.67

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

and obligations contained in this document contradict those specified in the standard or project specifications then the latter shall prevail.

b) Statutory and other applicable legislation

The contractor is deemed to have made himself conversant with all legislation pertaining to the environment, including provincial and local government ordinances, which may be applicable to the contract.

ADMINISTRATION OF ENVIRONMENTAL OBLIGATIONS

a) Appointment of a Designated Environmental Officer (DEO)

For the purposes of implementing the conditions contained herein, the contractor shall submit to the engineer for approval the appointment of a nominated representative of the contractor as the DEO for the contract. The request shall be given, in writing, at least fourteen days before the start of any work clearly setting out reasons for the nomination, and with sufficient detail to enable the engineer to make a decision. The engineer will, within seven days of receiving the request, approve, reject or call for more information on the nomination. Once a nominated representative of the contractor has been approved he/she shall be the DEO and shall be the responsible person for ensuring that the provisions of the EMP are complied with during the life of the contract. The engineer will be responsible for issuing instructions to the contractor where environmental considerations call for action to be taken. The DEO shall submit regular written reports to the engineer, but not less frequently than once a month.

The engineer shall have the authority to instruct the contractor to replace the DEO if, in the engineer's opinion, the appointed officer is not fulfilling his/her duties in terms of the requirements of the EMP or this specification. Such instruction will be in writing and shall clearly set out the reasons why a replacement is required. There shall be an approved DEO on the site at all times.

b) Administration

Before the contractor begins each construction activity the DEO shall give to the engineer a written statement setting out the following:

- The type of construction activity.
- Locality where the activity will take place.
- Identification of the environmental aspects and impacts that might result from the activity.
- Methodology for impact prevention for each activity or aspect.
- Methodology for impact containment for each activity or aspect.
- Emergency/disaster incident and reaction procedures.
- Treatment and continued maintenance of impacted environment.

The contractor may provide such information in advance of any or all construction activities provided that new submissions shall be given to the engineer whenever there is a change or variation to the original. The engineer may provide comment on the methodology and procedures proposed by the DEO, but he shall not be responsible for the contractor's chosen measures of impact mitigation and emergency/disaster management systems. However, the contractor shall demonstrate at inception and at least once during the contract that the approved measures and procedures function properly.

c) Good Housekeeping

The Contractor shall undertake "good housekeeping" practices during construction as stated in clause 1217 of the COLTO Standard Specifications for Roads and Bridges and subclauses 4.3.1 and 4.3.2 of the General Conditions of Contract. This will help avoid disputes on responsibility and allow for the smooth running of the contract as a whole. Good housekeeping extends beyond the wise practice of construction methods that leaves production in a safe state from the ravages of weather to include the care for and preservation of the environment within which the site is situated.

TRAINING

The designated environmental officer (DEO) must be conversant with all legislation pertaining to the environment applicable to this contract and must be appropriately trained in environmental management and must possess the skills necessary to impart environmental management skills to all personnel involved in the contract.

The contractor shall ensure that adequate environmental training takes place. All employees shall have been given an induction presentation on environmental awareness. Where possible, the presentation needs to be conducted in the language of the employees. The environmental training should, as a minimum, include the following:

- The importance of conformance with all environmental policies
- The environmental impacts, actual or potential, of their work activities;
- The environmental benefits of improved personal performance;
- Their roles and responsibilities in achieving conformance with the environmental policy and procedures and with the requirement of the Agency's environmental management systems, including emergency preparedness and response requirements;
- The potential consequences of departure from specified operating procedures;
- The mitigation measures required to be implemented when carrying out their work activities.

In the case of permanent staff the contractor shall provide evidence that such induction courses have been presented. In the case of new staff (including contract labour) the contractor shall inform the engineer when and how he/she intends concluding his environmental training obligations.

ACTIVITIES/ASPECTS CAUSING IMPACTS

A list of possible causes of environmental impacts that occur during construction activities is given in Table 7/1: Aspects or Activities that Cause Environmental Impacts during Construction Activities, which is to be found at the end of this part. This list is not exhaustive, and shall be used for guideline purposes only.

ENVIRONMENTAL MANAGEMENT OF CONSTRUCTION ACTIVITIES

a) Site Establishment

i) Site Plan

The contractor shall establish his construction camps, offices, workshops, staff accommodation and testing facilities on the site in a manner that does not adversely affect the environment. However, before construction can begin, the contractor shall submit to the engineer for his approval, plans of the exact location, extent and construction details of these facilities and the impact mitigation measures the contractor proposes to put in place.

The plans shall detail the locality as well as the layout of the waste treatment facilities for litter, kitchen refuse, sewage and workshop-derived effluents. The site offices should not be sited in close proximity to steep areas, as this will increase soil erosion. Preferred locations would be flat areas along the route. If the route traverses water courses, streams and rivers, it is recommended that the offices, and in particular the ablution facilities, aggregate stockpiles, spoil areas and hazardous material stockpiles are located as far away as possible from any water course as possible. Regardless of the chosen site, the contractor's intended mitigation measures shall be indicated on the plan. The site plan shall be submitted not later than the first site meeting. Detailed, electronic colour photographs shall be taken of the proposed site before any clearing may commence. These records are to be kept by the engineer for consultation during rehabilitation of the site. Read with COLTO Specification 1302(a), 1402 (e).

ii) Vegetation

The contractor has a responsibility to inform his staff of the need to be vigilant against any practice that will have a harmful effect on vegetation.

The natural vegetation encountered on the site is to be conserved and left as intact as possible. Vegetation planted at the site shall be indigenous and in accordance with instructions issued by the engineer. Only trees and shrubs directly affected by the works, and such others as may be indicated by the engineer in writing, may be felled or cleared. In wooded areas where natural vegetation has been cleared out of necessity, the same species of indigenous trees as were occurring, shall be re-established.

The project specification for the rehabilitation of the grass cover shall be strictly adhered to. Any proclaimed weed or alien species that propagates during the contract period shall be cleared by hand before seeding. (Read in conjunction with COLTO Specification 5801(b), 5802(b), (c), (d) and (e), 5804, 5805, 5806 and 5807). Fires shall only be allowed in facilities or equipment specially constructed for this purpose. A firebreak shall be cleared and maintained around the perimeter of the camp and office sites.

iii) Rehabilitation

The area where the site offices were erected will require rehabilitation at the end of the

C3.69

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

contract. All construction material, including concrete slabs and braai areas shall be removed from the site on completion of the contract.

iv) Water for human consumption

Water for human consumption shall be available at the site offices and at other convenient locations on site. All effluent water from the camp / office sites shall be disposed of in a properly designed and constructed system, situated so as not to adversely affect water sources (streams, rivers, pans dams etc). Only domestic type wastewater shall be allowed to enter this drain.

v) Heating and Cooking fuel

The contractor shall provide adequate facilities for his staff so that they are not encouraged to supplement their comforts on site by accessing what can be taken from the natural surroundings. The contractor shall ensure that energy sources are available at all times for construction and supervision personnel for heating and cooking purposes.

b) Sewage treatment

Particular reference in the site establishment plan shall be given to the treatment of sewage generated at the site offices, site laboratory and staff accommodation and at all localities on the site where there will be a concentration of labour. Sanitary arrangements should be to the satisfaction of project management, the local authorities and legal requirements.

Safe and effective sewage treatment will require one of the following sewage handling methods: septic tanks and soak-aways, dry-composting toilets such as “enviro loos”, or the use of chemical toilets which are supplied and maintained by a subcontractor. The type of sewage treatment will depend on the geology of the area selected, the duration of the contract and proximity (availability) of providers of chemical toilets. Should a soak-away system be used, it shall not be closer than 800 metres from any natural water course or water retention system. The waste material generated from these facilities shall be serviced on a regular basis. The positioning of the chemical toilets shall be done in consultation with the engineer. Read with COLTO Specifications 1402(g) and 1404(a).

Toilets and latrines shall be easily accessible and shall be positioned within walking distance from wherever employees are employed on the works. Use of the veld for this purpose shall not, under any circumstances, be allowed.

Outside toilets shall be provided with locks and doors and shall be secured to prevent them from blowing over. The toilets shall also be placed outside areas susceptible to flooding. The contractor shall arrange for regular emptying of toilets and shall be entirely responsible for enforcing their use and for maintaining such latrines in a clean, orderly and sanitary condition to the satisfaction of the engineer.

c) Waste Management

The contractor's intended methods for waste management and waste minimisation shall be implemented at the outset of the contract. All personnel shall be instructed to dispose of all waste in the proper manner.

i) Solid Waste

Solid waste shall be stored in an appointed area in covered, tip proof metal drums for collection and disposal. A refuse control system shall be established for the collection and removal of refuse to the satisfaction of the engineer. Disposal of solid waste shall be at a Department of Water Affairs and Forestry (DWAF) licensed landfill site or at a site approved by DWAF in the event that an existing operating landfill site is not within reasonable distance from the site offices and staff accommodation. No waste shall be burned or buried at or near the site offices, nor anywhere else on the site, including the approved solid waste disposal site. Read with COLTO Specification 1404(a).

ii) Litter

No littering by construction workers shall be allowed. During the construction period, the facilities shall be maintained in a neat and tidy condition and the site shall be kept free of litter.

Measures shall be taken to reduce the potential for litter and negligent behaviour with regard to the disposal of all refuse. At all places of work the contractor shall provide litter collection facilities for later safe disposal at approved sites. (Read with COLTO Specification 1302(b)).

C3.70

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

iii) Hazardous waste

Hazardous waste such as bitumen, tar, oils etc. shall be disposed of in a Department of Water Affairs and Forestry approved landfill site. Special care shall be taken to avoid spillage of tar or bitumen products such as binders or pre-coating fluid to avoid water-soluble phenols from entering the ground or contaminating water. Under no circumstances shall the spoiling of tar or bituminous products on the site, over embankments, in borrow pits or any burying, be allowed. Unused or rejected tar or bituminous products shall be returned to the supplier's production plant. Any spillage of tar or bituminous products shall be attended to immediately and affected areas shall be promptly reinstated to the satisfaction of the engineer.

d) Control at the workshop

The contractor's management and maintenance of his plant and machinery will be strictly monitored according to the criteria given below, regardless whether it is serviced on the site (i.e. at the place of construction activity or at a formalised workshop).

i) Safety

All the necessary handling and safety equipment required for the safe use of petrochemicals and oils shall be provided by the contractor to, and used or worn by, the staff whose duty it is to manage and maintain the contractor's and his subcontractor's and supplier's plant, machinery and equipment.

ii) Hazardous Material Storage

Petrochemicals, oils and identified hazardous substances shall only be stored under controlled conditions. All hazardous materials e.g. tar or bitumen binders shall be stored in a secured, appointed area that is fenced and has restricted entry. Storage of tar or bituminous products shall only take place using suitable containers to the approval of the engineer.

The contractor shall provide proof to the engineer that relevant authorisation to store such substances has been obtained from the relevant authority. In addition, hazard signs indicating the nature of the stored materials shall be displayed on the storage facility or containment structure. Before containment or storage facilities can be erected the contractor shall furnish the engineer with details of the preventative measures, he proposes to install in order to mitigate against pollution of the surrounding environment from leaks or spillage. The preferred method shall be a concrete floor that is bunded. Any deviation from the method will require proof from the relevant authority that the alternative method proposed is acceptable to that authority. The proposals shall also indicate the emergency procedures in the event of misuse or spillage that will negatively affect an individual or the environment.

iii) Fuel and Gas Storage

Fuel shall be stored in a secure area in a steel tank supplied and maintained by the fuel suppliers. An adequate bund wall, 110% of volume, shall be provided for fuel and diesel areas to accommodate any leakage spillage or overflow of these substances. The area inside the bund wall shall be lined with an impervious lining to prevent infiltration of the fuel into the soil. Any leakage, spillage or overflow of fuel shall be attended to without delay. Gas welding cylinders and LPG cylinders shall be stored in a secure, well-ventilated area.

iv) Oil and Lubricant Waste

Used oil, lubricants and cleaning materials from the maintenance of vehicles and machinery shall be collected in a holding tank and sent back to the supplier. Water and oil should be separated in an oil trap. Oils collected in this manner, shall be retained in a safe holding tank and removed from site by a specialist oil recycling company for disposal at approved waste disposal sites for toxic/hazardous materials. Oil collected by a mobile servicing unit shall be stored in the service unit's sludge tank and discharged into the safe holding tank for collection by the specialist oil recycling company.

All used filter materials shall be stored in a secure bin for disposal off site. Any contaminated soil shall be removed and replaced. Soils contaminated by oils and lubricants shall be collected and disposed of at a facility designated by the local authority to accept contaminated materials.

e) Clearing the Site

C3.71

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

In all areas where the contractor intends to, or is required to clear the natural vegetation and soil, either within the road reserve, or at designated or instructed areas outside the road reserve, a plan of action shall first be submitted to the engineer for his approval.

The plan shall contain a photographic record and chainage/ land reference of the areas to be disturbed. This shall be submitted to the engineer for his records before any disturbance/stockpiling may occur. The record shall be comprehensive and clear, allowing for easy identification during subsequent inspections.

The contractor shall be responsible for the re-establishment of grass within the road reserve boundaries for all areas disturbed during road construction. This includes, for example, service roads, stockpile areas, stop/go facilities, windrows and wherever material generated for, or from, road construction has to be stored temporarily or otherwise within the road reserve, or at designated or instructed areas outside the road reserve. This responsibility shall extend until expiry of the defects notification period.

f) Soil Management

i) Topsoil

Topsoil shall be removed from all areas where physical disturbance of the surface will occur and shall be stored and adequately protected. The contract will provide for the stripping and stockpiling of topsoil from the site for later re-use. Topsoil is considered to be the natural soil covering, including all the vegetation and organic matter.

Depth may vary at each site. The areas to be cleared of topsoil shall include the storage areas. All topsoil stockpiles and windrows shall be maintained throughout the contract period in a weed-free condition. Weeds appearing on the stockpiled or windrowed topsoil shall be removed by hand. Soils contaminated by hazardous substances shall be disposed of at an approved Department of Water Affairs and Forestry waste disposal site. (Read with COLTO Specifications 3104(a), 5802(a), (g), 5804(a), (b) and (c)). The topsoil stockpiles shall be stored, shaped and sited in such a way that they do not interfere with the flow of water to cause damming or erosion, or itself be eroded by the action of water. Stockpiles of topsoil shall not exceed a height of 2m, and if they are to be left for longer than 6 months, shall be analysed, and if necessary, upgraded before replacement. Stockpiles shall be protected against infestation by weeds.

The contractor shall ensure that no topsoil is lost due to erosion – either by wind or water. Areas to be topsoiled and grassed shall be done so systematically to allow for quick cover and reduction in the chance of heavy topsoil losses due to unusual weather patterns. The contractor's programme shall clearly show the proposed rate of progress of the application of topsoil and grassing. The contractor shall be held responsible for the replacement, at his own cost, for any unnecessary loss of topsoil due to his failure to work according to the progress plan approved by the engineer. The contractor's responsibility shall also extend to the clearing of drainage or water systems within and beyond the boundaries of the road reserve that may have been affected by such negligence.

ii) Subsoil

The subsoil is the layer of soil immediately beneath the topsoil. It shall be removed, to a depth instructed by the engineer, and stored separately from the topsoil if not used for road building. This soil shall be replaced in the excavation in the original order it was removed for rehabilitation purposes.

g) Drainage

The quality, quantity and flow direction of any surface water runoff shall be established prior to disturbing any area for construction purposes. Cognisance shall be taken of these aspects and incorporated into the planning of all construction activities. Before a site is developed or expanded, it shall be established how this development or expansion will affect the drainage pattern. Recognised water users / receivers shall not be adversely affected by the expansion or re-development. No water source shall be polluted in any way due to proposed changes.

Streams, rivers, pans, wetlands, dams, and their catchments shall be protected from erosion and from direct or indirect spillage of pollutants such as refuse, garbage, cement, concrete, sewage, chemicals, fuels, oils, aggregate, tailings, wash water, organic materials and bituminous or tar products.

The contractor shall submit to the engineer his proposals for prevention, containment and rehabilitation measures against environmental damage of the identified water and drainage systems that occur on the site. Consideration shall be given to the placement of sedimentation ponds or barriers where the soils are of a dispersive nature or where toxic fluids are used in the construction process. The sedimentation ponds must be large enough to contain runoff so that they function properly under heavy rain conditions.

h) Earthworks and Layerworks

C3.72



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

This section includes all construction activities that involve the mining of all materials, and their subsequent placement, stockpile, spoil, treatment or batching, for use in the permanent works, or temporary works in the case of deviations. Before any stripping prior to the commencement of construction, the contractor shall have complied with the requirements of sections C1008 (e) and C1008 (g). In addition, the contractor shall take cognisance of the requirements set out below.

i) Quarries and borrow pits

The contractor’s attention is drawn to the requirement of the Department of Minerals and Energy, that before entry into any quarry or borrow pit, an EMP for the establishment, operation and closure of the quarry or borrow pit shall have been approved by the Department. It is the responsibility of the contractor to ensure that he is in possession of the approved EMP or a copy thereof, prior to entry into the quarry or borrow pit. The conditions imposed by the relevant EMP are legally binding on the contractor and may be more extensive and explicit than the requirements of this specification. In the event of any conflict occurring between the requirements of the specific EMP and these specifications the former shall apply. The cost of complying with the requirements shall be deemed to be included in existing rates in the Bill of Quantities. (Read with COLTO Specification 3100 and 3200).

ii) Excavation, hauling and placement

The contractor shall provide the engineer with detailed plans of his intended construction processes prior to starting any cut or fill or layer. The plans shall detail the number of personnel and plant to be used and the measures by which the impacts of pollution (noise, dust, litter, fuel, oil, sewage), erosion, vegetation destruction and deformation of landscape will be prevented, contained and rehabilitated. Particular attention shall also be given to the impact that such activities will have on the adjacent built environment. The contractor shall demonstrate his “good housekeeping”, particularly with respect to closure at the end of every day so that the site is left in a safe condition from rainfall overnight or over periods when there is no construction activity. (Read with COLTO Standard Specification clauses 1217 and 3309)

iii) Spoil sites

The contractor shall be responsible for the safe siting, operation, maintenance and closure of any spoil site he uses during the contract period, including the defects notification period. This shall include existing spoil sites that are being re-entered. Before spoil sites may be used proposals for their locality, intended method of operation, maintenance and rehabilitation shall be given to the engineer for his approval. The location of these spoil sites shall have signed approval from the affected landowner before submission to the engineer. No spoil site shall be located within 500m of any watercourse. A photographic record shall be kept of all spoil sites for monitoring purposes. This includes before the site is used and after re-vegetation.

The use of approved spoil sites for the disposal of hazardous or toxic wastes shall be prohibited unless special measures are taken to prevent leaching of the toxins into the surrounding environment. Such special measures shall require the approval of the relevant provincial or national authority. The same shall apply for the disposal of solid waste generated from the various camp establishments. The engineer will assist the contractor in obtaining the necessary approval if requested by the contractor.

Spoil sites will be shaped to fit the natural topography. These sites shall receive a minimum of 75mm topsoil and be grassed with the recommended seed mixture. Slopes shall not exceed a vertical: horizontal ratio of 1:3. Only under exceptional circumstances will approval be given to exceed this ratio. Appropriate grassing measures to minimise soil erosion shall be undertaken by the contractor. This will include both strip and full sodding. The contractor may motivate to the engineer for other acceptable stabilising methods. The engineer may only approve a completed spoil site at the end of the defects notification period upon receipt from the contractor of a landowner’s clearance notice and an engineer’s certificate certifying slope stability (Read with COLTO standard Specifications clause 1214). The contractor’s costs incurred in obtaining the necessary certification for opening and closing of spoil sites shall be deemed to be included in the tendered rates for spoiling.

iv) Stockpiles

The contractor shall plan his activities so that materials excavated from borrow pits and cuttings, in so far as possible, can be transported direct to and placed at the point where it is to be used. However, should temporary stockpiling become necessary, the areas for the stockpiling of excavated and imported material shall be indicated and demarcated on the site plan submitted in writing to the engineer for his approval, together with the contractor's proposed measures for prevention, containment and rehabilitation against environmental damage.

The areas chosen shall have no naturally occurring indigenous trees and shrubs present that may be damaged during operations. Care shall be taken to preserve all vegetation in the immediate area of these temporary stockpiles. During the life of the stockpiles the contractor shall at all times ensure that they are:

Positioned and sloped to create the least visual impact;Constructed and maintained so as to avoid erosion of the material and contamination of surrounding environment; andKept free from all alien/undesirable vegetation.

After the stockpiled material has been removed, the site shall be re-instated to its original condition. No foreign material generated / deposited during construction shall remain on site. Areas affected by stockpiling shall be landscaped, top soiled, grassed and maintained at the contractor's cost until clearance from the engineer and the relevant Authority is received.

Material milled from the existing road surface that is temporarily stockpiled in areas approved by the engineer within the road reserve, shall be subject to the same condition as other stockpiled materials. Excess materials from windrows, in-situ milling or any detritus of material from road construction activities may not be swept off the road and left unless specifically instructed to do so in the contract drawing or under instruction from the engineer
In all cases, the engineer shall approve the areas for stockpiling and disposal of construction rubble before any operation commences and shall approve their clause only when they have been satisfactorily rehabilitated. (Read with COLTO Specification 3203 and 4306).

v) Blasting activities

Wherever blasting activity is required on the site (including quarries and/or borrow pits) the contractor shall rigorously adhere to the relevant statutes and regulations that control the use of explosives. In addition, the contractor shall, prior to any drilling of holes in preparation for blasting, supply the engineer with a locality plan of the blast site on which shall be shown the zones of influence of the ground and air shock-waves and expected limits of fly-rock. The plan shall show each dwelling, structure and service within the zones of influence and record all details of the dwellings/structures/services including existing positions, lengths and widths of cracks, as well as the condition of doors, windows, roofing, wells, boreholes etc. The contractor, alone, shall be responsible for any costs that can be attributed to blasting activities, including the collection of fly-rock from adjacent lands and fields. The submission of such a plan shall not in any way absolve the contractor from his responsibilities in this regard. The contractor shall also indicate to the engineer the manner in which he intends to advertise to the adjacent communities and/or road users the times and delays to be expected for each individual blast.

vi) Batching sites

Asphalt plants are considered scheduled processes listed in the second schedule to the Atmospheric Pollution Prevention Act, 1965 (Act No. 45 of 1965). Should the use of an asphalt plant be considered on site, the contractor shall be responsible to obtain the necessary permit from the Department of Environmental Affairs and Tourism, regardless of where they are sited.Crushing plants and concrete batching plants, whether sited inside or outside of defined quarry or borrow pit areas, shall be subject to the requirements of the Department of Minerals and Energy legislation as well as the applicable industrial legislation that governs gas and dust emissions into the atmosphere. Such sites will be the subject of regular inspections by the relative authorities during the life of the project. In addition, the selection, entry onto, operation, maintenance, closure and rehabilitation of such sites shall be the same as for those under section C1008(h)(iii), with the exception that the contractor shall provide additional measures to prevent, contain and rehabilitate against environmental damage from toxic/hazardous substances. In this regard the contractor shall provide plans that take into account such additional measures as concrete floors, bunded storage

C3.74

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

facilities, linings to drainage channels and settlement dams. Ultimate approval of these measures shall be from the relevant national authority, as shall approval of closure. The engineer will assist the contractor in his submissions to the relevant authority.

Effluent from concrete batch plants and crusher plants shall be treated in a suitable designated sedimentation dam to the legally required standards to prevent surface and groundwater pollution. The designs of such a facility should be submitted to the engineer for approval.

The contractor shall invite the relevant department to inspect the site within 2 months after any plant is commissioned and at regular intervals thereafter, not exceeding 12 months apart

j) Spillages

Streams, rivers and dams shall be protected from direct or indirect spillage of pollutants such as refuse, garbage, cement, concrete, sewage, chemicals, fuels, oils, aggregate, tailings, wash water, organic materials and tar or bituminous products. In the event of a spillage, the contractor shall be liable to arrange for professional service providers to clear the affected area.

Responsibility for spill treatment lies with the contractor. The individual responsible for, or who discovers a hazardous waste spill must report the incident to his/her DEO or to the engineer. The Designated Environmental Officer will assess the situation in consultation with the engineer and act as required. In all cases, the immediate response shall be to contain the spill. The exact treatment of polluted soil / water shall be determined by the contractor in consultation with the DEO and the engineer. Areas cleared of hazardous waste shall be re-vegetated according to the engineer's instructions

Should water downstream of the spill be polluted, and fauna and flora show signs of deterioration or death, specialist hydrological or ecological advice will be sought for appropriate treatment and remedial procedures to be followed. The requirement for such input shall be agreed with the engineer. The costs of containment and rehabilitation shall be for the contractor's account, including the costs of specialist input.

k) Areas of Specific Importance

Any area, as determined and identified within the project document as sensitive or of special interest within the site shall be treated according to the express instructions contained in these specifications or the approved EMP. The contractor may offer alternative solutions to the engineer in writing should he consider that construction will be affected in any way by the hindrance of the designated sensitive area or feature. However, the overriding principle is that such defined areas requiring protection shall not be changed. Every effort to identify such areas within the site will have been made prior to the project going out to tender. The discovery of other sites with archaeological or historical interest that have not been identified shall require ad hoc treatment.

i. Archaeological Sites

If an artefact on site is uncovered, work in the immediate vicinity shall be stopped immediately. The contractor shall take reasonable precautions to prevent any person from removing or damaging any such article and shall immediately upon discovery thereof inform the engineer of such discovery. The South African Heritage Research Agency (SAHRA) is to be contacted who will appoint an archaeological consultant. Work may only resume once clearance is given in writing by the archaeologist. (Read with COLTO General Condition of Contract Subclause 4.24 as amended by Particular Condition).

ii. Graves and middens

If a grave or midden is uncovered on site, or discovered before the commencement of work, then all work in the immediate vicinity of the graves/middens shall be stopped and the engineer informed of the discovery. SAHRA should be contacted and in the case of graves, arrangements made for an undertaker to carry out exhumation and reburial. The Employer will be responsible for attempts to contact family of the deceased and for the site where the exhumed remains can be re-interred. (Read with COLTO General Conditions of Contract Subclause 4.24 as amended by Particular Condition).

iii. Noise Control

The contractor shall endeavour to keep noise generating activities to a minimum. Noises that could cause a major disturbance, for instance blasting and crushing activities, should only be carried out during daylight hours. Compliance with the appropriate legislation with respect to

C3.75

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

noise, shall be mandatory. Should noise generating activities have to occur at night the people in the vicinity of the drilling shall be warned about the noise well in advance and the activities kept to a minimum.

m) Dust Control

Dust caused by strong winds shall be controlled by means of water spray vehicles. Dust omission from batching plants shall be subject to the relevant legislation and shall be the subject of inspection by the relevant office of the Department of Minerals and Energy.

n) Alien Vegetation

The contractor shall be held responsible for the removal of alien vegetation within the road reserve disturbed during road construction. This includes, for example, service roads, stockpile areas, stop/go facilities, windrows and wherever material generated for or from road construction has been stored temporarily or otherwise within the road reserve. This responsibility shall extend for the duration of the defects notification period.

RECORD KEEPING

The engineer and the DEO will continuously monitor the contractor's adherence to the approved impact prevention procedures and the engineer shall issue to the contractor a notice of non-compliance whenever transgressions are observed. The DEO should document the nature and magnitude of the non-compliance in a designated register, the action taken to discontinue the non-compliance, the action taken to mitigate its effects and the results of the actions. The non-compliance shall be documented and reported to the engineer in the monthly report.

Copies of any record of decision or EMP's for specific borrow pits or quarries used on the project shall be kept on site and made available for inspection by visiting officials from the employer or relevant environmental departments.

COMPLIANCE AND PENALTIES

The contractor shall act immediately when such notice of non-compliance is received and correct whatever is the cause for the issuing of the notice. Complaints received regarding activities on the construction site pertaining to the environment shall be recorded in a dedicated register and the response noted with the date and action taken. This record shall be submitted with the monthly reports and a verbal report given at the monthly site meetings.

Any avoidable non-compliance with the above-mentioned measures shall be considered sufficient ground for the imposition of a penalty

The following penalties shall apply for environmental violations:

a) Unnecessary removal or damage to trees

2600mm girth or less	:	R 5 000 per tree
Greater than 2600mm, but less than 6180mm girth	:	R 6 000 per tree
Greater than 6180mm girth	:	R10 000 per tree

b) Serious violations:

Hazardous chemical/oil spill and/or dumping in non-approved sites.	:	R10 000 per incident
General damage to sensitive environments.	:	R 5 000 per incident
Damage to cultural and historical sites.	:	R 5 000 per incident
Uncontrolled/unmanaged erosion (plus rehabilitation at contractor's cost).	:	R1 000 to R5 000 per incident
Unauthorised blasting activities.	:	R 5 000 per incident
Pollution of water sources.	:	R 10 000 per incident
Damage to sensitive vegetation within "no-go" areas of vegetation damaged, plus rehabilitation thereof at contractors cost	:	R 1 000 per incident

The engineer's decision with regard to what is considered a violation, its seriousness and the penalty imposed shall be final.

C3.76

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

c) Less serious violations:

Littering on site.	:	R1 000 per incident
Lighting of illegal fires on site.	:	R1 000 per incident
Persistent or un-repaired fuel and oil leaks.	:	R1 000 per incident
Any person related to the contractor's operations found within the designated "no-go" areas	:	R 500 per incident
Any vehicles or equipment related to the Contractor's operations found within the designated "no-go" areas	:	R 500 per incident
Excess dust or excess noise emanating from site.	:	R 500 per incident
Dumping of milled material in side drains or on grassed areas:	:	R 500 per incident
Possession or use of intoxicating substances on site.	:	R 500 per incident
Any vehicles being driven in excess of designated speed limits.	:	R 500 per incident
Removal and/or damage to flora or cultural or heritage objects on site, and/or killing of wildlife.	:	R 500 per incident
Illegal hunting.	:	R 500 per incident
Urination and defecation anywhere except in designated areas.	:	R 500 per incident

The engineer's decision with regard to what is considered a violation, its seriousness and the penalty imposed shall be final. The calculation shall include allied construction activities in the same way as the calculation of reduced payments under section 8200. The imposition of such a penalty shall not preclude the relevant provincial or national authority from applying an additional penalty in accordance with its statutory powers. Any non-compliance with the agreed procedures of the EMP is a transgression of the various statutes and laws that define the manner by which the environment is managed.

Failure to redress the cause shall be reported to the relevant authority for them to deal with the transgression, as it deems fit.

MEASUREMENT AND PAYMENT

The cost of complying to this specification shall be deemed to be included in the rates tendered for this project.

Item	Unit
B100.01	Penalty for unnecessary removal or damage to trees for the following diameter sizes
(a)	2600mm girth or less number (No)
(b)	Greater than 2600mm, but less than 6180mm girth number (No)
(c)	Greater than 6180mm girth number (No)

The unit of measurement shall be the number of trees by diameter size removed unnecessary or damaged. The penalty rates applied shall be those stated in clause C3.4.3.2.3.

Item	Unit
B100.02	Penalty for serious violations
(a)	Hazardous chemical/oil spill and/or dumping in non-approved sites number (No)
(b)	General damage to sensitive environments
(c)	Damage to cultural and historical sites number (No)
(d)	Pollution of water sources number (No)
(e)	Unauthorised blasting activities number (No)
(f)	Uncontrolled/unmanaged erosion per incident, depending on environment impacts, plus rehabilitation at contractor's cost) number (No)
(g)	Damage to sensitive vegetation within "no-go" areas of vegetation damaged, plus rehabilitation thereof at contractors cost number (No)

C3.77

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

The unit of measurement for B100.02 (a) to (g) shall be the number of serious violation incidents. The penalty rates to be applied shall be those stated in clause C3.4.3.2.3.

Item	Unit
B100.03 Penalty for less serious violations	
Littering on site number (No)	
Lighting of illegal fires on site	number (No)
Persistent or un-repaired fuel and oil leaks	number (No)
Any person related to the contractor's operations found within the designated "no-go" areas	number (No)
Any vehicles or equipment related to the Contractor's operations found within the designated "no-go" areas	number (No)
Excess dust or excess noise emanating from site	number (No)
Dumping of milled material in side drains or on grassed areas	number (No)
Possession or use of intoxicating substances on site	number (No)
Any vehicles being driven in excess of designated speed limits	number (No)
Removal and/or damage to flora or cultural or heritage objects on site, and/or killing of wildlife	number (No)
Illegal hunting number (No)	
Urination and defecation anywhere except in designated area	number (No)

The unit of measurement shall be the number of less serious violation incidents. The penalty rates applied shall be those stated in clause C3.4.3.2.3.

The engineer's decision with regard to what is considered a violation, its seriousness and the penalty imposed shall be final. The calculation shall include allied construction activities in the same way as the calculation of reduced payments under section 8200. The imposition of such a penalty shall not preclude the relevant provincial or national authority from applying an additional penalty in accordance with its statutory powers. Any non-compliance with the agreed procedures of the EMP is a transgression of the various statutes and laws that define the manner by which the environment is managed. Failure to redress the cause shall be reported to the relevant authority for them to deal with the transgression, as it deems fit.

MAKHADO LOCAL MUNICIPALITY



CONTRACT NO. 26 of 2025

UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD – PHASE 1

C4 SITE INFORMATION

Site Inspection

The bidder shall inform him/herself on the nature of the site and inspect the site.

The Employer's Agent will consider a bid only if the site inspection and/or bidder's meeting arranged by the Employer's Agent has been attended by a representative who must;

- Be suitably qualified to comprehend the implications of the work involved and
- Be the bidder him/herself or a person in the direct employ of the bidder.

Site Information

A geotechnical investigation has been carried out and the information is provided.

Locality Plan

See attached.

C4.1

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Contractor

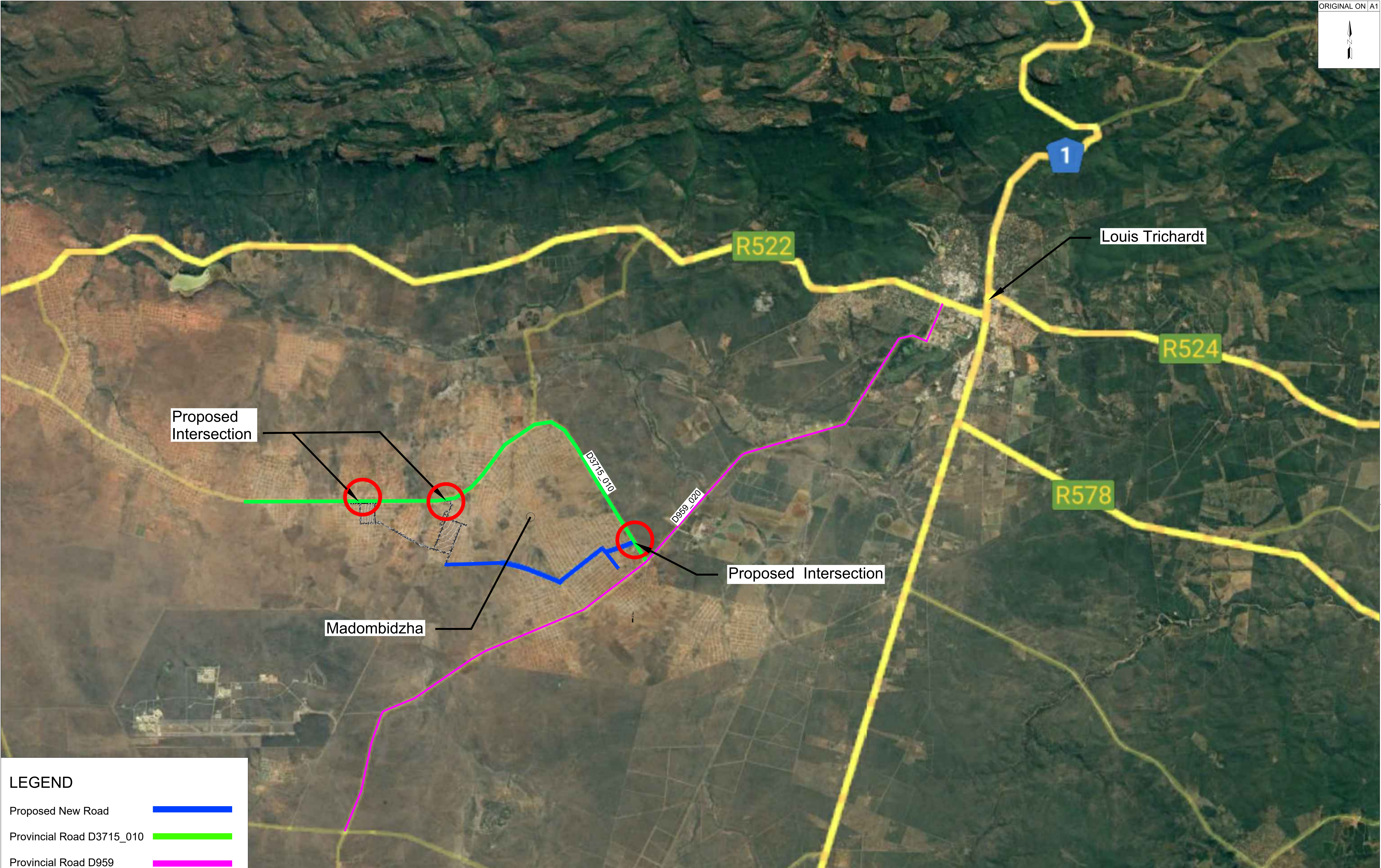
Witness 1

Witness 2

Employer

Witness 1

Witness 2





LEGEND

Proposed New Road

Provincial Road D3715_010

Provincial Road D959

GENERAL LAYOUT SCALE 1:50 000																															
				DESIGNED BY		DESIGNED M.K		CONSULTANT		RECOMMENDED		CLIENT		SCALE		CLIENT		MAKHADO LOCAL MUNICIPALITY		TYPE OF PLANNING		PRELIMINARY DESIGN		BID No.							
				 AGC Consulting Engineers		DESIGN CHECKED M.T		..... for CONSULTING ENGINEER DATE:		..... for HEAD OF DEPARTMENT DATE:		 MAKHADO MUNICIPALITY PRIVATE BAG X2596, LOUIS TRICHARDT, 0920		AS SHOWN		PROJECT TITLE		UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND REVELE VILLAGES				SHEET 1 OF 1							
						DRAWN P.C																		REVISION		DRAWING TITLE		MADOMBIDZHA LOCALITY PLAN		DRAWING No. AGC-CIV-PD-GL-001	
						DRAWING CHECKED A.C																									
No. DATE		REVISION		REVISED BY DATE										(A)																	



Centerline Summary

Client:	AGC Consulting Engineers
Project:	Upgrading of Madombidza (50/50), Ramatsha to Ravele Access Road

Sample Details				Atterberg Limits				Mod AASHTO		Interpreted CBR Values				Colto Class.
Sample No.	TP No.	Sample Depth	Sample Description (Unified Soil Class.)	GM	LL	PI	LS	MDD (Kg/m ³)	OMC (%)	100	95	93	90	
T02680/1	TP1	0,28-0,7	Dark Brown clayey Sand	1,4	28	13	6,5	1895	11,6	24	11	8	5	G9
T02680/2	TP2	0,05-0,23	Dark Brown silty/clayey Sand	1,0	21	7	3,3	2075	9,3	9	5	4	3	<G9
T02680/3	TP3	0,4-1,00	Light Brown clayey Sand	2,0	28	10	4,3	2124	9,1	19	11	8	6	G9
T02680/4	TP4	0,00-0,18	Light Brown poorly-graded silty Sand	2,2	-	SP	1,4	2180	7,7	43	22	17	12	G7
T02680/5	TP5	0,18-0,67	Dark Brown clayey Sand	1,9	35	15	6,9	2009	10,5	36	18	13	9	G8
T02680/6	TP7	0,08-0,40	Dark Brown silty Sand	1,0	-	SP	1,4	2127	7,5	40	14	10	5	G8
T02680/7	TP9	0,33-0,72	Dark Brown clayey Sand	2,0	30	13	6,2	2112	7,3	44	15	9	5	G9
T02680/8	TP10	0,7-1,00	Dark Yellow Clayey Gravel	2,2	46	21	9,8	2113	9,5	39	21	16	11	<G9
T02680/9	TP11	0,2-1,00	Dark Brown High-plasticity Silt	0,9	53	24	10,9	1731	16,4	3	2	1	1	<G9
T02680/10	TP12	0,0-0,8	Light Brown poorly-graded silty Gravel	2,2	-	SP	1,8	2117	9,6	33	15	11	6	G8
T02680/11	TP13	0,08-0,37	Dark Brown clayey Sand	1,0	29	14	5,8	1980	10,1	24	12	9	6	<G9
T02680/12	TP15	0,64-1,00	Light Brown silty Sand	1,9	47	17	8,5	2029	8,6	35	17	13	8	<G9

TP Position	Lat	Long	Centerline Layout
Test Pit 1	23° 6'35.38"S	29°48'56.08"E	
Test Pit 2	23° 6'39.47"S	29°48'45.44"E	
Test Pit 3	23° 6'42.94"S	29°48'34.43"E	
Test Pit 4	23° 6'58.31"S	29°48'41.41"E	
Test Pit 5	23° 6'50.19"S	29°48'34.67"E	
Test Pit 6	23° 6'41.75"S	29°48'27.90"E	
Test Pit 7	23° 6'44.94"S	29°48'20.60"E	
Test Pit 8	23° 6'51.22"S	29°48'11.66"E	
Test Pit 9	23° 6'57.44"S	29°48'3.07"E	
Test Pit 10	23° 7'3.40"S	29°47'54.72"E	
Test Pit 11	23° 7'10.04"S	29°47'45.34"E	
Test Pit 12	23° 7'12.07"S	29°47'42.06"E	
Test Pit 13	23° 7'8.41"S	29°47'32.92"E	
Test Pit 14	23° 7'4.73"S	29°47'23.25"E	
Test Pit 15	23° 7'1.25"S	29°47'13.69"E	

DCP Data

DCP No.	Test Position	Inferred In-situ CBR (from weighted averages) for the following depth ranges (mm)						Max. Pen. Depth (mm)
		0-150	150-300	300-450	450-600	600-750	750-900	
DCP 1	Test Pit 1	>110	83	48	42	-	-	660
DCP 2	Test Pit 2	102	95	-	-	-	-	440
DCP 3	Test Pit 3	>110	-	-	-	-	-	190
DCP 4	Test Pit 4	81	49	-	-	-	-	450
DCP 5	Test Pit 5	59	48	-	-	-	-	320
DCP 6	Test Pit 6	89	86	56	-	-	-	550
DCP 7	Test Pit 7	>110	31	12	12	33	-	765
DCP 8	Test Pit 8	108	>110	-	-	-	-	395
DCP 9	Test Pit 9	>110	56	72	-	-	-	475
DCP 10	Test Pit 10	59	52	53	-	-	-	515
DCP 11	Test Pit 11	74	53	-	-	-	-	405
DCP 12	Test Pit 12	>110	102	-	-	-	-	420
DCP 13	Test Pit 13	28	10	8	1	22	22	930
DCP 14	Test Pit 14	>110	-	-	-	-	-	260
DCP 15	Test Pit 15	52	16	-	-	-	-	450
DCP No.	Test Position	Weighted Average Penetration Rate (mm/blow) - DN						Max. Pen. Depth (mm)
		0-150	150-300	300-450	450-600	600-750	750-900	
DCP 1	Test Pit 1	2,7	3,5	5,5	6	-	-	660
DCP 2	Test Pit 2	3	3,2	-	-	-	-	440
DCP 3	Test Pit 3	2	-	-	-	-	-	190
DCP 4	Test Pit 4	3,6	5,4	-	-	-	-	450
DCP 5	Test Pit 5	4,6	5,5	-	-	-	-	320
DCP 6	Test Pit 6	3,3	3,4	4,8	-	-	-	550
DCP 7	Test Pit 7	2,5	7,7	16,6	15,8	7,2	-	765
DCP 8	Test Pit 8	2,9	2,1	-	-	-	-	395
DCP 9	Test Pit 9	2,8	4,8	3,9	-	-	-	475
DCP 10	Test Pit 10	4,6	5,1	5	-	-	-	515
DCP 11	Test Pit 11	3,8	5	-	-	-	-	405
DCP 12	Test Pit 12	2,2	3	-	-	-	-	420
DCP 13	Test Pit 13	8,2	18,3	22,5	17	10	10	930
DCP 14	Test Pit 14	2	-	-	-	-	-	260
DCP 15	Test Pit 15	5,1	13	-	-	-	-	450



Centerline Summary

Client:	AGC Consulting Engineers
Project:	Upgrading of Madombidza (50/50), Ramatsha to Ravele Access Road

Sample Details				Atterberg Limits				Mod AASHTO		Interpreted CBR Values				Colto Class.
Sample No.	TP No.	Sample Depth	Sample Description (Unified Soil Class.)	GM	LL	PI	LS	MDD (Kg/m ³)	OMC (%)	100	95	93	90	
T02680/13	TP16	0,0-0,18	Dark Brown silty/clayey Sand	1,4	20	6	2,8	2158	7,6	38	20	15	10	G7
T02680/14	TP17	0,20-0,6	Pale Red clayey Sand	1,8	35	14	6,8	2067	9,6	44	23	17	12	G7
T02680/15	TP19	0,38-0,91	Dark Reddish Brown poorly-graded clayey Gravel	2,6	32	17	8,4	2158	5,9	41	20	15	10	G7
T02680/16	TP20	0,0-0,31	Dark Brown clayey Sand	0,7	35	16	7,5	1926	10,7	4	2	2	1	<G9
T02680/17	TP21	0,11-0,19	Dark Reddish Brown low-plasticity Clay	0,6	40	20	9,3	1780	17,9	9	4	3	2	<G9
T02680/18	TP22	0,35-0,67	Light Brown clayey Sand	1,3	43	20	9,3	2071	8,4	29	14	11	7	<G9
T02680/19	TP24	0,39-0,65	Light Reddish Brown silty Sand	1,6	46	14	6,7	1788	15,3	51	26	20	13	G7
T02680/20	TP25	0,18-0,06	Dark Reddish Brown clayey Sand	1,7	29	14	6,6	1956	13,2	15	8	6	4	<G9
T02680/21	TP26	0,0-0,17	Light Brown poorly-graded silty Sand	2,1	-	SP	1,3	2150	7,5	77	40	30	20	G6
T02680/22	TP27	0,035-0,22	Dark Olive poorly-graded silty Sand	2,0	-	NP	0,0	2223	7,1	114	51	37	23	G5
T02680/23	TP28	0,05-0,35	Pale Red silty Sand	0,9	44	17	8,3	1747	16,3	8	4	3	2	<G9
T02680/24	TP30	0,045-0,30	Dark Brown clayey Sand	1,2	33	13	6,2	1954	11,5	16	8	6	4	<G9

TP Position	Lat	Long	Centerline Layout
Test Pit 16	23° 6'58.02"S	29°47'2.85"E	
Test Pit 17	23° 6'55.46"S	29°46'52.28"E	
Test Pit 18	23° 6'53.83"S	29°46'41.69"E	
Test Pit 19	23° 6'53.89"S	29°46'30.75"E	
Test Pit 20	23° 6'54.10"S	29°46'20.23"E	
Test Pit 21	23° 6'54.46"S	29°46'9.44"E	
Test Pit 22	23° 6'54.59"S	29°45'58.58"E	
Test Pit 23	23° 6'54.83"S	29°45'47.76"E	
Test Pit 24	23° 6'49.35"S	29°45'48.04"E	
Test Pit 25	23° 6'39.48"S	29°45'52.32"E	
Test Pit 26	23° 6'27.67"S	29°45'57.40"E	
Test Pit 27	23° 6'17.65"S	29°46'1.85"E	
Test Pit 28	23° 6'44.07"S	29°45'47.29"E	
Test Pit 29	23° 6'40.92"S	29°45'36.55"E	
Test Pit 30	23° 6'38.06"S	29°45'26.78"E	

DCP Data

DCP No.	Test Position	Inferred In-situ CBR (from weighed averages) for the following depth ranges (mm)						Max. Pen. Depth (mm)
		0-150	150-300	300-450	450-600	600-750	750-900	
DCP 16	Test Pit 16	29	29	66	25	-	-	740
DCP 17	Test Pit 17	70	70	55	53	-	-	630
DCP 18	Test Pit 18	42	42	70	70	-	-	615
DCP 19	Test Pit 19	>110	64	53	-	-	-	565
DCP 20	Test Pit 20	-	-	-	-	-	-	40
DCP 21	Test Pit 21	81	60	42	53	53	-	835
DCP 22	Test Pit 22	>110	66	53	-	-	-	520
DCP 23	Test Pit 23	99	44	48	70	70	-	840
DCP 24	Test Pit 24	37	17	53	-	-	-	475
DCP 25	Test Pit 25	89	61	42	-	-	-	485
DCP 26	Test Pit 26	108	-	-	-	-	-	260
DCP 27	Test Pit 27	95	70	89	-	-	-	505
DCP 28	Test Pit 28	>110	95	-	-	-	-	365
DCP 29	Test Pit 29	81	25	28	11	-	-	650
DCP 30	Test Pit 30	84	23	28	29	26	19	960
DCP No.	Test Position	Weighted Average Penetration Rate (mm/blow) - DN						Max. Pen. Depth (mm)
		0-150	150-300	300-450	450-600	600-750	750-900	
DCP 16	Test Pit 16	8	8	4,2	9	-	-	740
DCP 17	Test Pit 17	4	4	4,8	5	-	-	630
DCP 18	Test Pit 18	6	6	4	4	-	-	615
DCP 19	Test Pit 19	2,8	4,3	5	-	-	-	565
DCP 20	Test Pit 20	-	-	-	-	-	-	40
DCP 21	Test Pit 21	3,6	4,5	6	5	5	-	835
DCP 22	Test Pit 22	1,5	4,2	5	-	-	-	520
DCP 23	Test Pit 23	3,1	5,8	5,5	4	4	-	840
DCP 24	Test Pit 24	6,7	12	5	-	-	-	475
DCP 25	Test Pit 25	3,3	4,5	6	-	-	-	485
DCP 26	Test Pit 26	2,9	-	-	-	-	-	260
DCP 27	Test Pit 27	3,2	4	3,3	-	-	-	505
DCP 28	Test Pit 28	2,2	3,2	-	-	-	-	365
DCP 29	Test Pit 29	3,6	9,1	8,2	17,3	-	-	650
DCP 30	Test Pit 30	3,5	9,5	8,2	8	8,8	11,1	960



Centerline Summary

Client:	AGC Consulting Engineers
Project:	Upgrading of Madombidza (50/50), Ramatsha to Ravele Access Road

Sample Details				Atterberg Limits				Mod AASHTO		Interpreted CBR Values				Colto Class.
Sample No.	TP No.	Sample Depth	Sample Description (Unified Soil Class.)	GM	LL	PI	LS	MDD (Kg/m ³)	OMC (%)	100	95	93	90	
T02680/24	TP30	0,045-0,30	Dark Brown clayey Sand	1,2	33	13	6,2	1954	11,5	16	8	6	4	<G9
T02680/25	TP31	0,34-1,00	Dark Brown clayey Sand	0,9	34	15	6,9	1809	15,3	8	4	3	2	<G9
T02680/26	TP32	0,0-0,09	Dark Reddish Orange well-graded clayey Gravel	2,3	28	11	5,3	2159	7,4	41	20	16	10	G7
T02680/27	TP33	0,05-0,26	Light Brown well-graded silty Gravel	2,4	-	SP	0,8	2126	6,6	105	54	42	28	G4
T02680/28	TP34	0,16-0,38	Dark Reddish Brown clayey Sand	1,7	35	16	6,8	2042	9,9	23	19	9	6	<G9
T02680/29	TP35	0,51-0,99	Dark Brown clayey Sand	1,8	35	14	7,0	2064	9,5	20	10	8	5	G9
T02680/30	TP37	0,11-0,34	Dark Brown clayey Sand	1,6	23	8	3,6	2150	6,8	45	23	17	11	G7
T02680/31	TP38	0,25-0,62	Light Brown clayey Sand	2,2	27	9	4,1	2148	7,6	59	29	22	14	G6
T02680/32	TP39	0,05-0,35	Dark Reddish Brown clayey Sand	2,1	28	8	3,5	2196	5,8	57	29	22	14	G6
T02680/33	TP40	0,08-0,58	Dark Grey Clayey Gravel	2,3	31	12	5,6	2200	6,3	48	27	22	15	G7
T02680/34	TP41	0,33-0,82	Dark Brown poorly-graded clayey Gravel	2,3	20	4	2,0	2242	6,4	77	38	29	19	G6
T02680/35	TP42	0,03-0,39	Pale Red clayey Sand	0,8	39	18	8,9	1823	14,7	6	3	2	1	<G9
T02680/36	TP43	0,04-0,19	Dark Reddish Brown low-plasticity Clay	0,7	38	17	8,1	1857	12	6	3	2	2	<G9
T02680/37	TP45	0,55-0,79	Light Reddish Brown clayey Sand	1,3	33	12	6,2	1756	16,6	19	10	8	5	G9
T02680/38	TP45	0,07-0,21	Light Brown well-graded clayey Grave	2,3	18	4	2,0	2184	8,2	88	43	32	21	G6

TP Position	Lat	Long	Centerline Layout
Test Pit 31	23° 6'34.36"S	29°45'16.28"E	
Test Pit 32	23° 6'29.50"S	29°45'7.10"E	
Test Pit 33	23° 6'24.48"S	29°44'58.07"E	
Test Pit 34	23° 6'19.40"S	29°44'48.25"E	
Test Pit 35	23° 6'14.97"S	29°44'39.63"E	
Test Pit 36	23° 6'14.97"S	29°44'29.13"E	
Test Pit 37	23° 6'15.16"S	29°44'20.24"E	
Test Pit 38	23° 6'9.73"S	29°44'18.97"E	
Test Pit 39	23° 5'59.88"S	29°44'18.62"E	
Test Pit 40	23° 6'10.01"S	29°44'33.84"E	
Test Pit 41	23° 5'59.39"S	29°44'33.58"E	
Test Pit 42	23° 6'35.20"S	29°45'36.01"E	
Test Pit 43	23° 6'25.42"S	29°45'40.36"E	
Test Pit 44	23° 6'13.64"S	29°45'45.48"E	
Test Pit 45	23° 5'59.87"S	29°45'51.70"E	

DCP Data

DCP No.	Test Position	Inferred In-situ CBR (from weighed averages) for the following depth ranges (mm)						Max. Pen. Depth (mm)
		0-150	150-300	300-450	450-600	600-750	750-900	
DCP 31	Test Pit 31	95	37	46	-	-	-	550
DCP 32	Test Pit 32	>110	70	70	-	-	-	500
DCP 33	Test Pit 33	65	44	34	20	-	-	700
DCP 34	Test Pit 34	80	45	42	-	-	-	470
DCP 35	Test Pit 35	28	49	35	35	49	-	885
DCP 36	Test Pit 36	59	48	77	-	-	-	525
DCP 37	Test Pit 37	70	99	102	-	-	-	580
DCP 38	Test Pit 38	42	53	39	48	43	-	850
DCP 39	Test Pit 39	>110	73	70	-	-	-	550
DCP 40	Test Pit 40	89	73	70	-	-	-	525
DCP 41	Test Pit 41	39	81	70	-	-	-	545
DCP 42	Test Pit 42	19	16	32	41	29	-	800
DCP 43	Test Pit 43	35	23	20	35	35	35	970
DCP 44	Test Pit 44	39	9	3	4	8	18	960
DCP 45	Test Pit 45	70	63	39	-	-	-	570
DCP No.	Test Position	Weighted Average Penetration Rate (mm/blow) - DN						Max. Pen. Depth (mm)
		0-150	150-300	300-450	450-600	600-750	750-900	
DCP 31	Test Pit 31	3,2	6,7	5,6	-	-	-	550
DCP 32	Test Pit 32	2,6	4	4	-	-	-	500
DCP 33	Test Pit 33	4,3	5,8	7,1	10,9	-	-	700
DCP 34	Test Pit 34	3,6	5,7	6	-	-	-	470
DCP 35	Test Pit 35	8,2	5,3	6,9	6,9	5,4	-	885
DCP 36	Test Pit 36	4,6	5,5	3,8	-	-	-	525
DCP 37	Test Pit 37	4	3,1	3	-	-	-	580
DCP 38	Test Pit 38	6	5	6,3	5,4	5,9	-	850
DCP 39	Test Pit 39	1,8	3,9	4	-	-	-	550
DCP 40	Test Pit 40	3,3	3,9	4	-	-	-	525
DCP 41	Test Pit 41	6,4	3,6	4	-	-	-	545
DCP 42	Test Pit 42	11,1	13,1	7,5	6,1	8	-	800
DCP 43	Test Pit 43	7	9,8	10,8	7	7	7	970
DCP 44	Test Pit 44	6,4	21	51	41,7	21,6	11,9	960
DCP 45	Test Pit 45	4	4,4	6,4	-	-	-	570




Hanko Investments T/A Tzaneen Lab
Postal Address P.O. Box 3784, Tzaneen, 0850
Physical Address: 1992 Industria Road, Tzaneen
Tel: 015 307 1661 **Email:** admin@tzaneenlab.co.za
Website: www.tzaneenlab.co.za

Client:	AGC Consulting Engineers
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Client:	AGC Consulting Engineers
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Project:	Upgrading of Madombidza (50/50), Ramatsha to Ravele Access Road
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[illegible]

TP Position	Lat	Long	Centerline Layout
Test Pit 46	23° 6'16.96"S	29°46'5.05"E	
Test Pit 47	23° 6'13.98"S	23° 6'13.98"S	
Test Pit 48	23° 6'11.48"S	29°45'47.57"E	
Test Pit 49	23° 6'17.04"S	29°45'41.19"E	
Test Pit 50	23° 6'8.06"S	29°45'44.06"E	
Test Pit 51	23° 5'57.13"S	29°45'50.26"E	


		Inferred In-situ CBR (from weighed averages) for the following depth ranges (mm)	
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[illegible]

3.1.2 Borrow Pit 1 Results Summary

<div><div><div><div>Tzaneen</div><div>Lab</div><div>CIVIL MATERIALS TESTING LABORATORIES</div></div></div><div><div>Hanco Investments T/A Tzaneen Lab</div><div>Postal Address P.O. Box 3784, Tzaneen, 0850</div><div>Physical Address: 1992 Industria Road, Tzaneen</div><div>Tel: 015 307 1661 Email: admin@tzaneenlab.co.za</div><div>Website: www.tzaneenlab.co.za</div></div></div>																
BORROW PIT 1 SUMMARY																
Client:			AGC Consulting													
Project:			Upgrading of Madombidza, Ramatsha to Ravele Access Road Borrow Pits													
Sample Details				Atterberg Limits				Mod AASHTO		Interpreted CBR Values				COTO Class.		
Sample No.	TP No.	Sample Depth	Sample Description (Unified Soil Class.)	GM	LL	PI	LS	MDD (Kg/m³)	OMC (%)	100	95	93	90			
T02953/1	BP1-TP1	0,30-1,80	Dark Reddish Orange well-graded clayey Gravel	2,3	30	11	5,1	2151	8,9	48	22	16	10	G7		
T02953/2	BP1-TP2	0,3-1,10	Dark Reddish Brown well-graded clayey Gravel	2,4	27	6	3,4	2183	7,7	55	28	21	14	G6		
T02953/3	BP1-TP3	0,25-1,4	Pale Red Clayey Gravel	2,2	38	15	7,3	2081	7,8	68	35	26	18	G7		
T02953/4	BP1	EXISTING	Light Reddish Brown well-graded clayey Gravel	2,5	20	6	2,9	2192	6,7	84	45	35	24	G6		
T02953/5	BP1	MIXED	Dark Reddish Brown poorly-graded clayey Gravel	2,6	28	11	5,0	2131	7,3	95	48	36	24	G6		
Sample Details				Atterberg Limits			Mod AASHTO		Interpreted UCS / ITS Values (MPa)					Classification (COLTO)		
Sample No.	Description			LL	PI	LS	MDD (Kg/m³)	OMC (%)	100	97	95	90	ITS (kPa)	UCS	ITS	Combined
T02953/5a	Dark Reddish Brown poorly-graded clayey Gravel			21	5	2,67	2100	8,6	1,37	1,11	0,97	0,69	164	NO CLASS	NO CLASS	NO CLASS
T02953/5b	Dark Reddish Brown poorly-graded silty Gravel				NP	0	2060	9,7	1,71	1,38	1,2	0,84	237	C3	C4	NO CLASS
T02953/5c	Dark Reddish Brown poorly-graded silty Gravel			-	NP	0	2022	10,6	2,57	1,97	1,65	1,06	303	C3	C3	C3
TP Position		Lat		Long		Centerline Layout										
TP1		23° 8'11.45"S		29°46'9.97"E												
TP2		23° 8'10.65"S		29°46'10.80"E												
TP3		23° 8'11.71"S		29°46'11.35"E												
Position 4		23° 8'10.99"S		29°46'12.47"E												

3.2.2 Borrow Pit 2 Results Summary



Tzaneen

Lab

CIVIL MATERIALS
TESTING LABORATORIES

Hanco Investments T/A Tzaneen Lab

Postal Address P.O. Box 3784, Tzaneen, 0850

Physical Address: 1992 Industria Road, Tzaneen

Tel: 015 307 1661 Email: admin@tzaneenlab.co.za

Website: www.tzaneenlab.co.za

BORROW PIT 2 SUMMARY

Client:


AGC Consulting

Project:

Upgrading of Madombidza, Ramatsha to Ravele Access Road Borrow Pits

Sample Details				Atterberg Limits				Mod AASHTO		Interpreted CBR Values				COTO Class.
Sample No.	TP No.	Sample Depth	Sample Description (Unified Soil Class.)	GM	LL	PI	LS	MDD (Kg/m³)	OMC (%)	100	95	93	90	
T02953/6	BP2-TP1	0,15-0,60	Light Brown well-graded silty Gravel	2,4	-	NP	0,0	2142	7,2	71	39	31	21	G6
T02953/7	BP2-TP2	0,10-1,0	Light Olive well-graded silty Sand	2,1	-	SP	1,9	1988	11,4	40	23	18	13	G7
T02953/8	BP2	EXISTING	Light Brown well-graded silty Gravel	2,5	-	SP	1,8	2091	9,2	84	43	32	22	G6
T02953/9	BP2	MIXED	Light Brown well-graded clayey Gravel	2,5	24	7	3,6	2120	7,9	80	40	30	20	G6

Sample Details			Atterberg Limits			Mod AASHTO		Interpreted UCS / ITS Values (MPa)					Classification (COLTO)		
Sample No.	Description		LL	PI	LS	MDD (Kg/m³)	OMC (%)	100	97	95	90	ITS (kPa)	UCS	ITS	Combined
T02953/9a	Light Brown well-graded silty Gravel		-	NP	0	2113	8,2	1,33	1	0,82	0,5	187	C4	NO CLASS	NO CLASS
T02953/9b	Light Brown well-graded silty Gravel		-	NP	0	2075	9,1	1,67	1,34	1,16	0,8	228	C3	C4	NO CLASS
T02953/9c	Light Brown well-graded silty Gravel		-	NP	0	2034	10,4	2,17	1,74	1,5	1,04	264	C3	C3	C3

TP Position	Lat	Long	<div><div>AGC Consulting Engineers</div><div>1992 Industria Road, Tzaneen, 0850</div><div></div></div>
TP1	23° 6'47.64"S	29°46'30.85"E	
TP2	23° 6'46.23"S	29°46'31.77"E	
Position 3	23° 6'46.44"S	29°46'34.96"E	

MAKHADO LOCAL MUNICIPALITY



CONTRACT NO. 26 of 2025

**UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD –
PHASE 1**

C5 RELEVANT DOCUMENTATION

The following documents are attached hereto and form part of the Contract:

- (i) Ministerial Determination No.4: Extended Public Works Programmes

C5.1

<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

GOVERNMENT NOTICE

DEPARTMENT OF LABOUR

No. R. 347

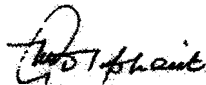
4 May 2012

BASIC CONDITIONS OF EMPLOYMENT ACT, 1997

MINISTERIAL DETERMINATION 4: EXPANDED PUBLIC WORKS PROGRAMMES

I, Nelisiwe Mildred Oliphant, Minister of Labour, hereby in terms of section 50 of the Basic Conditions of Employment Act, 1997, make a Ministerial Determination establishing conditions of employment for employees in Expanded Public Works Programmes, South Africa, in the Schedule hereto and determine the second Monday after the date of publication of this notice as the date from which the provisions of the said Ministerial Determination shall become binding.

All the provisions of the Ministerial Determination: Expanded Public Works Programmes published under Government Notice R949 in Government Gazette 33665 of 22 October 2010 will be superseded by this ministerial determination with effect from the date of implementation.



NM OLIPHANT, MP
Minister of Labour

10/04/2012

SCHEDULE

MINISTERIAL DETERMINATION NO: 3 : EXPANDED PUBLIC WORKS PROGRAMMES

Index

-
1. Definitions
 2. Application of this determination
 3. Sections not applicable to public works programmes
 4. Conditions
-

1. **Definitions**

1.1 In this determination –

“expanded public works programme” means a programme to provide public or community assets or services through a labour intensive programme initiated by government and funded from public resources.

1.2 Without limiting subsection (1), the following programmes constitute Expanded Public Works Programmes:

- (a) Environment and Culture Sector Programmes including: Working for Water, Working on Fire, Working for Wetlands, People and Parks, Working for Energy, Working for Woodlands, Working for the Coast, Landcare, Working on Waste, Working for Tourism, Investing in Culture Programmes
- (b) Infrastructure Sector Programmes and Projects declared part of EPWP which may include the construction, rehabilitation and maintenance of: rural and low-volume roads, storm-water drains, water reticulation, basic sanitation, footpaths, sidewalks, bicycle paths, schools and clinics.
- (c) Social Sector Programmes including Early Childhood Development, Home, Community Based Care, Community Safety and other community based programmes
- (d) All projects and programmes accessing the EPWP wage incentive including those implemented by Non Governmental organisations (NGO) and Community Based Organisations (CBO) and the Community Works Programme.
- (e) Any other programme deemed to be part of the EPWP as determined by the Department of Public Works

2. **Application**

This Determination applies to all employers and employees engaged in expanded public works programmes.

3. **The following provisions of the Basic Conditions of Employment Act do not apply to public works programmes –**

3.1 Section 10(2) [Overtime rate]

-
- | | | |
|-----|----------------------|--|
| 3.2 | Section 14(3) | [Remuneration required for meal intervals of longer than 75 minutes] |
| 3.3 | Section 29(h) to (p) | [Written particulars of employment] |
| 3.4 | Section 30 | [Display of employee's rights] |
| 3.5 | Section 41 | [Severance pay] |
| 3.6 | Section 37 | [Notice of termination] |
| 3.7 | Sections 51 – 58 | [Sectoral Determinations] |

4. Conditions

As set out in the ANNEXURE:

ANNEXURE**CONDITIONS OF EMPLOYMENT FOR EXPANDED PUBLIC WORKS PROGRAMMES****1. Introduction**

1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on an Expanded Public Works Programme (EPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a SPWP.

1.2 In this document –

- (a) “department” means any department of the State, implementing agent or contractor;
- (b) “employer” means any department, implementing agency or contractor that hires workers to work in elementary occupations on a EPWP;
- (c) “worker” means any person working in an elementary occupation on a EPWP;
- (d) “elementary occupation” means any occupation involving unskilled or semi-skilled work;
- (e) “management” means any person employed by a department or implementing agency to administer or execute an EPWP;
- (f) “task” means a fixed quantity of work;
- (g) “task-based work” means work in which a worker is paid a fixed rate for performing a task;
- (h) “task-rated worker” means a worker paid on the basis of the number of tasks completed;
- (i) “time-rated worker” means a worker paid on the basis of the length of time worked.

2. Terms of Work

2.1 Workers on an EPWP are employed on a temporary basis or contract basis.

3. **Normal Hours of Work**

- 3.1 An employer may not set tasks or hours of work that require a worker to work—
- (a) more than forty hours in any week;
 - (b) on more than five days in any week; and
 - (c) for more than eight hours on any day.
- 3.2 An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.
- 3.3 A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker.

4. **Meal Breaks**

- 4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.
- 4.2 An employer and worker may agree on longer meal breaks.
- 4.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.
- 4.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

5. **Special Conditions for Security Guards**

- 5.1 A security guard may work up to 55 hours per week and up to eleven hours per day.
- 5.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

6. **Daily Rest Period**

Every worker is entitled to a daily rest period of at least twelve consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

7. **Weekly Rest Period**

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

8. **Sick Leave**

- 8.1 Only workers who work more than 24 hours per month have the right to claim sick-pay in terms of this clause.
- 8.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.
- 8.3 A worker may accumulate a maximum of twelve days' sick leave in a year.
- 8.4 Accumulated sick-leave may not be transferred from one contract to another contract.
- 8.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.
- 8.6 An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.
- 8.7 An employer must pay a worker sick pay on the worker's usual payday.
- 8.8 Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is –
 - (a) absent from work for more than two consecutive days; or
 - (b) absent from work on more than two occasions in any eight-week period.

- 8.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.
- 8.10 A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

9. **Maternity Leave**

- 9.1 A worker may take up to four consecutive months' unpaid maternity leave.
- 9.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.
- 9.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.
- 9.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.
- 9.5 A worker may begin maternity leave –
 - (a) four weeks before the expected date of birth; or
 - (b) on an earlier date –
 - (i) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or
 - (ii) if agreed to between employer and worker; or
 - (c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.
- 9.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.

10. Family responsibility leave

10.1 Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances -

- (a) when the employee's child is born;
- (b) when the employee's child is sick;
- (c) in the event of a death of –
 - (i) the employee's spouse or life partner;
 - (ii) the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

11. Statement of Conditions

11.1 An employer must give a worker a statement containing the following details at the start of employment –

- (a) the employer's name and address and the name of the EPWP;
- (b) the tasks or job that the worker is to perform; and
- (c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;
- (d) the worker's rate of pay and how this is to be calculated;
- (e) the training that the worker will receive during the EPWP.

11.2 An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.

11.3 An employer must supply each worker with a copy of these conditions of employment.

12. Keeping Records

12.1 Every employer must keep a written record of at least the following –

- (a) the worker's name and position;

- (b) copy of an acceptable worker identification
 - (c) in the case of a task-rated worker, the number of tasks completed by the worker;
 - (d) in the case of a time-rated worker, the time worked by the worker;
 - (e) payments made to each worker.
- 12.2 The employer must keep this record for a period of at least three years after the completion of the EPWP.

13. Payment

- 13.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account.
- 13.2 A worker may not be paid less than the minimum EPWP wage rate of R63.18 per day or per task. This will be adjusted annually on the 1st of November in-line with inflation (available CPI as provided by StatsSA six (6) weeks before implementation).
- 13.3 A task-rated worker will only be paid for tasks that have been completed.
- 13.4 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.
- 13.5 A time-rated worker will be paid at the end of each month.
- 13.6 Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.
- 13.7 Payment in cash or by cheque must take place –
- (a) at the workplace or at a place agreed to by the worker;
 - (b) during the worker's working hours or within fifteen minutes of the start or finish of work;
 - (c) in a sealed envelope which becomes the property of the worker.
- 13.8 An employer must give a worker the following information in writing –

- (a) the period for which payment is made;
- (b) the numbers of tasks completed or hours worked;
- (c) the worker's earnings;
- (d) any money deducted from the payment;
- (e) the actual amount paid to the worker.

13.9 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it.

13.10 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

14. **Deductions**

14.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.

14.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.

14.3 An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.

14.4 An employer may not require or allow a worker to –

- (a) repay any payment except an overpayment previously made by the employer by mistake;
- (b) state that the worker received a greater amount of money than the employer actually paid to the worker; or
- (c) pay the employer or any other person for having been employed.

15. **Health and Safety**

15.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.

15.2 A worker must –

- (a) work in a way that does not endanger his/her health and safety or that of any other person;
- (b) obey any health and safety instruction;
- (c) obey all health and safety rules of the EPWP;
- (d) use any personal protective equipment or clothing issued by the employer;
- (e) report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

16. **Compensation for Injuries and Diseases**

- 16.1 It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on a EPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.
- 16.2 A worker must report any work-related injury or occupational disease to their employer or manager.
- 16.3 The employer must report the accident or disease to the Compensation Commissioner.
- 16.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

17. **Termination**

- 17.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.
- 17.2 A worker will not receive severance pay on termination.
- 17.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.

- 17.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available.
- 17.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available.

Certificate of Service

- 18.1 On termination of employment, a worker is entitled to a certificate stating –
- (a) the worker's full name;
 - (b) the name and address of the employer;
 - (c) the EPWP on which the worker worked;
 - (d) the work performed by the worker;
 - (e) any training received by the worker as part of the EPWP;
 - (f) the period for which the worker worked on the EPWP;
 - (g) any other information agreed on by the employer and worker.
-

MAKHADO LOCAL MUNICIPALITY



CONTRACT NO. 26 of 2025

**UPGRADING OF MADOMBIDZHA (50/50), RAMANTSHA TO RAVELE ACCESS ROAD –
PHASE 1**

C6 DRAWINGS

C4.1

Contractor

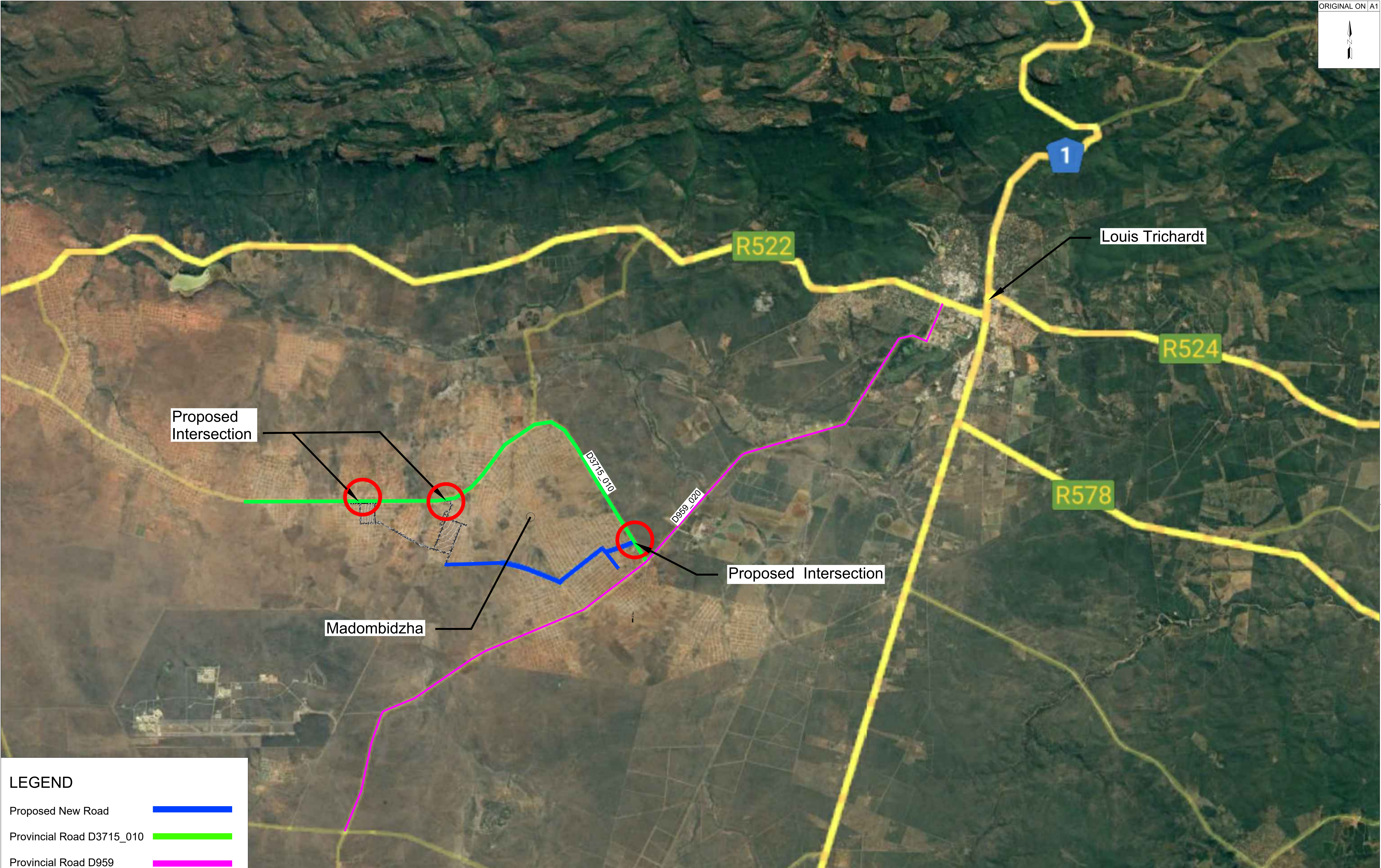
Witness 1

Witness 2

Employer

Witness 1

Witness 2





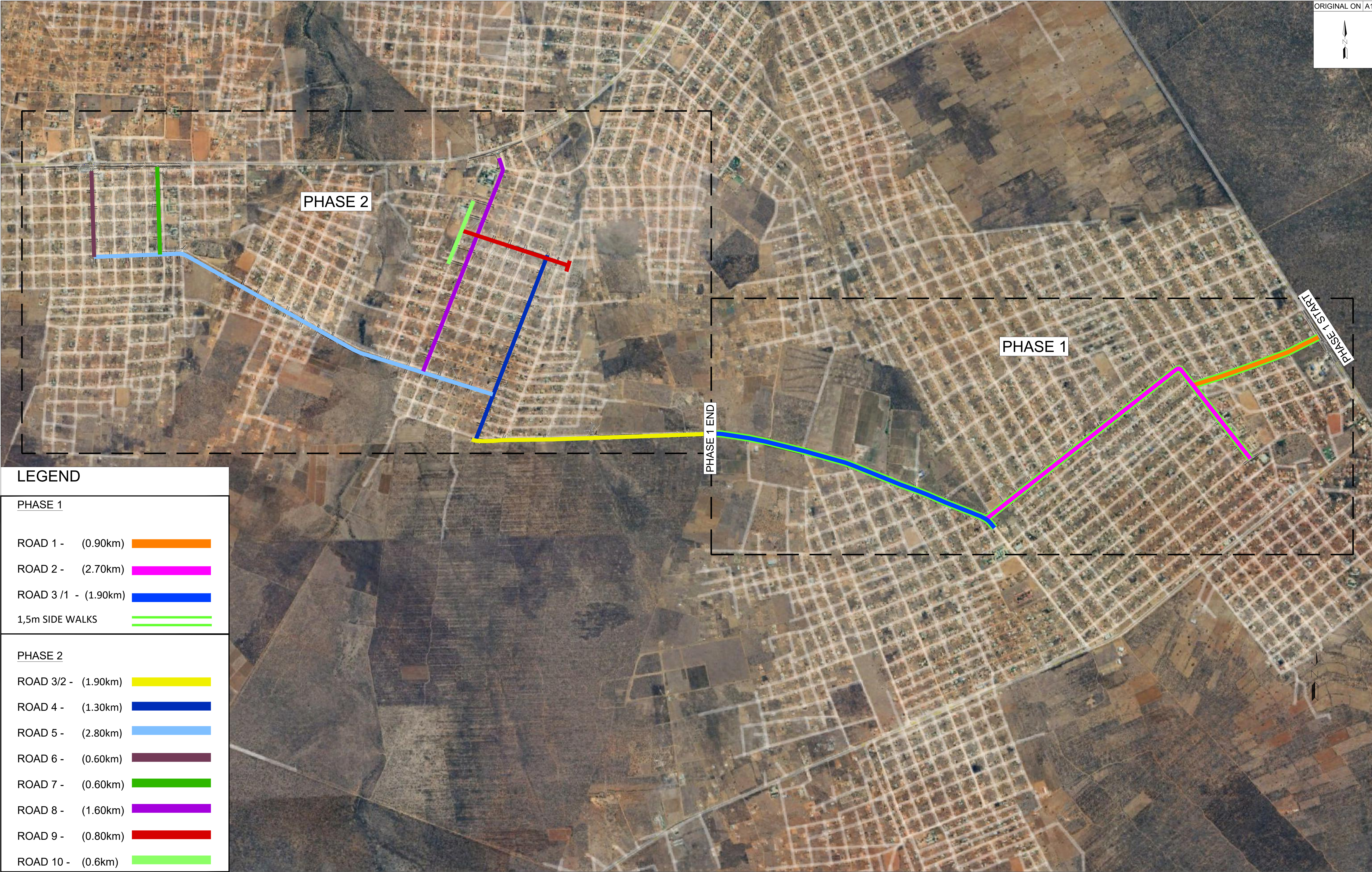
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Proposed New Road

Provincial Road D3715_010

Provincial Road D959



GENERAL LAYOUT SCALE 1:50 000																									
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				 AGC Consulting Engineers		DESIGN CHECKED M.T	 for CONSULTING ENGINEER	 for HEAD OF DEPARTMENT		 MAKHADO MUNICIPALITY PRIVATE BAG X2596, LOUIS TRICHARDT, 0920		AS SHOWN		PROJECT TITLE		UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND REVELE VILLAGES				SHEET 1 OF 1			
						DRAWN P.C																			
						DRAWING CHECKED A.C																			
No.		DATE		REVISION		REVISED BY		DATE						A		DRAWING TITLE		MADOMBIDZHA LOCALITY PLAN				DRAWING No. AGC-CIV-PD-GL-001			



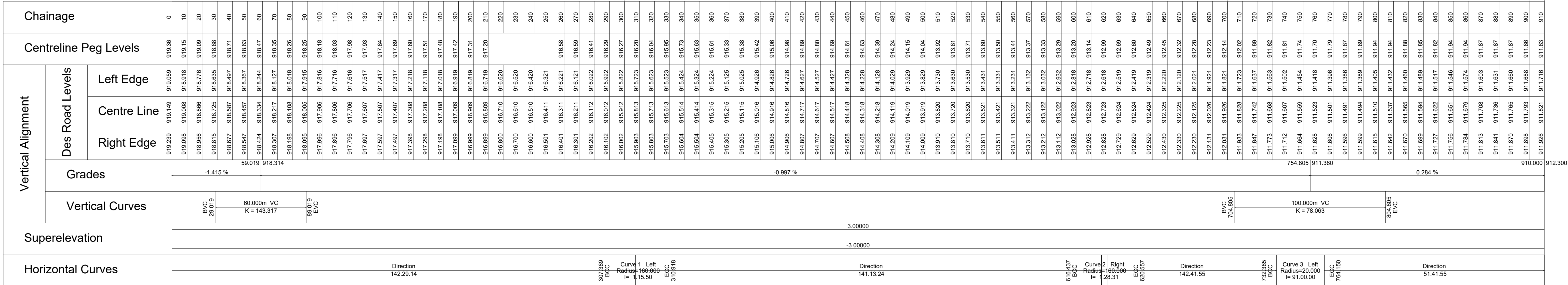
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- PHASE 1**
- ROAD 1 - (0.90km)
 - ROAD 2 - (2.70km)
 - ROAD 3 /1 - (1.90km)
 - 1,5m SIDE WALKS

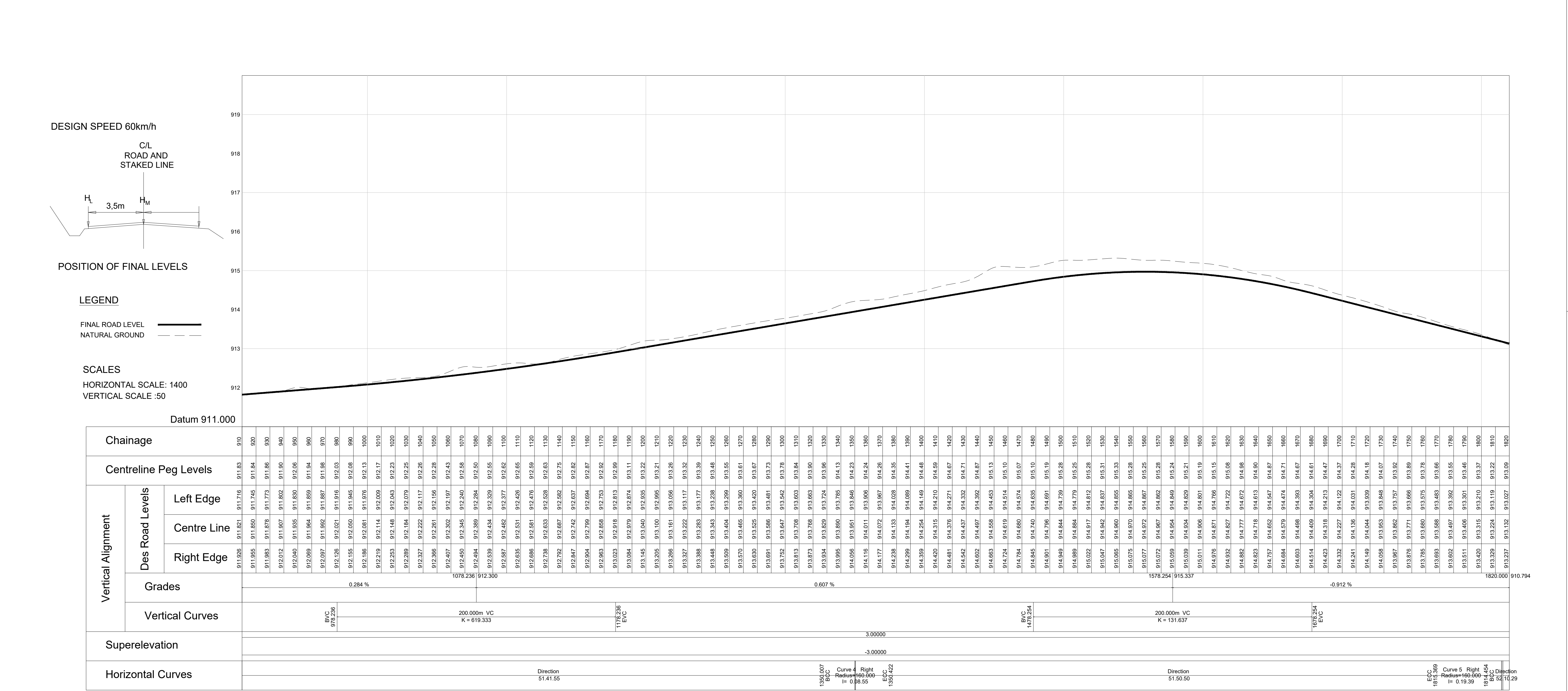
- PHASE 2**
- ROAD 3/2 - (1.90km)
 - ROAD 4 - (1.30km)
 - ROAD 5 - (2.80km)
 - ROAD 6 - (0.60km)
 - ROAD 7 - (0.60km)
 - ROAD 8 - (1.60km)
 - ROAD 9 - (0.80km)
 - ROAD 10 - (0.6km)

				DESIGNED BY	<div><div>AGC Consulting Engineers 3A Pierre Street Hampton Court Polokwane 0699</div></div>	DESIGNED M.K	CONSULTANT	RECOMMENDED	CLIENT	SCALE	CLIENT	MAKHADO LOCAL MUNICIPALITY	TYPE OF PLANNING	DETAIL DESIGN	BID No.
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						DRAWN P.C	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT	<div></div> PRIVATE BAG X2596, LOUIS TRICHARDT, 0920	REVISION		GENERAL ROADS PLAN LAYOUT			DRAWING No. AGC-CIV-PD-GL-001
No.	DATE	REVISION	REVISED BY	DATE		DRAWING CHECKED A.C	DATE:	DATE:		(A)	DRAWING TITLE				

Road Curve List						
No	Radius	Road2			TAN.Out	Deflection
		TR.In	TR.Out	TAN.In		
0	0.00	0.00	0.00	0.00	0.00	0.00.00
1	160.00	0.00	0.00	1.60	1.60	1.08.55
2	160.00	0.00	0.00	2.06	2.06	1.28.31
3	20.00	0.00	0.00	20.39	20.39	91.05.46
4	160.00	0.00	0.00	0.50	0.50	0.21.29
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6	0.00	0.00	0.00	0.00	0.00	0.00.00



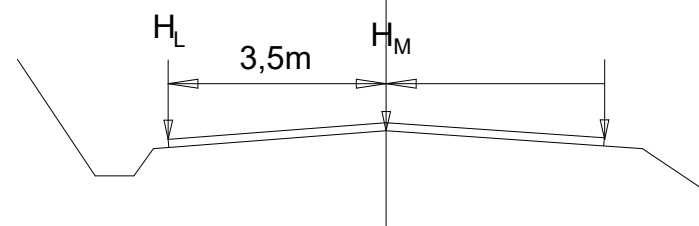
AGC-CIV-PD-RDLS-002



Road2				
Position	SV	Y-Coord	X-Coord	Radius
PI0	0	121709.91	2557946.24	0.00
BCC1	307.55	121897.68	2557702.67	
PI1	309.15	121898.66	2557701.40	160.00
ECC1	310.76	121899.66	2557700.14	
BCC2	616.44	122091.11	2557461.84	
PI2	618.50	122092.40	2557460.23	160.00
ECC2	620.56	122093.65	2557458.59	

Road2				
BCC3	732.35	122161.39	2557369.67	
PI3	748.25	122173.75	2557353.45	20.00
ECC3	764.15	122189.72	2557366.11	
BCC4	1333.93	122636.27	2557720.01	
PI4	1334.43	122636.66	2557720.32	160.00
ECC4	1334.93	122637.06	2557720.63	
BCC5	1814.44	123014.71	2558016.10	
PI5	1814.88	123015.06	2558016.38	160.00
ECC5	1815.32	123015.41	2558016.65	
PI6	2329.57	123418.67	2558335.76	

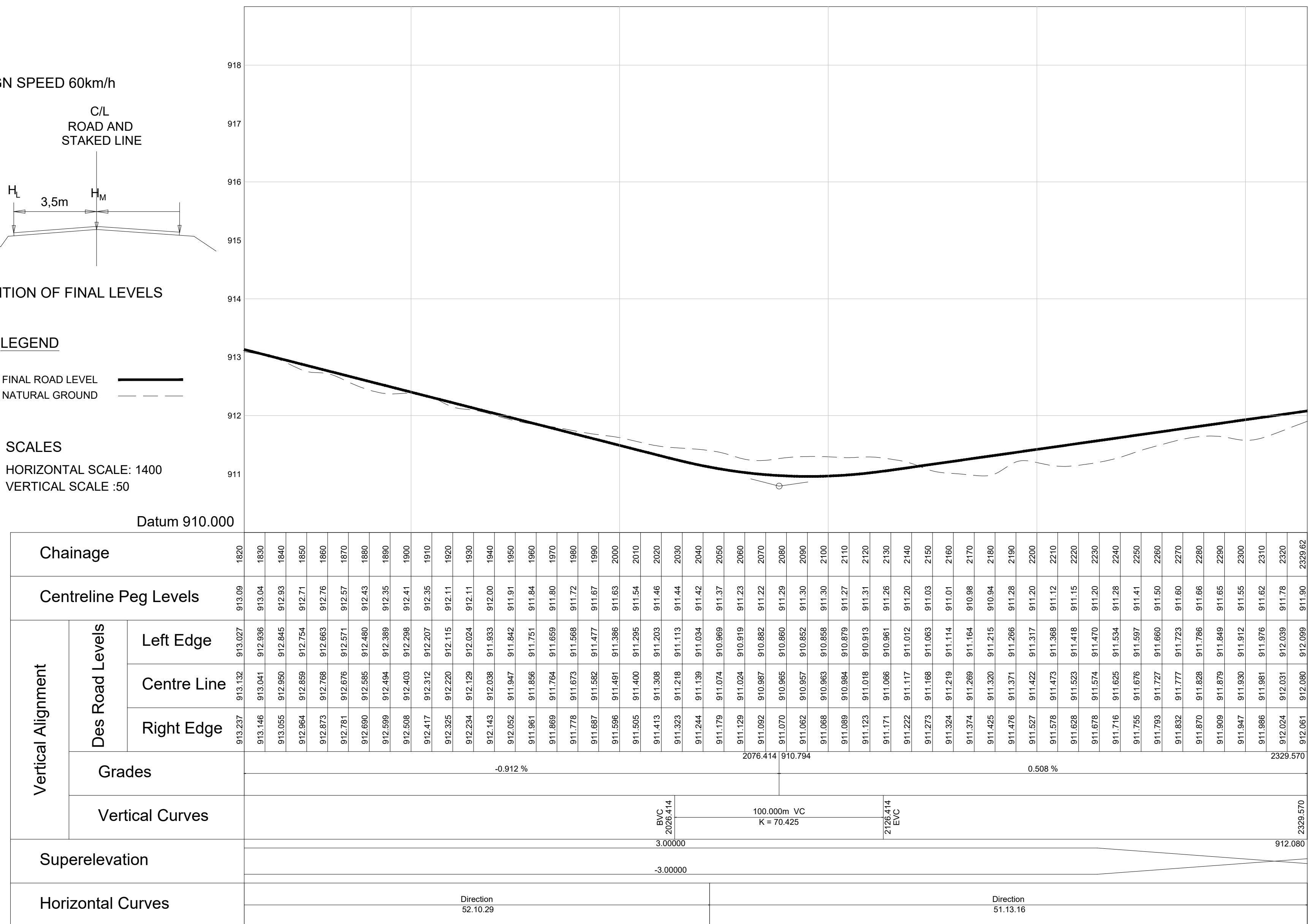
		Road2				
No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection
0	0.00	0.00	0.00	0.00	0.00	0.00.00
1	160.00	0.00	0.00	1.60	1.60	1.08.55
2	160.00	0.00	0.00	2.06	2.06	1.28.31
3	20.00	0.00	0.00	20.39	20.39	91.05.46
4	160.00	0.00	0.00	0.50	0.50	0.21.29
5	160.00	0.00	0.00	0.44	0.44	0.19.00
6	0.00	0.00	0.00	0.00	0.00	0.00.00



FINAL ROAD LEVEL —————

NATURAL GROUND - - - - -

HORIZONTAL SCALE: 1400
VERTICAL SCALE :50



No.	DATE	REVISION	REVISED BY DATE



AGC Consulting Engineers

AGC Consulting
Engineers
3A Pierre Street
Hampton Court
Polokwane
0699

M.R
DESIGN CHECKED M.T
DRAWN P.C
DRAWING CHECKED

.....
for CONSULTING ENGINEER
DATE:

.....
for HEAD OF DEPARTMENT
DATE:



MAKHADO MUNICIPALITY
PRIVATE BAG
X2596, LOUIS TRICHARDT
0920

AS SHOWN

REVISION

A

PROJECT TITLE
DRAWING TITLE

UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND REVELE VILLAGES

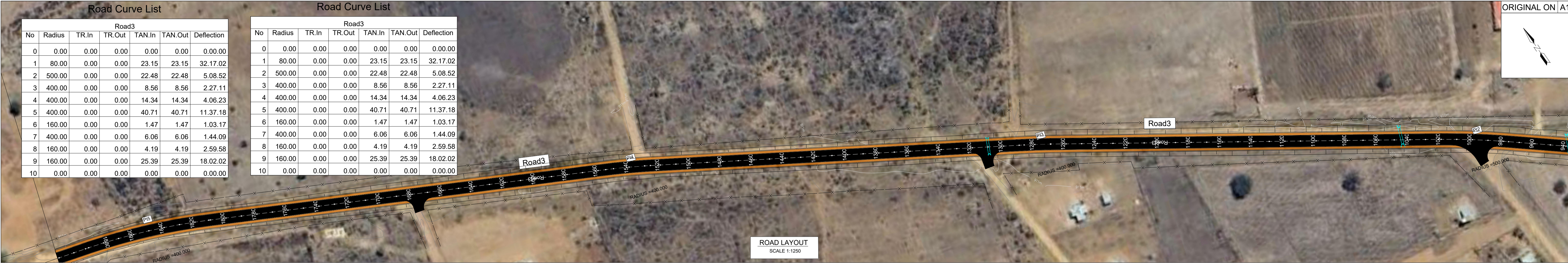
ROAD 2 LAYOUT AND LONG SECTION

PRELIMINARY DESIGN

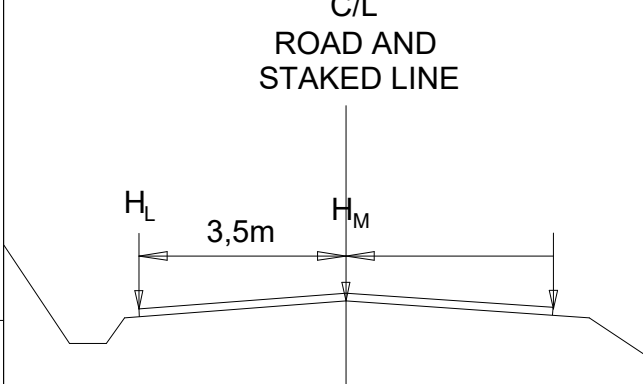
SHEET 3 OF 3

DRAWING No.

AGC-CIV-PD-RDLS-002



DESIGN SPEED 60km/h



POSITION OF FINAL LEVELS

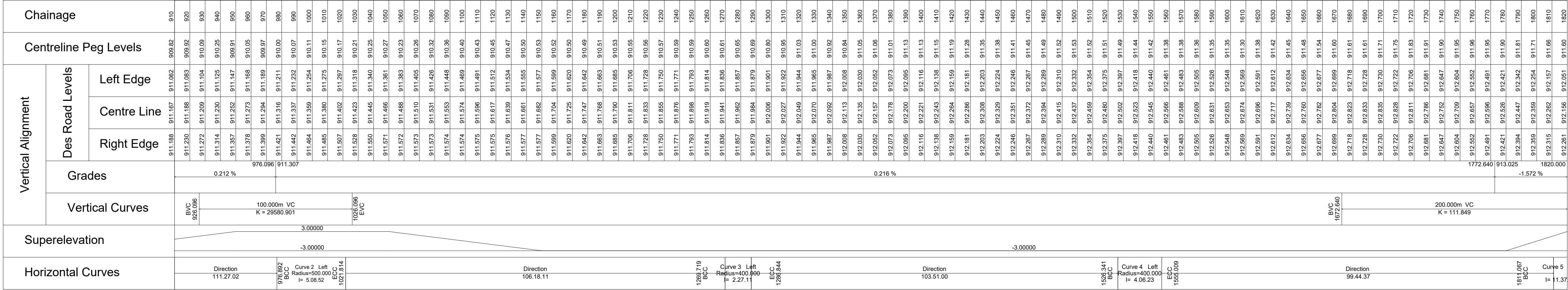
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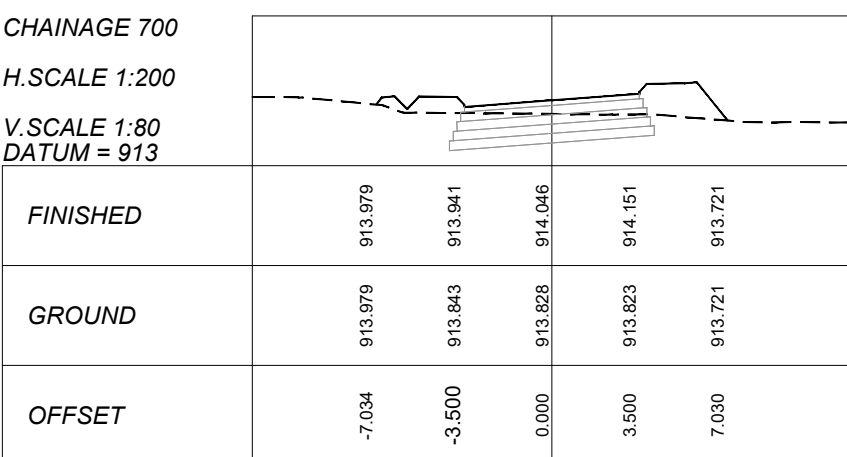
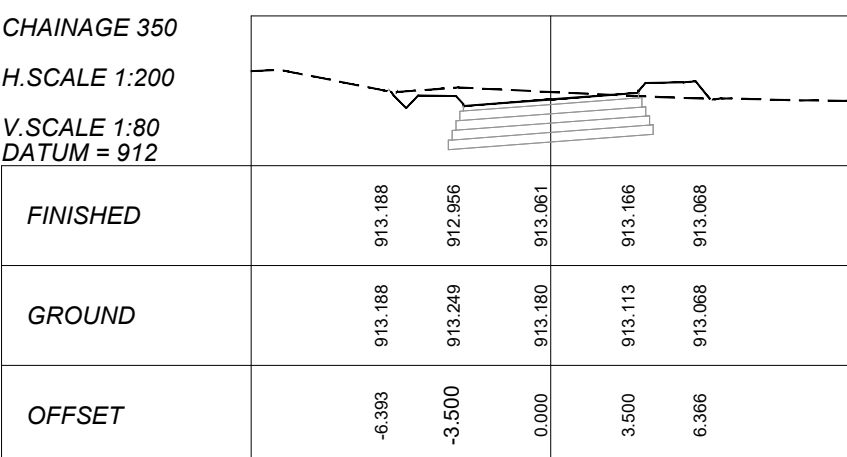
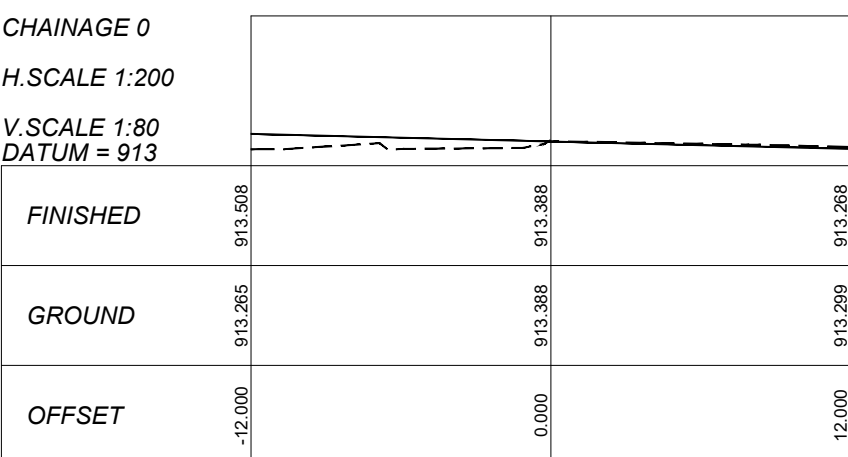
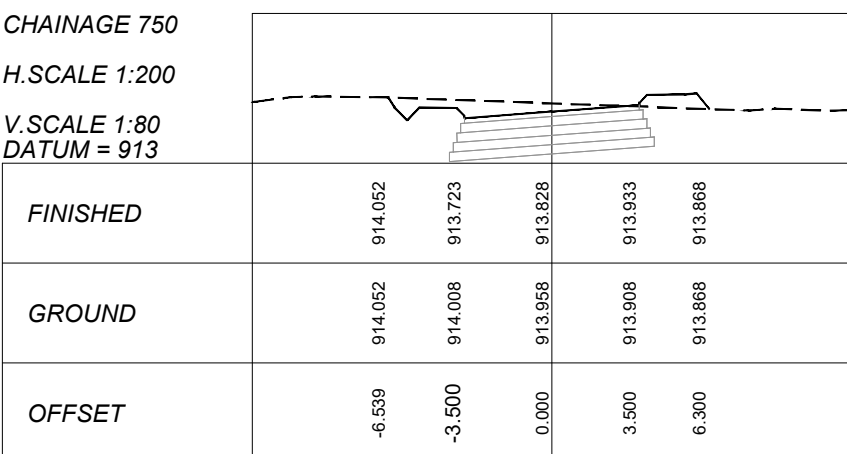
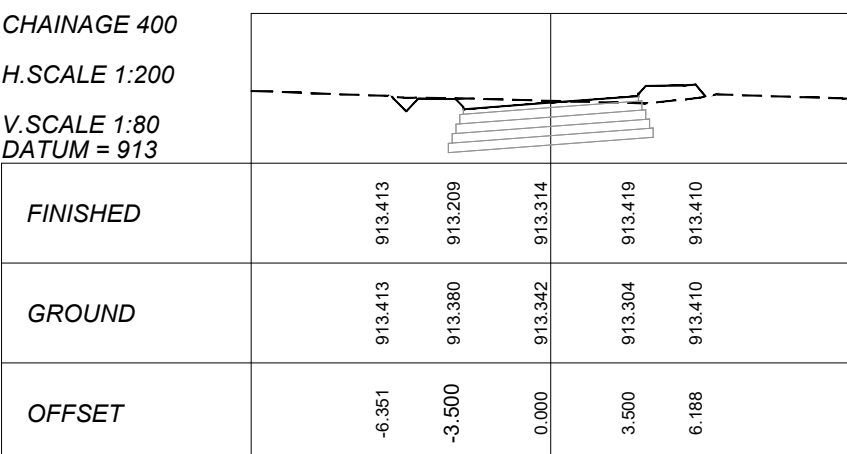
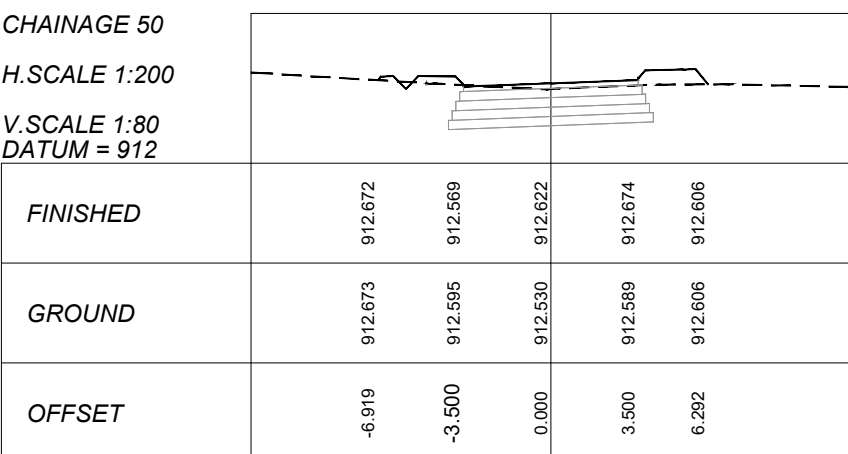
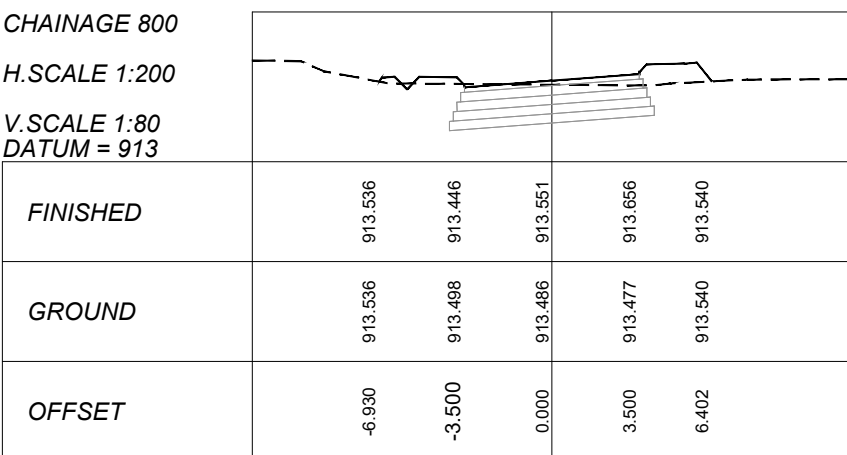
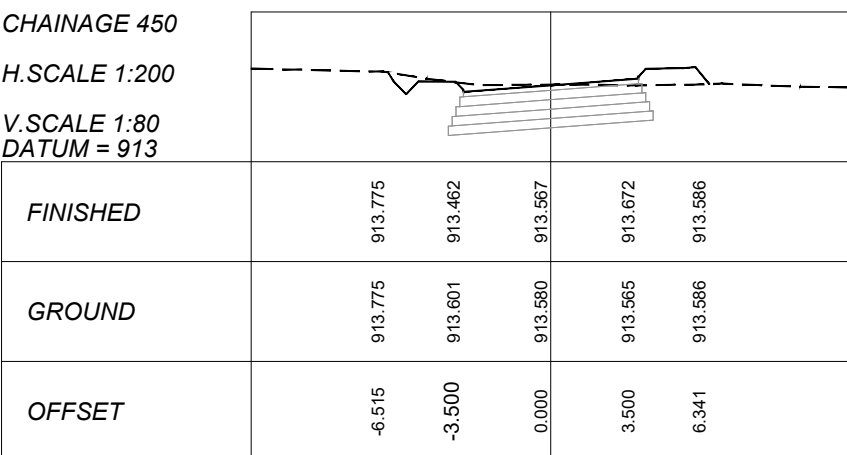
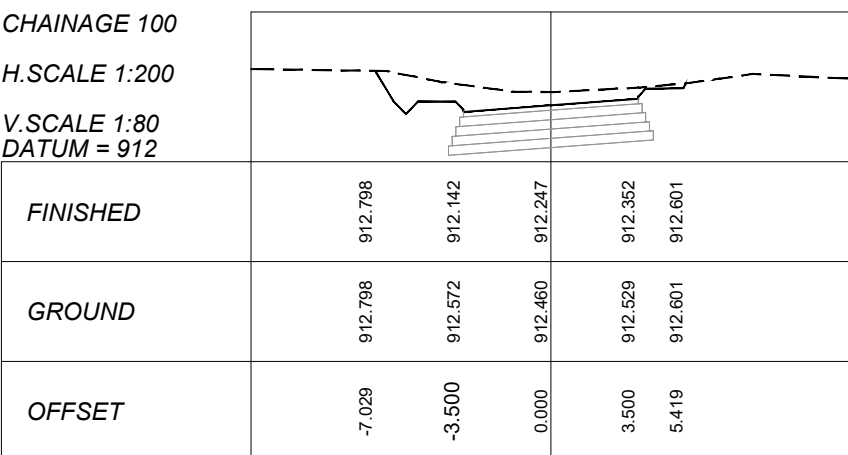
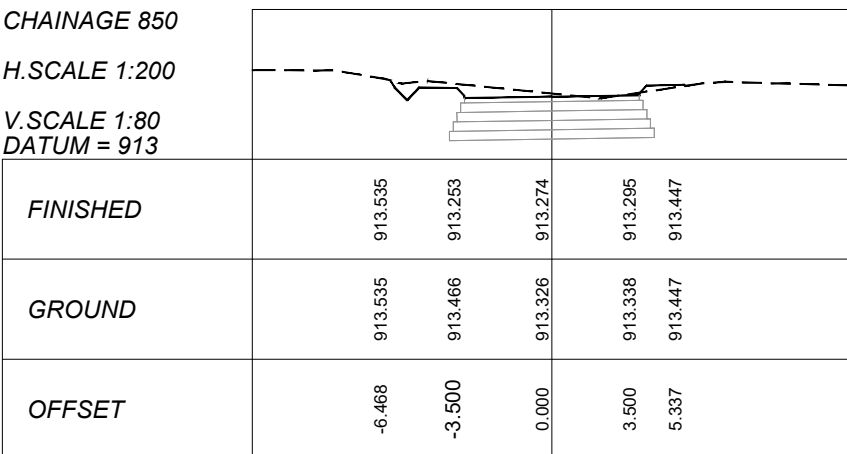
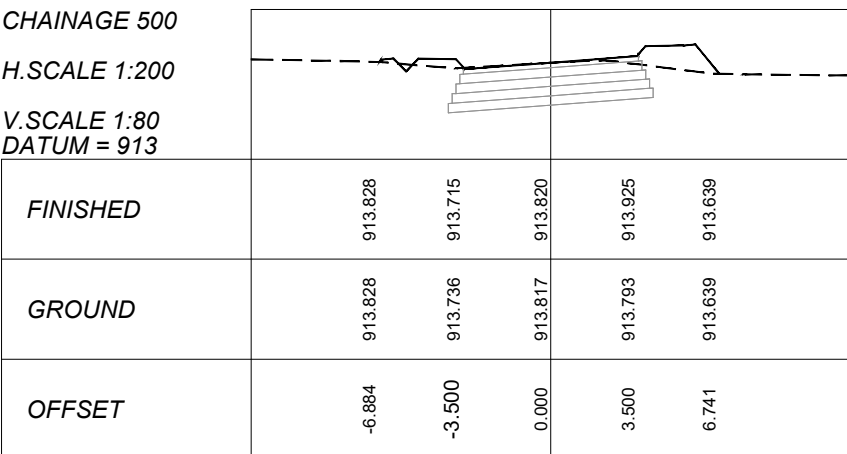
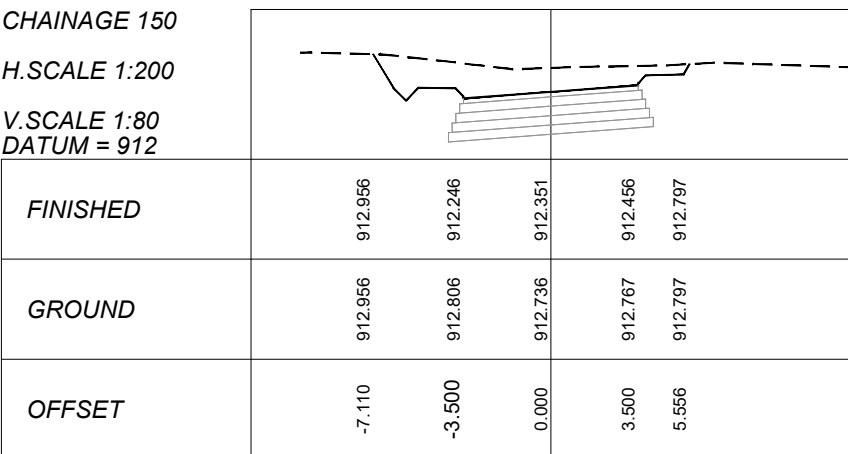
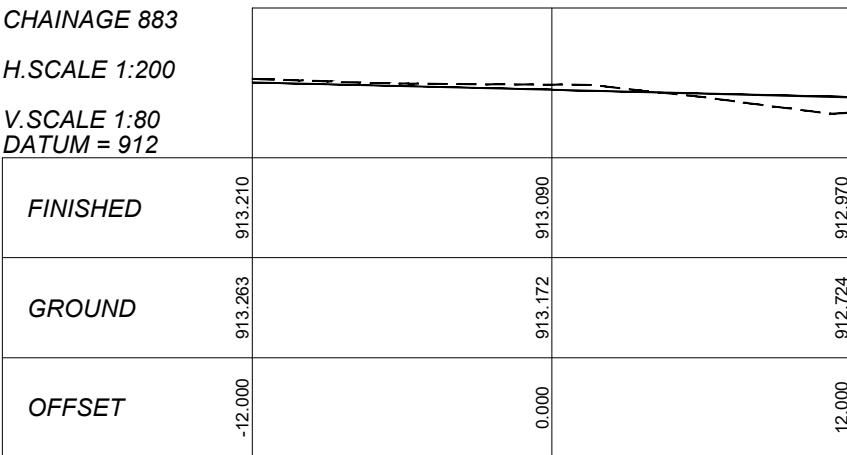
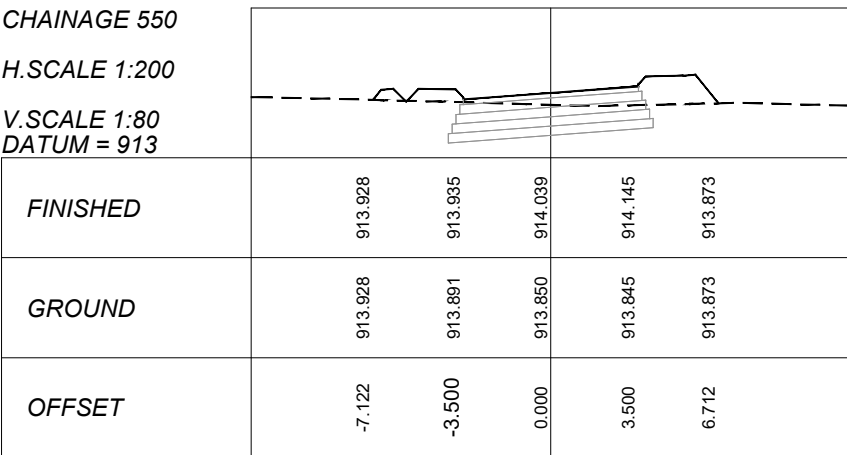
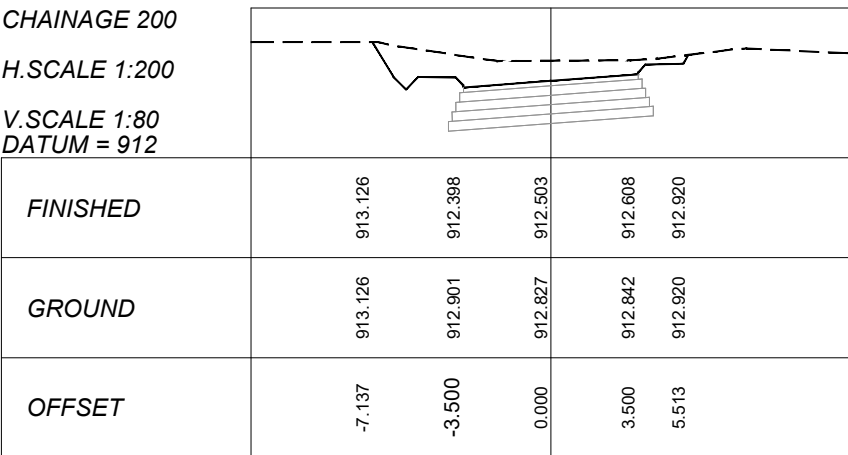
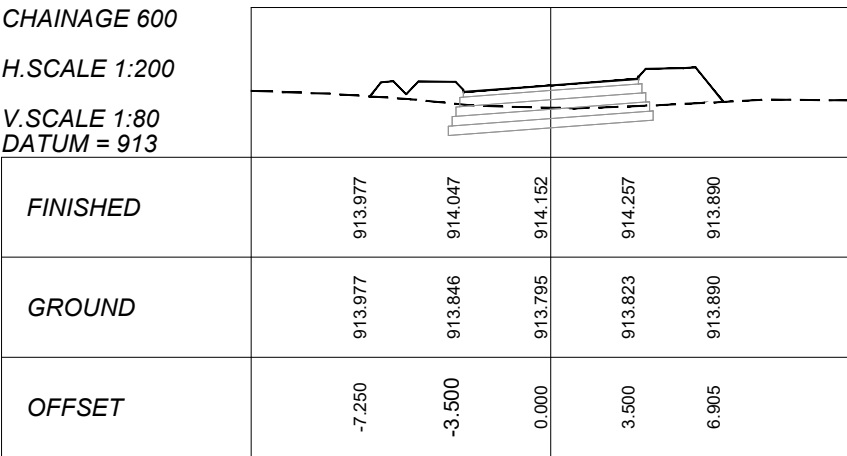
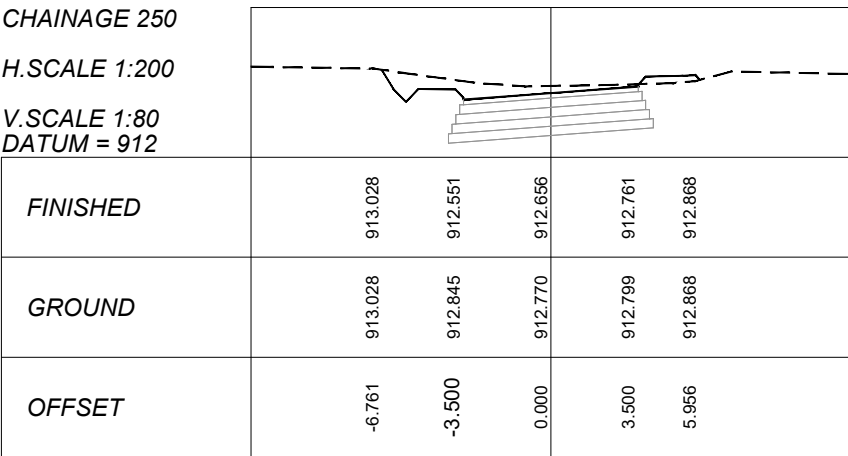
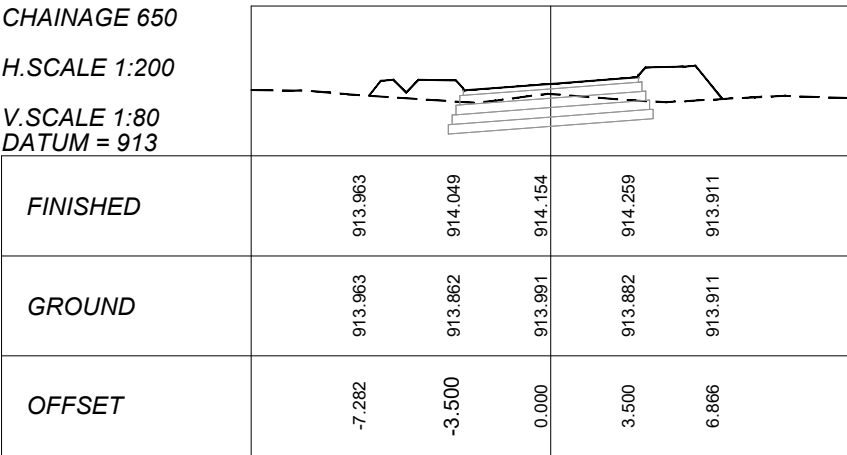
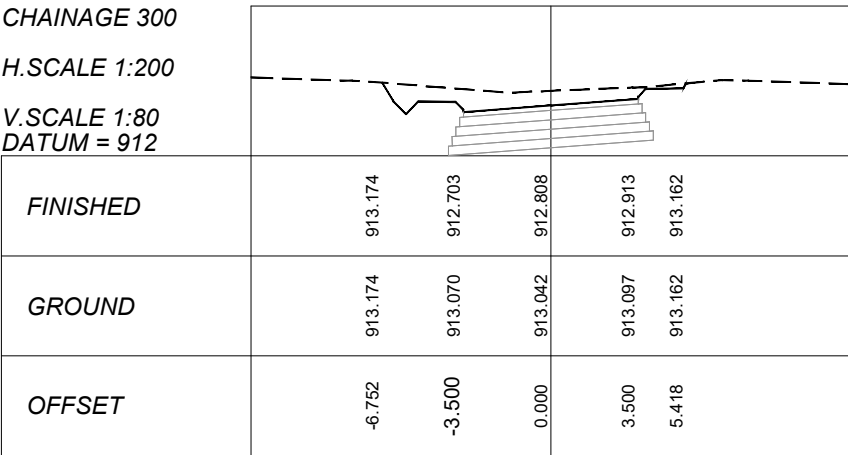
FINAL ROAD LEVEL
NATURAL GROUND

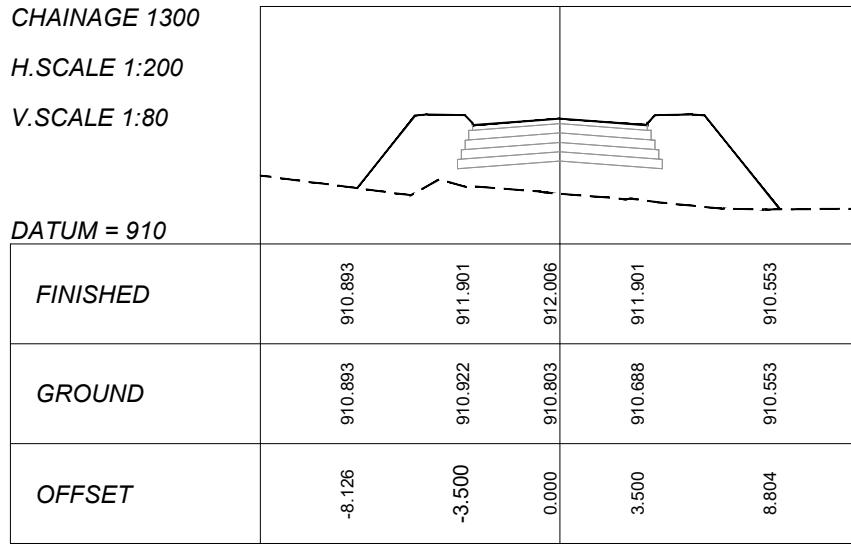
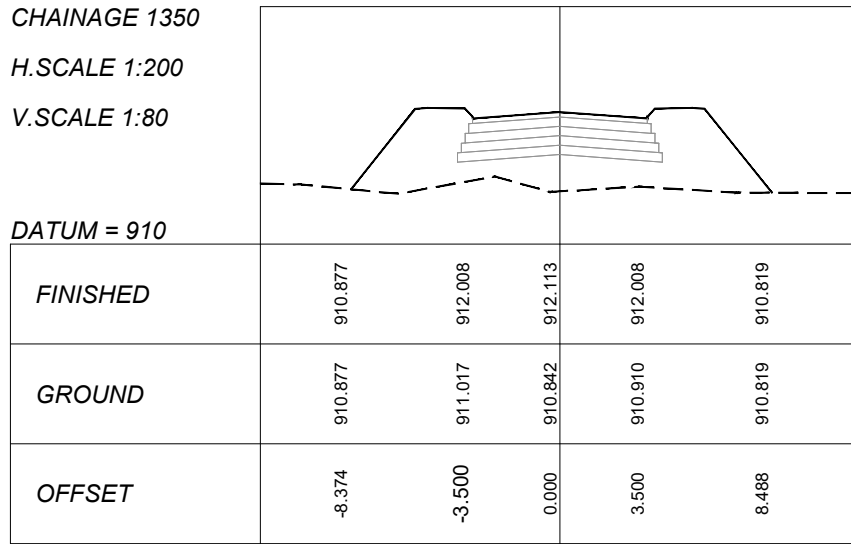
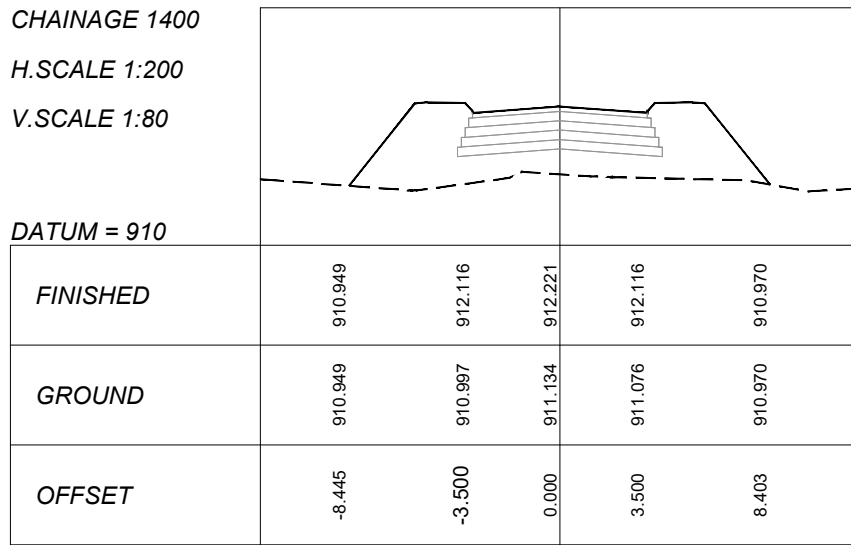
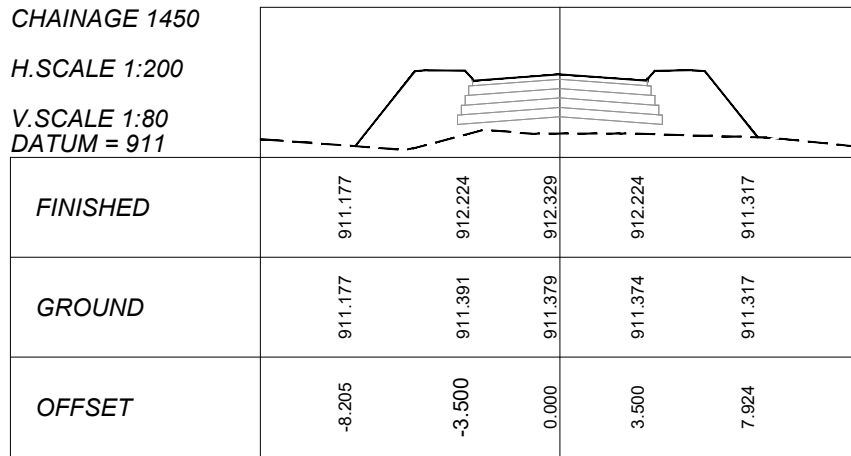
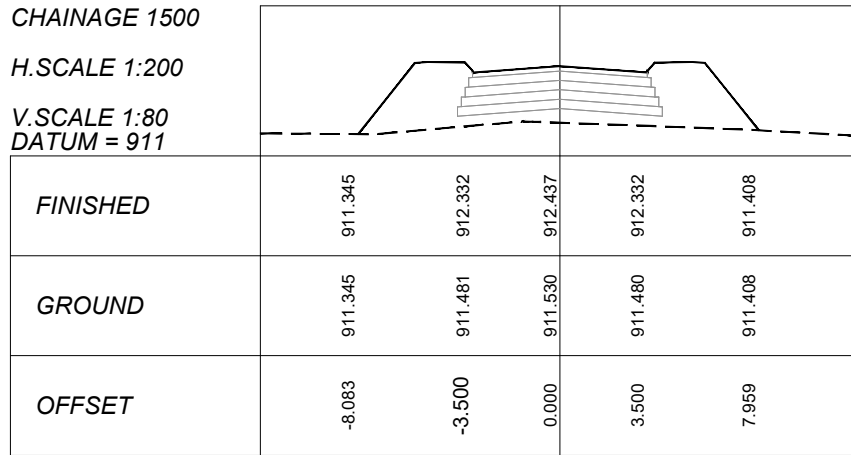
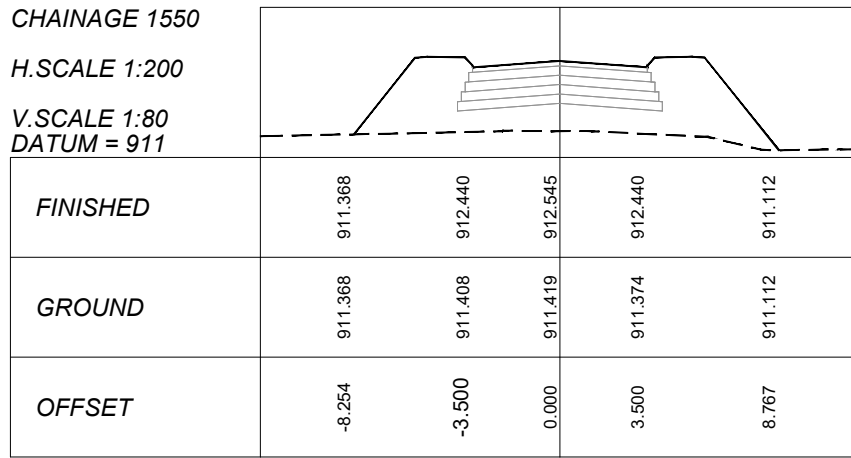
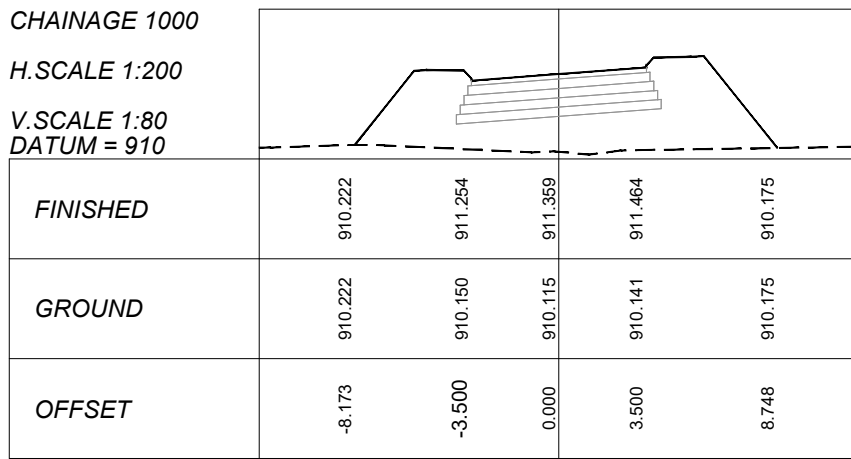
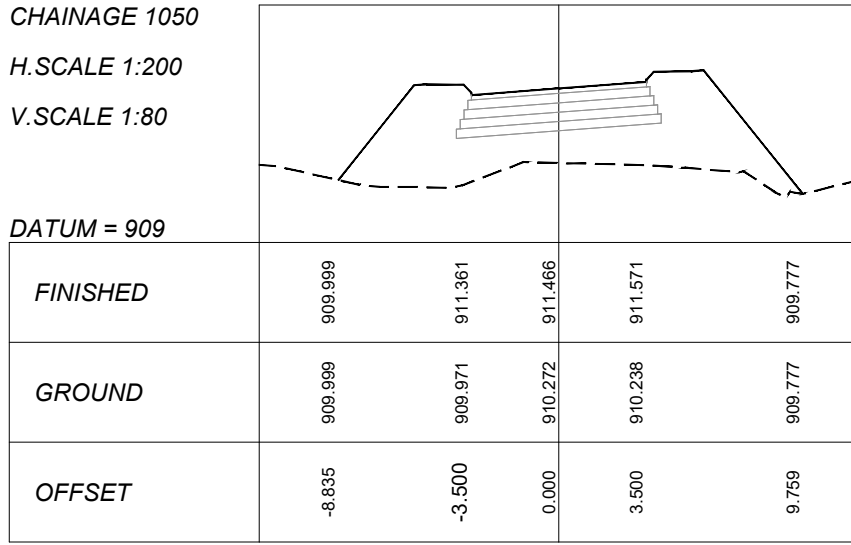
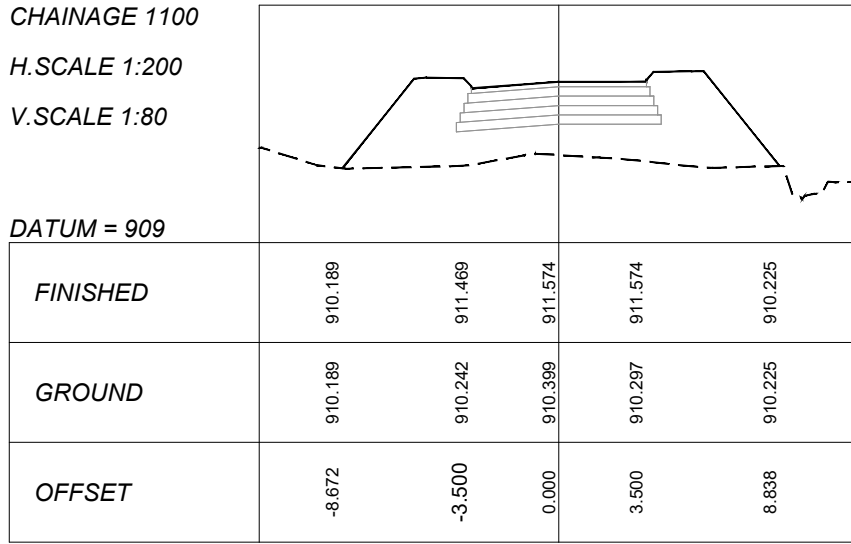
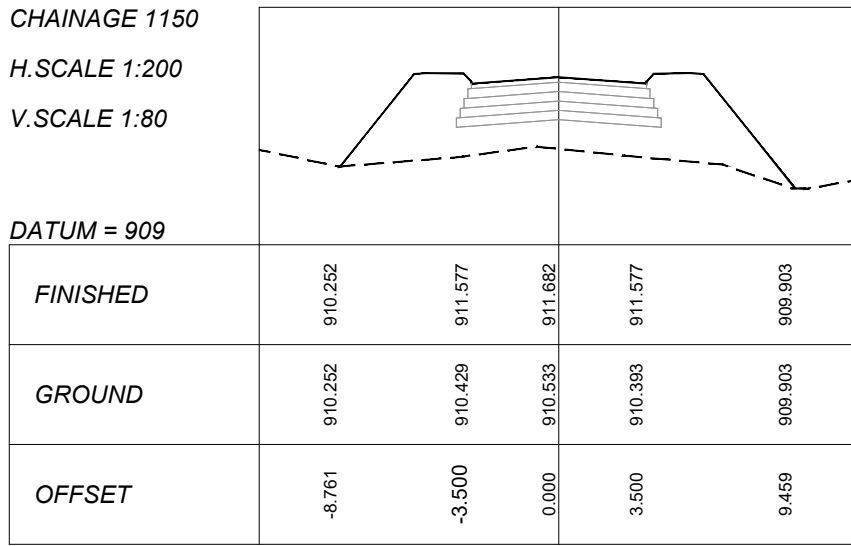
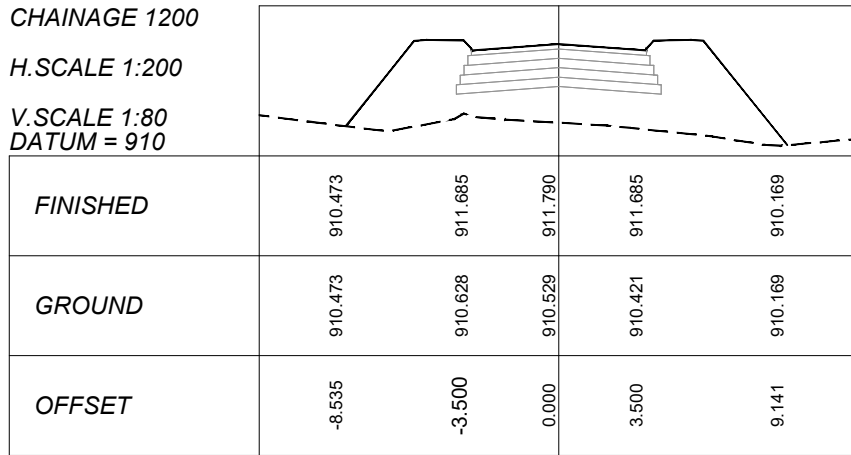
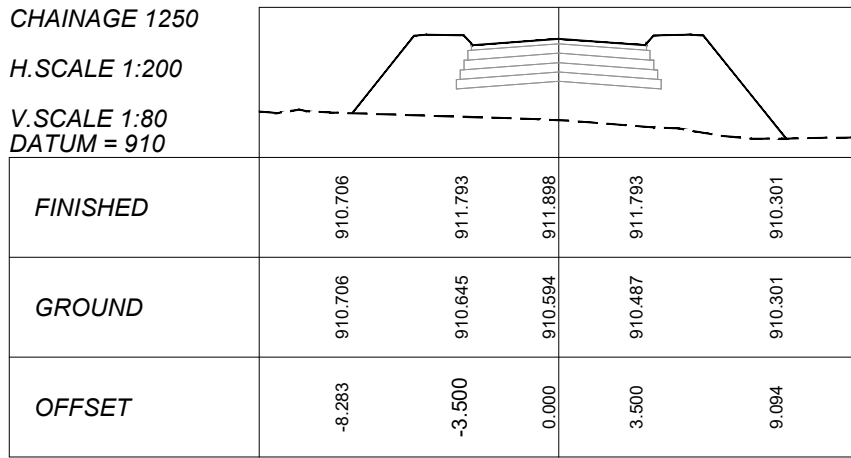
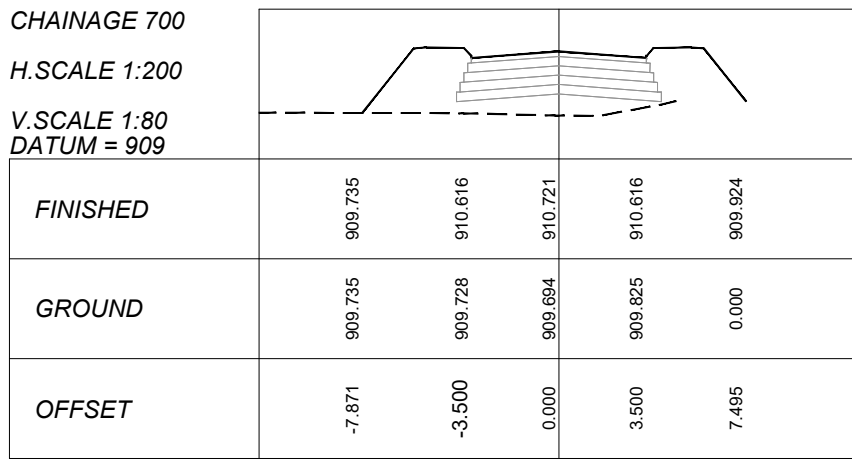
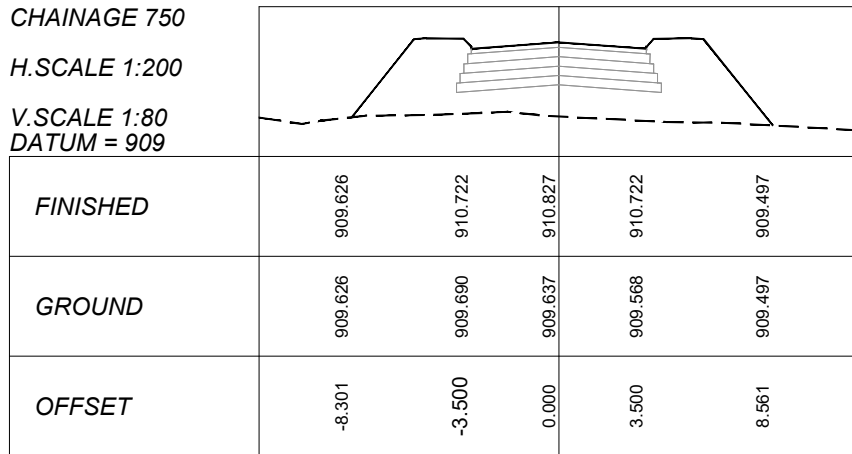
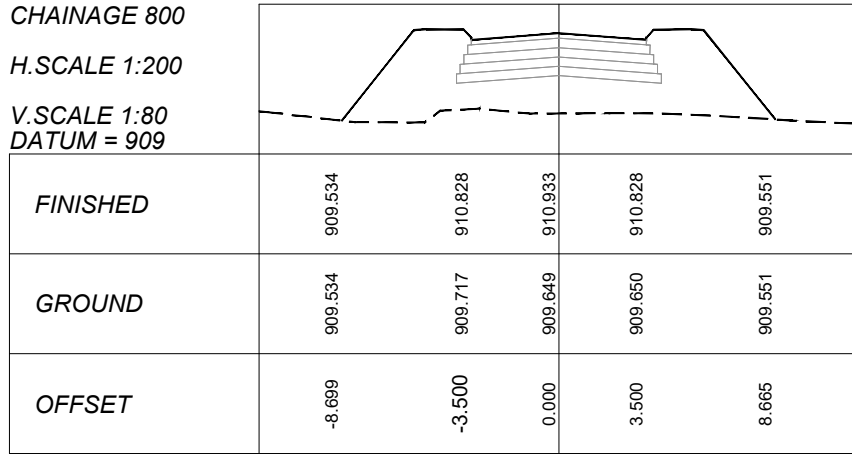
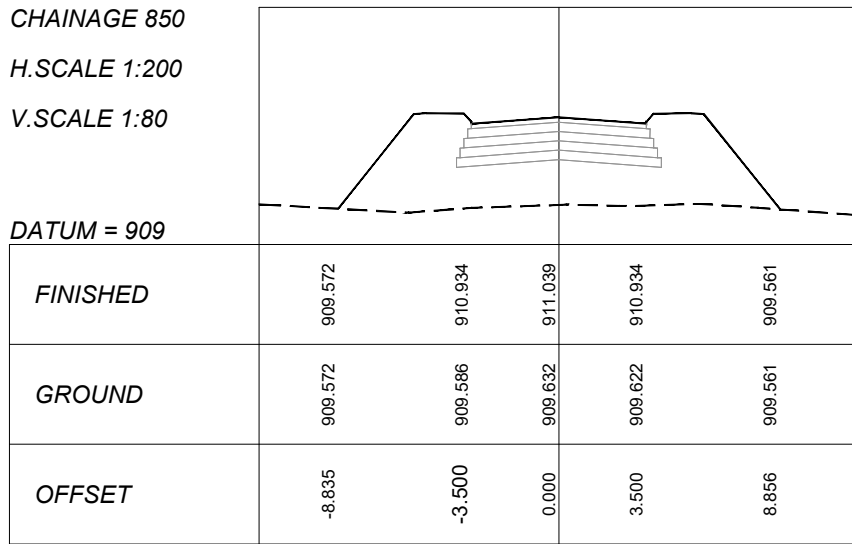
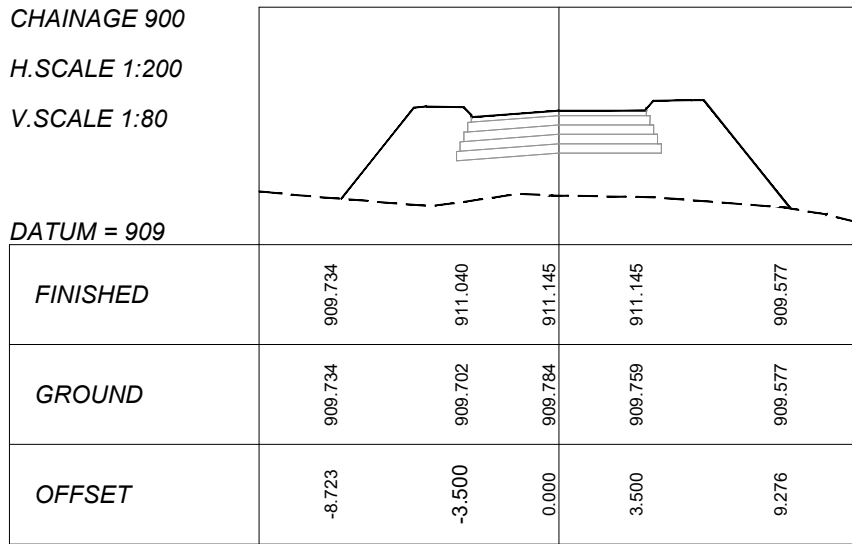
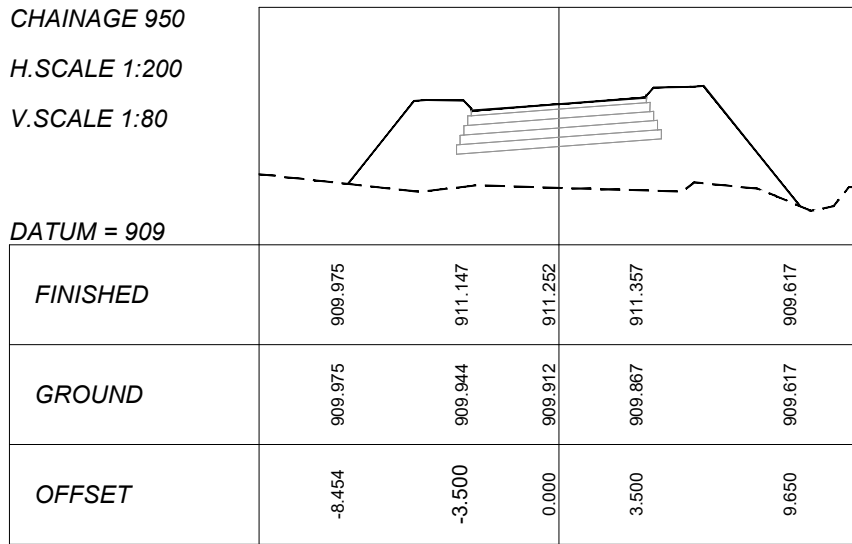
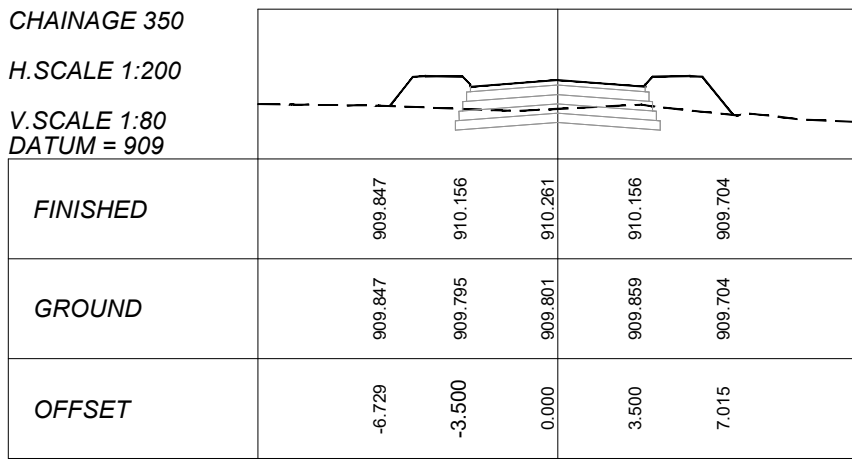
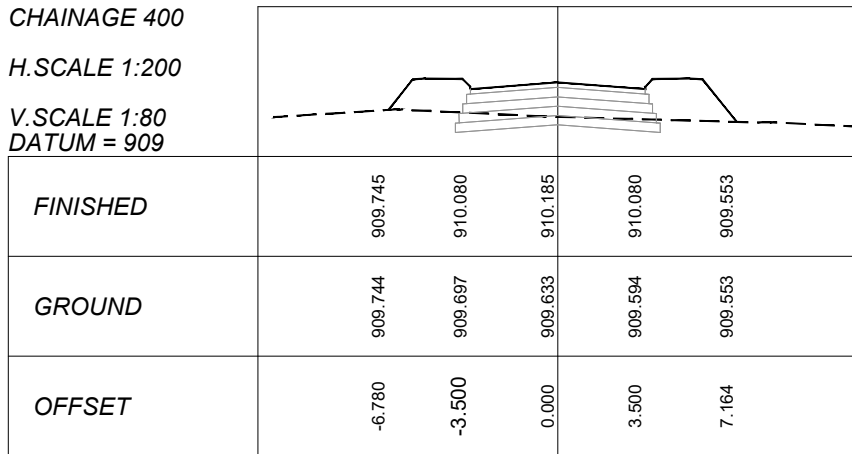
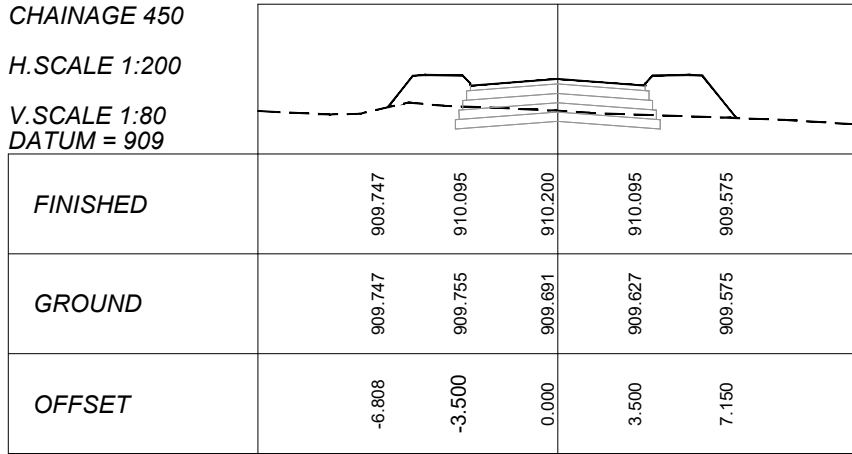
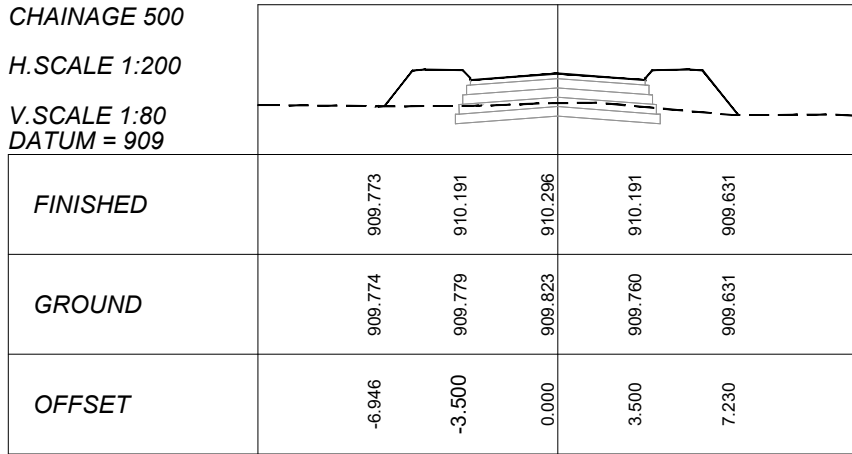
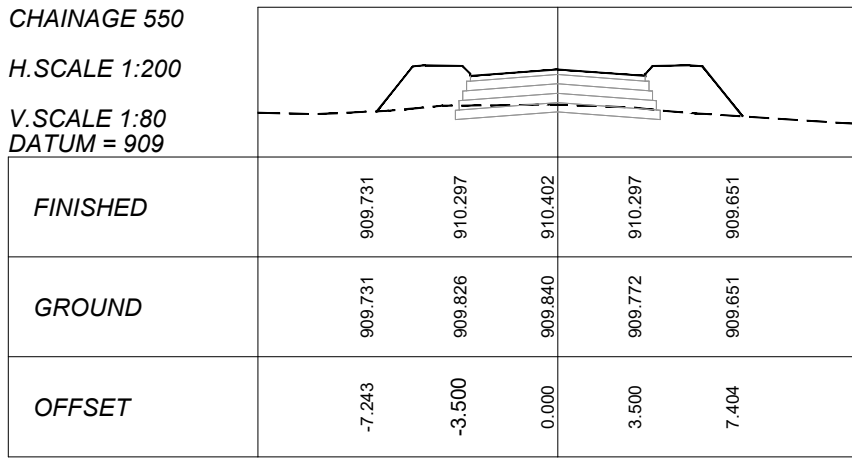
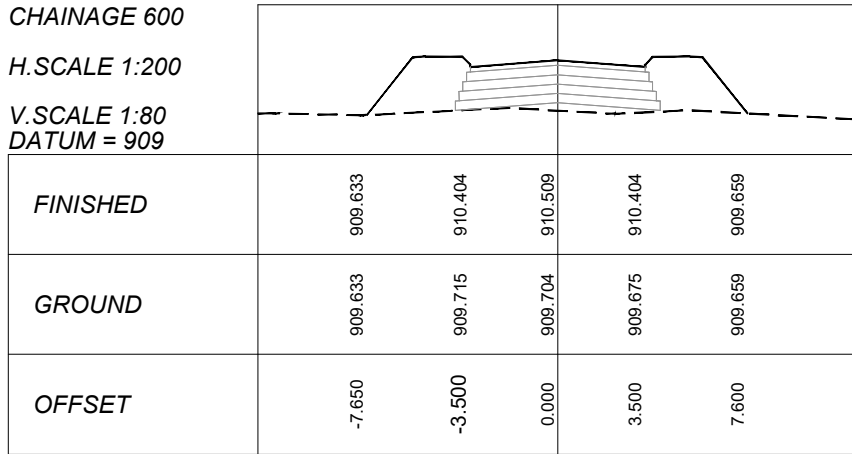
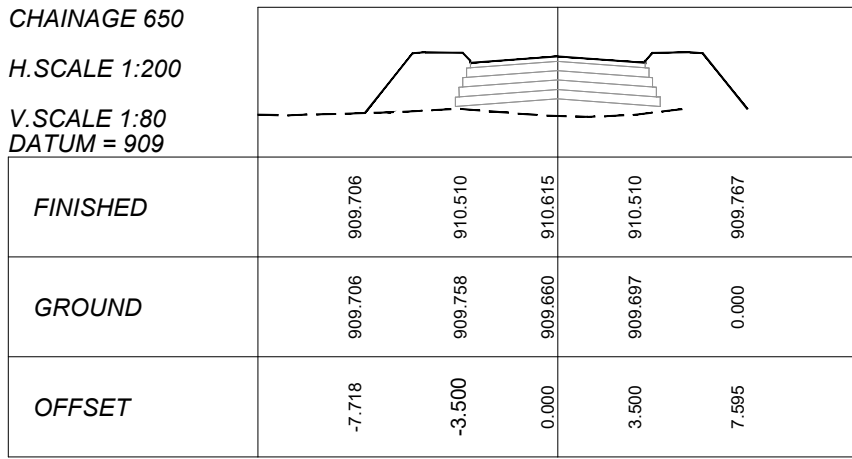
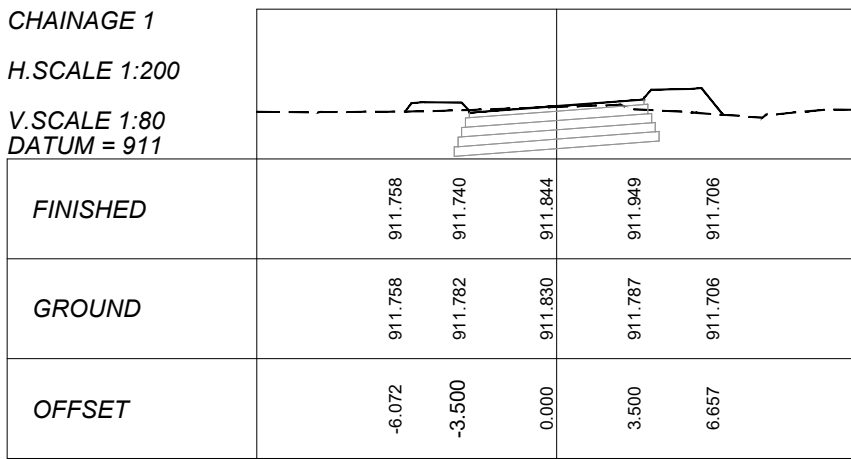
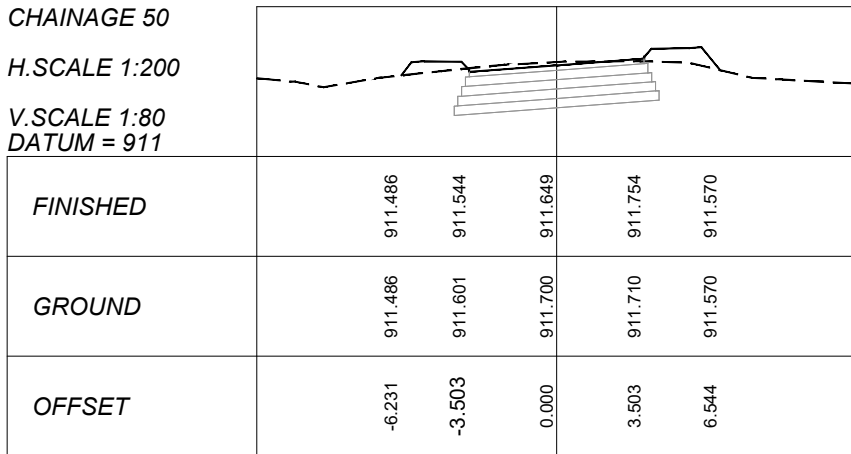
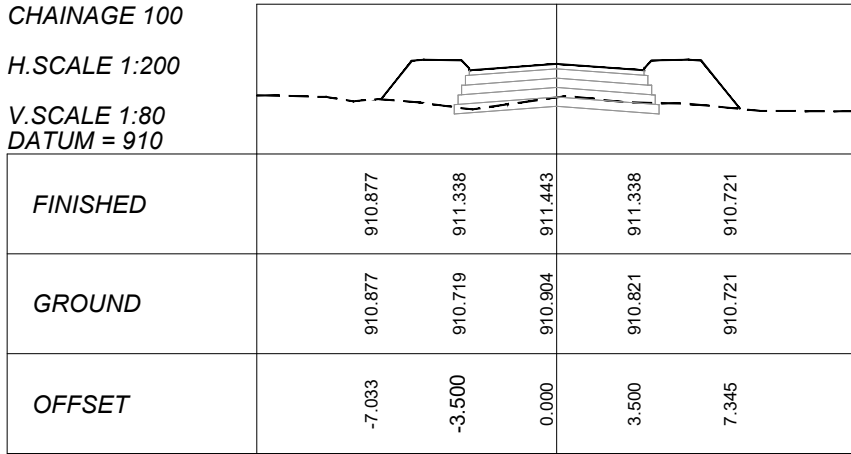
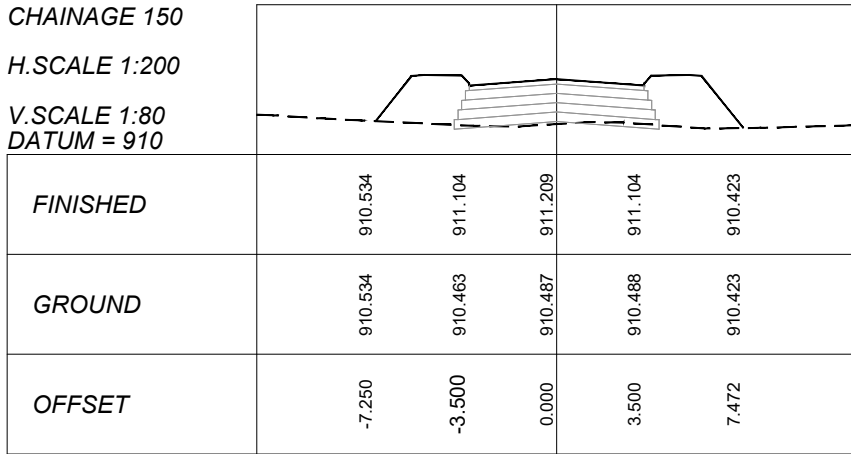
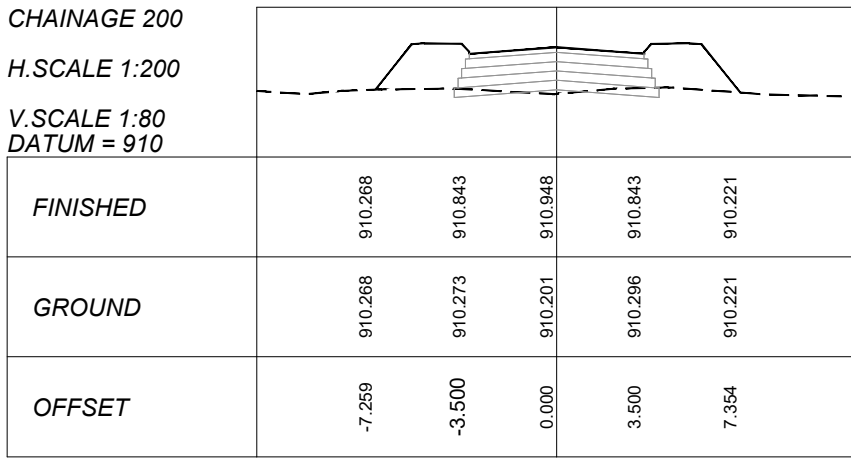
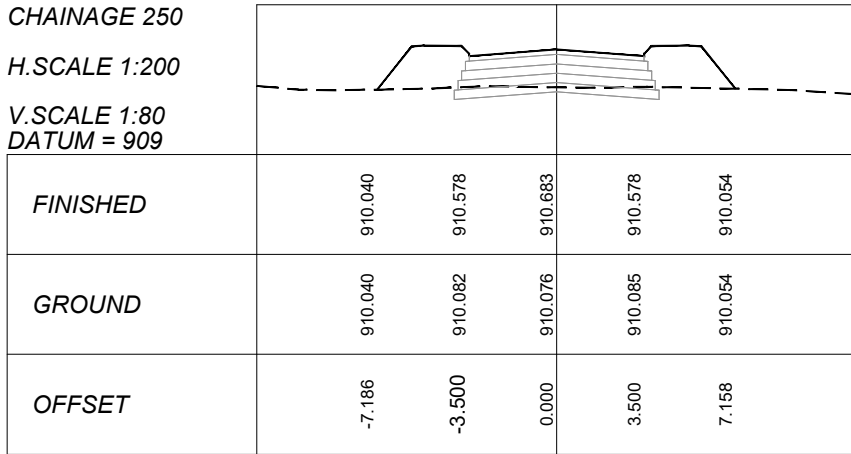
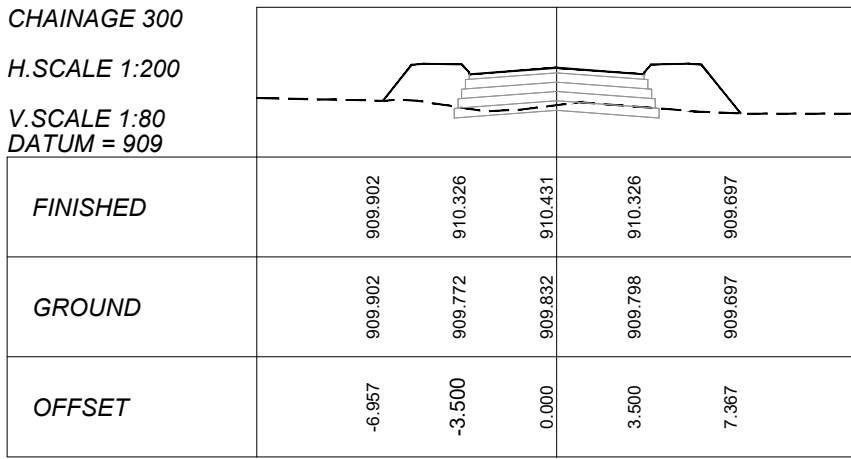
SCALES

HORIZONTAL SCALE: 1400
VERTICAL SCALE :50

Datum 906.000







No.	DATE	REVISION	REVISED BY	DATE	



AGC Consulting
Engineers
3A Pierre Street
Hampton Court
Polokwane
0699

DESIGNED M.K
DESIGN CHECKED M.T
DRAWN P.C
DRAWING CHECKED A.C

CONSULTANT
.....
for CONSULTING ENGINEER
DATE:

RECOMMENDED
.....
for HEAD OF DEPARTMENT
DATE:



MAKHADO MUNICIPALITY
PRIVATE BAG
X2596, LOUIS TRICHAARDT,
0920

SCALE
AS SHOWN
REVISION
(A)

CLIENT
PROJECT TITLE
DRAWING TITLE

MAKHADO LOCAL MUNICIPALITY

UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND
RAVELE VILLAGES

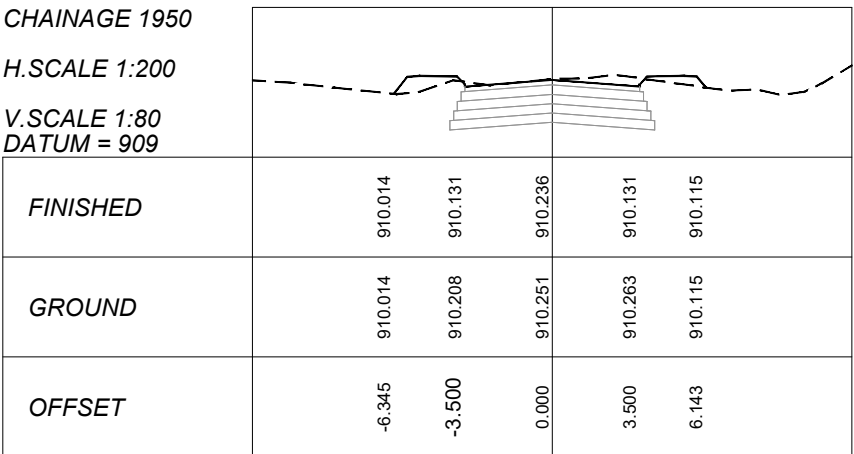
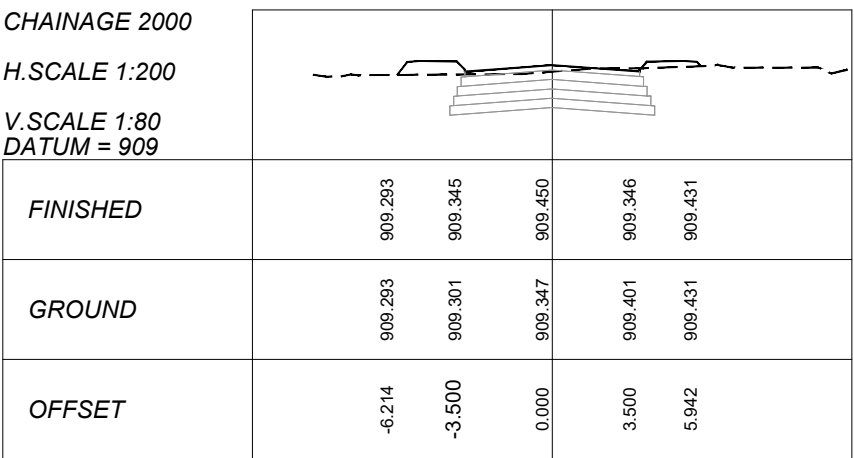
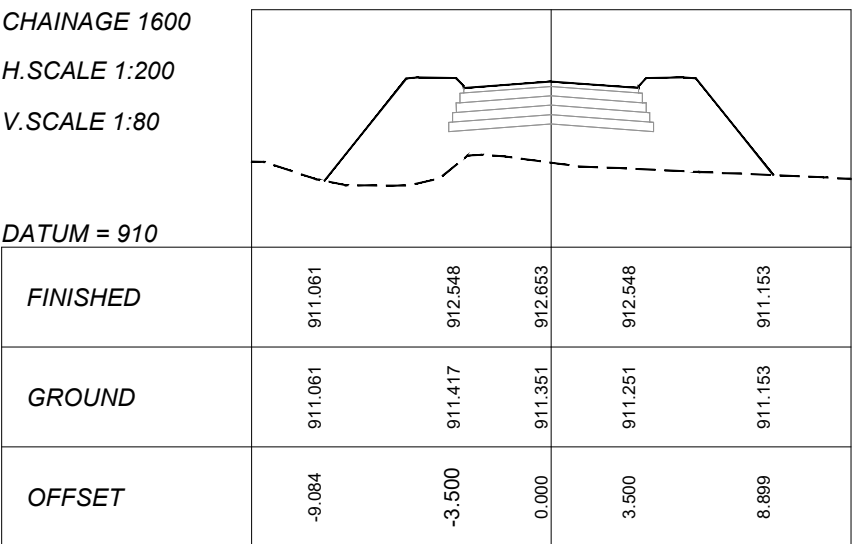
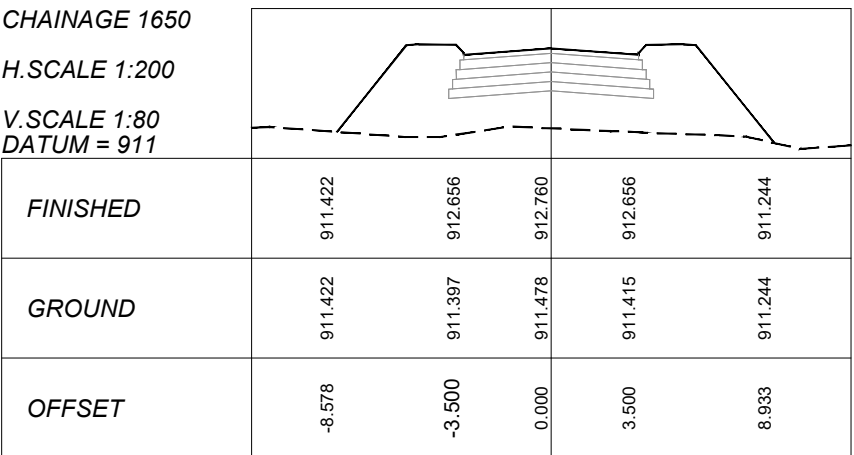
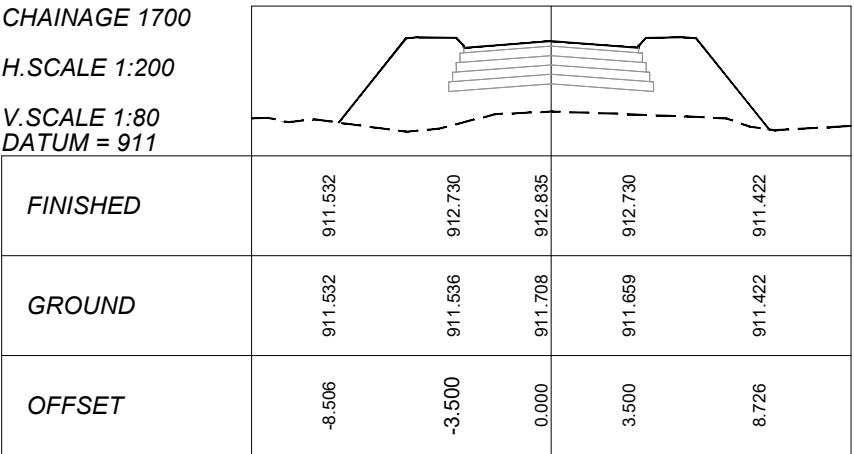
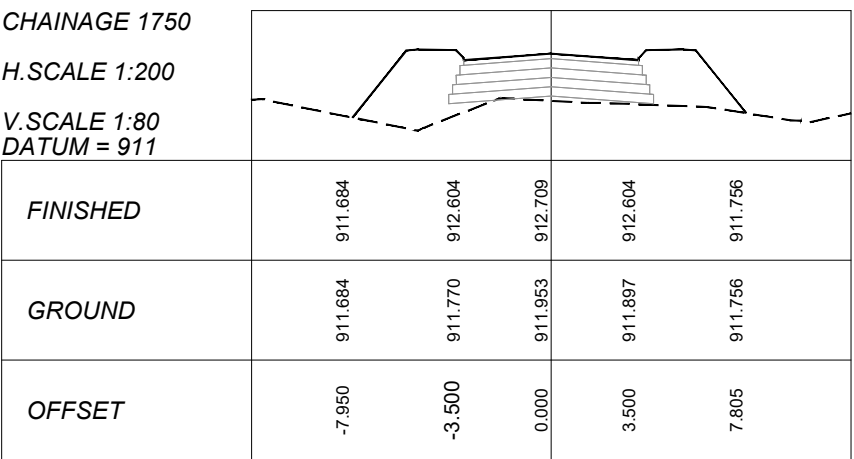
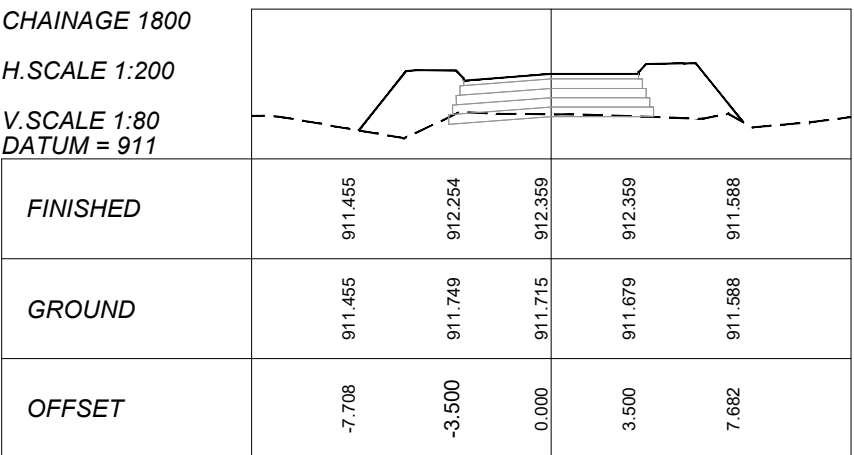
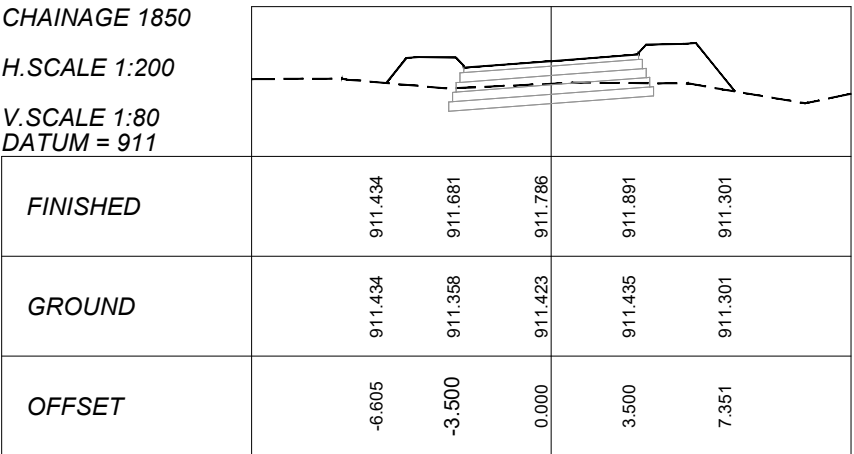
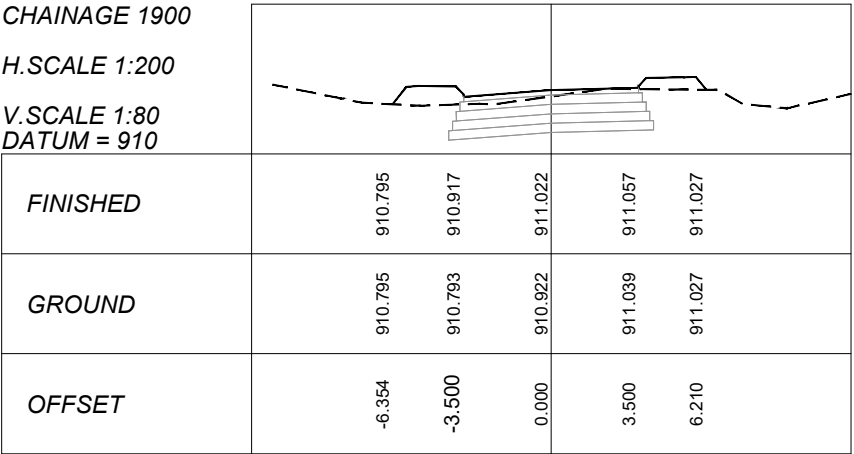
ROAD CROSS SECTION LAYOUT

TYPE OF PLANNING PRELIMINARY DESIGN

BID No.


SHEET 1

DRAWING No.
AGC-CIV-PD-RDXS-003



No.	DATE	REVISION	REVISED BY	DATE	


DESIGNED BY



AGC Consulting Engineers
3A Pierre Street
Hampton Court
Polokwane
0699

DESIGNED M.K	CONSULTANT	RECOMMENDED
DESIGN CHECKED M.T		
DRAWN P.C	..... for CONSULTING ENGINEER	..... for HEAD OF DEPARTMENT
DRAWING CHECKED A.C	DATE:	DATE:

CLIENT

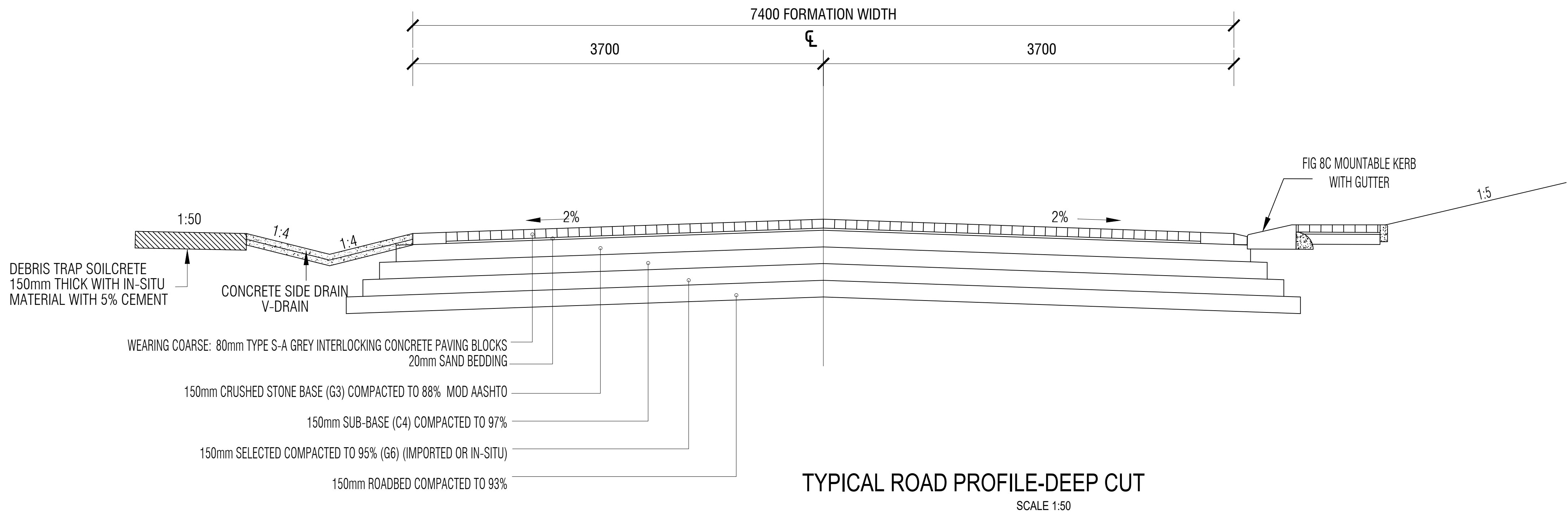
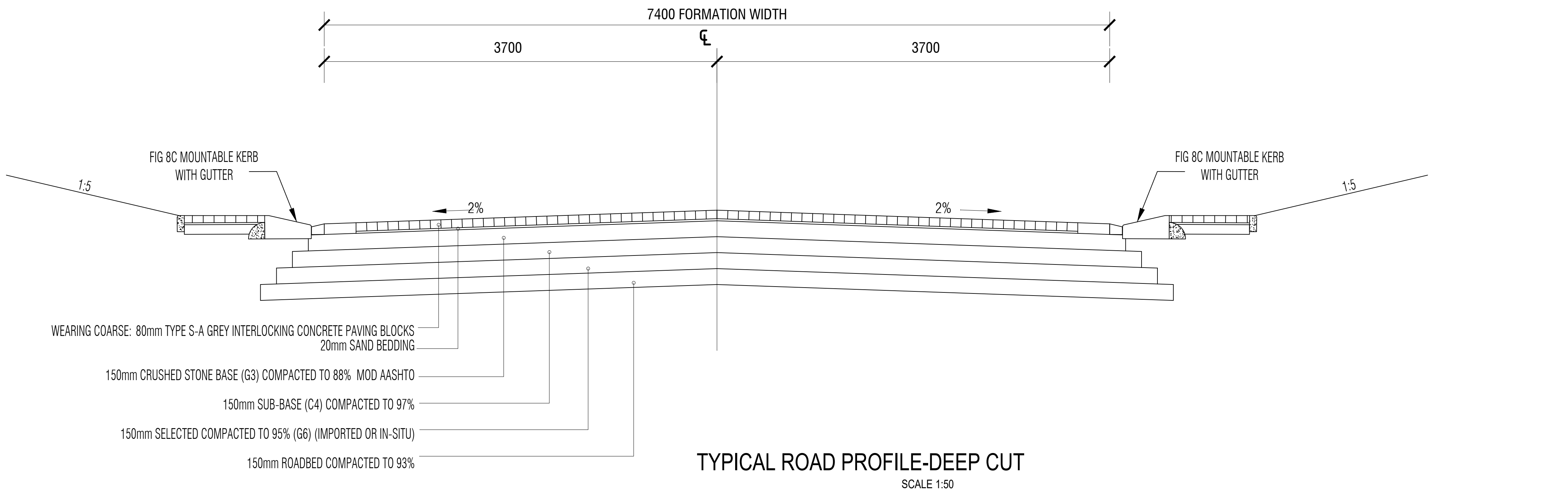


MAKHADO MUNICIPALITY
PRIVATE BAG
X2596, LOUIS TRICHARDT,
0920

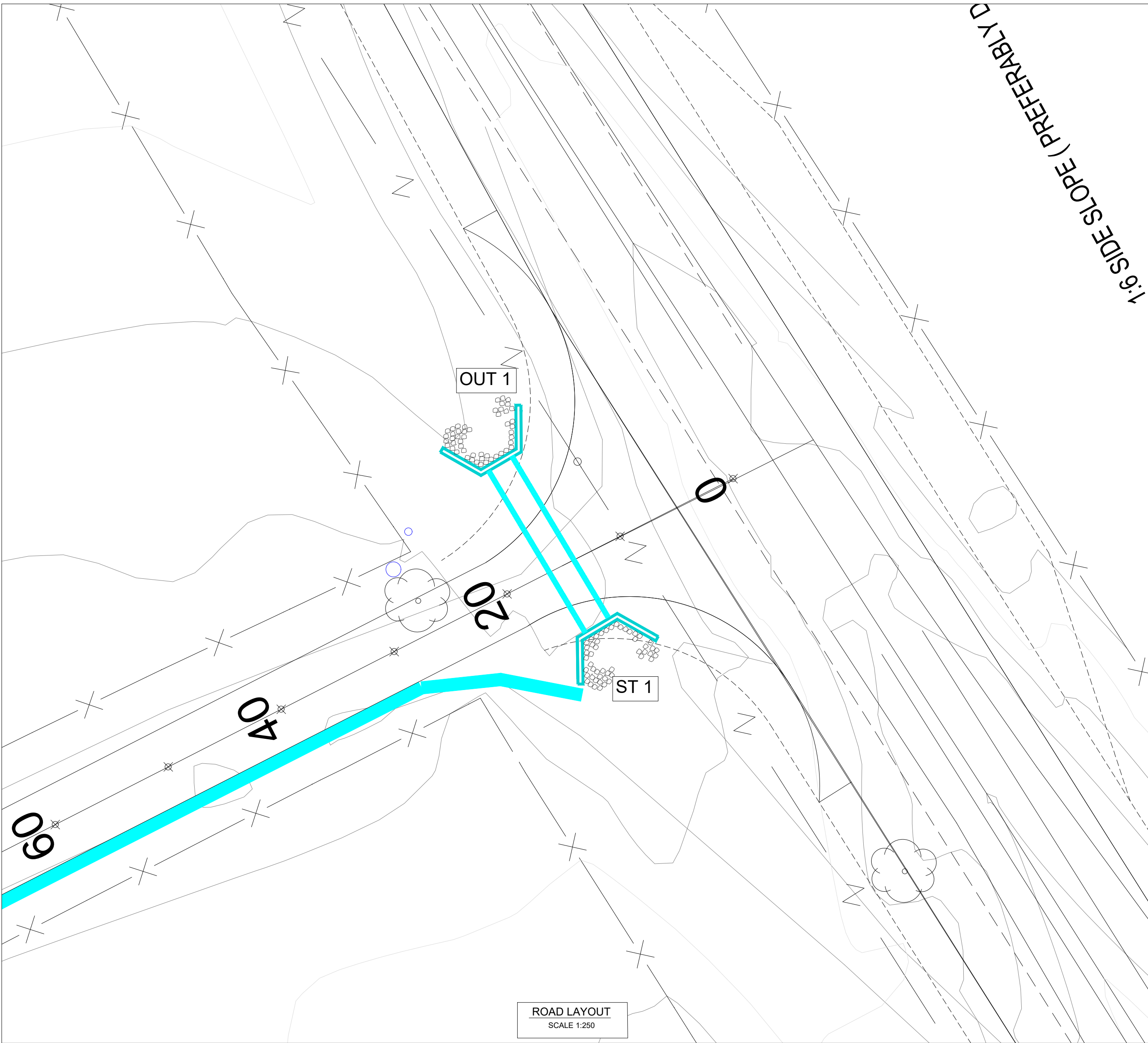
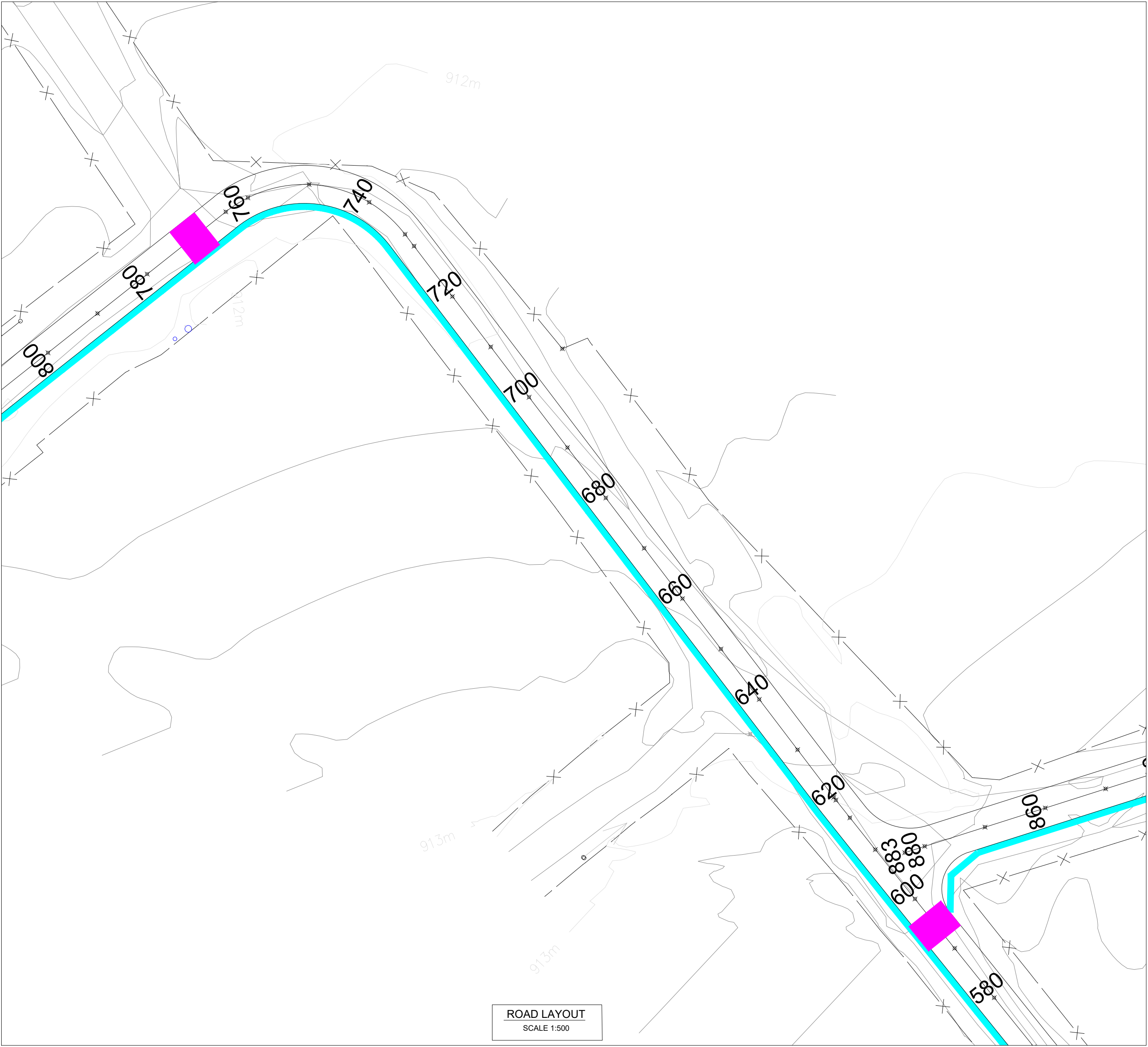
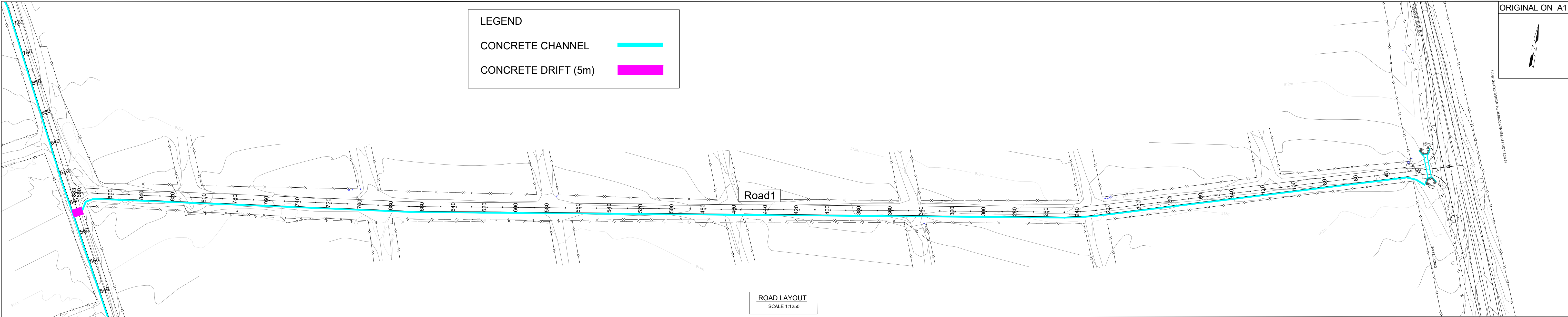
SCALE
AS SHOWN
REVISION
A

CLIENT	MAKHADO LOCAL MUNICIPALITY	TYPE OF PLANNING	PRELIMINARY DESIGN
PROJECT TITLE	UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND RAVELE VILLAGES		
DRAWING TITLE	ROAD CROSS SECTION LAYOUT		

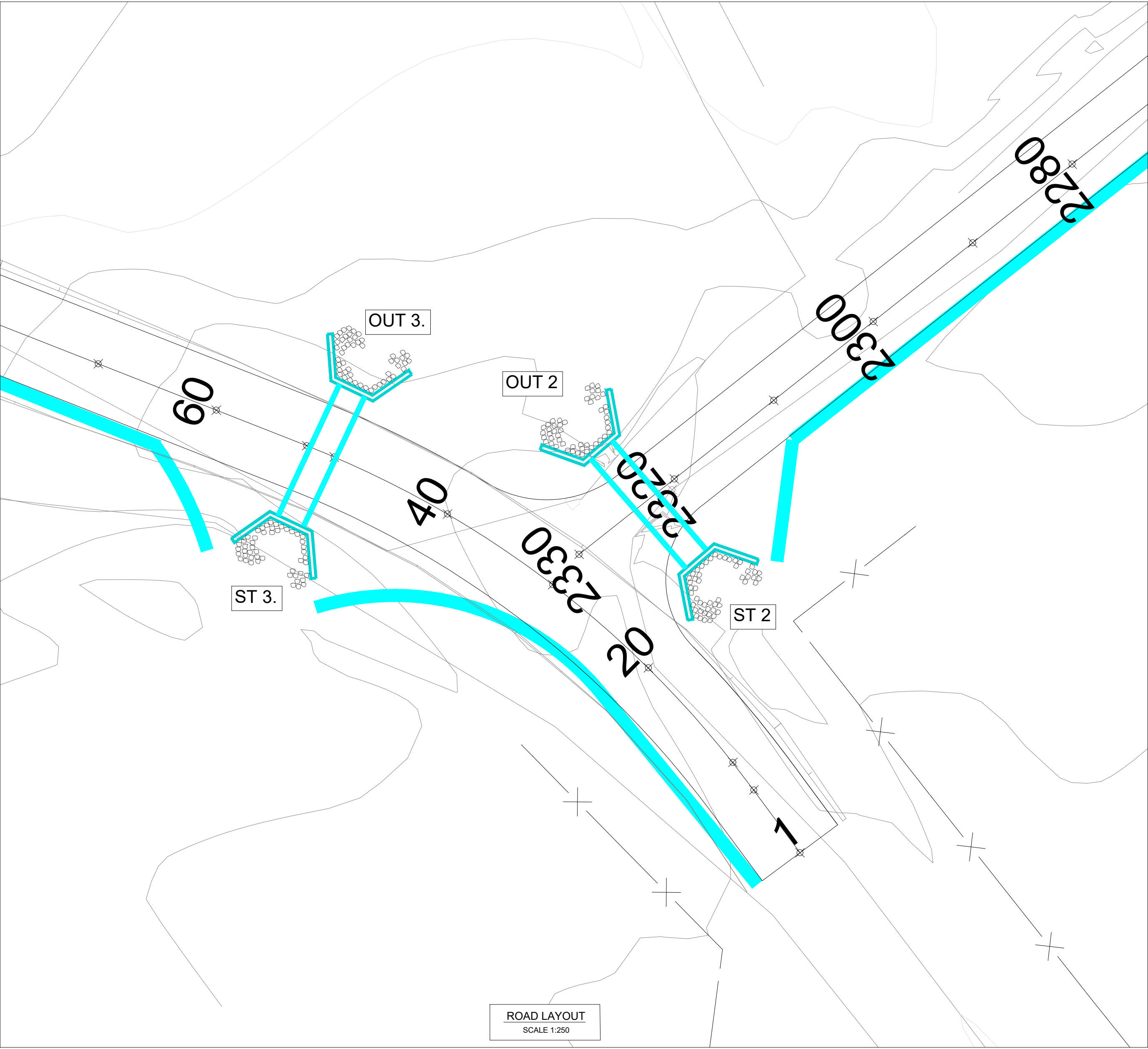
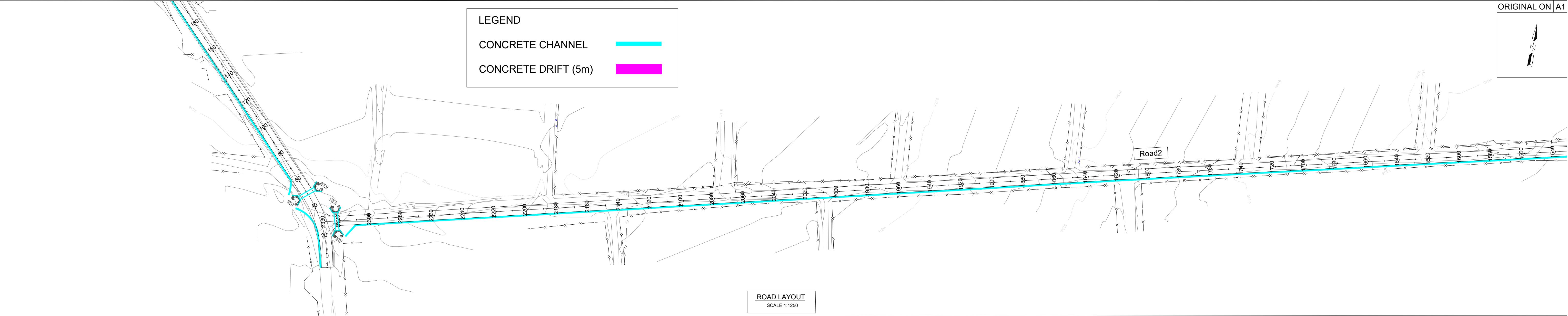
BID No.
SHEET 2
DRAWING No. AGC-CIV-PD-RDXS-003



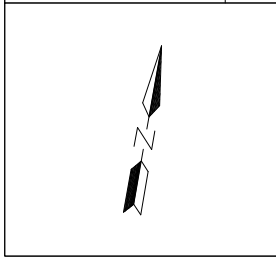
				DESIGNED BY		DESIGNED	CONSULTANT	RECOMMENDED	CLIENT	SCALE	CLIENT	TYPE OF PLANNING	BID No.
				AGC Consulting Engineers 3A Pierre Street Hampton Court Polokwane 0699		M.K			MAKHADO MUNICIPALITY PRIVATE BAG X2596, LOUIS TRICHARDT, 0920	AS SHOWN	MAKHADO LOCAL MUNICIPALITY	PRELIMINARY DESIGN	
						DESIGN CHECKED					PROJECT TITLE		SHEET 1 OF 1
						DRAWN	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT					DRAWING No.
						M.K	DATE:	DATE:					AGC-CIV-PD-TD-002
						DRAWING CHECKED				REVISION	DRAWING TITLE		
						M.K				(A)	TYPICAL CROSS-SECTION DETAIL		
No.	DATE	REVISION		REVISED BY	DATE								



						<div>DESIGNED BY</div> <div></div> <div>AGC Consulting Engineers 3A Pierre Street Hampton Court Polokwane 0699</div>			<div>DESIGNED M.K</div> <div>DESIGN CHECKED M.K</div> <div>DRAWN M.K</div> <div>DRAWING CHECKED M.K</div>			<div>CONSULTANT</div> <div></div> <div>for CONSULTING ENGINEER</div> <div>DATE:</div>			<div>RECOMMENDED</div> <div></div> <div>for HEAD OF DEPARTMENT</div> <div>DATE:</div>			<div>CLIENT</div> <div></div> <div>MAKHADO MUNICIPALITY PRIVATE BAG X2596, LOUIS TRICHARDT, 0920</div>			<div>SCALE</div> <div>AS SHOWN</div> <div>REVISION</div> <div><div>A</div></div>			<div>CLIENT</div> <div>MAKHADO LOCAL MUNICIPALITY</div>			<div>TYPE OF PLANNING</div> <div>PRELIMINARY DESIGN</div>			<div>BID No.</div>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				



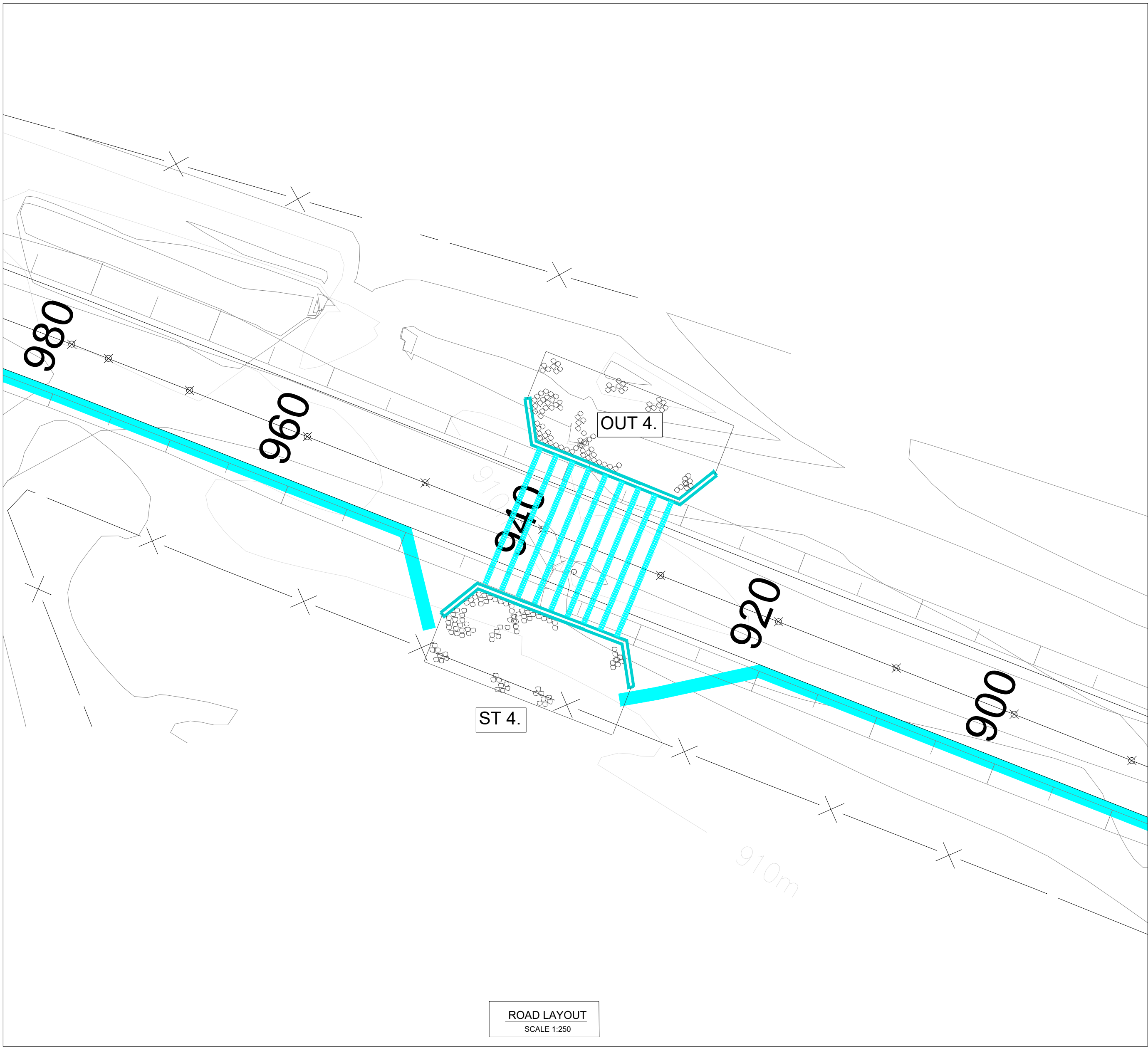
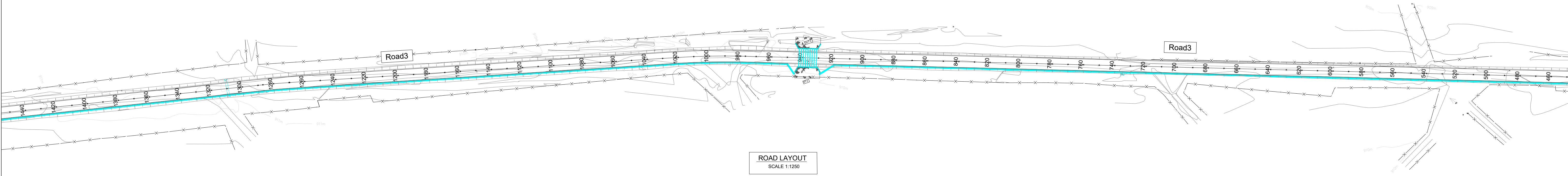
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							AGC Consulting Engineers 3A Pierre Street Hampton Court Polokwane 0699		DESIGN CHECKED M.K		for CONSULTING ENGINEER		for HEAD OF DEPARTMENT				MAKHADO MUNICIPALITY PRIVATE BAG X2596, LOUIS TRICHARDT, 0920		AS SHOWN		PROJECT TITLE		UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND REVELE VILLAGES				SHEET 2		
									DRAWN M.K										REVISION		DRAWING TITLE								
									DRAWING CHECKED M.K										DATE:		DATE:		A		STORMWATER LAYOUT		DRAWING No.		
																											AGC-CIV-PD-STW-002		
No.	DATE	REVISION			REVISED BY	DATE																							



LEGEND

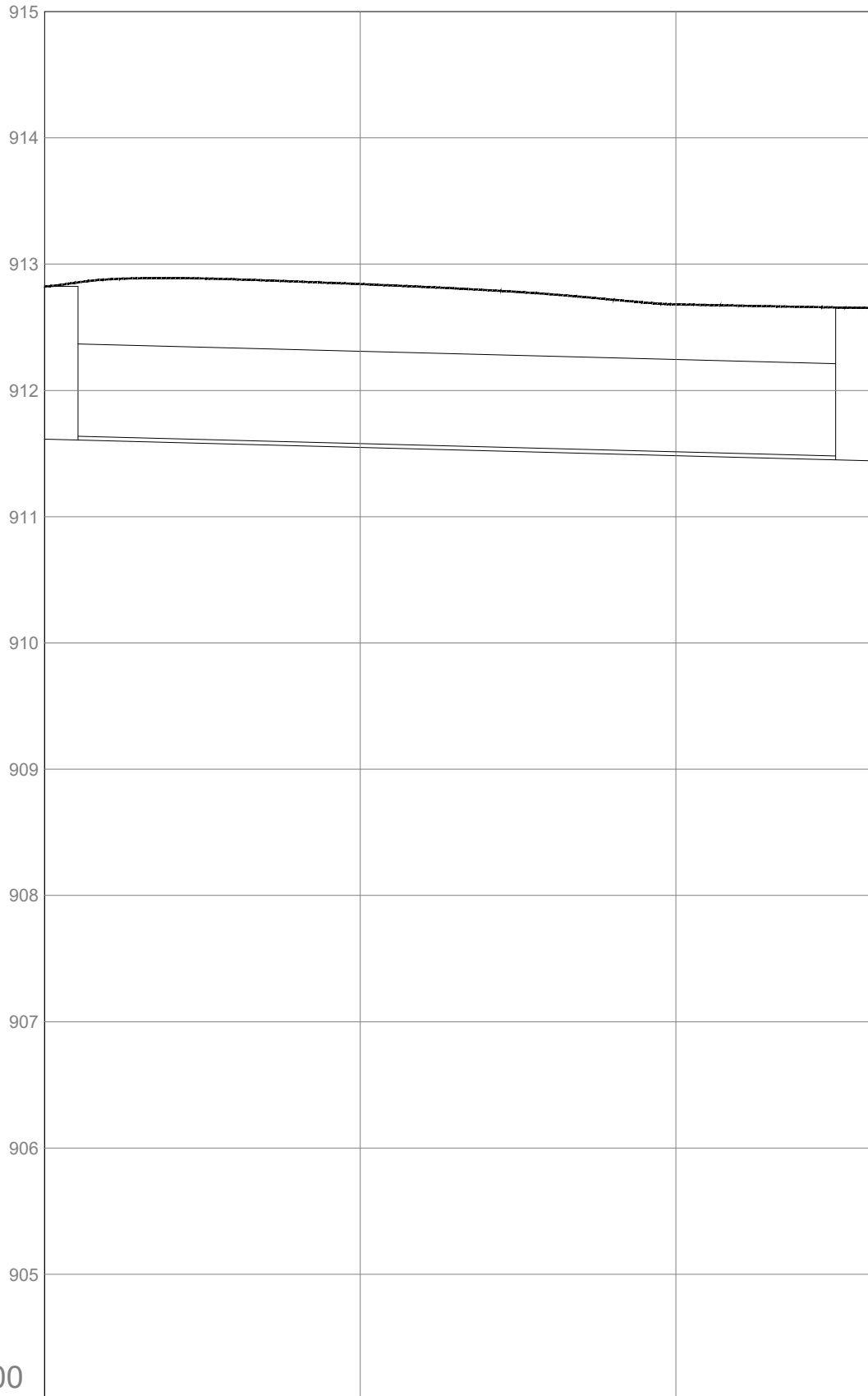
CONCRETE CHANNEL

CONCRETE DRIFT (5m)



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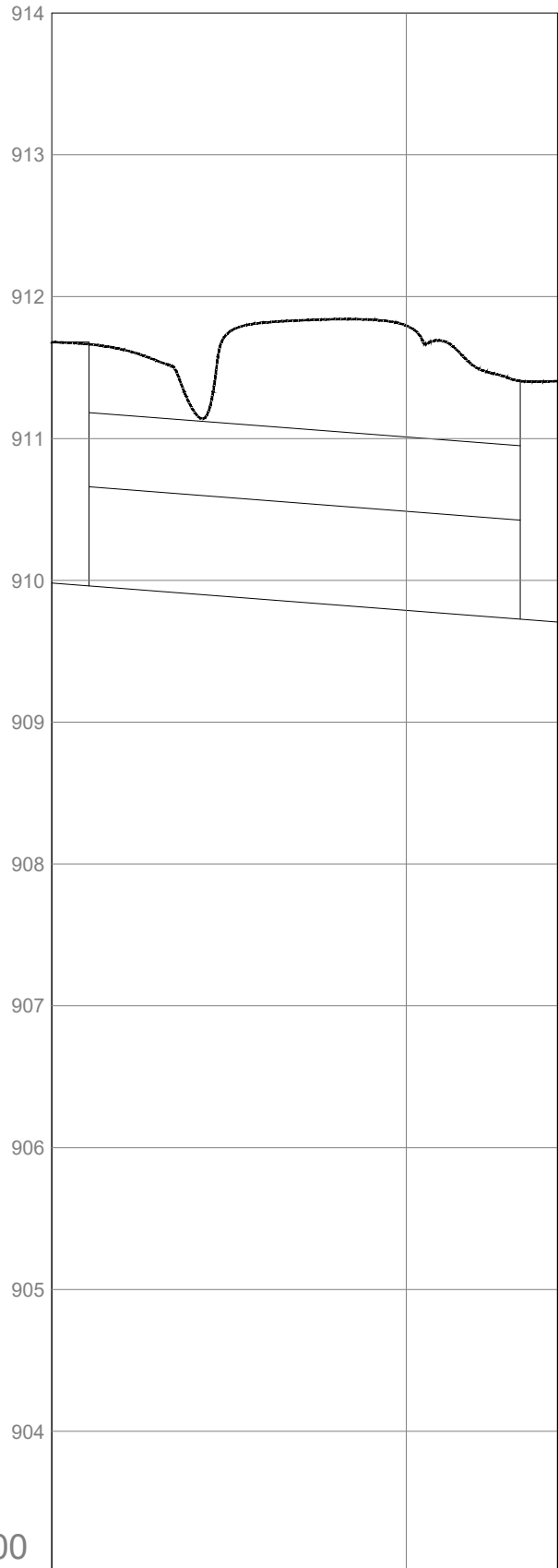
SCALES
HORIZONTAL SCALE: 200
VERTICAL SCALE :50



Datum 904.000			
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Ground Level	912.823	912.661	912.653
Manhole Name	ST 1		OUT 1
Inlet / Outlet	911.643	911.513	911.473
Hydraulic Elevation	911.643		911.473
Length	26.118 m		
Link Type / Link Size	100D Concrete 750 mm		
Slope	0.651%		
Flow Capacity	0.000 m³/s 0.013 m³/s		
Velocity	0.000 m/s		

Manhole ST 1 to OUT 1

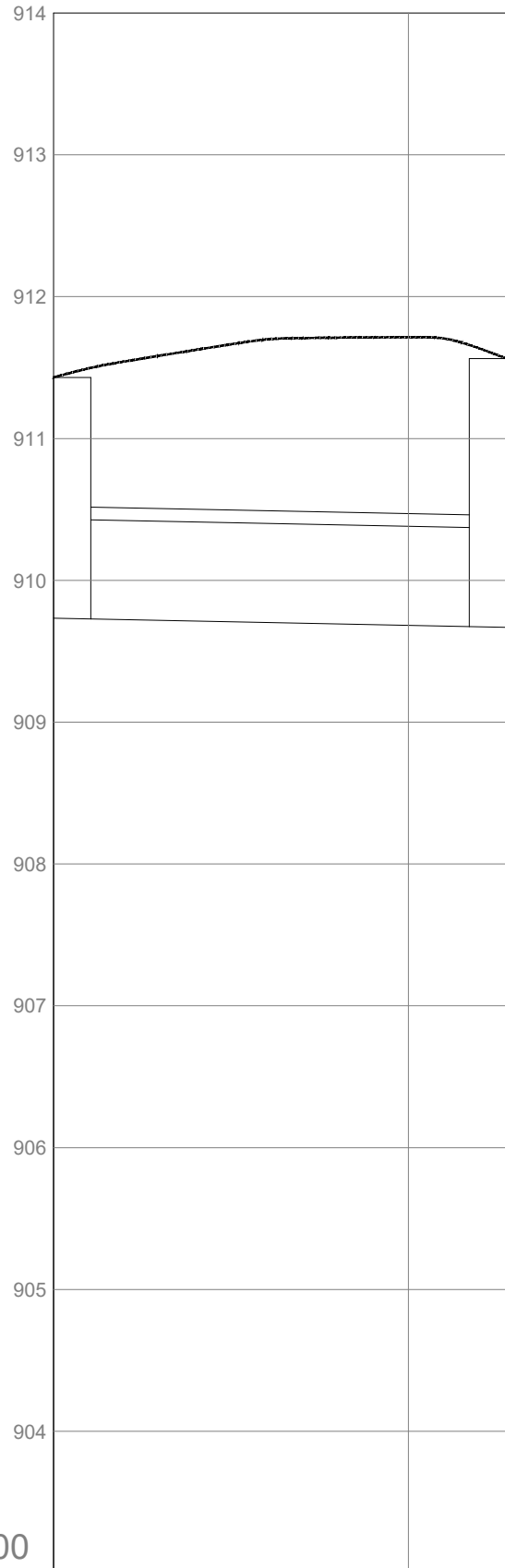
SCALES
HORIZONTAL SCALE: 200
VERTICAL SCALE :50



Datum 903.000			
Chainage	0.000		14.262
Ground Level	911.680		911.405
Manhole Name	ST 2		OUT 2
Inlet / Outlet	910.038	909.763	909.763
Hydraulic Elevation	911.203		910.928
Length	14.265 m		
Link Type / Link Size	100D Concrete 600 mm		
Slope	1.928%		
Flow Capacity	0.856 m³/s 0.856 m³/s		
Velocity	3.374 m/s		

Manhole ST 2 to OUT 2

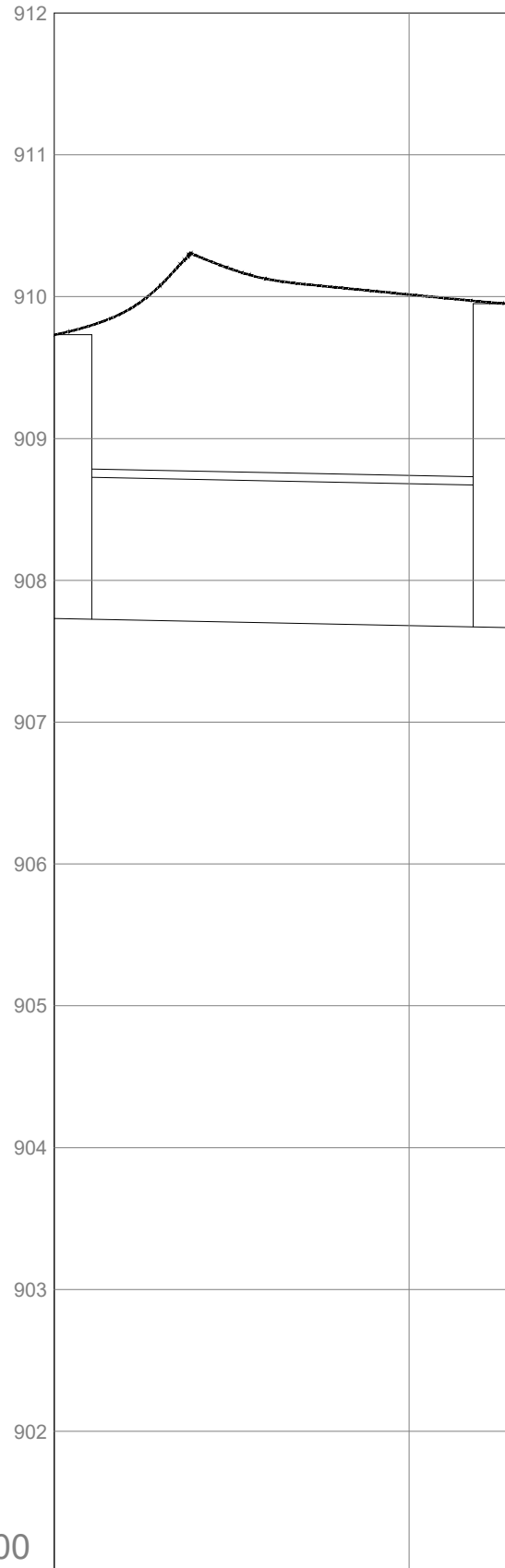
SCALES
HORIZONTAL SCALE: 200
VERTICAL SCALE :50



Datum 903.000			
Chainage	0.000		12.769
Ground Level	914.431		911.564
Manhole Name	ST 3		OUT 3
Inlet / Outlet	908.789	908.725	908.725
Hydraulic Elevation	910.521		910.457
Length	12.769 m		
Link Type / Link Size	100D Concrete 600 mm		
Slope	0.500%		
Flow Capacity	0.436 m³/s 0.436 m³/s		
Velocity	1.697 m/s		

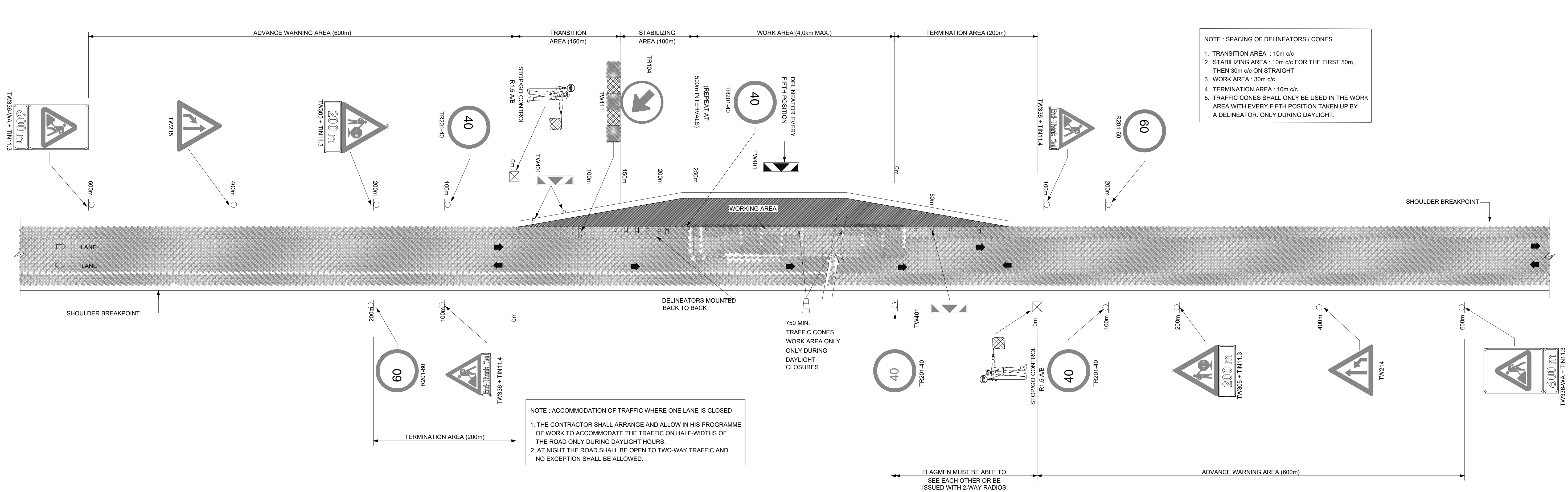
Manhole ST 3. to OUT 3.

SCALES
HORIZONTAL SCALE: 200
VERTICAL SCALE :50

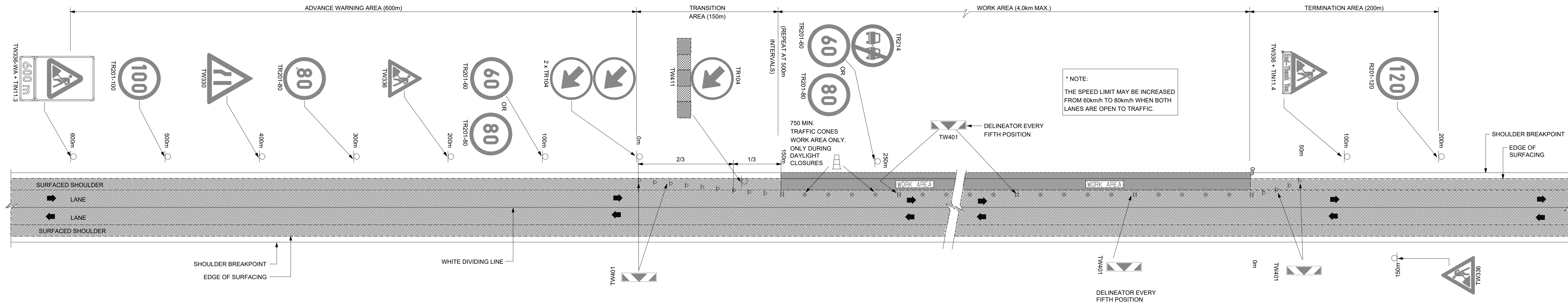


Datum 901.000			
Chainage	0.000		12.852
Ground Level	909.731		909.950
Manhole Name	ST 4		OUT 4
Inlet / Outlet	907.731	907.667	907.667
Hydraulic Elevation	908.790		908.725
Length	12.852 m		
Link Type / Link Size	Portal Culvert 8 x 900 x 900		
Slope	0.500%		
Flow Capacity	12.920 m³/s 15.915 m³/s		
Velocity	2.645 m/s		

Manhole ST 4. to OUT 4.



SIGN SEQUENCE FOR STOP / GO OPERATION FOR LANE AND SHOULDER
SINGLE CARRIAGEWAY ROAD TO OPERATE NORMALLY WHILE BY-PASS LANE IS BEING CONSTRUCTED



MAXIMUM SPEED LIMITS
THE MAXIMUM SPEED LIMIT SHALL BE CONSISTENT WITH THE PREVAILING CONDITIONS OF THE DEVIATION IN TERMS OF ROAD SAFETY REQUIREMENTS

SIGN SEQUENCE FOR WORK ON SHOULDERS ON SINGLE CARRIAGEWAY ROADS

DESIGNED BY  AGC Consulting Engineers 3A Pierre Street Hampton Court Polokwane 0699				DESIGNED M.K	CONSULTANT	RECOMMENDED	CLIENT  MAKHADO MUNICIPALITY PRIVATE BAG X2596, LOUIS TRICHARDT, 0920	SCALE AS SHOWN	CLIENT MAKHADO LOCAL MUNICIPALITY	TYPE OF PLANNING PRELIMINARY DESIGN	BID No.
DRAWN P.C				DESIGN CHECKED M.T	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT		REVISION A	PROJECT TITLE UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND REVELE VILLAGES		SHEET 1
DRAWING CHECKED A.C					DATE:	DATE:			DRAWING TITLE TYPICAL TRAFFIC MANAGEMENT LAYOUT		DRAWING No. AGC-CIV-PD-TD-001
No.	DATE	REVISION	REVISED BY	DATE							



ROAD LAYOUT
SCALE 1:250

No.	DATE	REVISION	REVISED BY	DATE	

DESIGNED BY

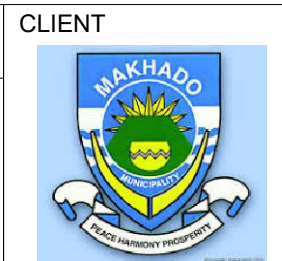


AGC Consulting Engineers
3A Piere Street
Hampton Court
Polokwane
0699

DESIGNED M.K
DESIGN CHECKED M.T
DRAWN P.C
DRAWING CHECKED A.C

CONSULTANT
..... for CONSULTING ENGINEER
DATE:

RECOMMENDED
..... for HEAD OF DEPARTMENT
DATE:

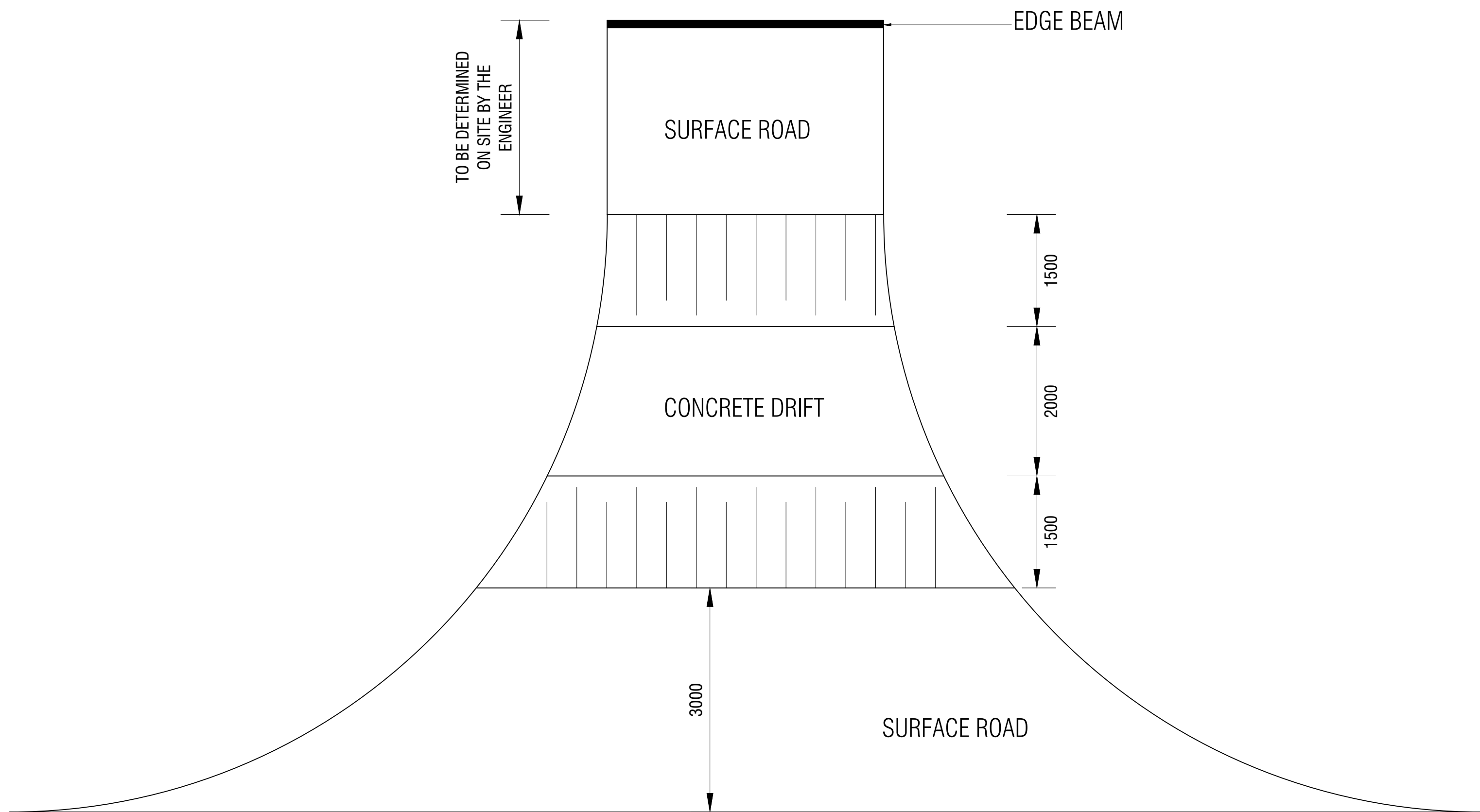


CLIENT
MAKHADO MUNICIPALITY PRIVATE BAG X2596, LOUIS TRICHARDT, 0920

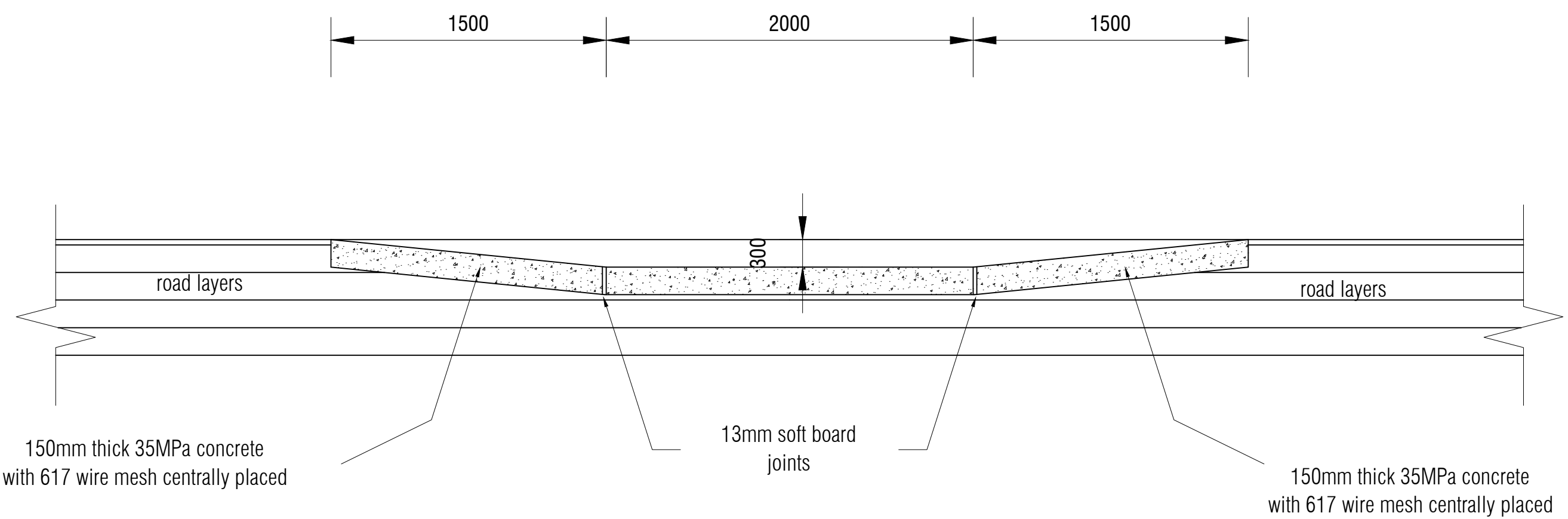
SCALE
AS SHOWN
REVISION
(A)

CLIENT	MAKHADO LOCAL MUNICIPALITY	TYPE OF PLANNING	PRELIMINARY DESIGN
PROJECT TITLE	UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND REVELE VILLAGES		
DRAWING TITLE	ROAD 1 AND D3715_050 INTERSECTION LAYOUT		

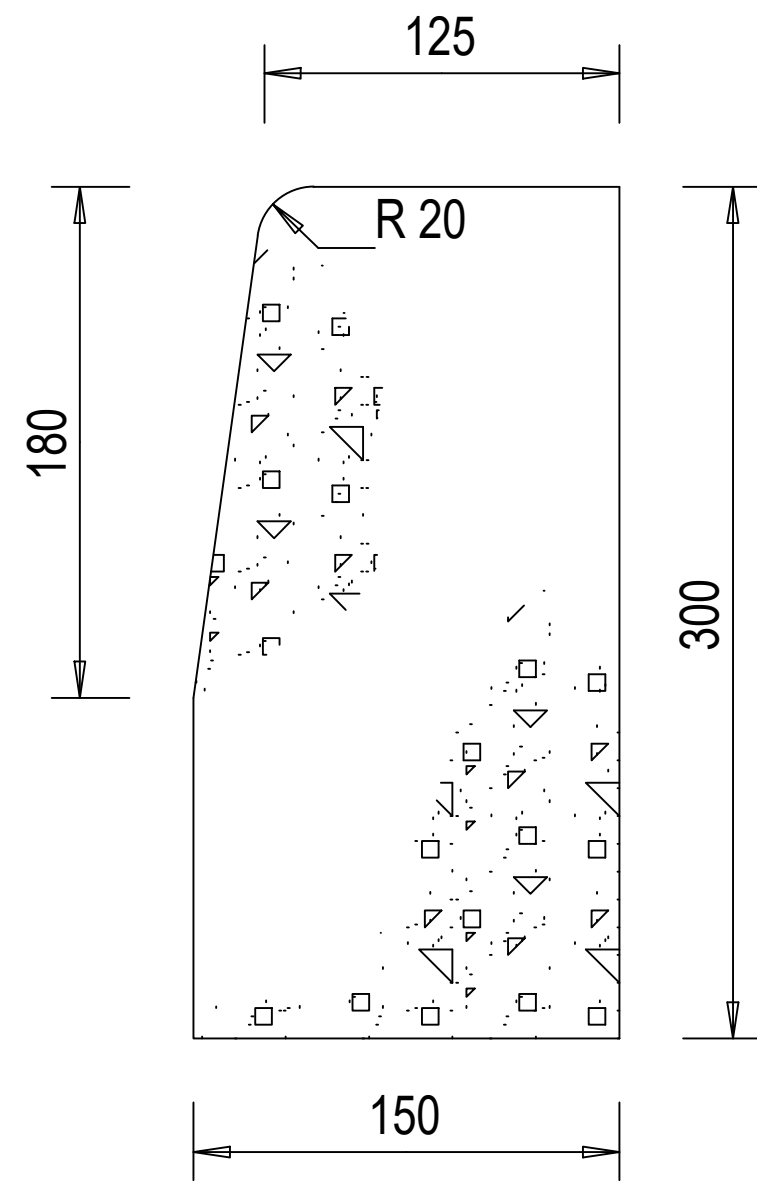
BID No.
SHEET 1 OF 1
DRAWING No.
AGC-CIV-PD-RD-002



TYPICAL DRIFT PLAN
SCALE 1: 50



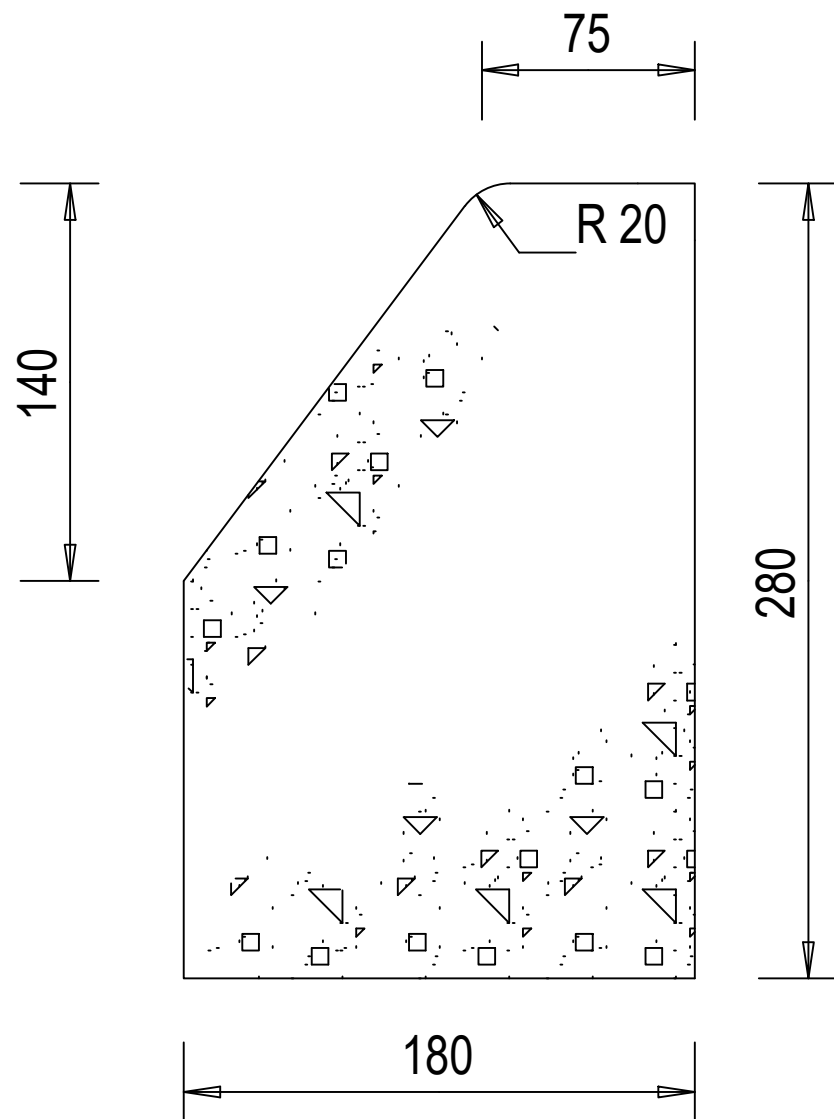
					DESIGNED BY		DESIGNED M.K	CONSULTANT	RECOMMENDED	CLIENT	SCALE	CLIENT	MAKHADO LOCAL MUNICIPALITY	TYPE OF PLANNING	PRELIMINARY DESIGN	BID No.
							DESIGN CHECKED M.K				AS SHOWN	PROJECT TITLE	UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND RAVELE			SHEET 1 OF 1
							DRAWN M.K	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT		REVISION		VILLAGES			DRAWING No.
							DRAWING CHECKED M.K	DATE:	DATE:		(A)	DRAWING TITLE	TYPICAL DRIFT PLAN			AGC-CIV-PD-TD-003
No.	DATE		REVISION		DESIGNED BY	AGC Consulting Engineers 3A Pierre Street Hampton Court Polokwane 0699				MAKHADO MUNICIPALITY PRIVATE BAG X2596, LOUIS TRICHARDT, 0920						



BARRIER KERB

SABS (FIG. 3)

Can also be used
as mountable kerbs



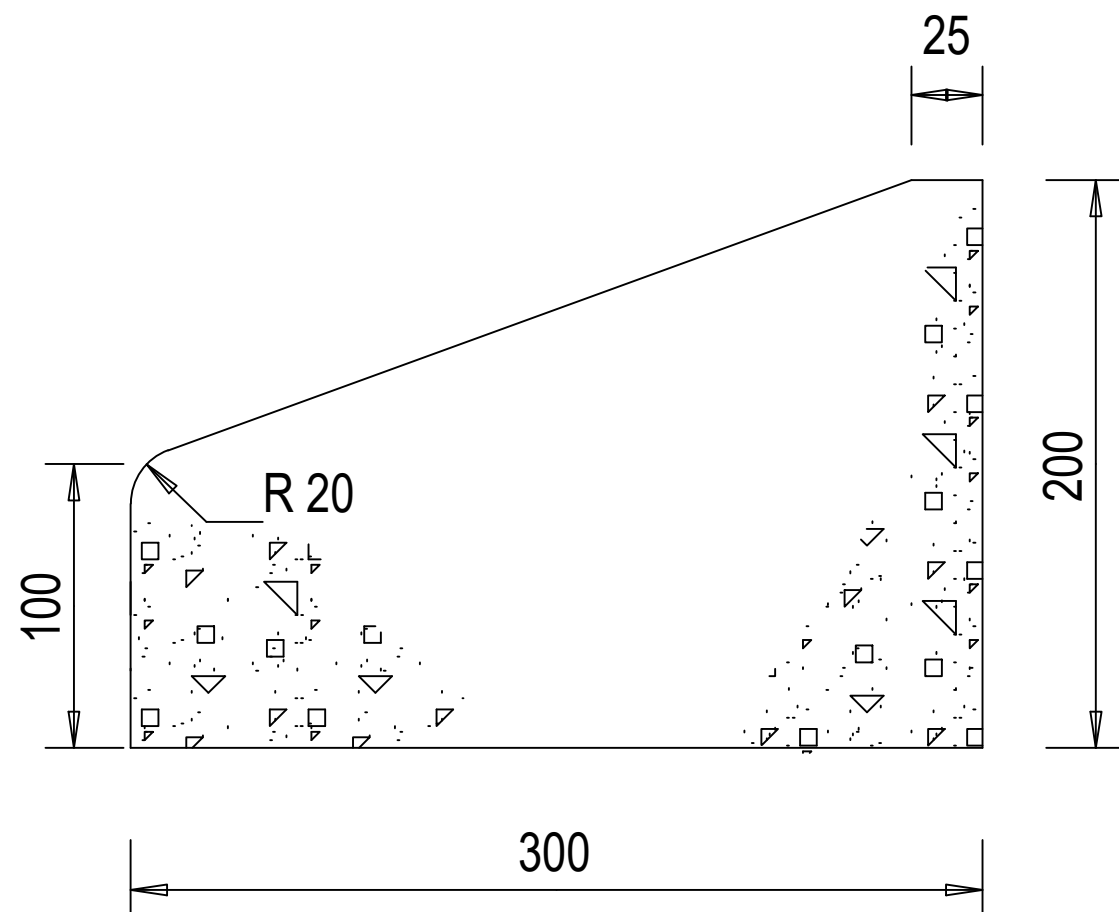
SEMI-MOUNTABLE KERB

SABS (FIG. 7)

For use in medians only

NOTES:

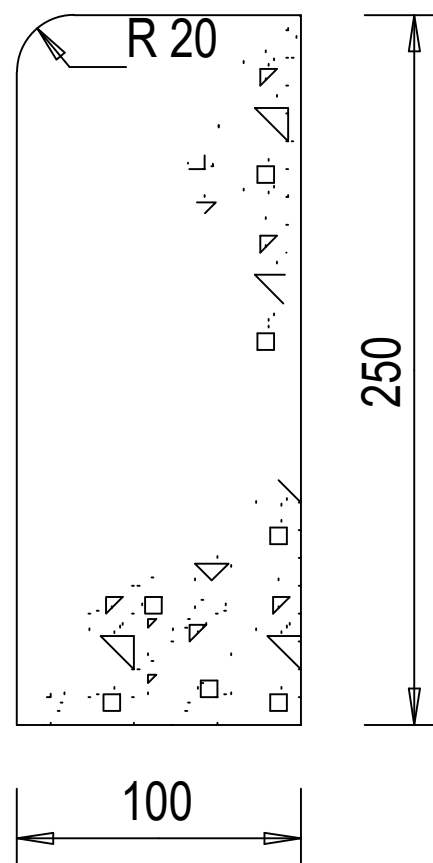
1. MOUNTABLE KERBS TO BE FIG.8c
UNLESS OTHERWISE SPECIFIED
2. ALL KERB SHAPES AND STRENGTH
TO COMPLY WITH SABS 927.
3. CONCRETE HAUNCHING TO BE PLACED AT BACK
OF KERBS AT ALL JOINTS ON STRAIGHTS,
BUT CONTINUOUSLY AT BACK OF KERBS.
4. EXCLUDING THE USE OF CAST-IN-SITU CONCRETE
KERBING IN EXISTING DEVELOPED SUBURBS
AND TOWNSHIPS.



MOUNTABLE KERB

SABS (FIG. 8c)

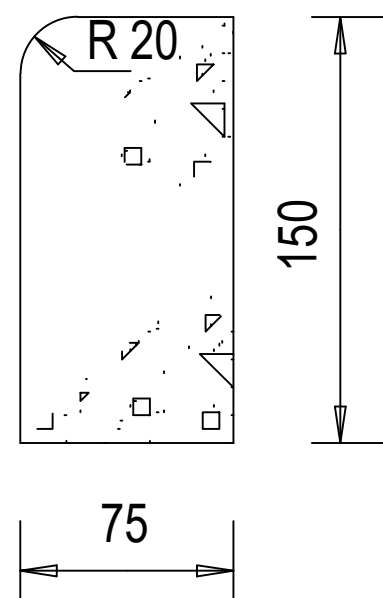
Industrial use



RECTANGULAR

SABS (FIG.10)

For high side kerbing
in low cost developments

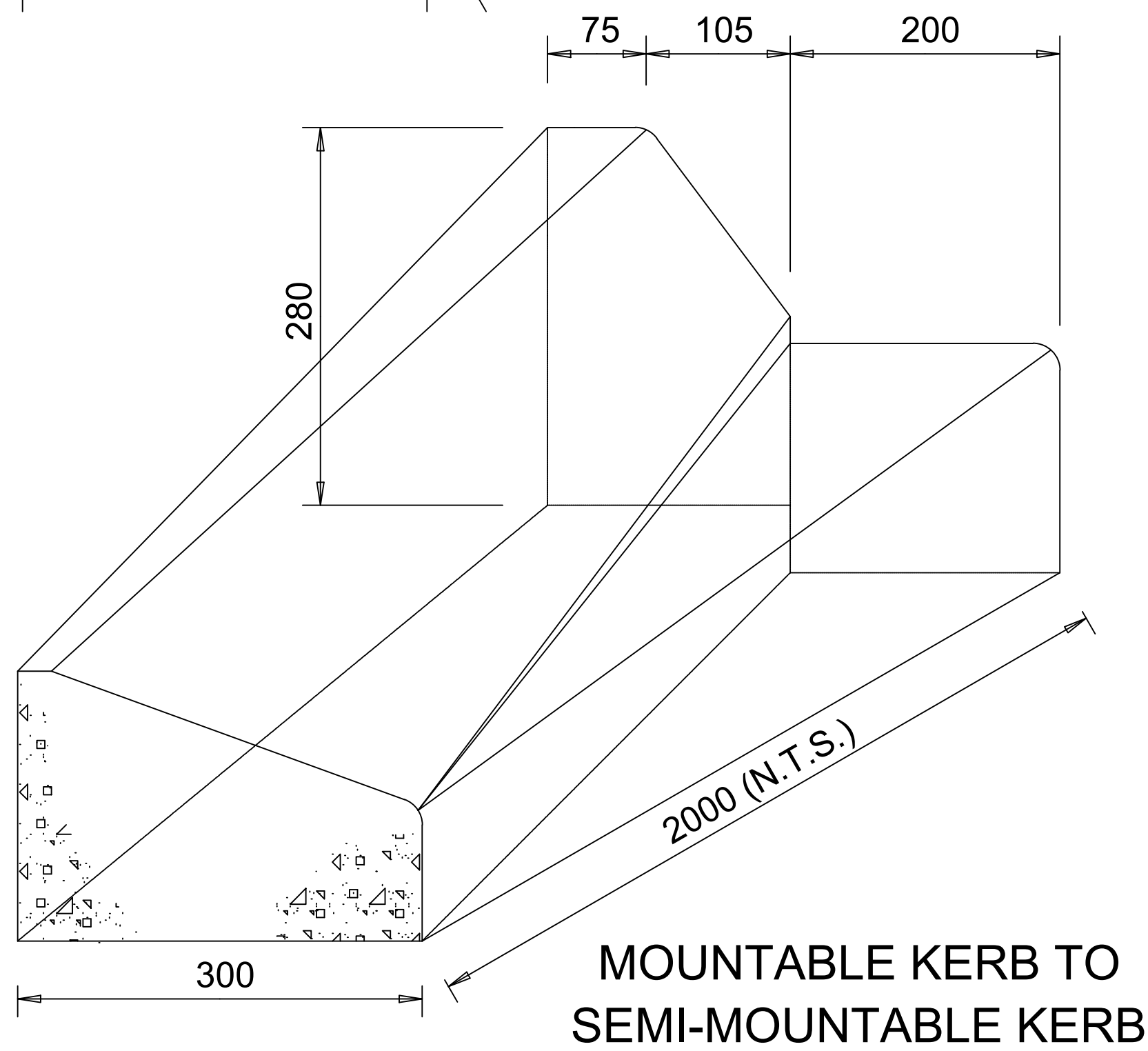
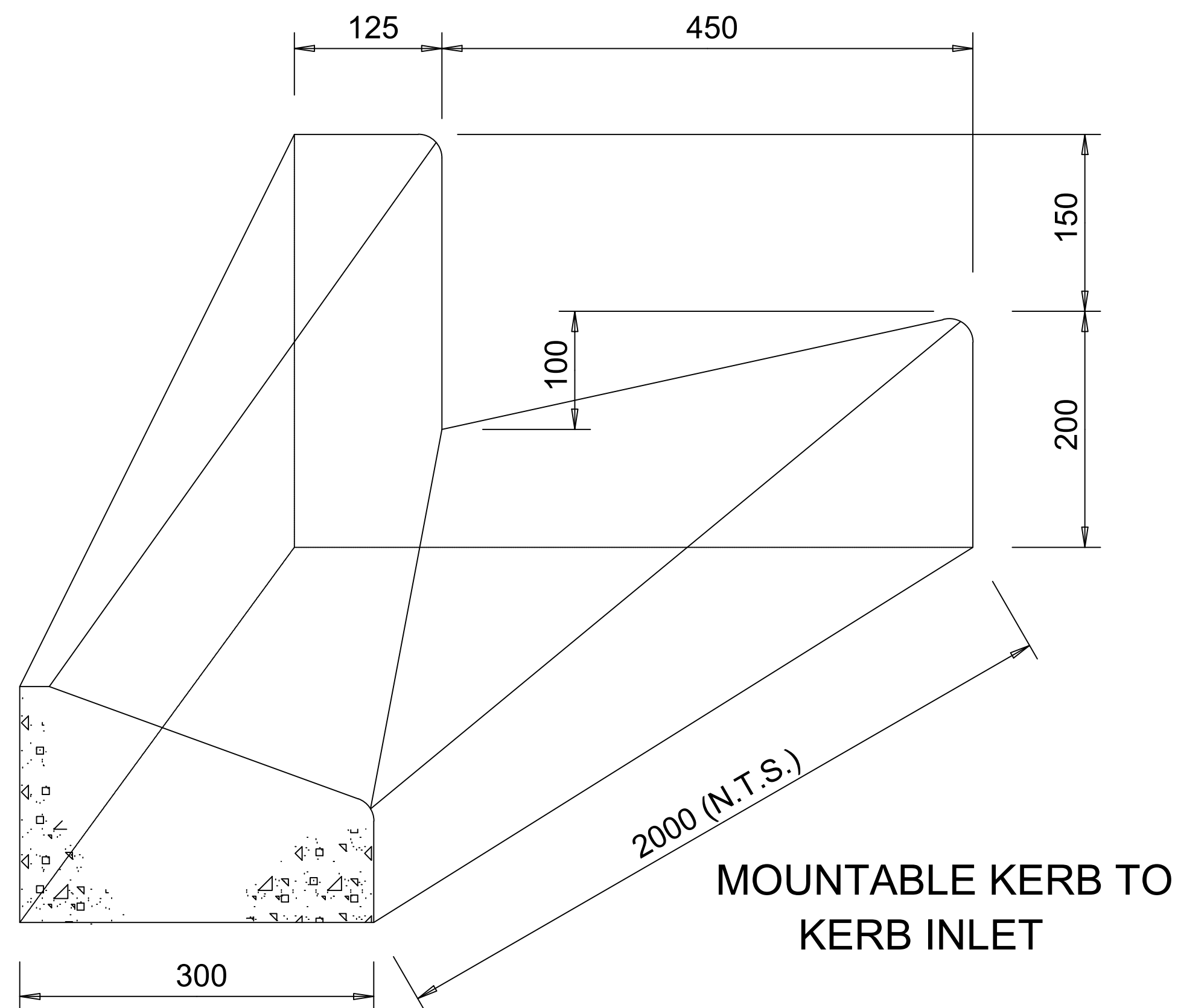


RECTANGULAR

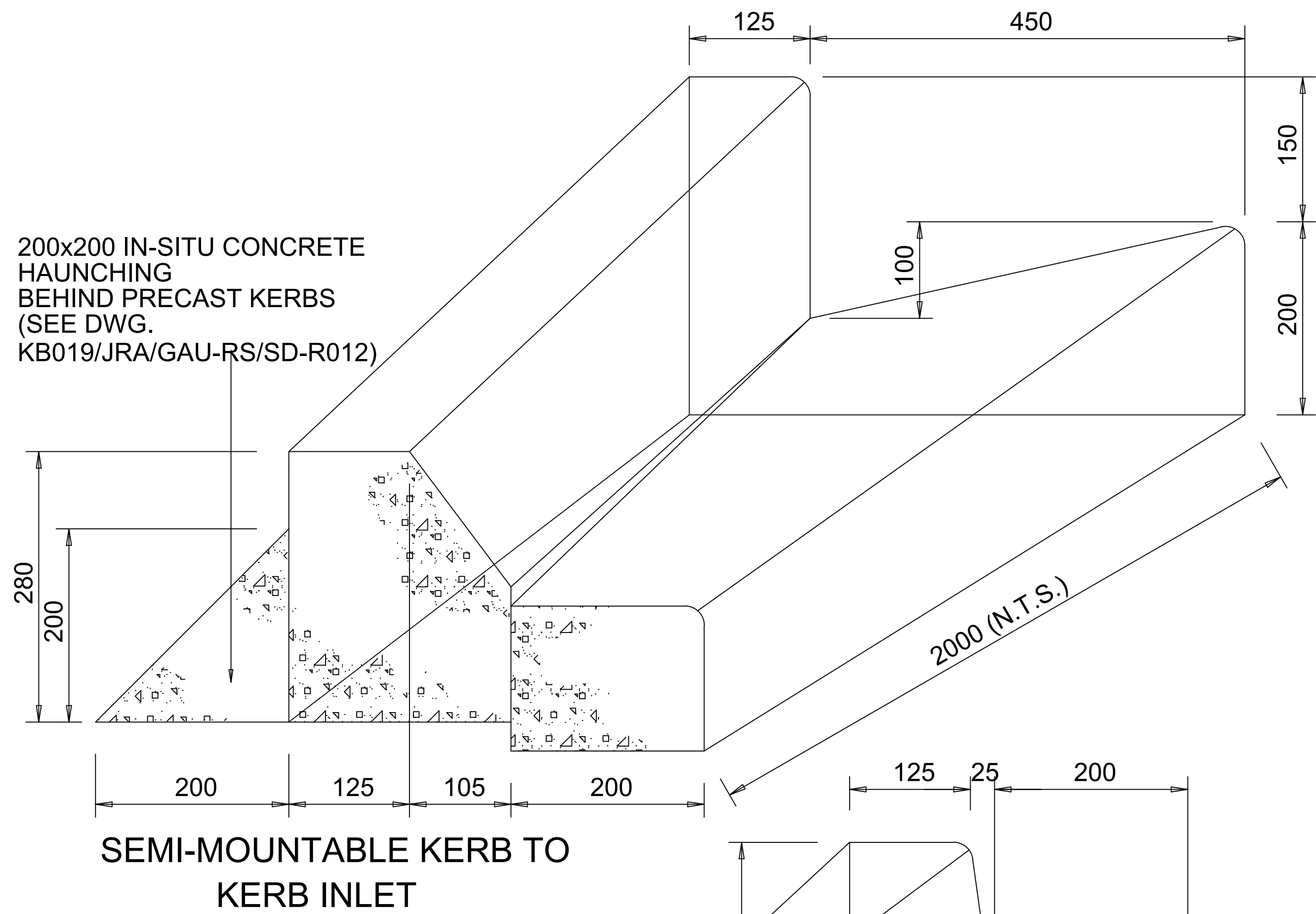
SABS (FIG.12)

Edge restraints for
paving blocks

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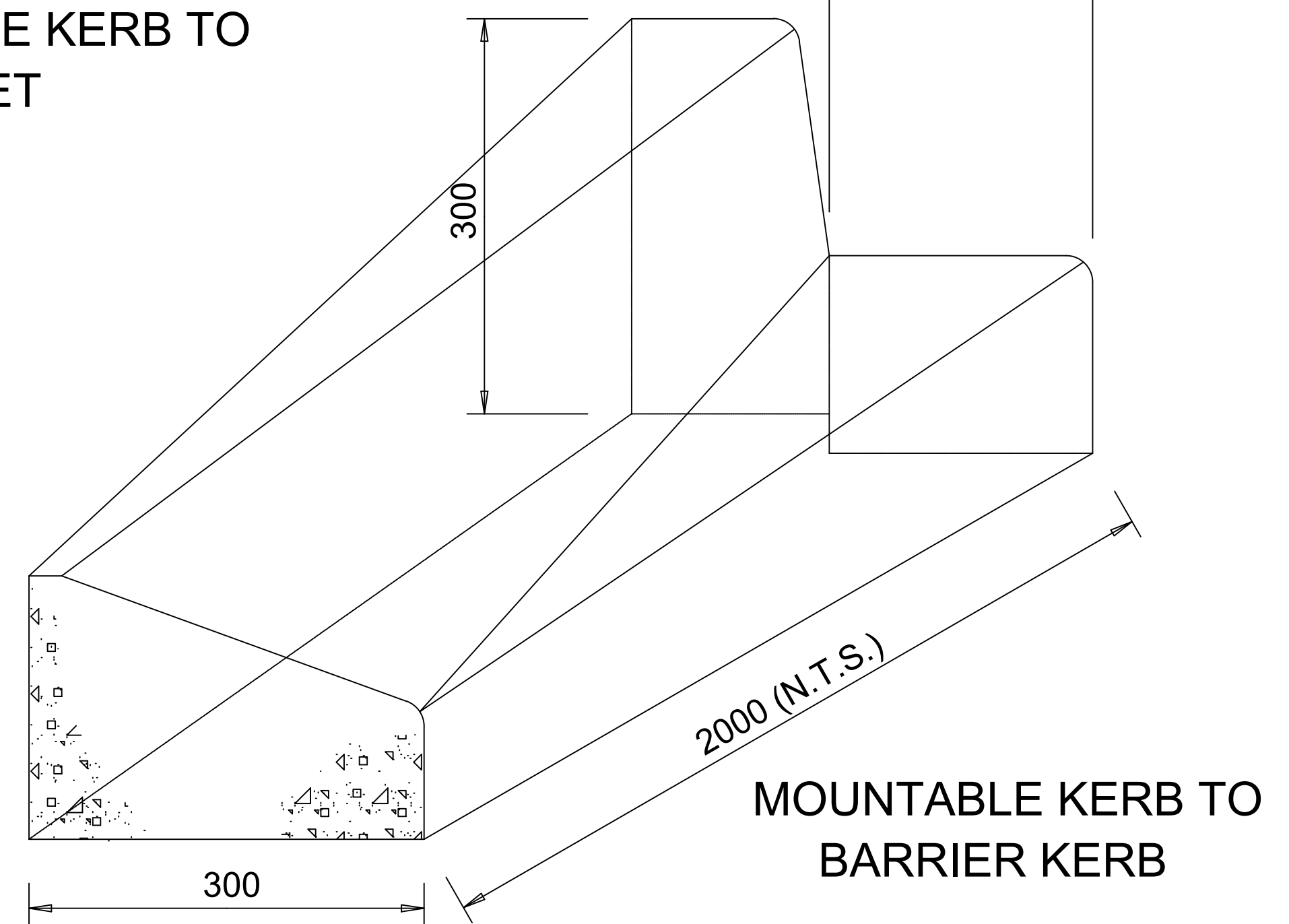




200x200 IN-SITU CONCRETE
HAUNCHING
BEHIND PRECAST KERBS
(SEE DWG.
KB019/JRA/GAU-RS/SD-R012)

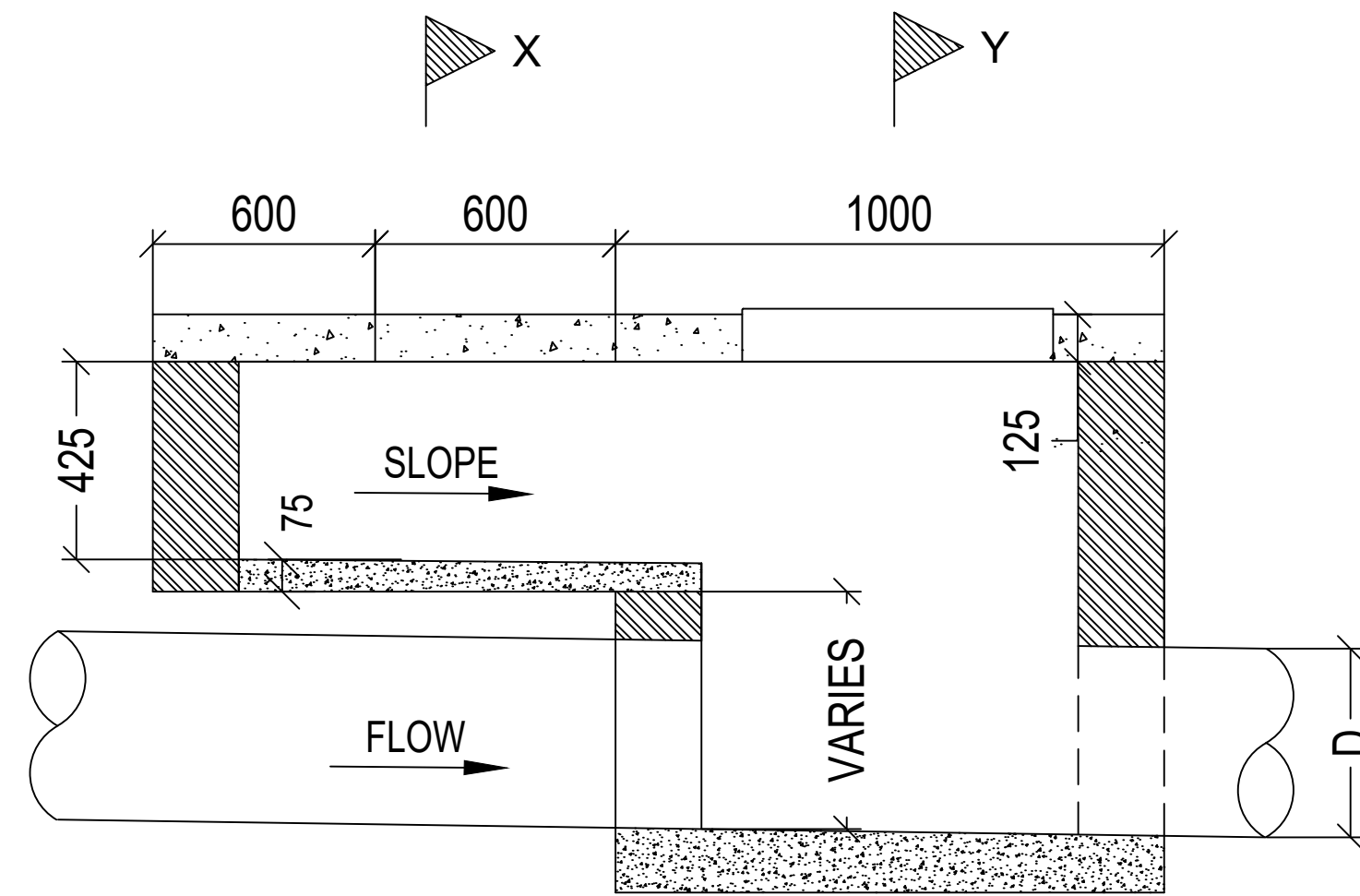


NOTES :

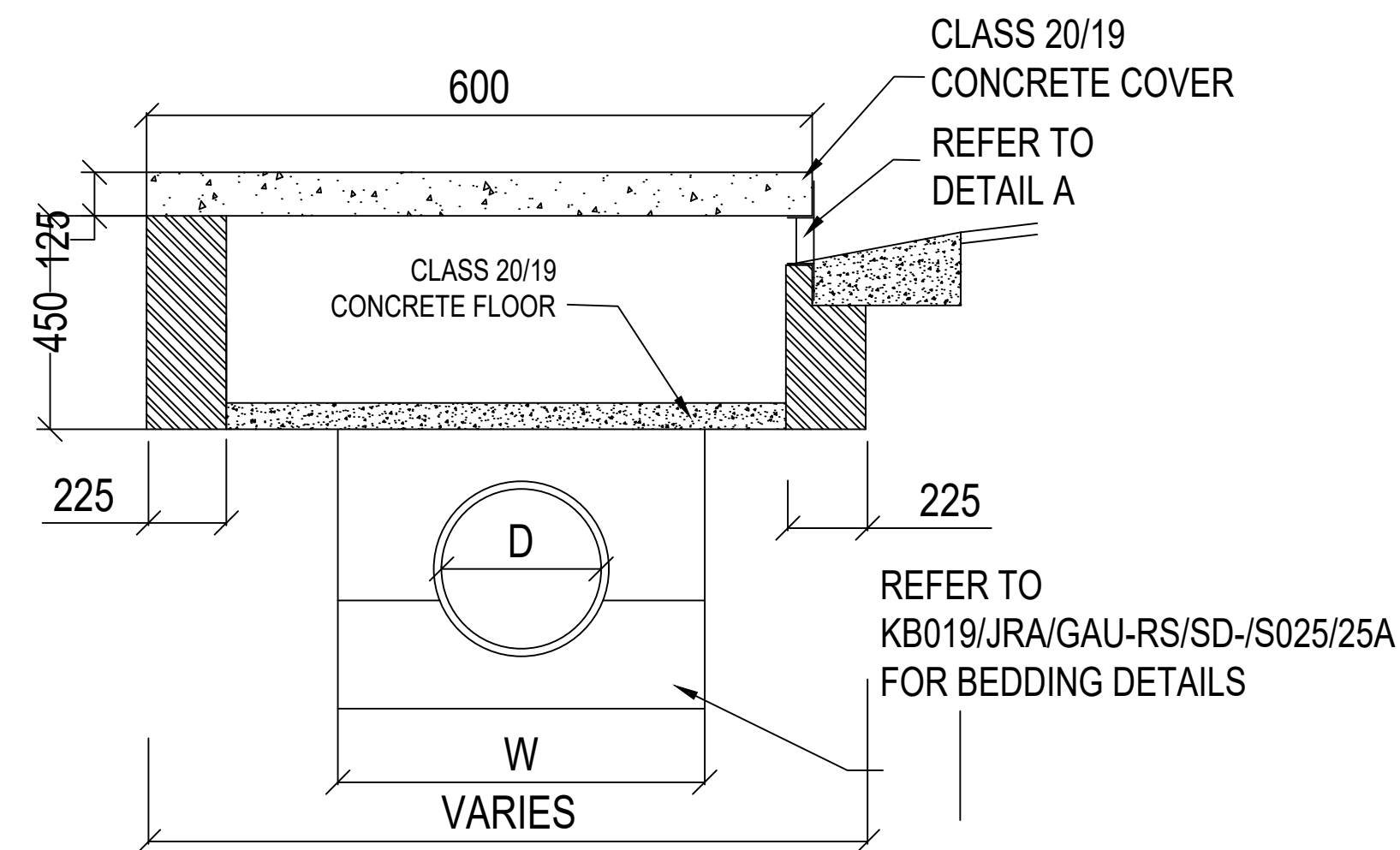
1. ALL CAST IN-SITU CONCRETE TO BE CLASS 25/19
2. TRANSITIONS NEED TO BE STEEL TROWEL FINISHED.



				DESIGNED BY	 AGC Consulting Engineers 3A Pierre Street Hampton Court Polokwane 0699	DESIGNED M.K	CONSULTANT	RECOMMENDED	CLIENT	SCALE	CLIENT	MAKHADO LOCAL MUNICIPALITY	TYPE OF PLANNING	PRELIMINARY DESIGN	BID No.
						DESIGN CHECKED M.K			 MAKHADO MUNICIPALITY	AS SHOWN	PROJECT TITLE	UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND RAVELE VILLAGES			SHEET 1 OF 1
						DRAWN M.K	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT		REVISION					DRAWING No.
No.	DATE		REVISION	REVISED BY	DATE	DRAWING CHECKED M.K	DATE:	DATE:		(A)	DRAWING TITLE	STANDARD DETAIL			AGC-CIV-PD-TD-006




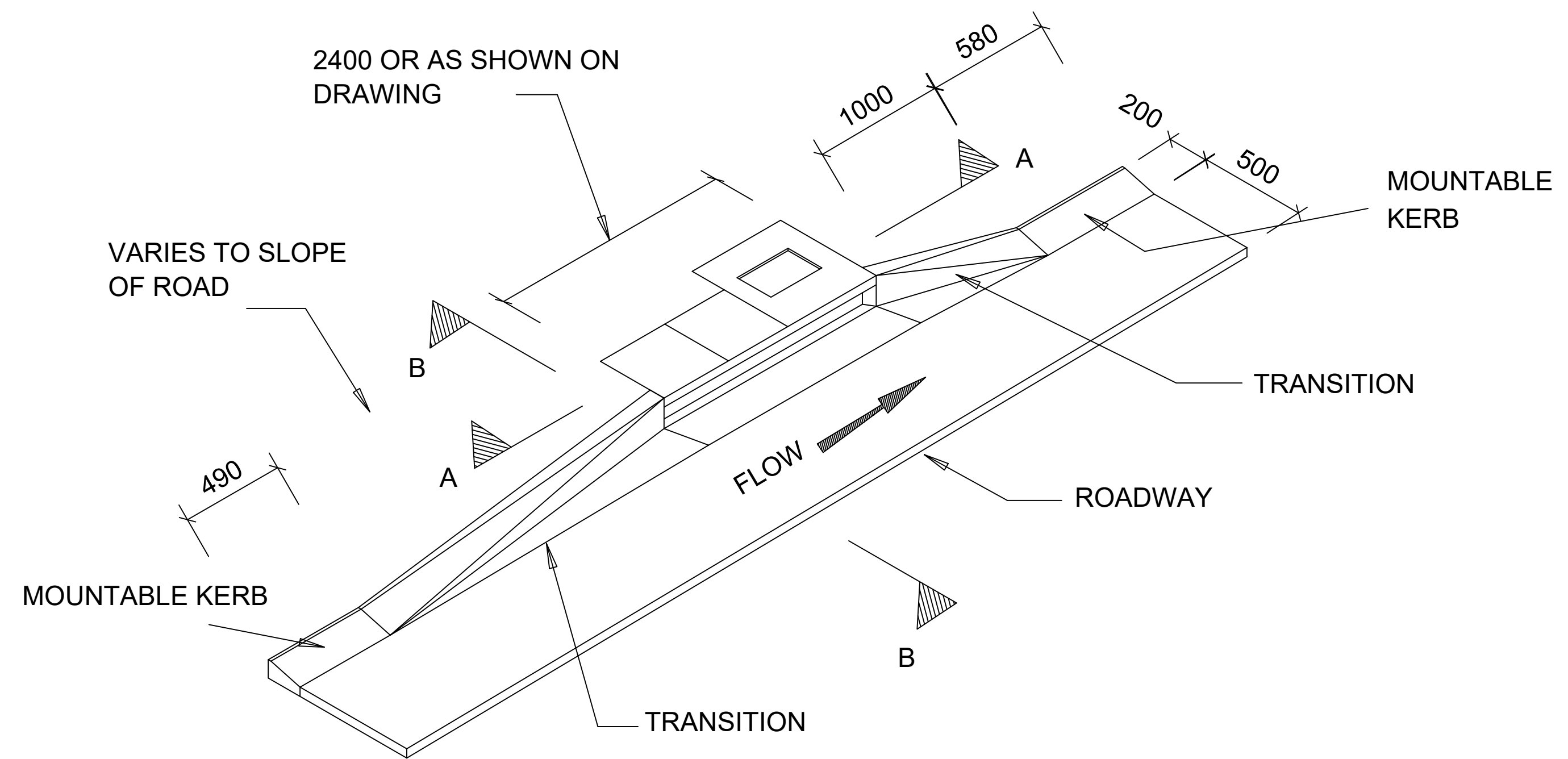
SECTION A-A



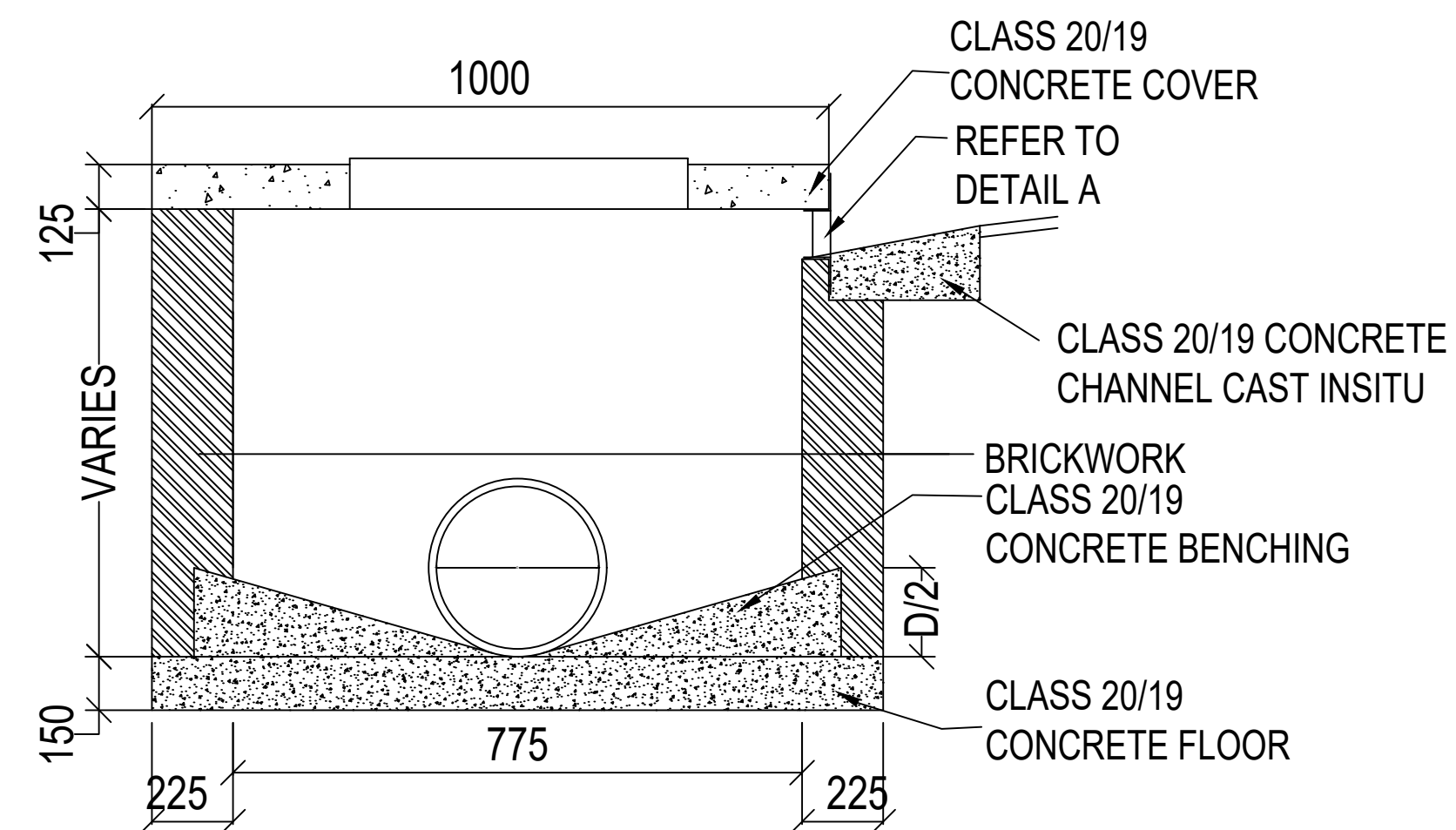
SECTION X-X

NOTES:

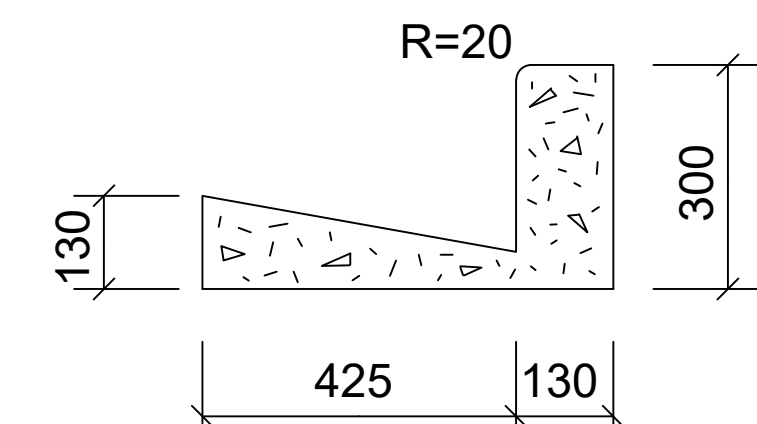
- TRANSITION LENGTHS:-
- 1.0m IF SLOPES < 4%
 - 2.0m IF SLOPES < 7%
 - 3.0m IF SLOPES < 10%
- STORMWATER IN OUTLET STRUCTURE TO BE CHANNELED BY CONCRETE BENCHING
2. THE POSITION OF THE STORMWATER PIPE IN THE OUTLET STRUCTURE MAY VARY
3. DIMENSION "W" TO BE AS FOLLOWS IF NOT OTHERWISE INDICATED
- 600 min
4. - MAX. OD OF OUTLET PIPE PLUS 300mm.
- 



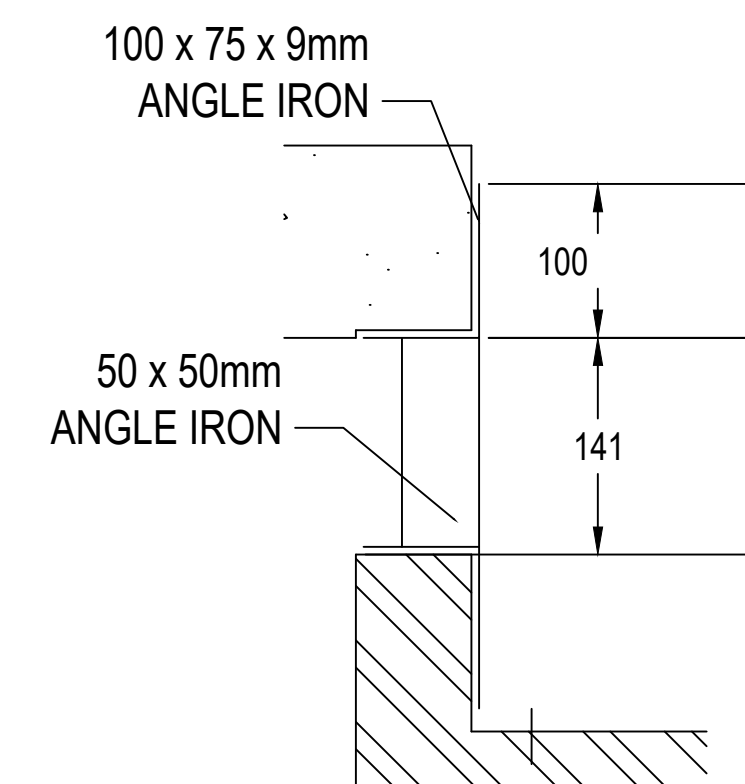
ISOMETRIC VIEW OF DOWNSTREAM CROSSING



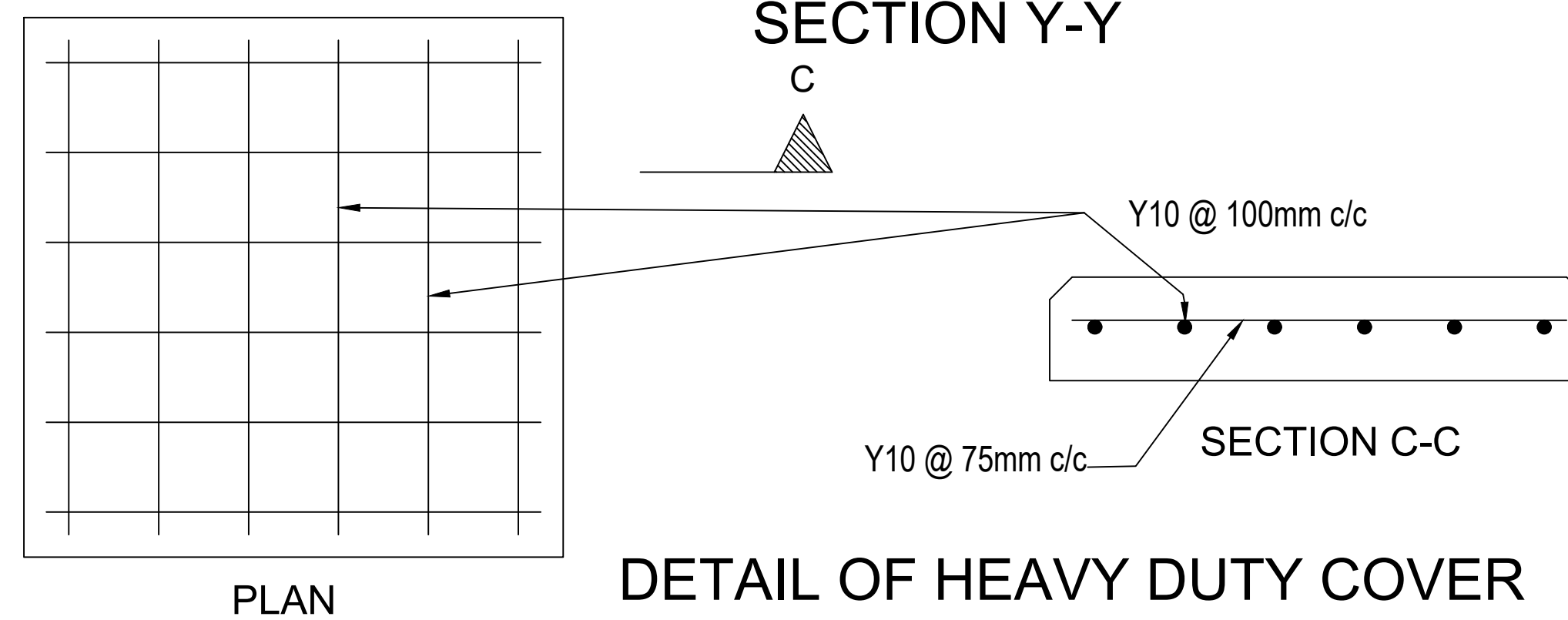
SECTION Y-Y



SECTION B-B

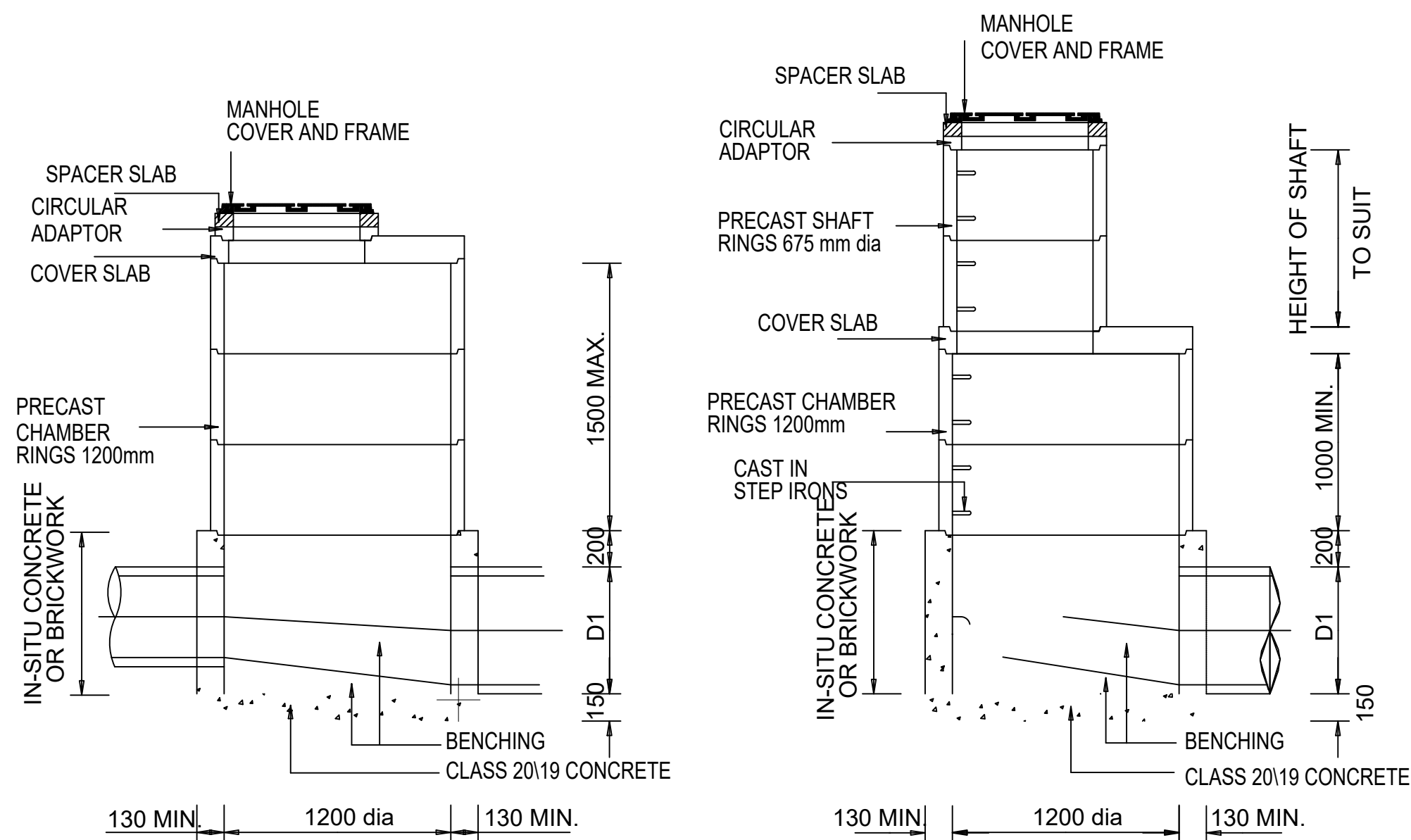


DETAIL A



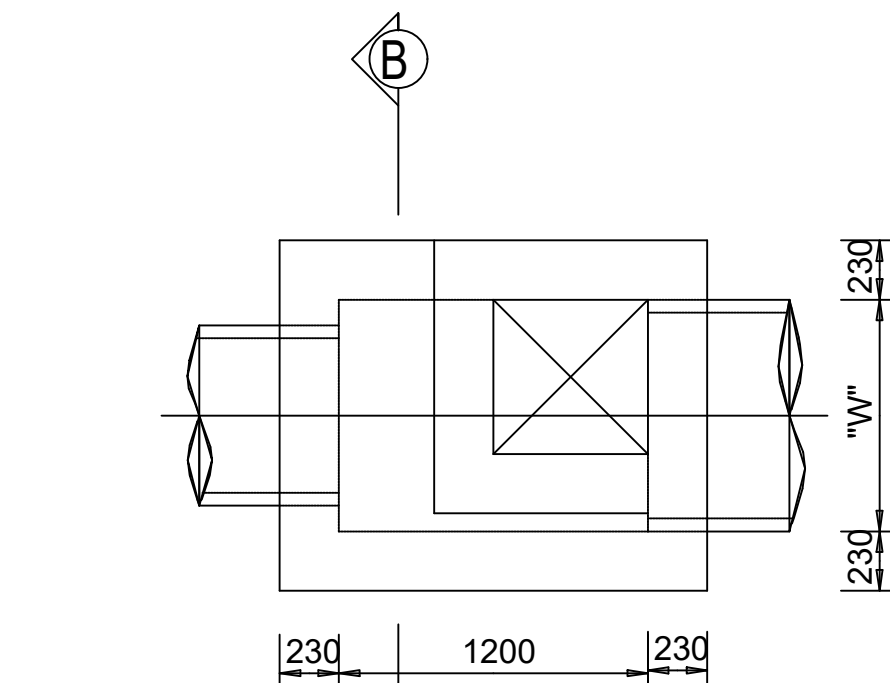
DETAIL OF HEAVY DUTY COVER

[illegible]



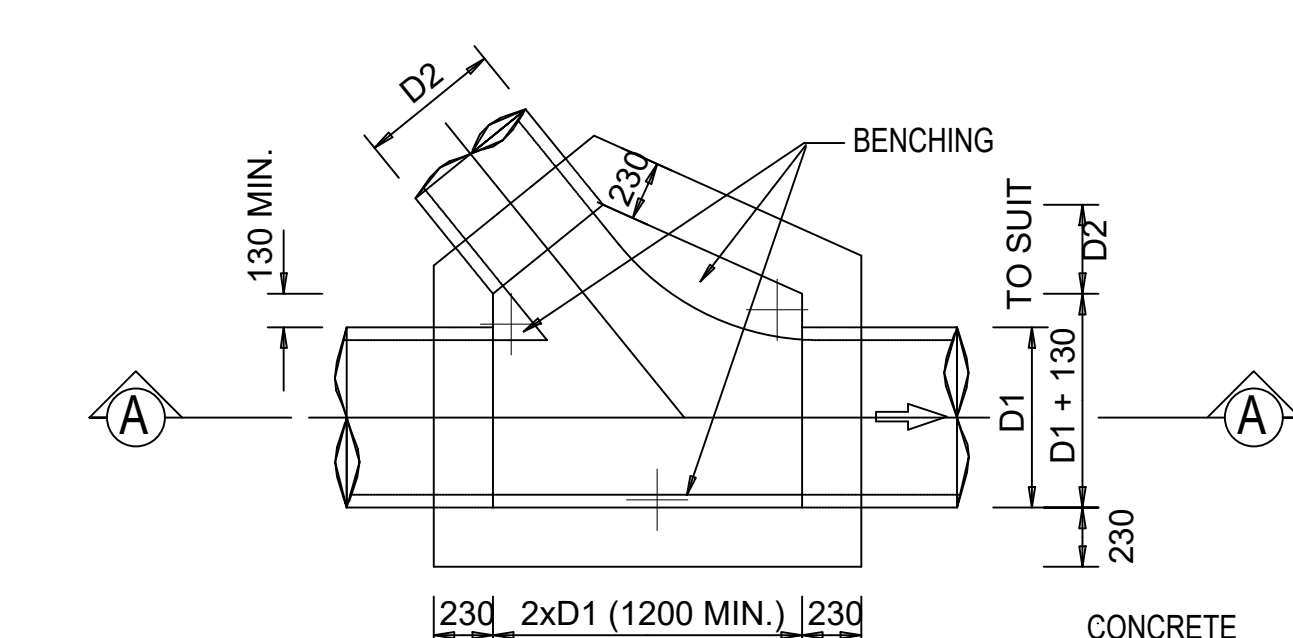
SECTION OF SHALLOW
MANHOLE WITHOUT SHAFT

SECTION OF DEEP
MANHOLE WITH SHAFT

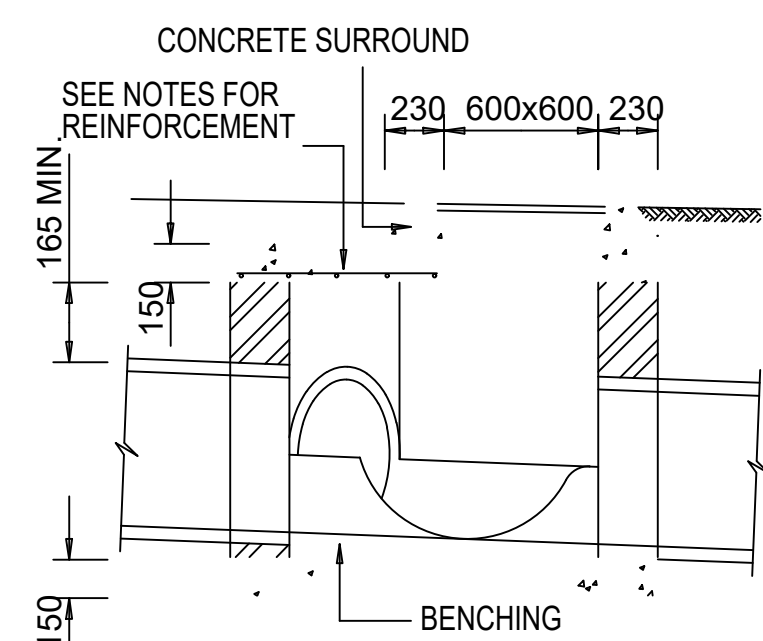


STRAIGHT THROUGH
MANHOLE

SECTION B-B

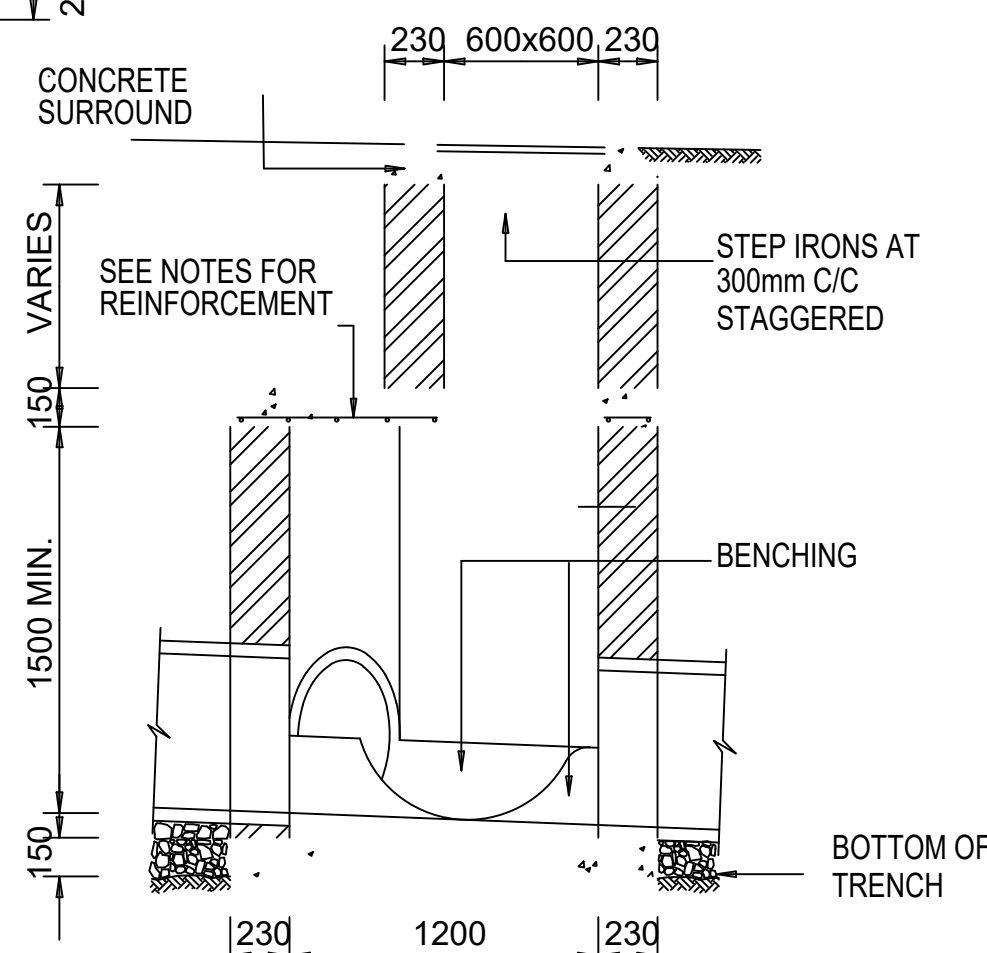


JUNCTION MANHOLE



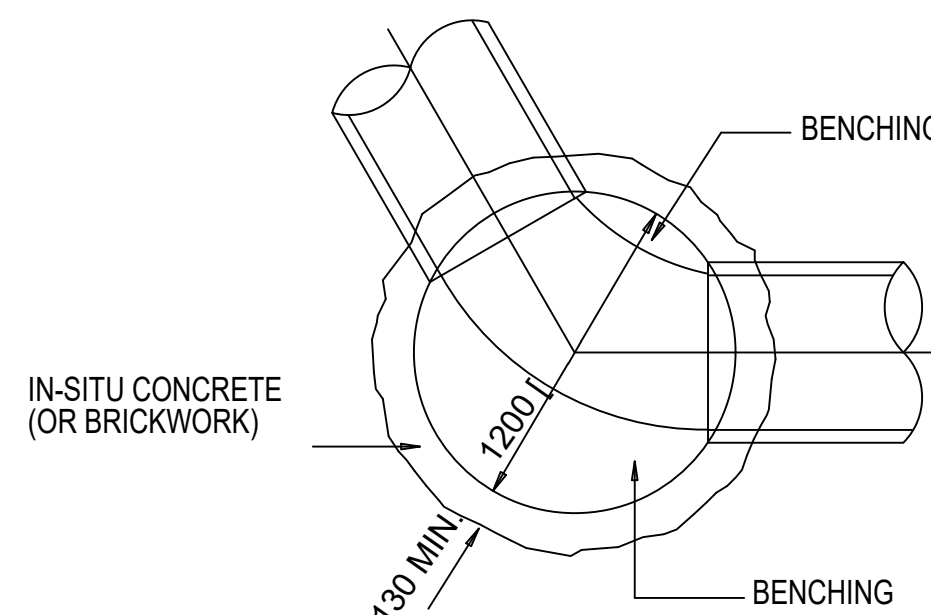
SECTION A-A

SECTION THROUGH MANHOLE WITHOUT SHAFT

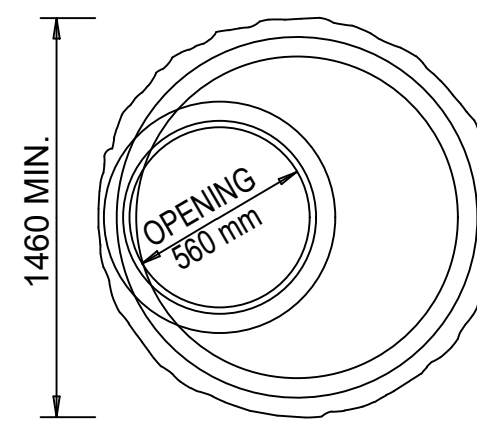


SECTION A-A

SECTION THROUGH MANHOLE WITH SHAFT



PLAN OF MANHOLE
PRECAST UNITS REMOVED

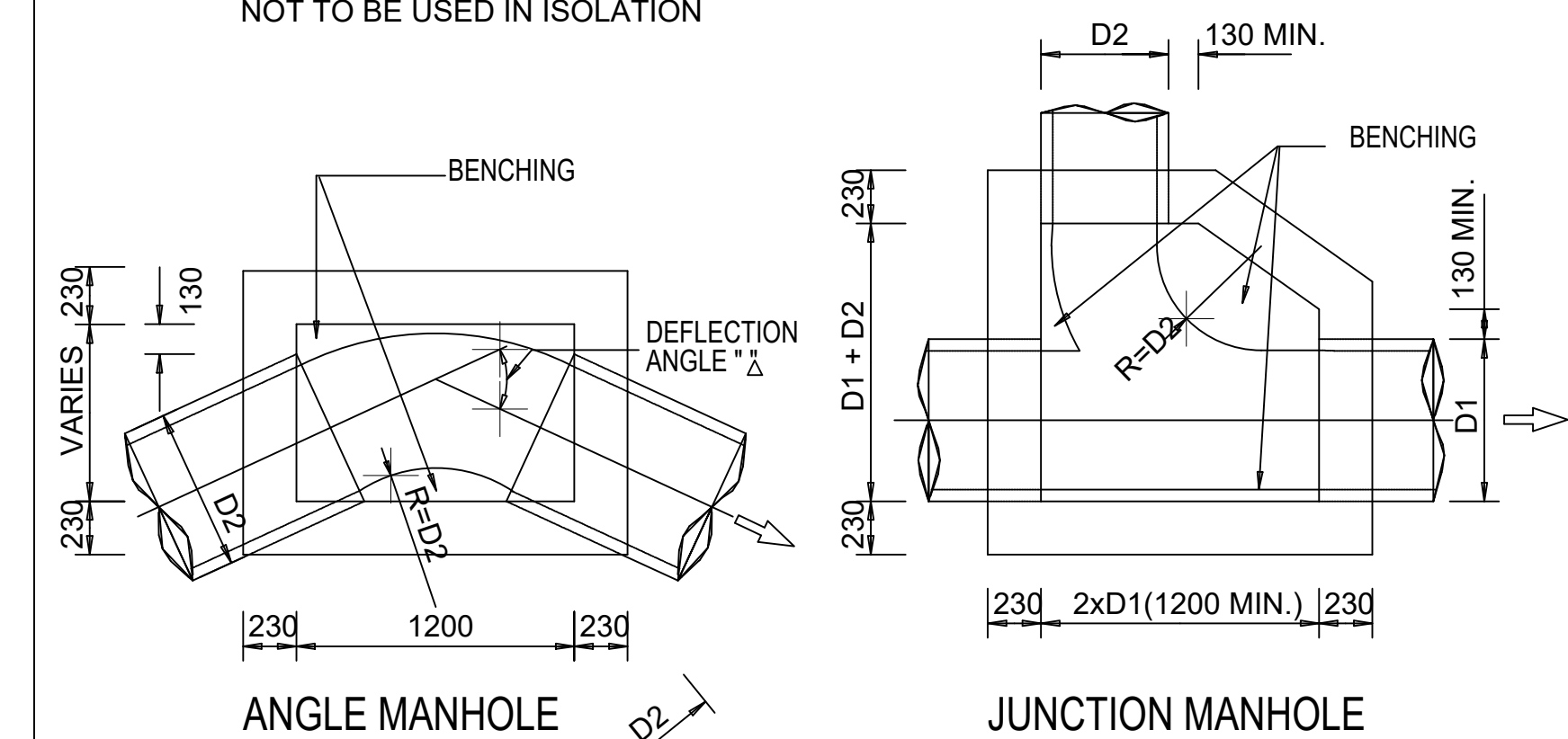


PLAN OF MANHOLE
COVER REMOVED

NOTES:

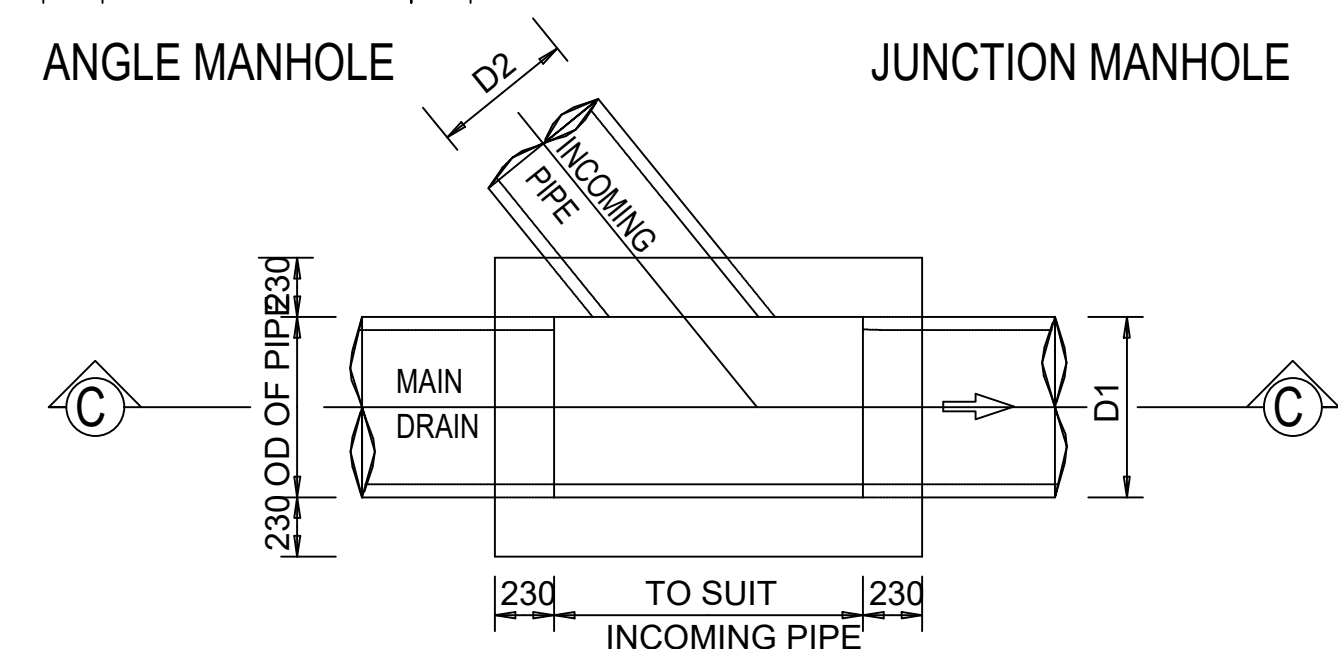
- FOR DETAILS OF MANHOLES WHERE THE INCOMING PIPES ARE LARGER THAN 750 mm - REFER TO DRG'S. KB019/JRA/GAU-RS/SD-S010, S011, S012
- DIMENSION "W" TO BE AS FOLLOWS IF NOT OTHERWISE INDICATED:
 - 600 mm.
 - MAX. OD OF OUTLET PIPE PLUS 300 mm.
- REINFORCEMENT IN DECK SLABS TO BE Y12 DEFORMED H.T. BARS AT 150 c/c BOTHWAYS WITH 25 mm COVER.
- FLOOR BENCHING AND HD CI FRAME SURROUNDS TO BE STEEL TROWELLED.
- MANHOLE COVER TYPE 6 TO BE USED OUTSIDE ROAD SURFACE AREA.
- MANHOLE COVERS TYPE 2A TO BE USED INSIDE ROAD SURFACE AREA.
- DECK SLABS MAY BE CONSTRUCTED WITH PRECAST CONCRETE PLANKS WITH AN IN-SITU TOPPING PROVIDED THE COMPOSITE CONSTRUCTION IS OF EQUIVALENT STRENGTH.
- JUNCTION BOX WALLS MAY ALSO BE CONSTRUCTED WITH 150 mm THICK CAST IN-SITU CLASS 20/19 CONCRETE.
- JUNCTION BOXES SHALL NOT BE USED UNLESS SPECIFICALLY REQUIRED BY THE LOCAL AUTHORITY.
- ALL BRICKS TO BE QUALITY FBSE30 TO SABS 227-1986 WITH WATER ABSORPTION <14% AND EFFLORESCENCE <10.
- ALL BRICK WORK TO BE ENGLISH BOND.

TYPICAL JUNCTION BOX DETAILS
NOT TO BE USED IN ISOLATION



ANGLE MANHOLE

JUNCTION MANHOLE



PLAN

SECTION C-C

DESIGNED BY M.K				CONSULTANT RECOMMENDED				CLIENT MAKHADO MUNICIPALITY				SCALE AS SHOWN				CLIENT MAKHADO LOCAL MUNICIPALITY				TYPE OF PLANNING PRELIMINARY DESIGN				BID No.			
DESIGN CHECKED M.K				DRAWN M.K				PRIVATE BAG X2596, LOUIS TRICHARDT, 0920				REVISION (A)				PROJECT TITLE UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND RAVELE VILLAGES				DRAWING No. AGC-CIV-PD-TD-019				SHEET 1 OF 1			
DRAWING CHECKED M.K				DATE:				DATE:				DRAWING TITLE STANDARD DETAIL															
No.				DATE				REVISION				REVISED BY				DATE											

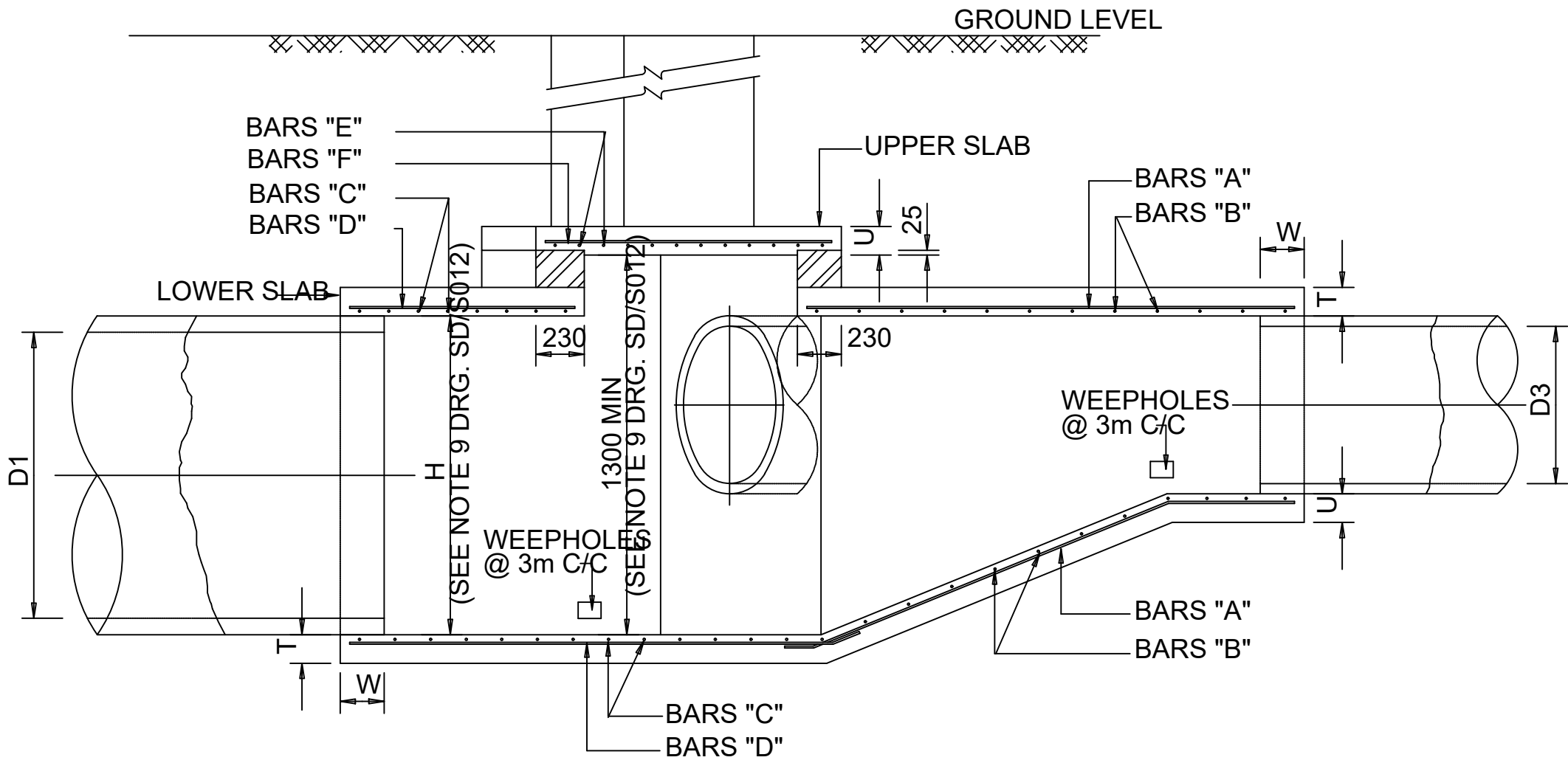
NOTE:

POINT PI 2 IS LOCATED ON THE INTERSECTION OF OFFSET LINES 1&2 TO HALF THE EXTERNAL PIPE DIAMETERS i.e. D5/2 & D4/2 RESPECTIVELY.

PLAN: SETTING OUT DETAIL
DETAILS OF 45 - 90 JUNCTIONS

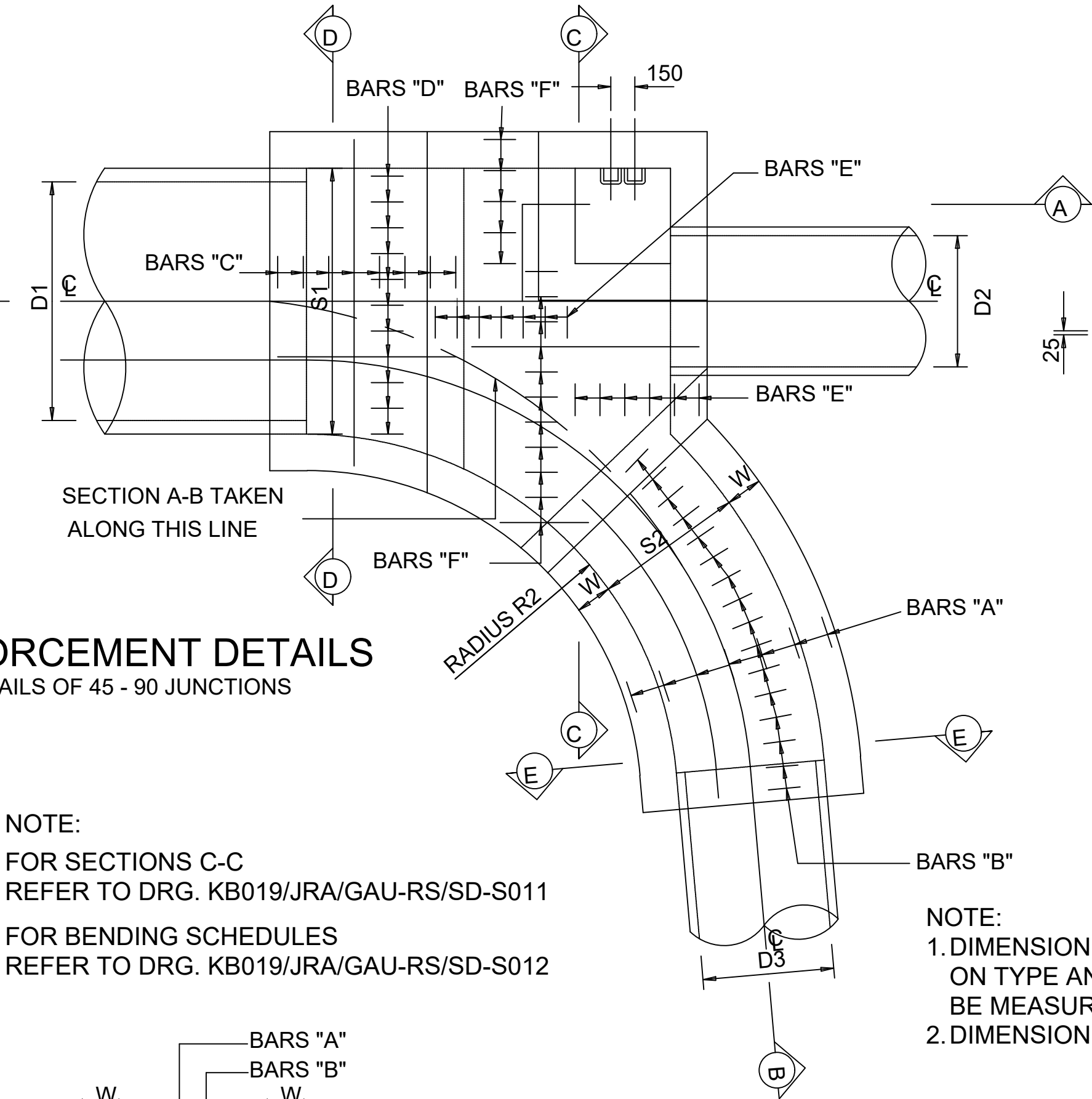
TABLE 1: VALUES OF L AND R2								
NOMINAL DIA D3 (mm)	825	900	1050	1200	1350	1500	1650	1800
L (m)	2,29	2,48	2,90	3,31	3,71	4,10	4,49	4,85
R2 (m)	2,33	2,54	2,96	3,38	3,79	4,18	4,57	4,95

TABLE OF TANGENT LENGTHS, T2												
DIAMETERS		DEFLECTION ANGLE " " Δ										
D3 (mm)	D4 (mm)	90	85	80	75	70	65	60	55	50	45	
825	933	2,33	2,14	1,96	1,79	1,63	1,48	1,35	1,21	1,09	0,97	
900	1014	2,54	2,33	2,13	1,95	1,78	1,62	1,47	1,32	1,18	1,05	
1050	1185	2,96	2,71	2,48	2,27	2,07	1,89	1,71	1,54	1,38	1,23	
1200	1352	3,38	3,10	2,84	2,59	2,37	2,15	1,95	1,76	1,58	1,40	
1350	1516	3,79	3,47	3,18	2,91	2,65	2,41	2,19	1,97	1,77	1,57	
1500	1672	4,18	3,83	3,51	3,21	2,93	2,66	2,41	2,18	1,95	1,73	
1650	1828	4,57	4,19	3,83	3,51	3,20	2,91	2,64	2,38	2,13	1,89	
1800	1978	4,95	4,54	4,15	3,80	3,47	3,15	2,86	2,58	2,31	2,05	



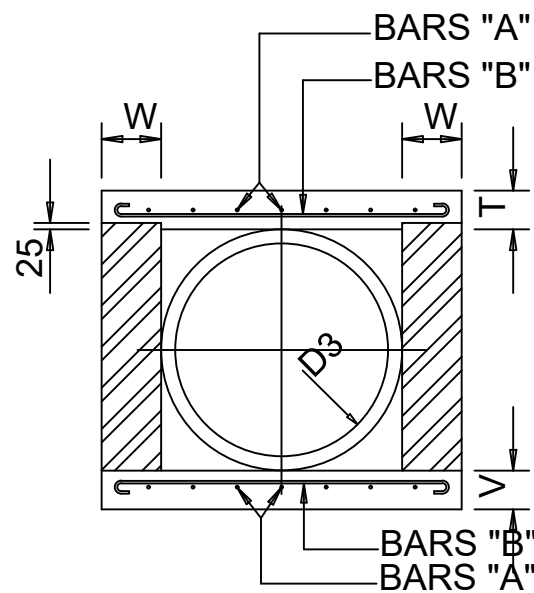
SECTION A-B
DETAILS OF 45 - 90 JUNCTIONS

PLAN: REINFORCEMENT DETAILS
DETAILS OF 45 - 90 JUNCTIONS



NOTE:

- FOR SECTIONS C-C REFER TO DRG. KB019/JRA/GAU-RS/SD-S011
- FOR BENDING SCHEDULES REFER TO DRG. KB019/JRA/GAU-RS/SD-S012

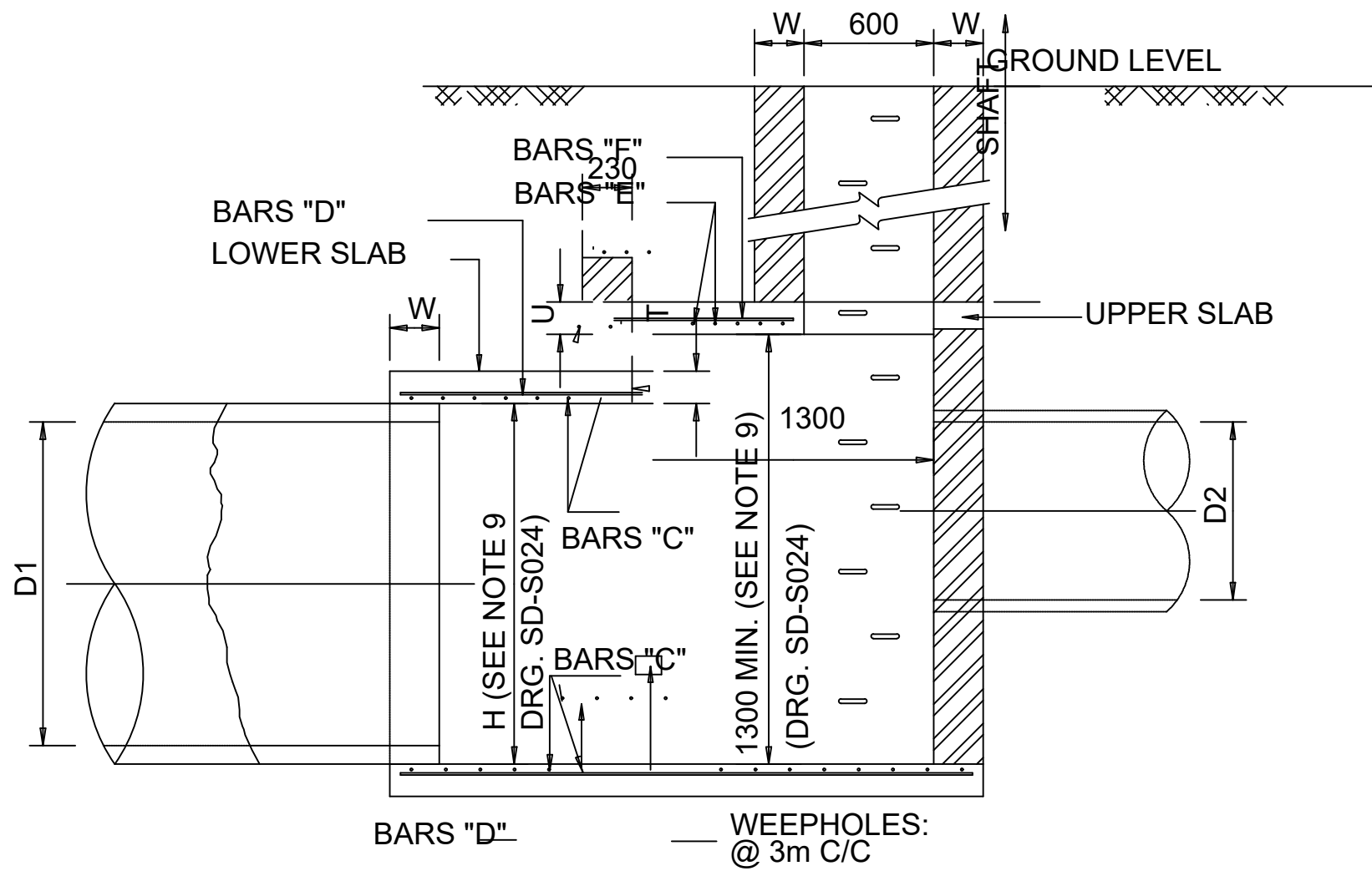


SECTION E-E
DETAILS OF 45 - 90 JUNCTIONS

SECTION D-D
DETAILS OF 45 - 90 JUNCTIONS

NOTE:

- DIMENSION D4 VARIES, IT IS DEPENDANT ON TYPE AND CLASS OF PIPE AND SHOULD BE MEASURED ON SITE.
- DIMENSION D4 IS FOR GUIDANCE ONLY.



SECTION A-A

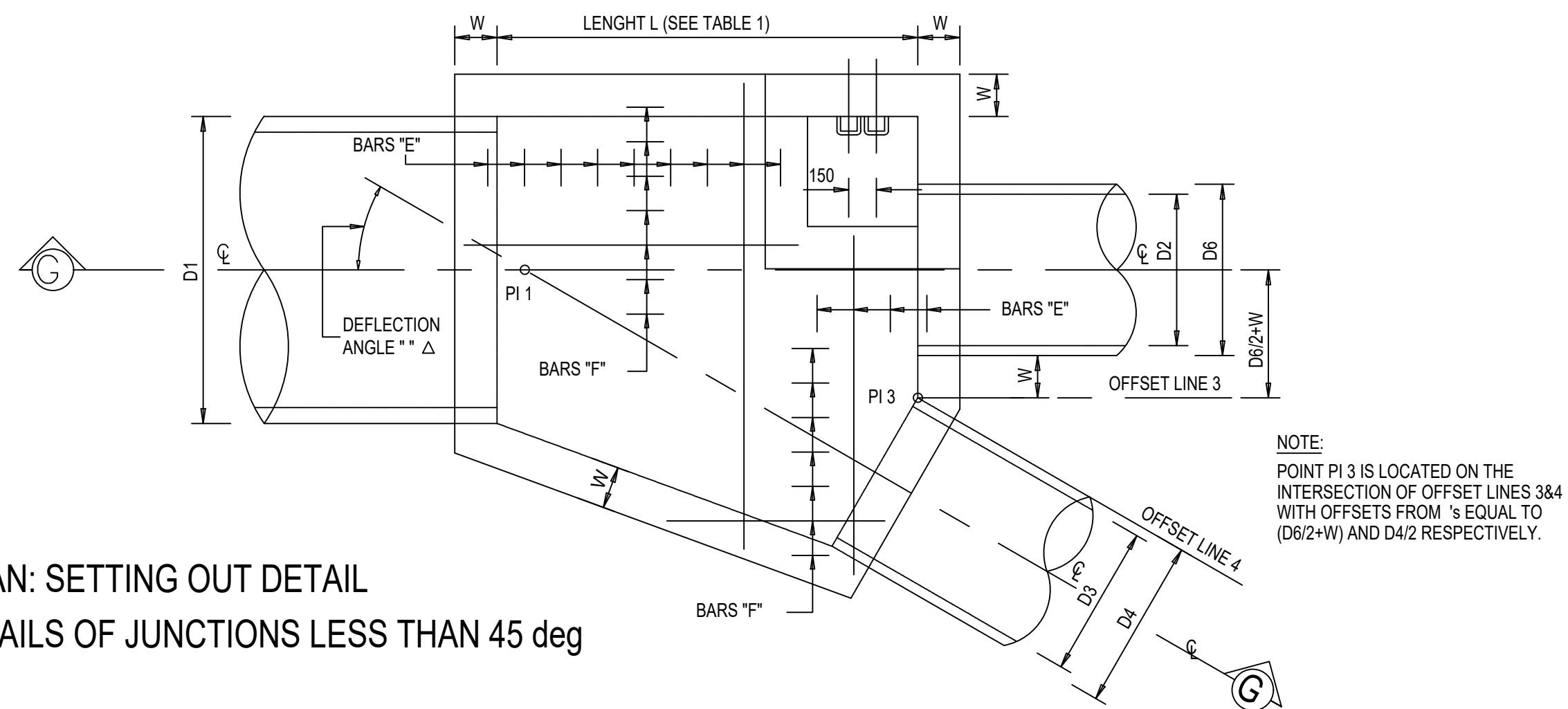
DETAILS OF 45 - 90 JUNCTIONS

TO SABS 227-1986 WITH WATER ABSORTION

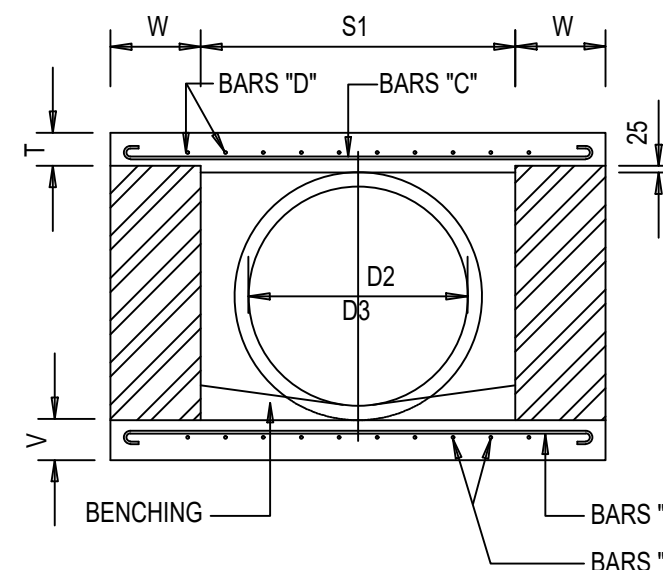
NOTE:

- ALL BRICKS TO BE OF QUALITY FBSE30
- <14% AND EFFLORESCENCE <10.
- ALL BRICKWORK TO BE IN ENGLISH BOND

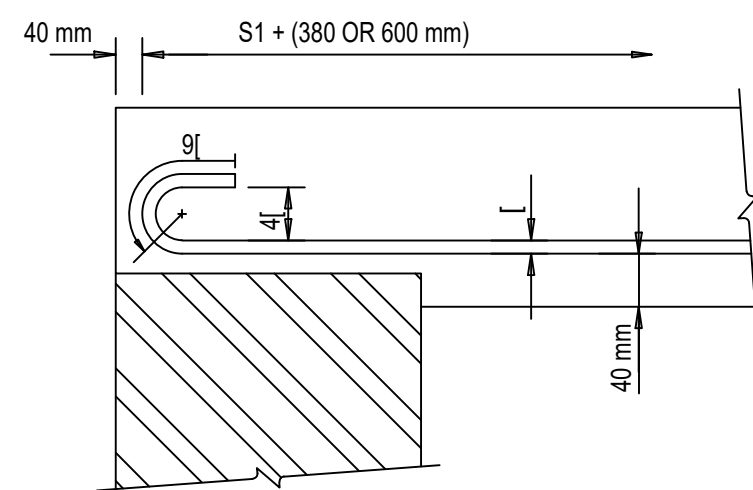
No.		DATE	REVISION		DESIGNED BY M.K	DESIGNED M.K	CONSULTANT	RECOMMENDED	CLIENT	SCALE	CLIENT	TYPE OF PLANNING	BID No.
					AGC Consulting Engineers 3A Pierre Street Hampton Court, Polokwane 0699	DESIGN CHECKED M.K			MAKHADO MUNICIPALITY PRIVATE BAG X2596, LOUIS TRICHARDT, 0920	AS SHOWN	PROJECT TITLE	PRELIMINARY DESIGN	
					AGC Consulting Engineers	DRAWN M.K	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT			UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND RAVELE VILLAGES		SHEET 1 OF 1
						DRAWING CHECKED M.K	DATE:	DATE:			DRAWING TITLE	STANDARD DETAIL	DRAWING No. AGC-CIV-PD-TD-020



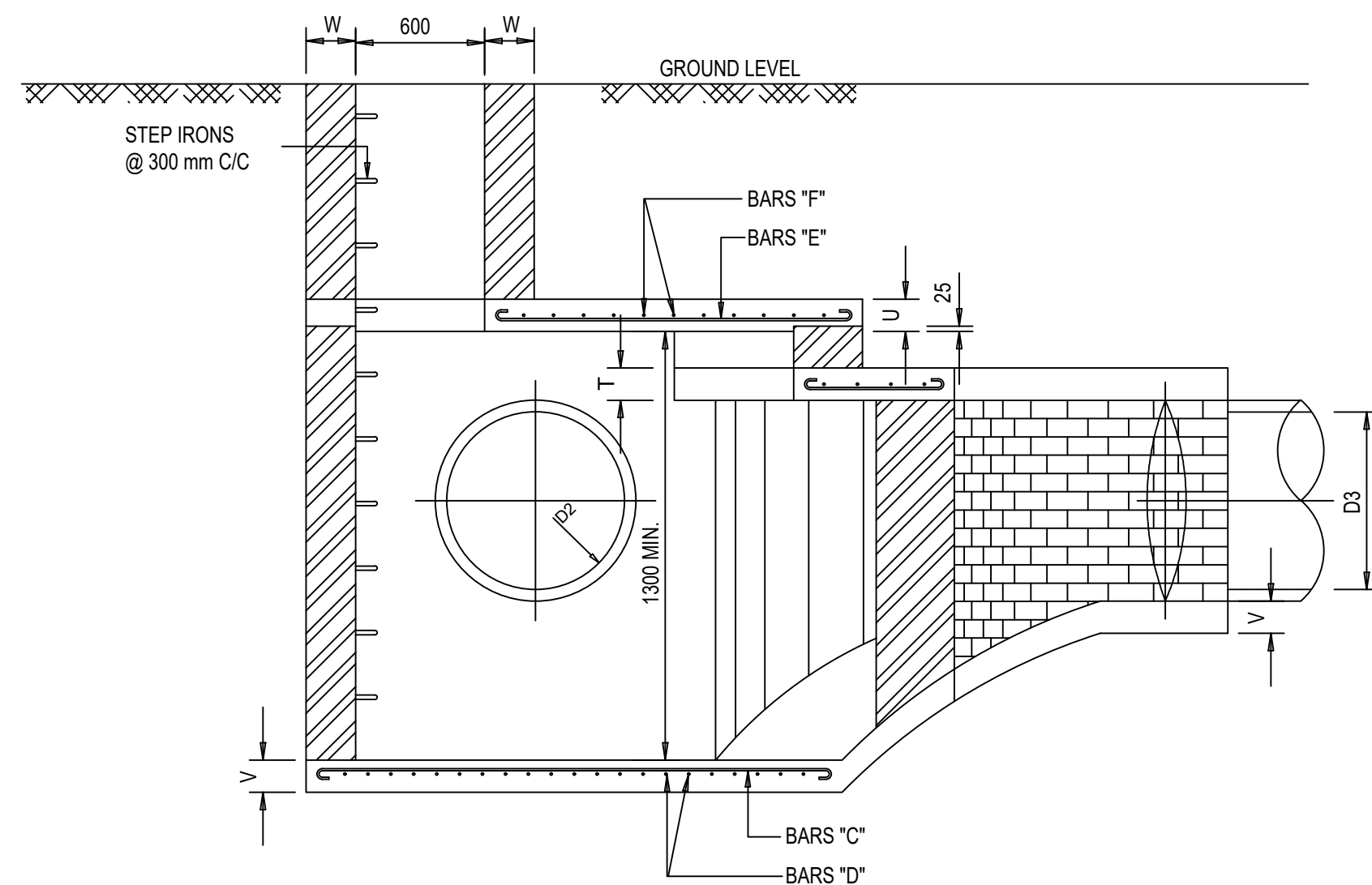
PLAN: SETTING OUT DETAIL
DETAILS OF JUNCTIONS LESS THAN 45 deg



SECTION Y-Y
DETAILS OF BEND



DETAIL OF HOOKS

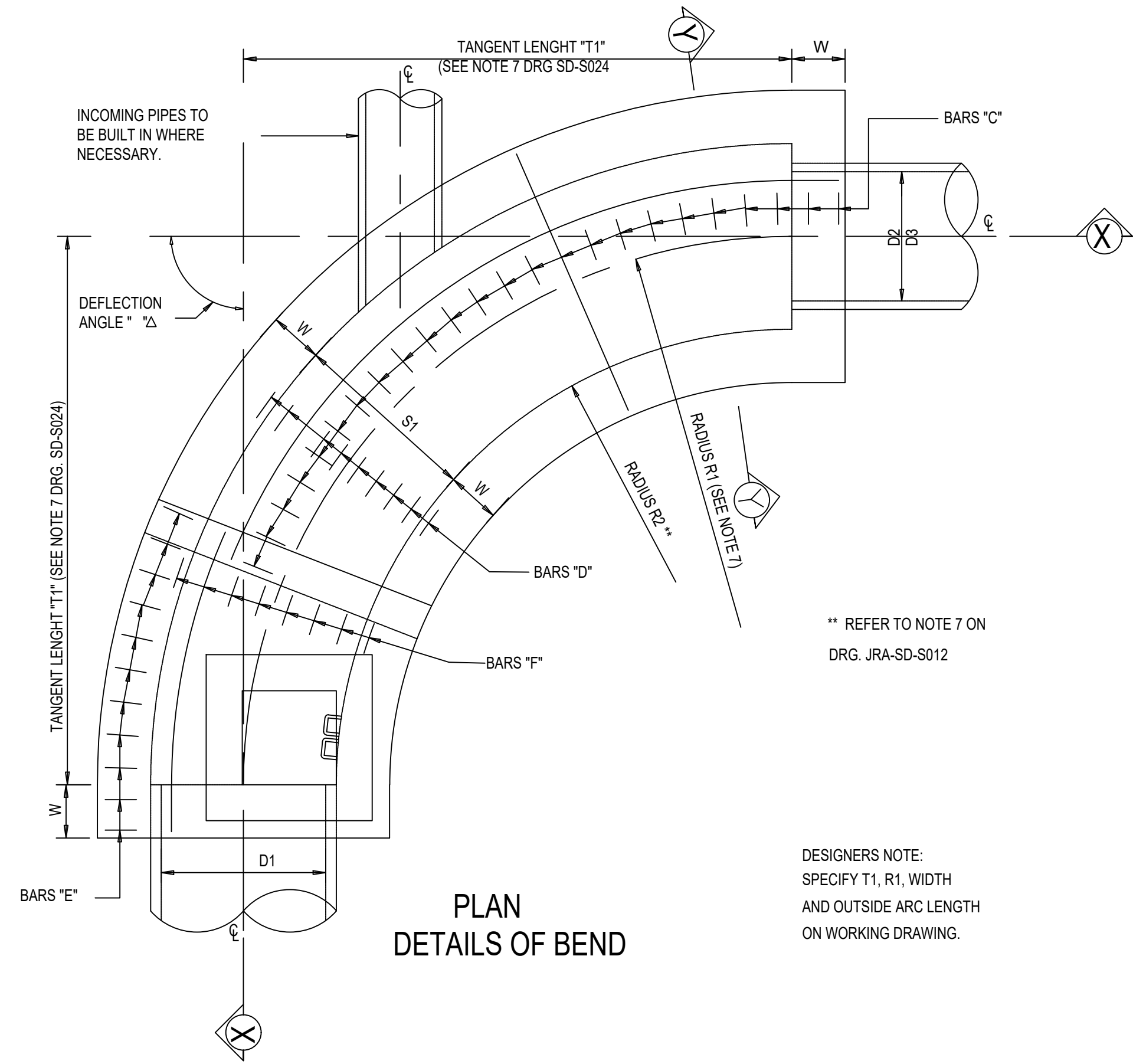


SECTION C-C
DETAILS OF 45 deg - 90 deg JUNCTIONS

NOTE:
FOR LAYOUT PLANS
REFER TO DRG.
KB019/JRA/GAU-RS/SD-SO10

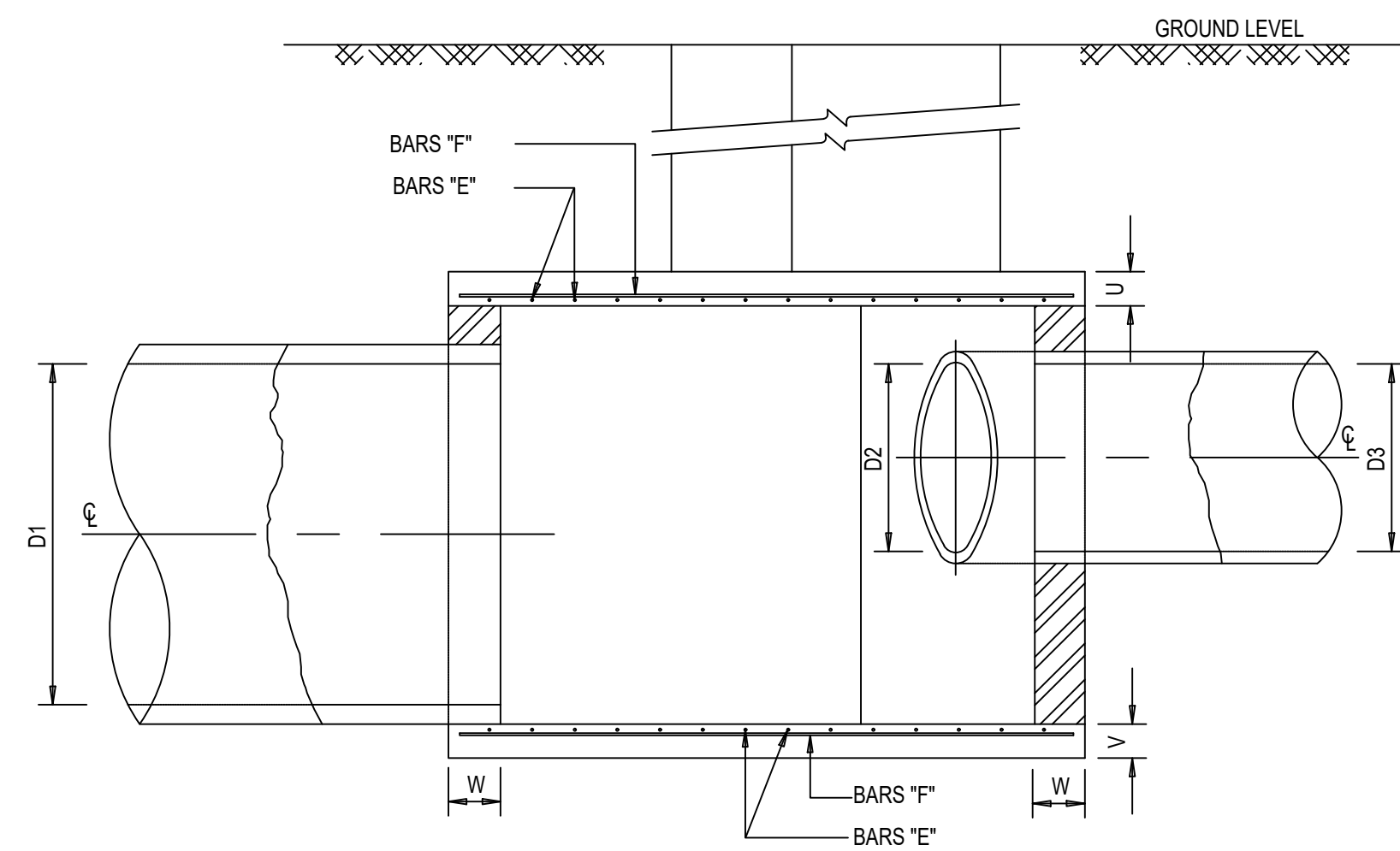
NOTE:
FOR SECTION X-X
REFER TO DRG.
KB019/JRA/GAU-RS/SD-SO12

NOTE:
ALL BRICKS TO BE QUALITY
FBSE30 TO SABS 227-1986
WITH WATER ABSORTION <14%
AND EFFLORESCENCE <10.
ALL BRICK WORK TO BE ENGLISH BOND.



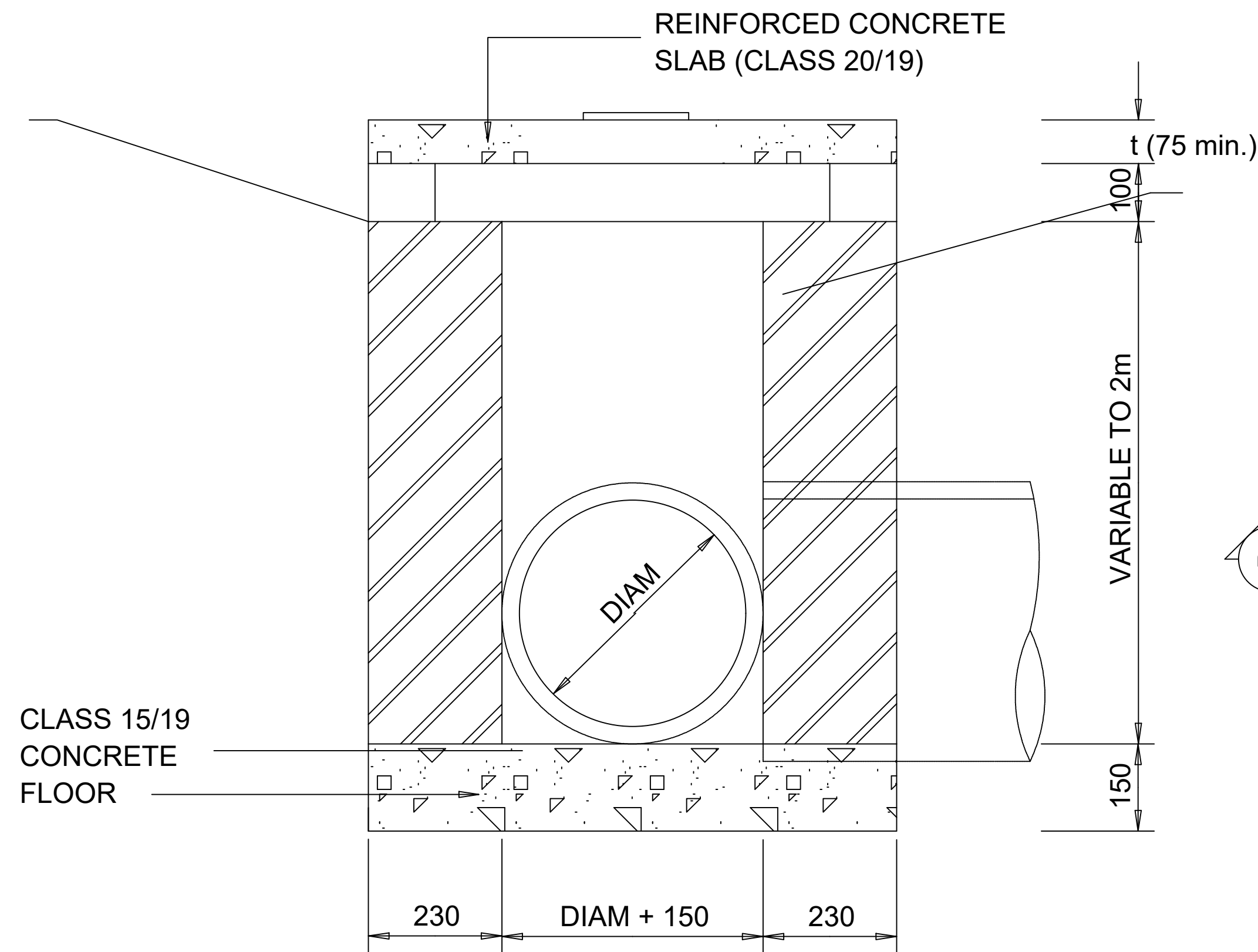
PLAN
DETAILS OF BEND

DESIGNERS NOTE:
SPECIFY T1, R1, WIDTH
AND OUTSIDE ARC LENGTH
ON WORKING DRAWING.

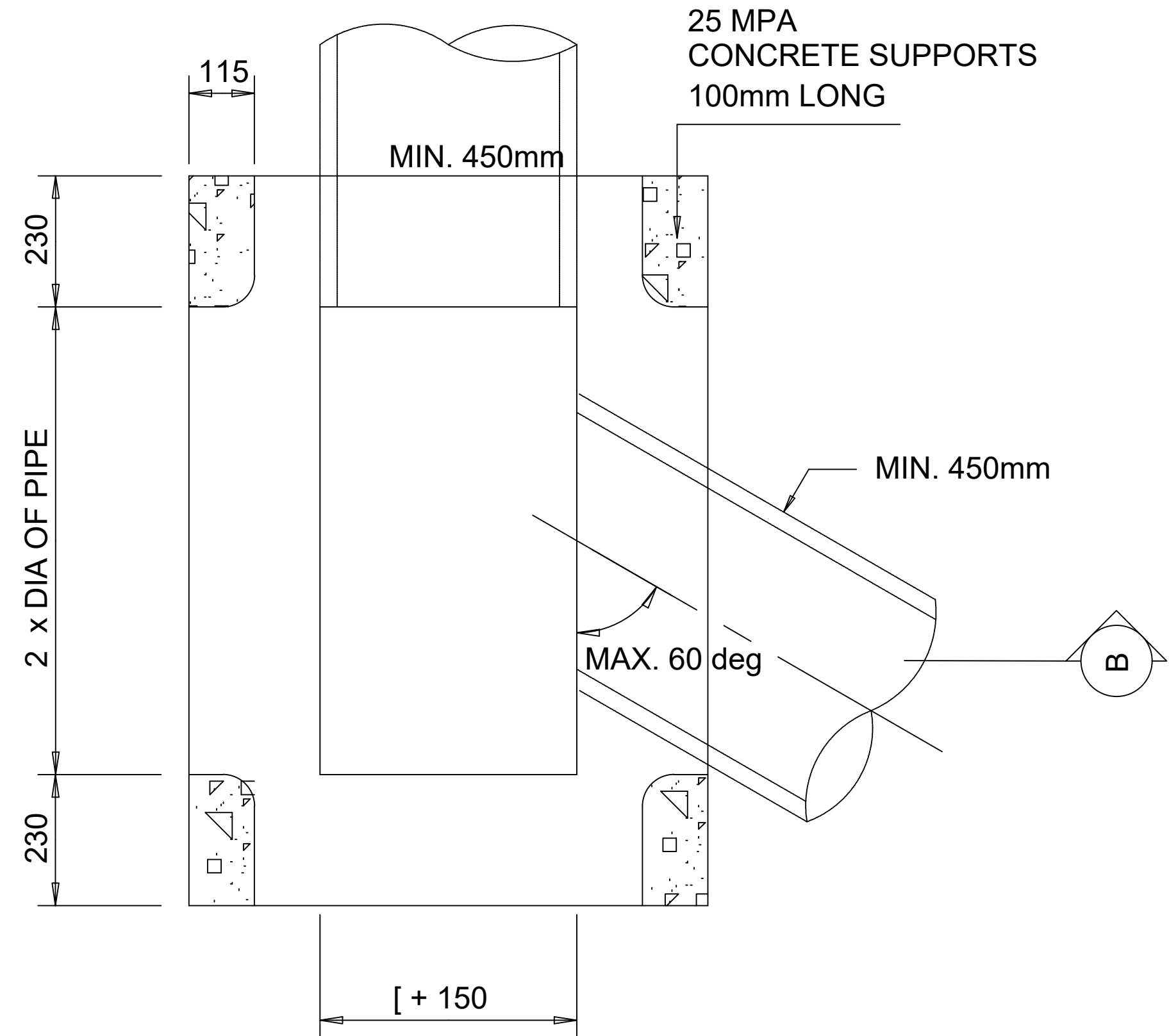


SECTION G-G
DETAILS OF JUNCTIONS LESS THAN 45 deg

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SLAB REINFORCEMENT DETAILS			
SPAN	t	MAIN REINFORCEMENT	DISTRIBUTION STEEL
450	75	Y10 dia @ 150	Y10 dia @ 300
500	90	Y12 dia @ 200	Y10 dia @ 300
600	100	Y12 dia @ 160	Y10 dia @ 300
750	100	Y12 dia @ 160	Y10 dia @ 300
900	125	Y16 dia @ 210	Y10 dia @ 300
1000	125	Y16 dia @ 200	Y10 dia @ 300
1100	125	Y16 dia @ 200	Y10 dia @ 300
1200	140	Y16 dia @ 185	Y10 dia @ 300
1350	140	Y16 dia @ 175	Y10 dia @ 300
1500	150	Y16 dia @ 165	Y10 dia @ 270
1650	165	Y16 dia @ 165	Y10 dia @ 270
1800	165	Y16 dia @ 150	Y10 dia @ 260
2000	180	Y16 dia @ 125	Y10 dia @ 230
2200	190	Y20 dia @ 170	Y10 dia @ 200
2400	200	Y20 dia @ 150	Y10 dia @ 200
2600	200	Y20 dia @ 150	Y10 dia @ 200
2750	215	Y20 dia @ 140	Y10 dia @ 180
2900	225	Y20 dia @ 140	Y10 dia @ 170
3000	250	Y20 dia @ 125	Y10 dia @ 160



PLAN OF FIELD INLET (WITHOUT LID)

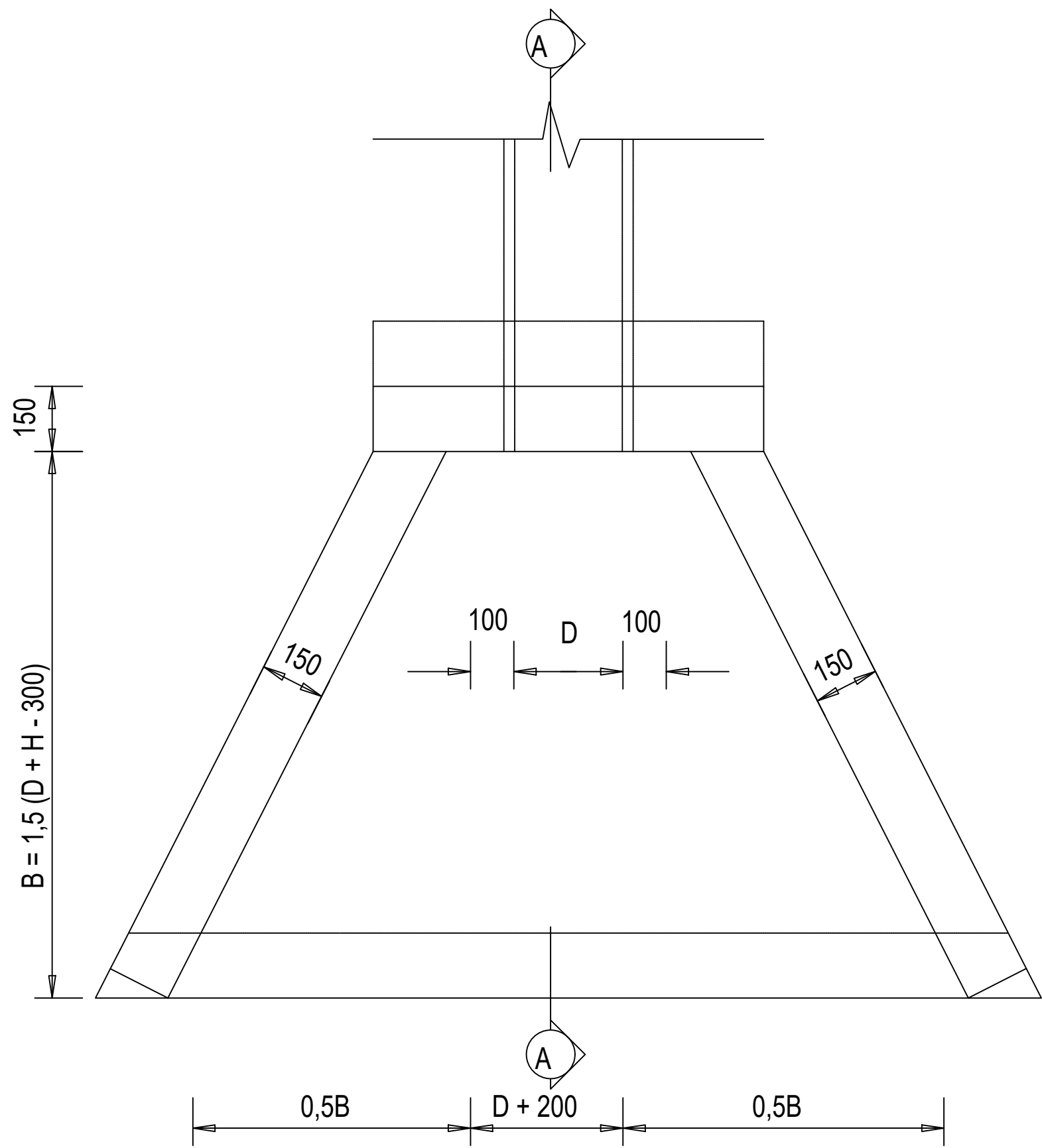


END SUPPORT FOR COVER SLAB

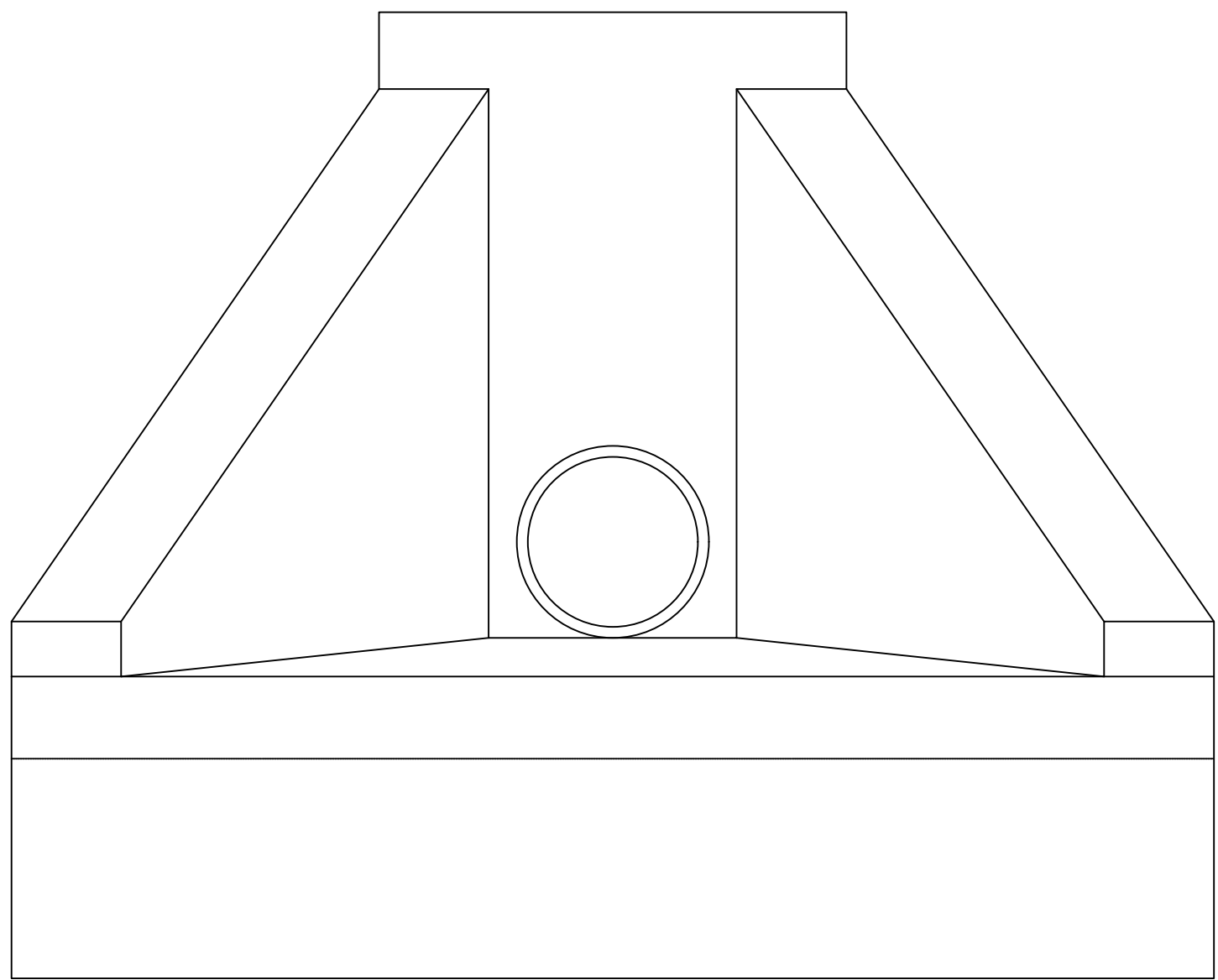
NOTES:

- ALL BRICKS TO BE QUALITY FBSE30 TO SABS 227-1986 WITH WATER ABSORTION <14% AND EFFLORESCENE <10.
- ALL BRICK WORK TO BE ENGLISH BOND.
- REINFORCED CONCRETE SLAB AND SUPPORTS CAST SEPARATE.

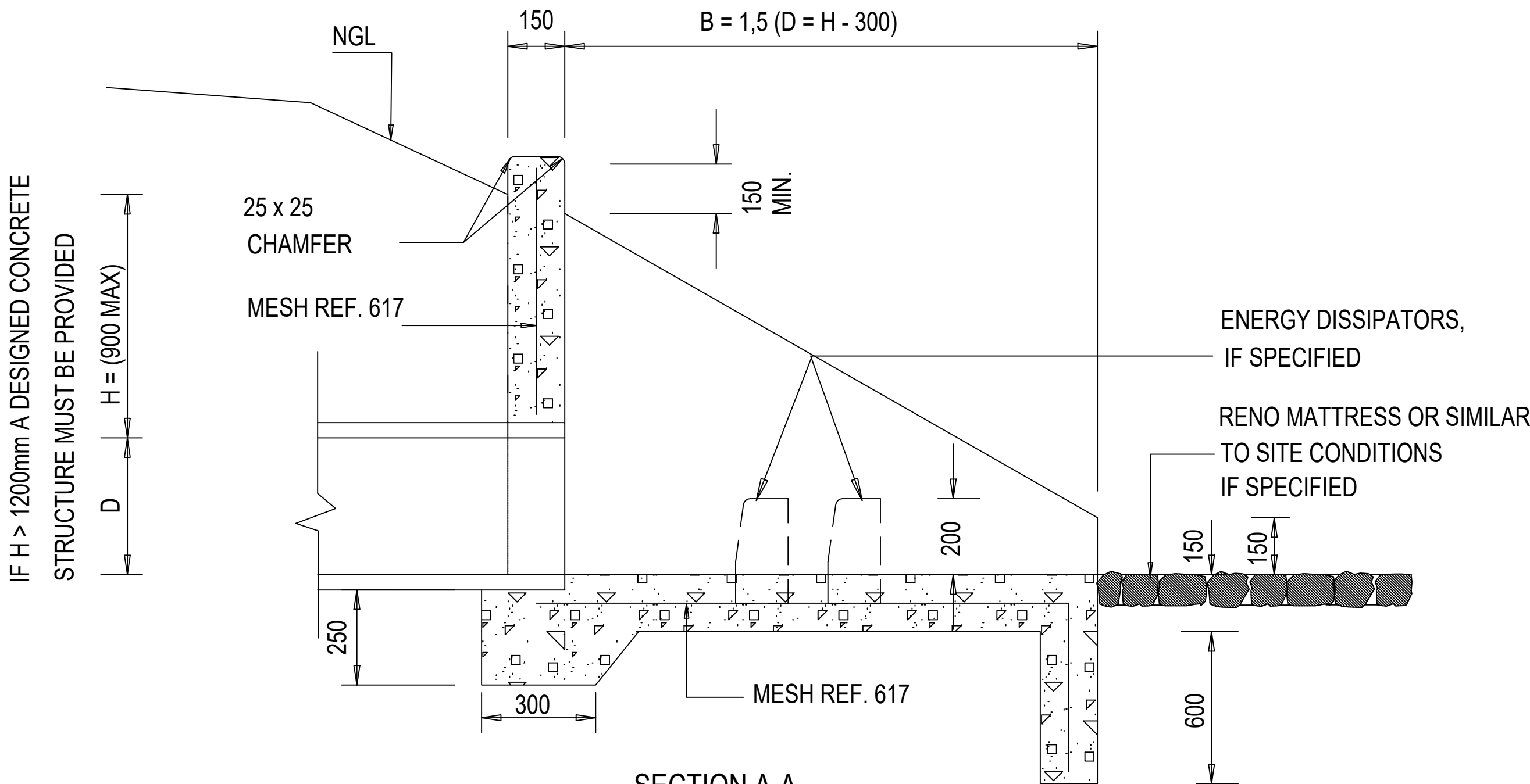
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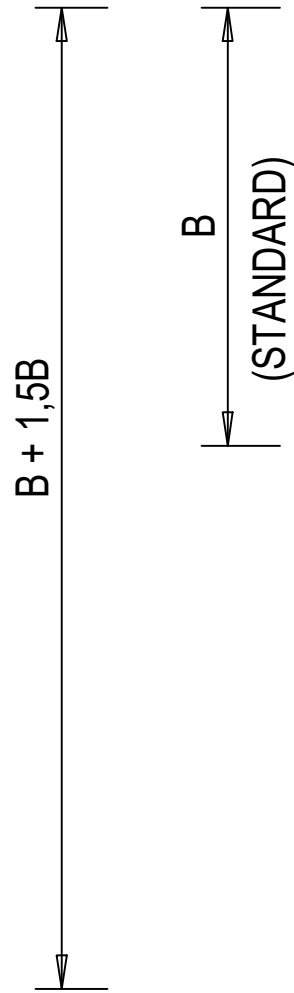
PLAN



FRONT ELEVATION



SECTION A-A



PLAN

(SPECIAL STORMWATER OUTLET FOR USE
WHEN OUTLET VELOCITY EXCEEDS 2,0 m/s)

NOTES:

1. ALL CONCRETE IN INLET AND OUTLET STRUCTURE TO BE CLASS 20/19 WITH A WOOD FLOAT FINISH WITH 25 x 25 CHAMFER ON ALL EXPOSED EDGES.
2. MINIMUM COVER TO REINFORCEMENT = 25mm OR 40mm ON THE GROUND.
3. ALL ROAD WORKS TO COMPLY WITH SABS 1200 SPECIFICATIONS.

VERTICAL KERBING, FIG.3

				DESIGNED BY		DESIGNED		CONSULTANT		RECOMMENDED		CLIENT		SCALE		CLIENT		TYPE OF PLANNING		BID No.	
						M.K								AS SHOWN		MAKHADO LOCAL MUNICIPALITY		PRELIMINARY DESIGN			
						M.K										PROJECT TITLE				SHEET 1 OF 1	
						M.K										DRAWING TITLE				DRAWING No.	
						M.K										STANDARD DETAIL				AGC-CIV-PD-TD-024	
No.	DATE	REVISION		REVISED BY	DATE																



AGC Consulting Engineers
3A Pierre Street Hampton
Court Polokwane
0699

DESIGNED
M.K
DESIGN CHECKED
M.K
DRAWN
M.K
DRAWING CHECKED
M.K

CONSULTANT
for CONSULTING ENGINEER
DATE:

RECOMMENDED
for HEAD OF DEPARTMENT
DATE:



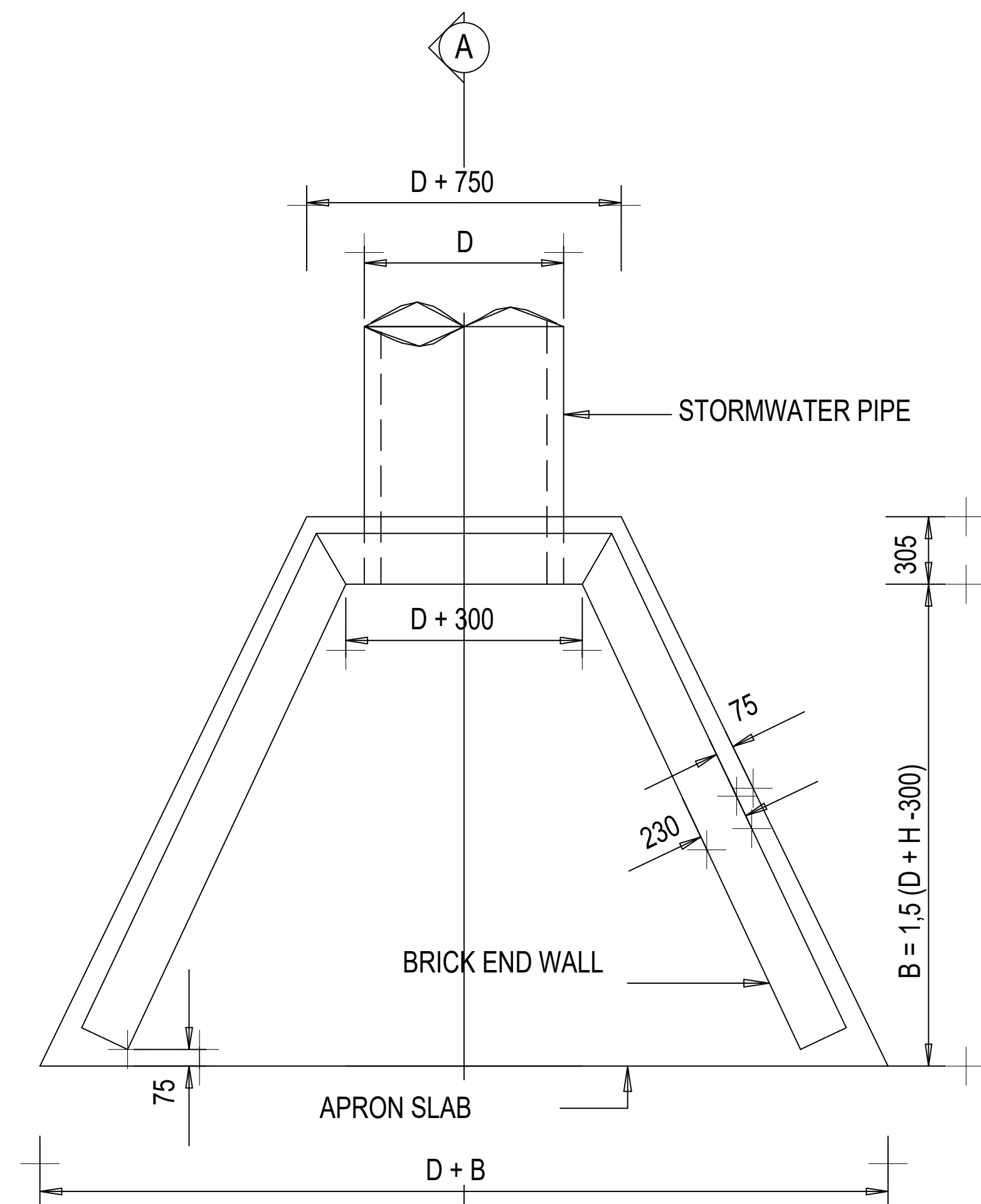
MAKHADO MUNICIPALITY
PRIVATE BAG
X2596, LOUIS TRICHARDT,
0920

SCALE
AS SHOWN
REVISION
(A)

CLIENT
MAKHADO LOCAL MUNICIPALITY
PROJECT TITLE
UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND RAVELE
VILLAGES
DRAWING TITLE
STANDARD DETAIL

TYPE OF PLANNING
PRELIMINARY DESIGN

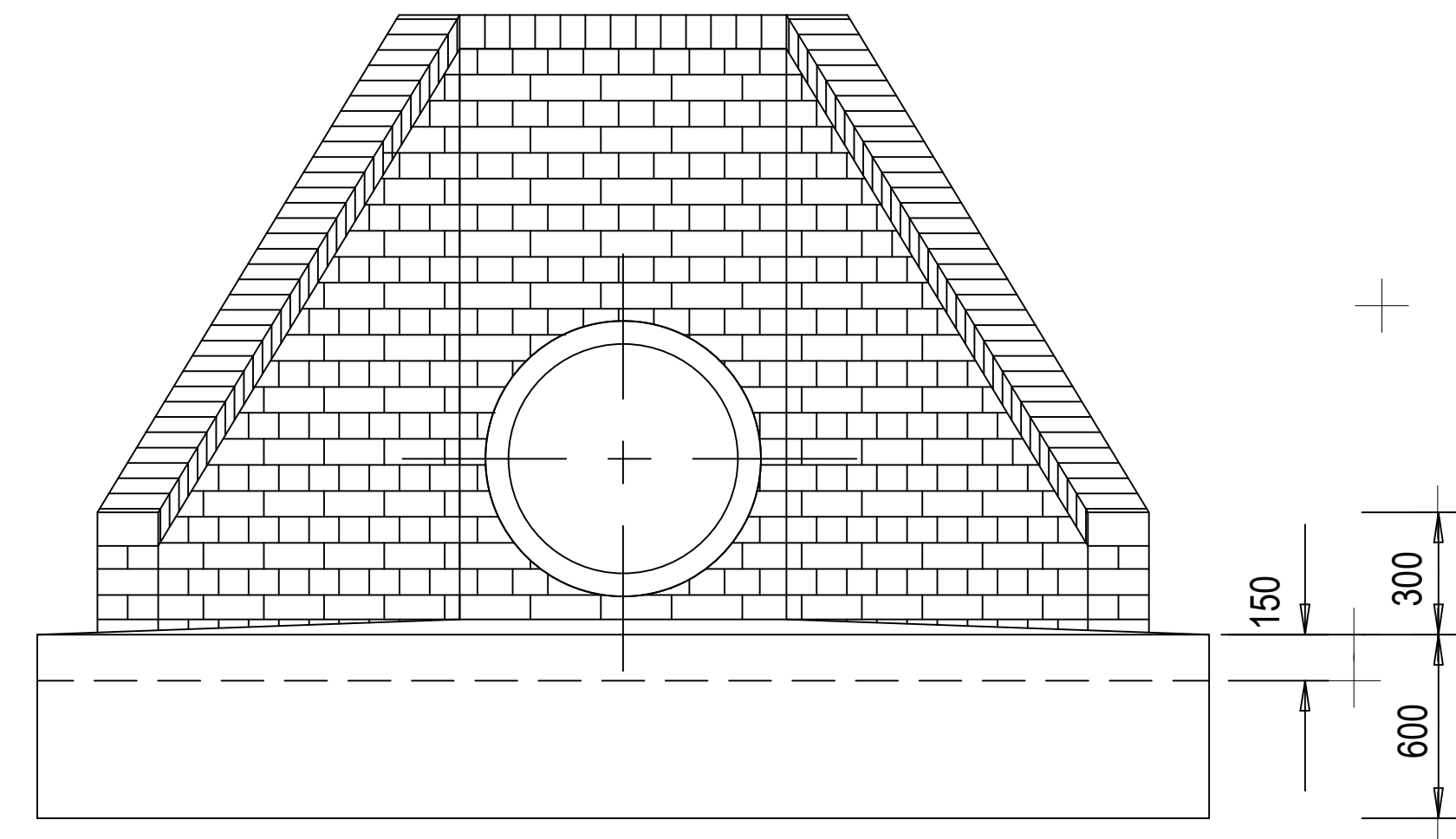
BID No.
SHEET 1 OF 1
DRAWING No.
AGC-CIV-PD-TD-024



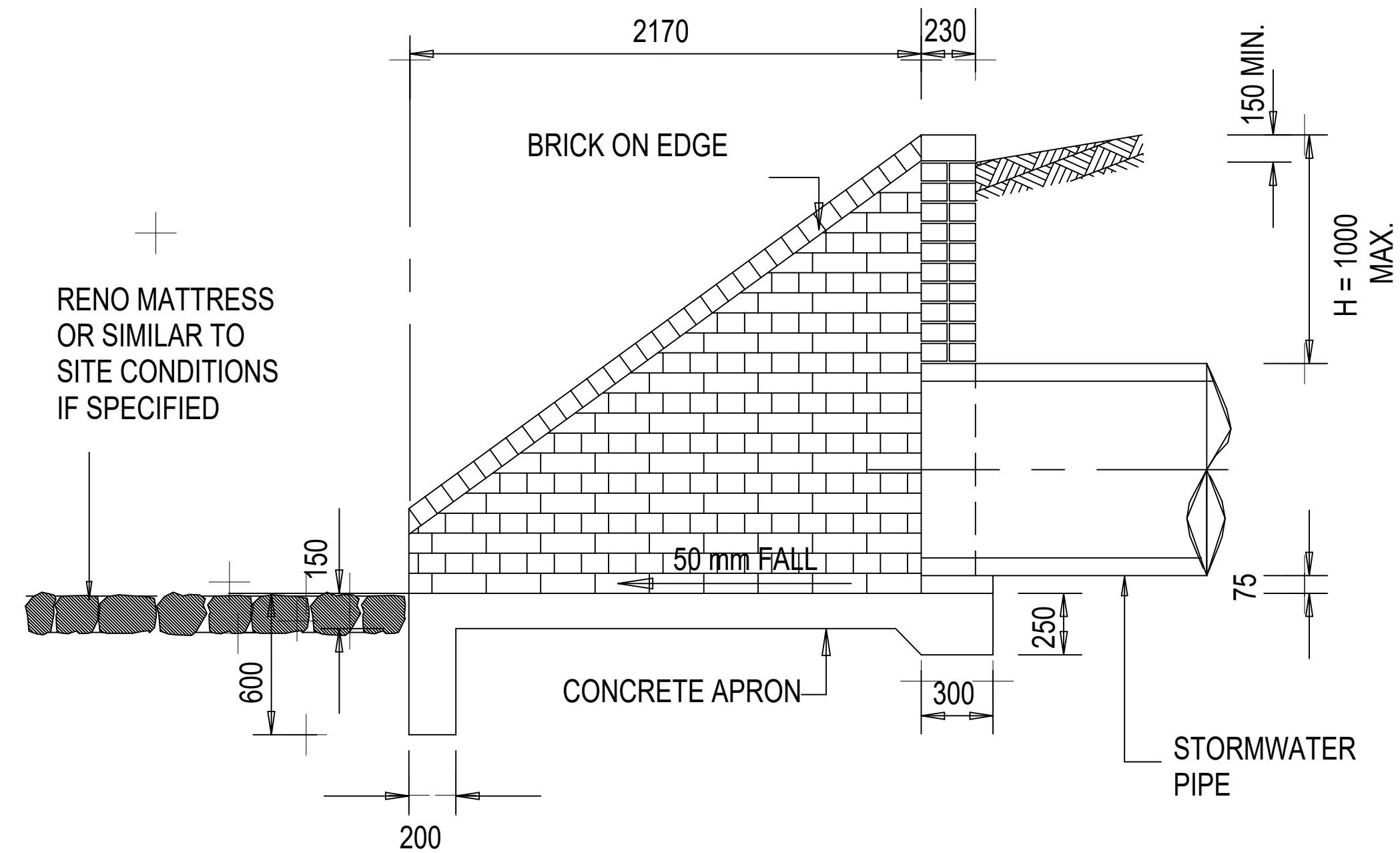
PLAN

NOTES

1. THE MATERIAL FOR A DEPTH OF 150mm UNDER THE APRON SLAB MUST BE COMPACTED TO A MINIMUM DENSITY OF 90 % OF THE MOD. AASHTO DENSITY.
2. ALL CONCRETE TO BE CLASS 20/19.
3. ENERGY BREAKERS MUST BE PROVIDED ACCORDING TO DRG KB019/JRA/GAU-RS/SD-S018 WHEN REQUIRED BY THE ENGINEER
4. THIS OUTLET STRUCTURE ONLY TO BE USED WHEN PIPE SIZE IS LESS THAN 600 mm dia. REFER TO KB019/JRA/GAU-RS/SD-S018
5. ALL BRICKS TO BE OF QUALITY FBSE30 TO SABS 227-1986 WITH WATER ABSORTION <14% AND EFFLORESCENCE <10.
6. ALL BRICKWORK TO BE IN ENGLISH BOND.
7. NO PLASTERING OF BRICKWORK WILL BE ALLOWED.

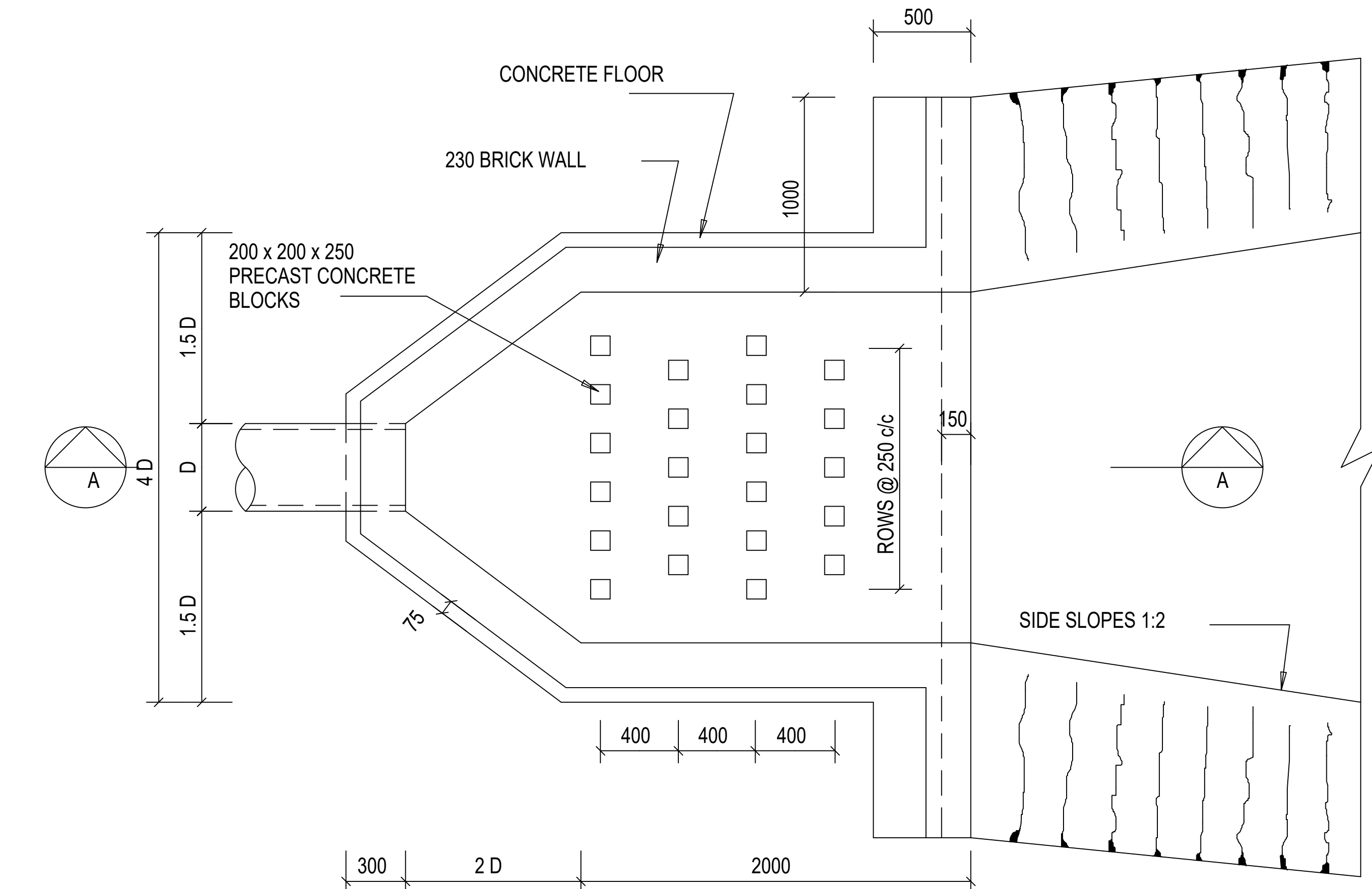


FRONT ELEVATION

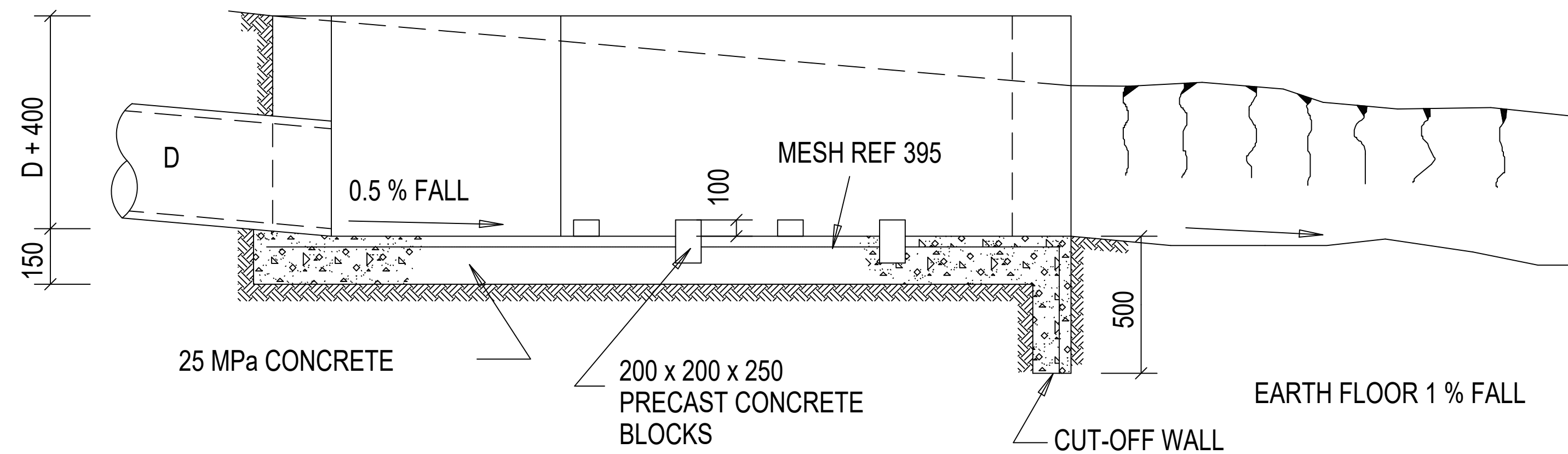


SECTION A-A

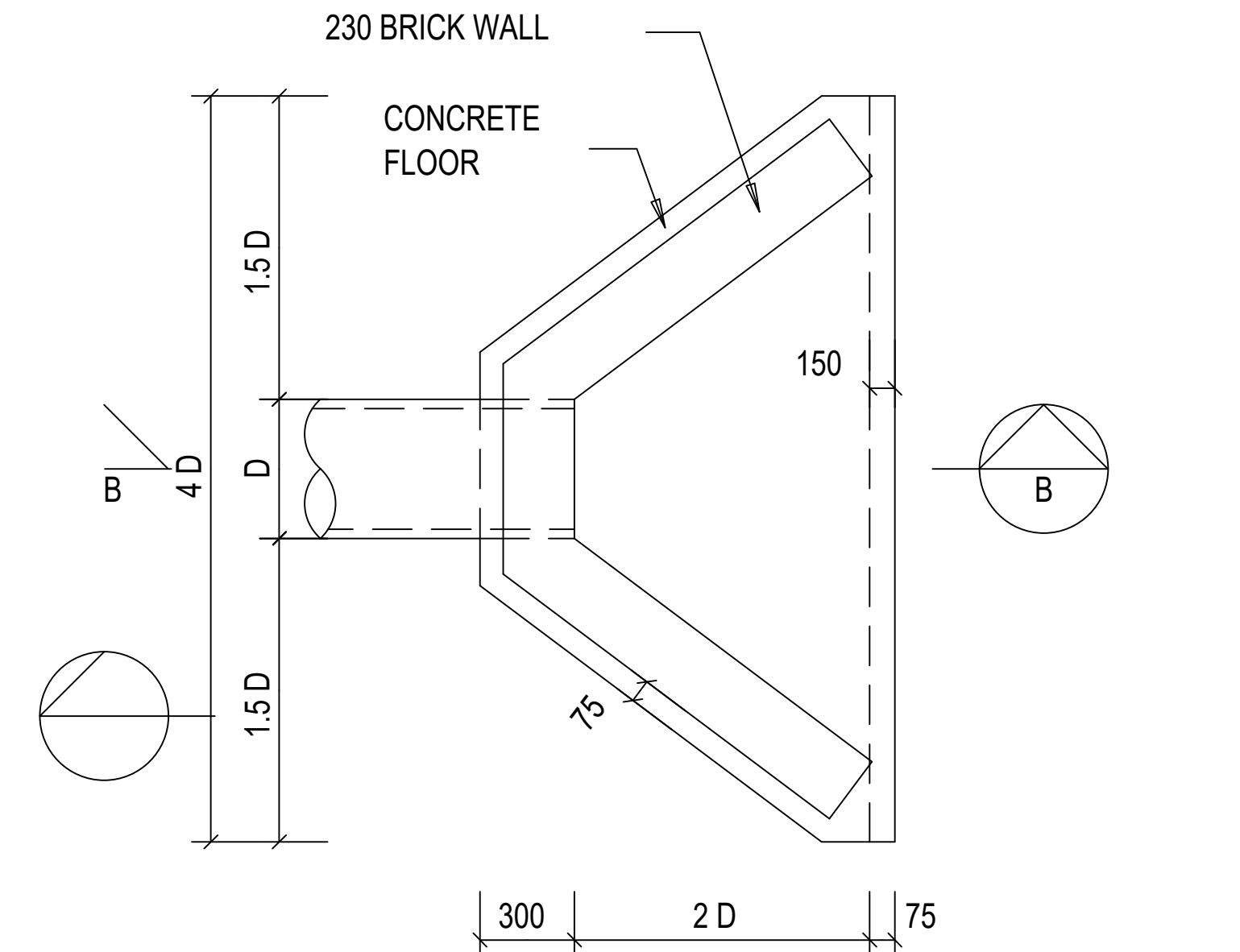
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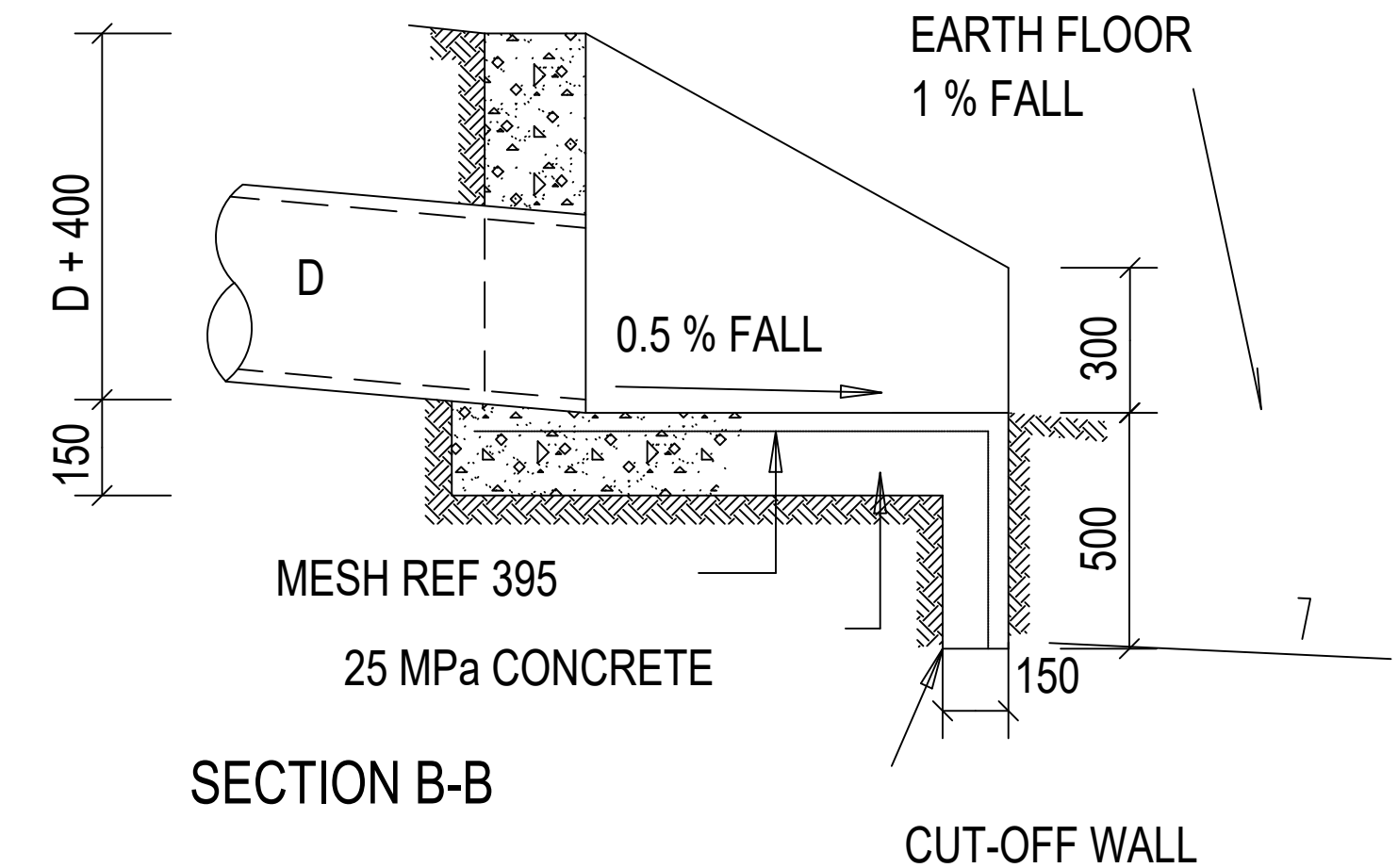
PLAN



SECTION A-A
ENERGY DISSIPATION OUTLET



PLAN

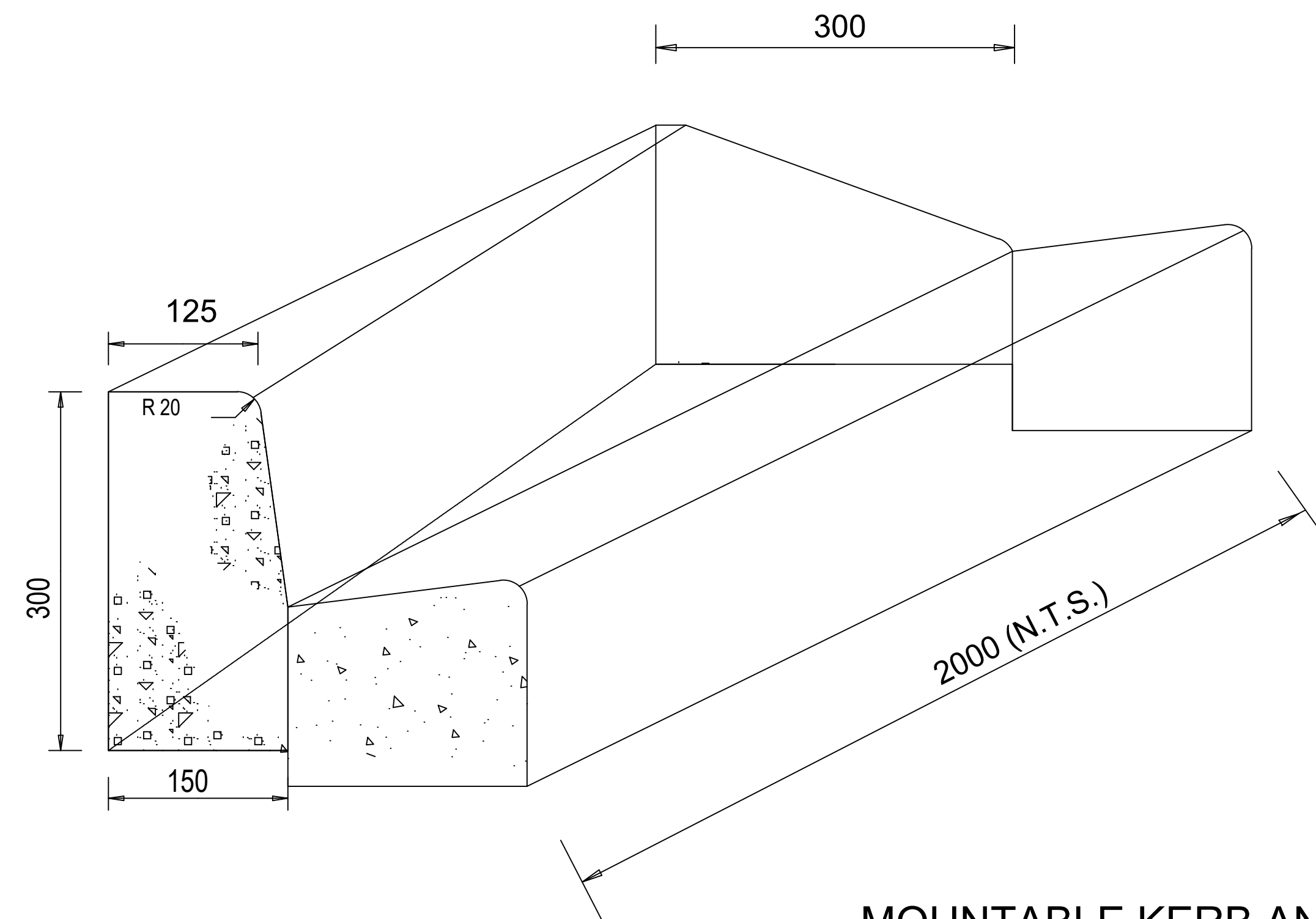


SECTION B-B

CUT-OFF WALL

- NOTE:
- ONE LAYER OF MESH REF 395 TO BE PLACED ON FLOOR AND CUT-OFF WALL AS SHOWN WITH 40mm COVER AND MIN. LAP LENGTH OF 350mm.
 - ALL CONCRETE INCLUDING PRECAST CONCRETE BLOCKS IN ENERGY DISSIPATING OUTLETS TO BE CHAMFERED 25 x 25 ON EXPOSED EDGES.
 - WITH WATER ABSORTION <14% AND EFFLORESCENCE <10.
 - ALL BRICKWORK TO BE IN ENGLISH BOND.
 - NO PLASTERING OF BRICKWORK WILL BE ALLOWED.
- ALL BRICKS TO BE OF QUALITY FBSE30 TO SABS 227-1986

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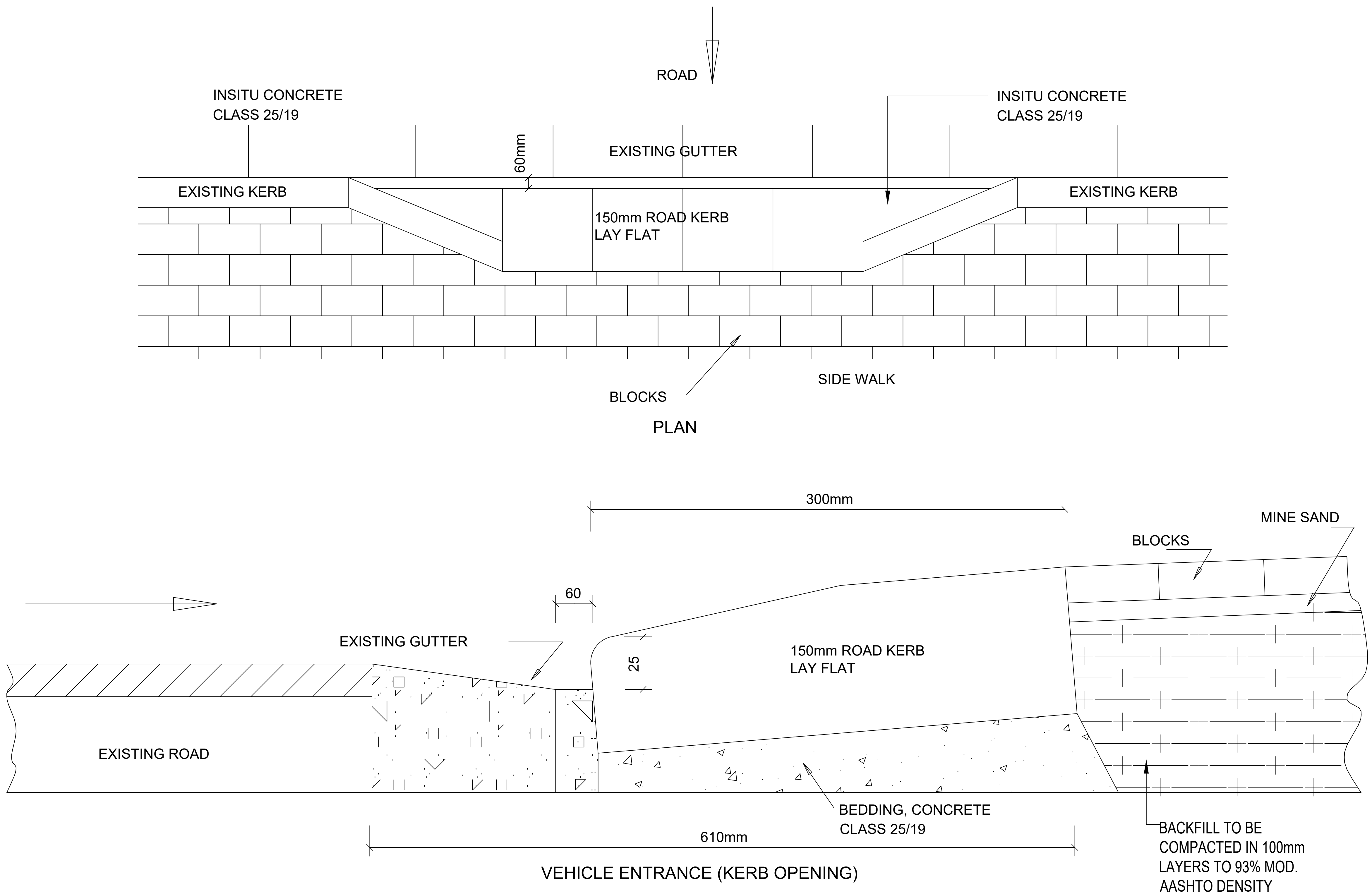


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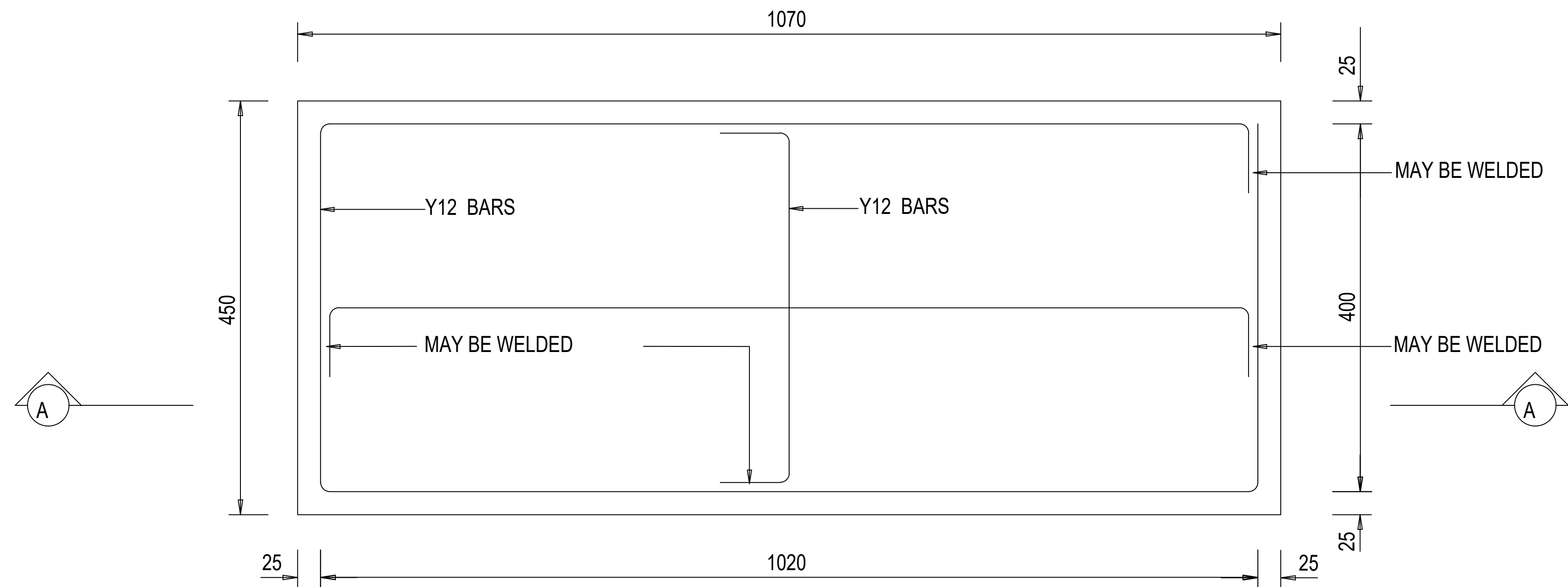
1. ALL CAST IN-SITU CONCRETE TO BE CLASS 25/19
2. TRANSITIONS NEED TO BE STEEL TROWEL FINISHED.

MOUNTABLE KERB AND GUTTER TO BARRIER KERBAND GUTTER

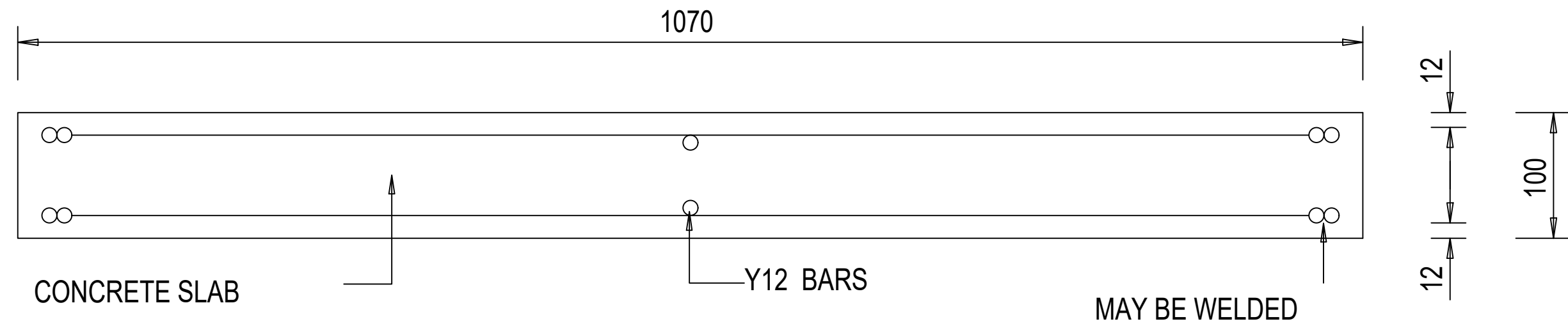
[illegible]



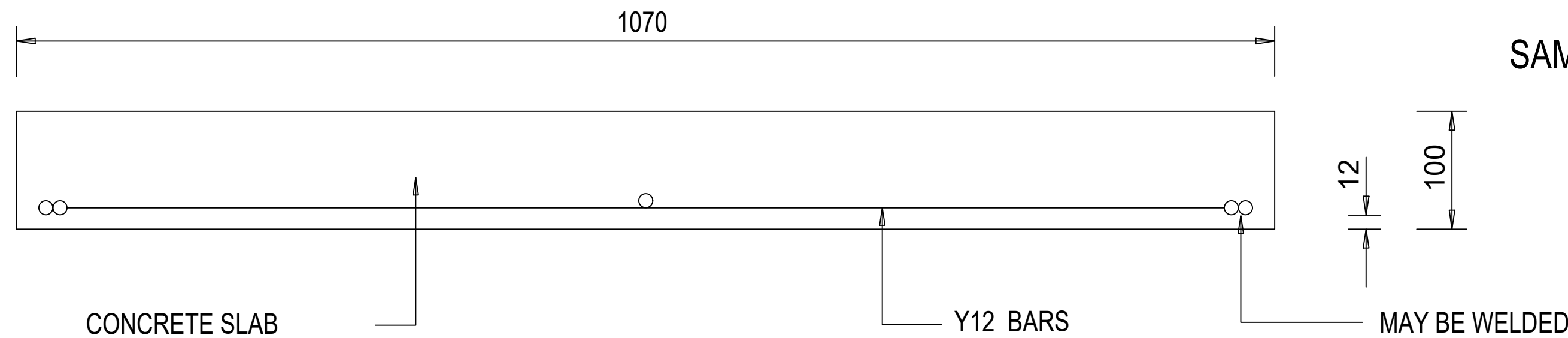
				DESIGNED BY		DESIGNED	CONSULTANT	RECOMMENDED	CLIENT	SCALE	CLIENT	TYPE OF PLANNING	BID No.
				AGC Consulting Engineers		M.K			MAKHADO MUNICIPALITY	AS SHOWN	MAKHADO LOCAL MUNICIPALITY	PRELIMINARY DESIGN	
				3A Pierre Street Hampton Court Polokwane 0699		DESIGN CHECKED			PRIVATE BAG X2596, LOUIS TRICHARDT, 0920		PROJECT TITLE	UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND RAVELE VILLAGES	SHEET 1 OF 1
						DRAWN	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT		REVISION			DRAWING No.
						M.K	DATE:	DATE:		(A)	DRAWING TITLE	STANDARD DETAIL	AGC-CIV-PD-TD-008
						DRAWING CHECKED							
						M.K							
No.	DATE	REVISION		REVISED BY	DATE	AGC Consulting Engineers							



PLAN
KERB OPENING (VEHICLE ENTRANCE)

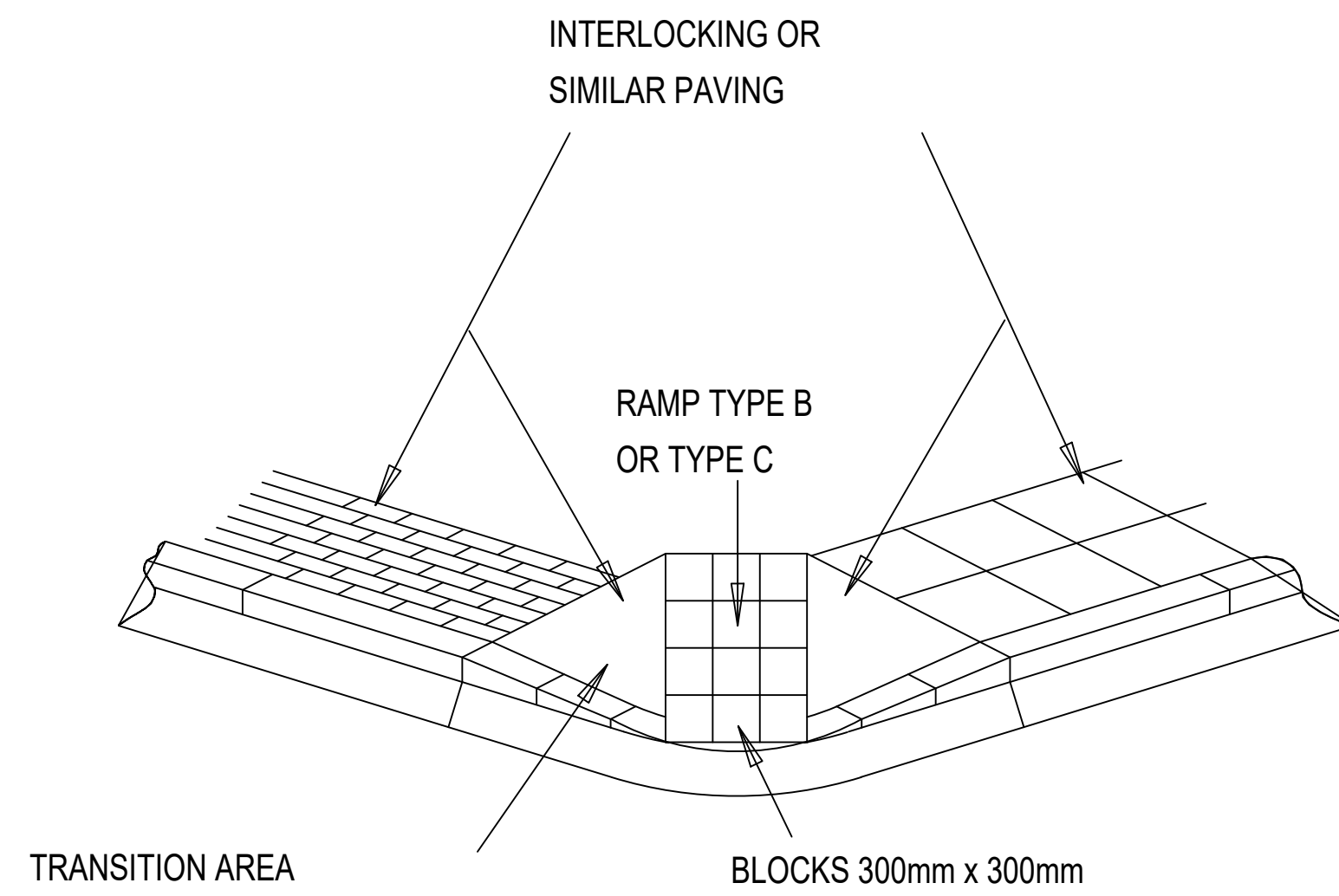


SECTION A-A
DOUBLE REINFORCING
SAME REINFORCING TOP AND BOTTOM



SECTION A-A
SINGLE REINFORCING

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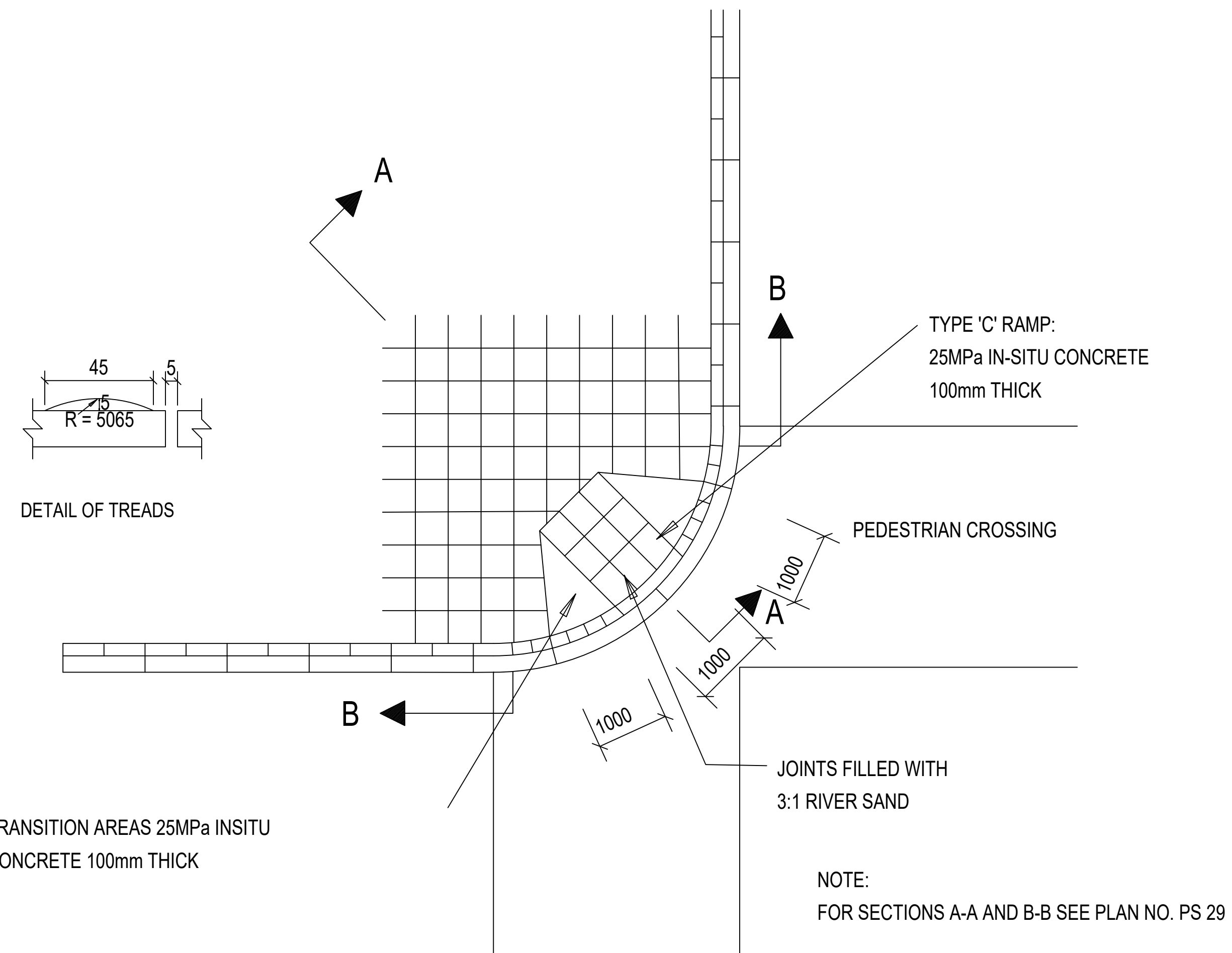
ISOMETRIC VIEW OF
PEDESTRIAN RAMP TYPE B AND TYPE C

TYPES OF RAMP ALLOWED

'TYPE A' - RAMPS AND TRANSITION SURFACES TO BE INTERLOCKING
PAVING BLOCKS, G-BLOCKS OR SIMILAR

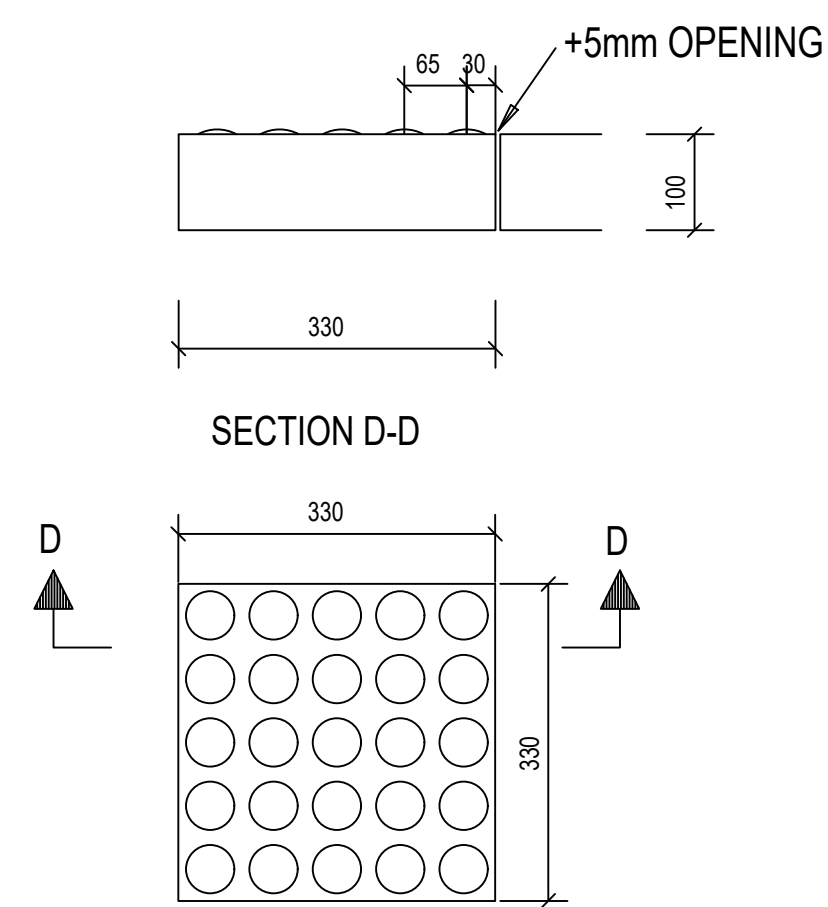
TYPE B' - RAMPS TO BE 330 X 330 X 100 PRECAST CONCRETE BLOCKS OF 30 MPa CONCRETE AND THE TRANSITIONS SURFACES TO BE 25 MPa 100 mm THICK IN-SITU CONCRETE. (SHOWN HERE)

'TYPE C' - RAMPS AND TRANSITION SURFACES TO BE 100 mm 25MPa IN-SITU CONCRETE WITH SPECIALLY CORRUGATED SURFACE TEXTURE.

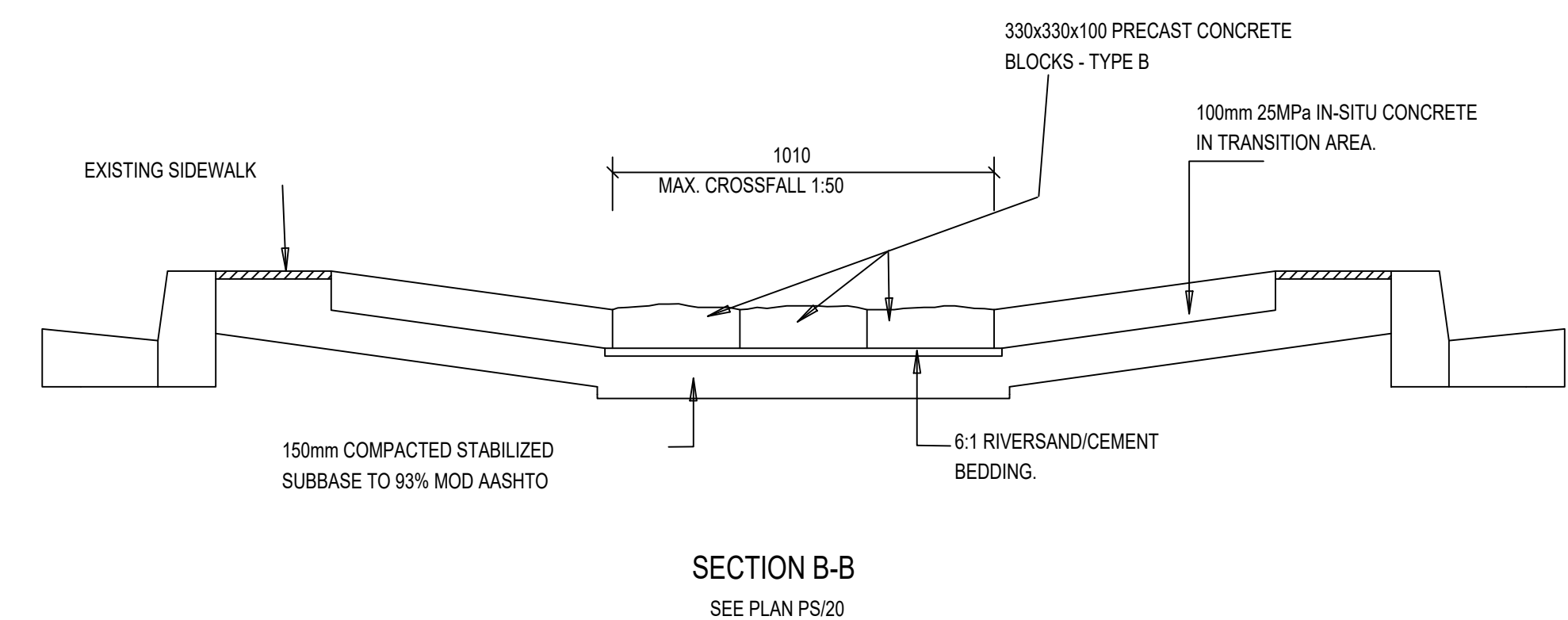
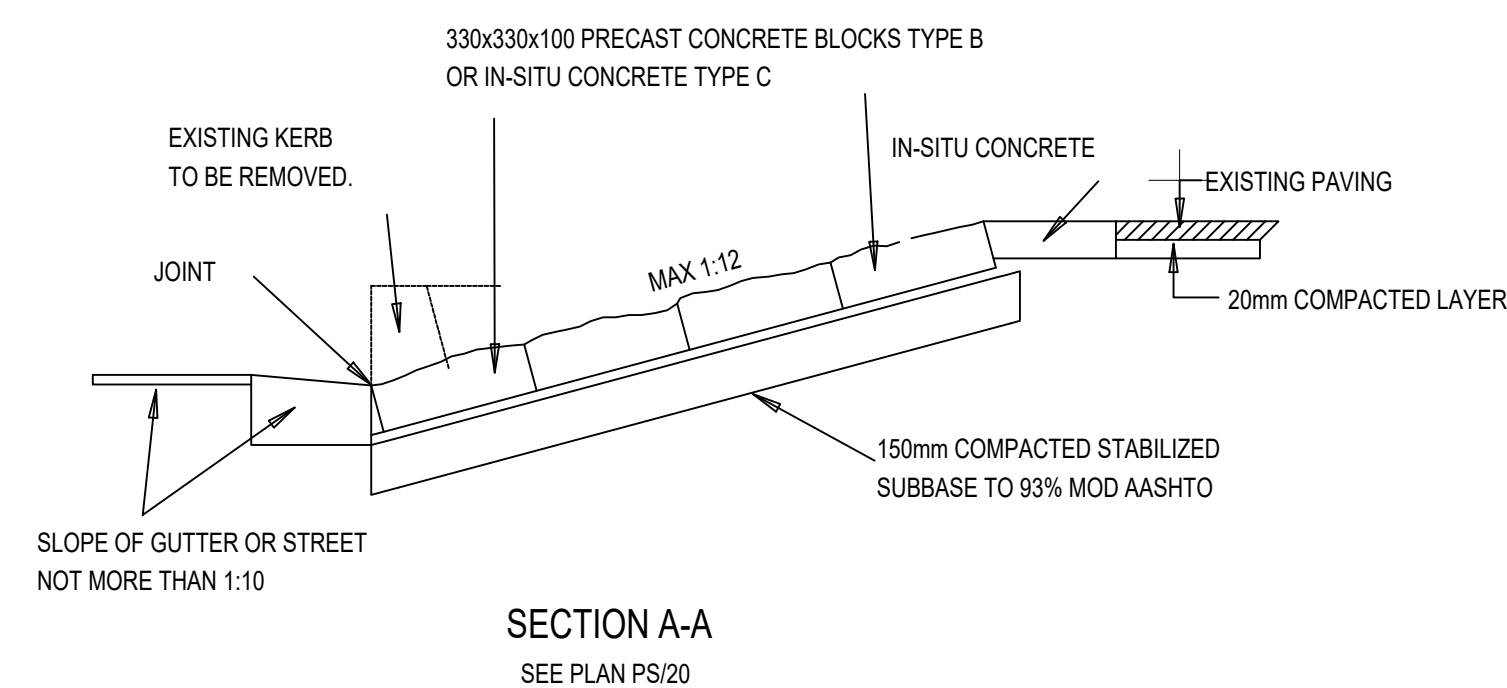


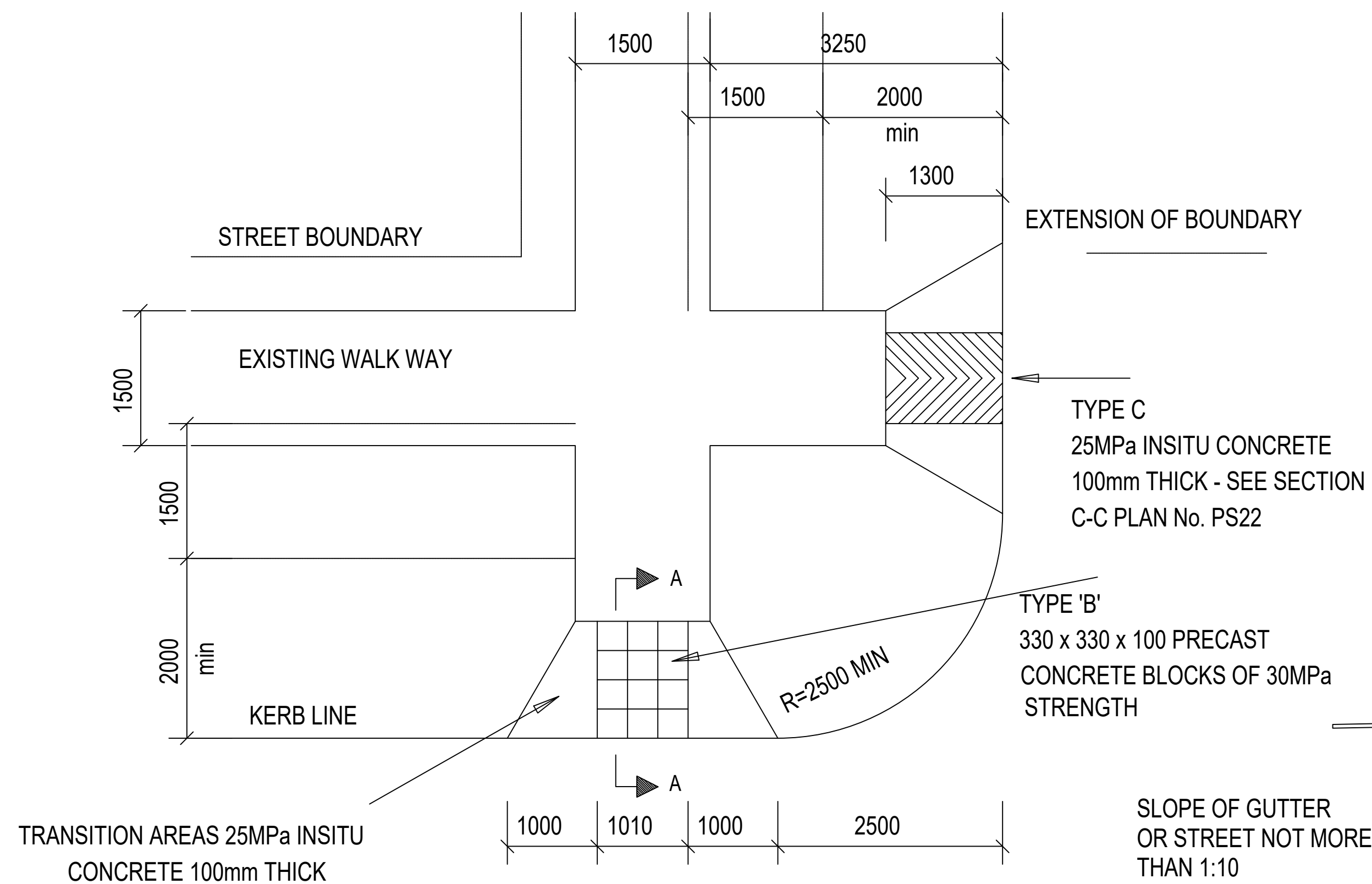
PLAN

CASE 1 : PEDESTRIAN RAMPS AT STREET CROSSINGS



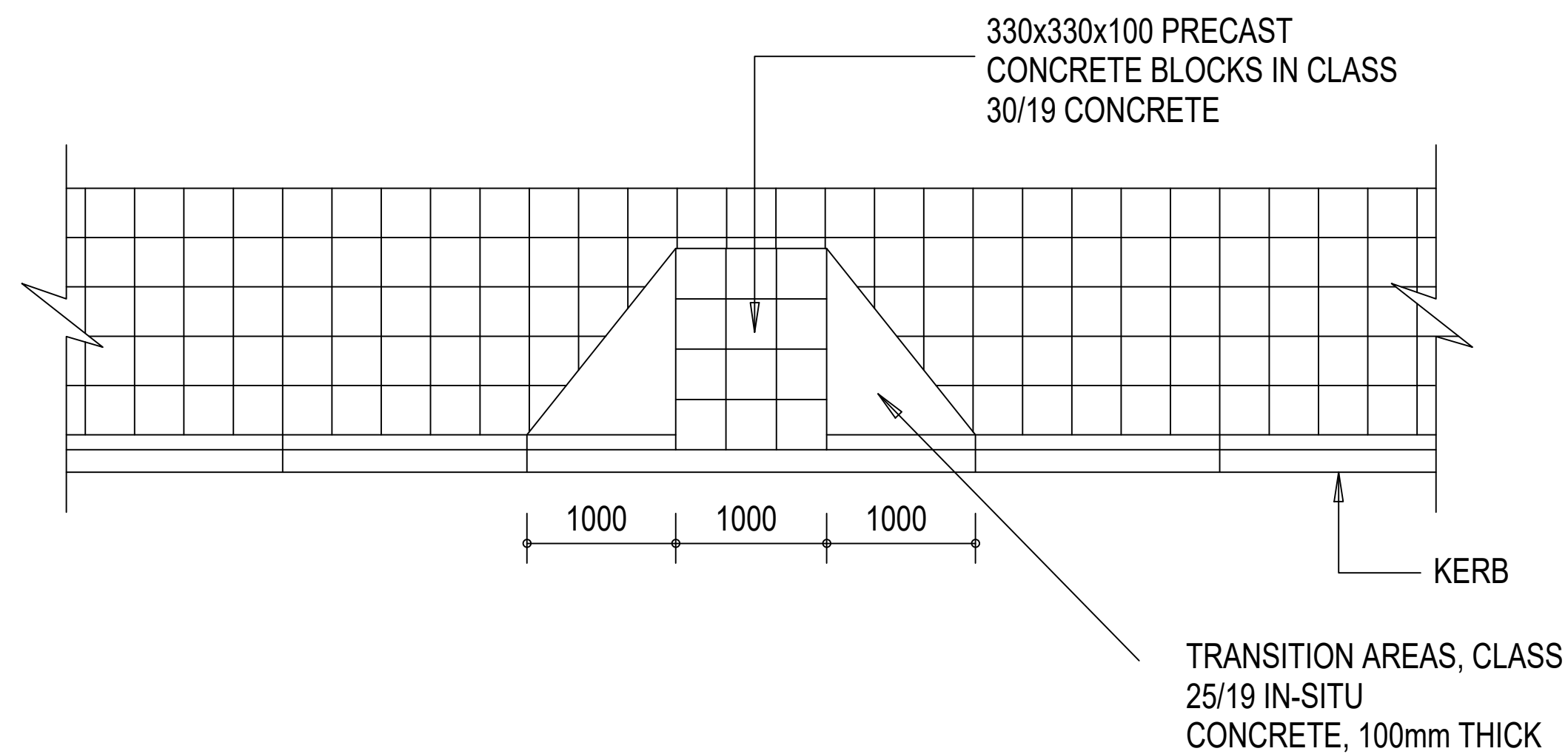
PLAN TYPE 'B' PRECAST CONCRETE BLOCKS

[illegible]



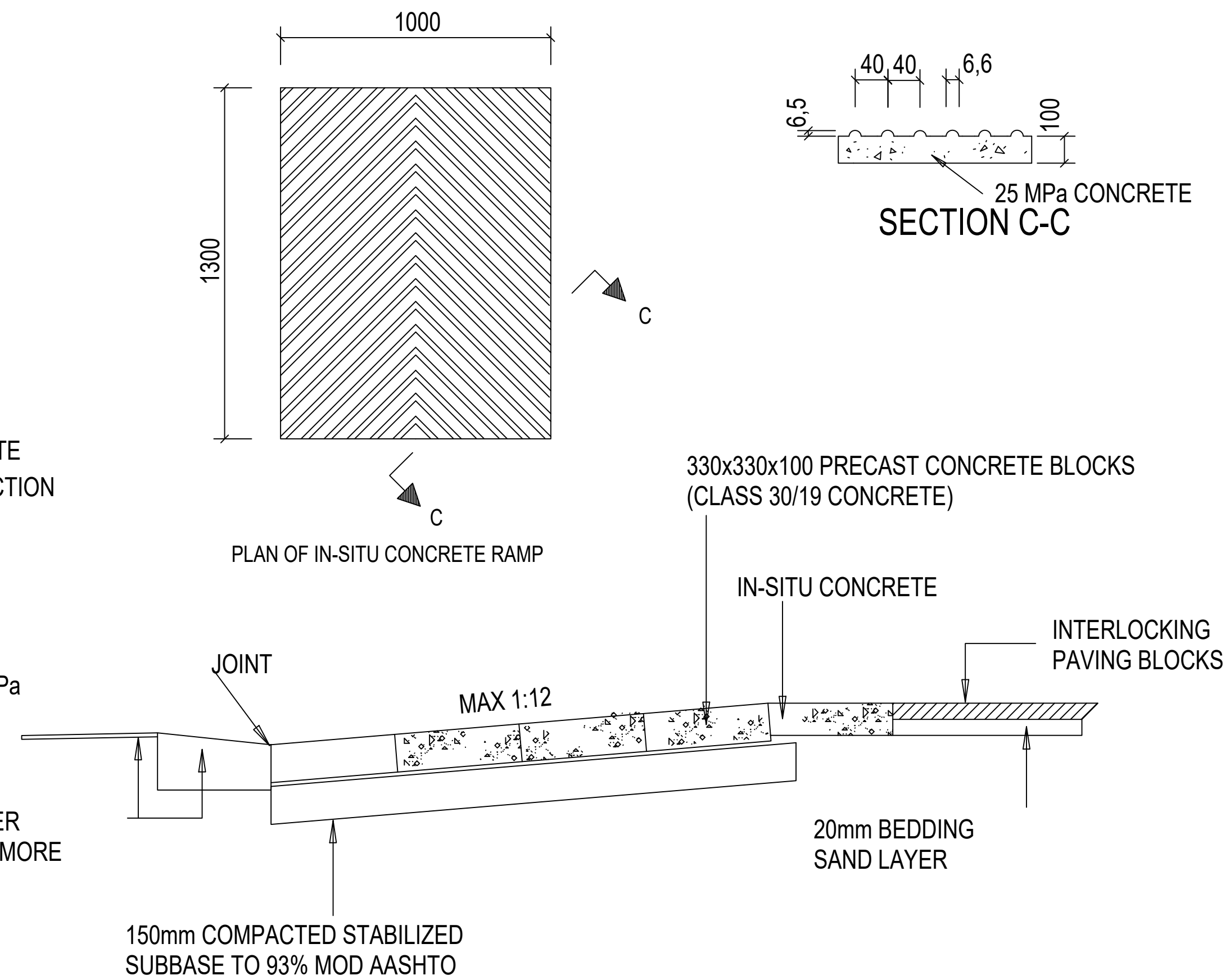
PLAN

TWO PEDESTRIAN CROSSINGS AT EACH STREET CORNER

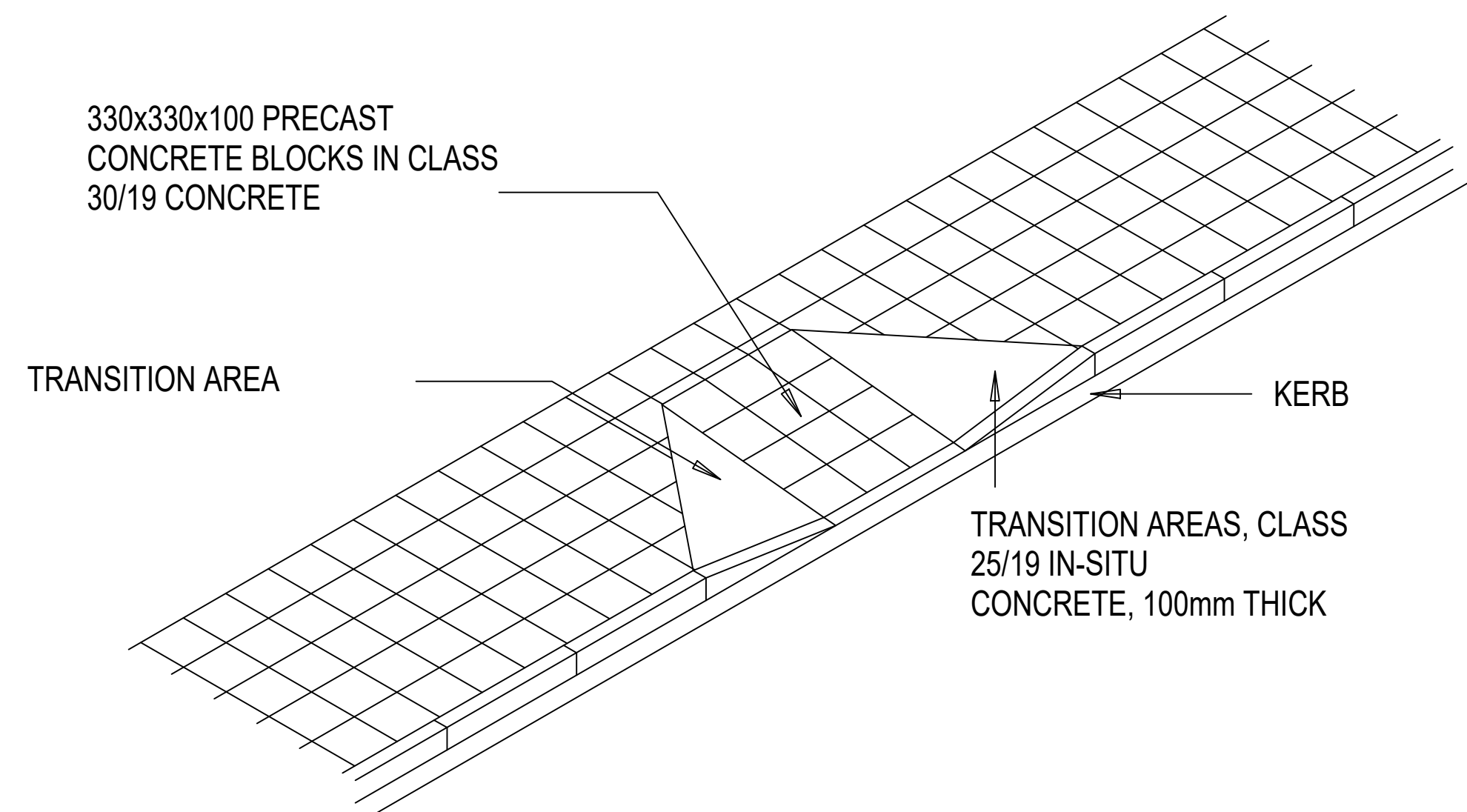


PLAN

PEDESTRIAN RAMPS ON STRAIGHT ROADS

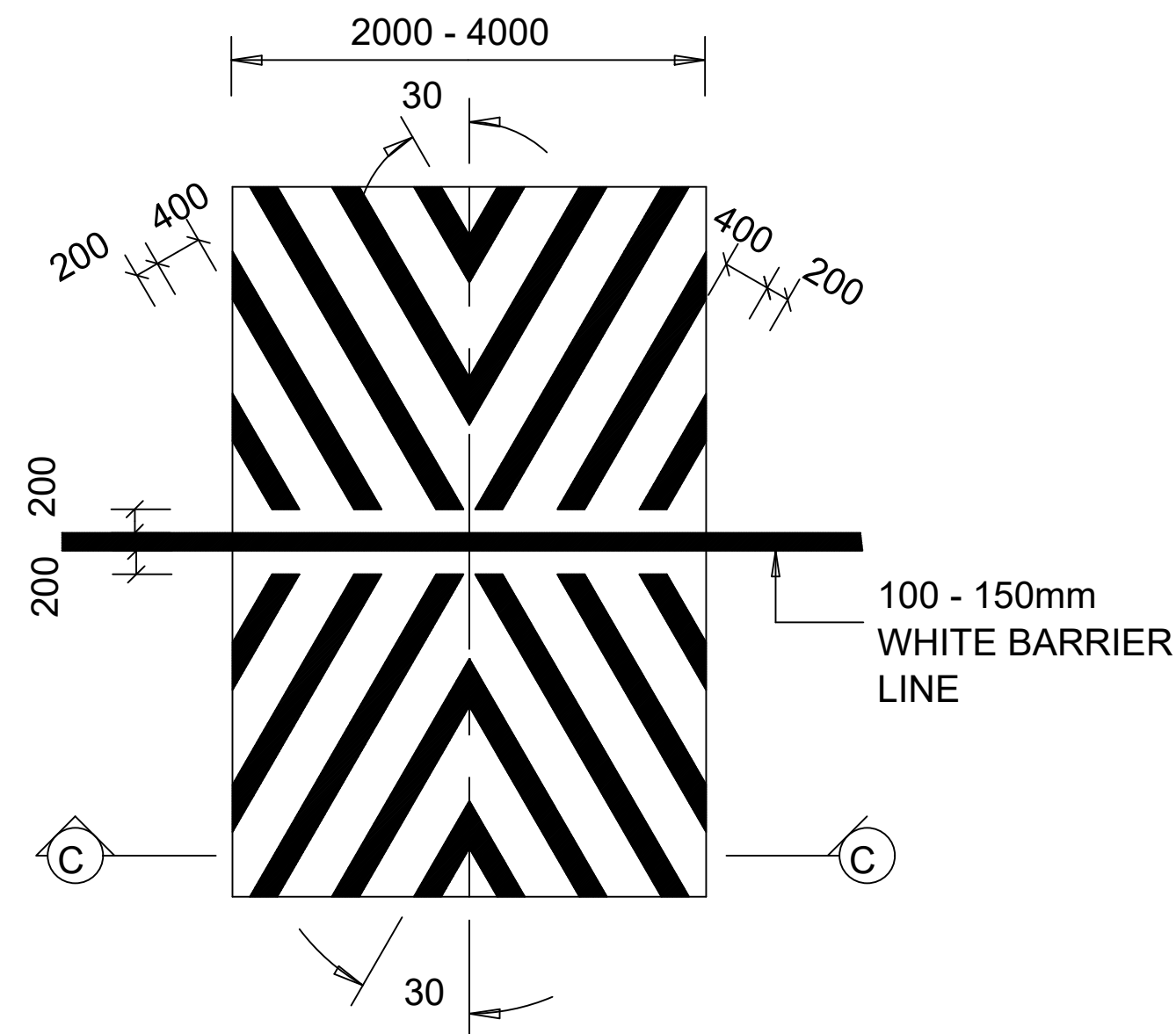


SECTION A-A



ISOMETRIC VIEW OF PEDESTRIAN RAMP

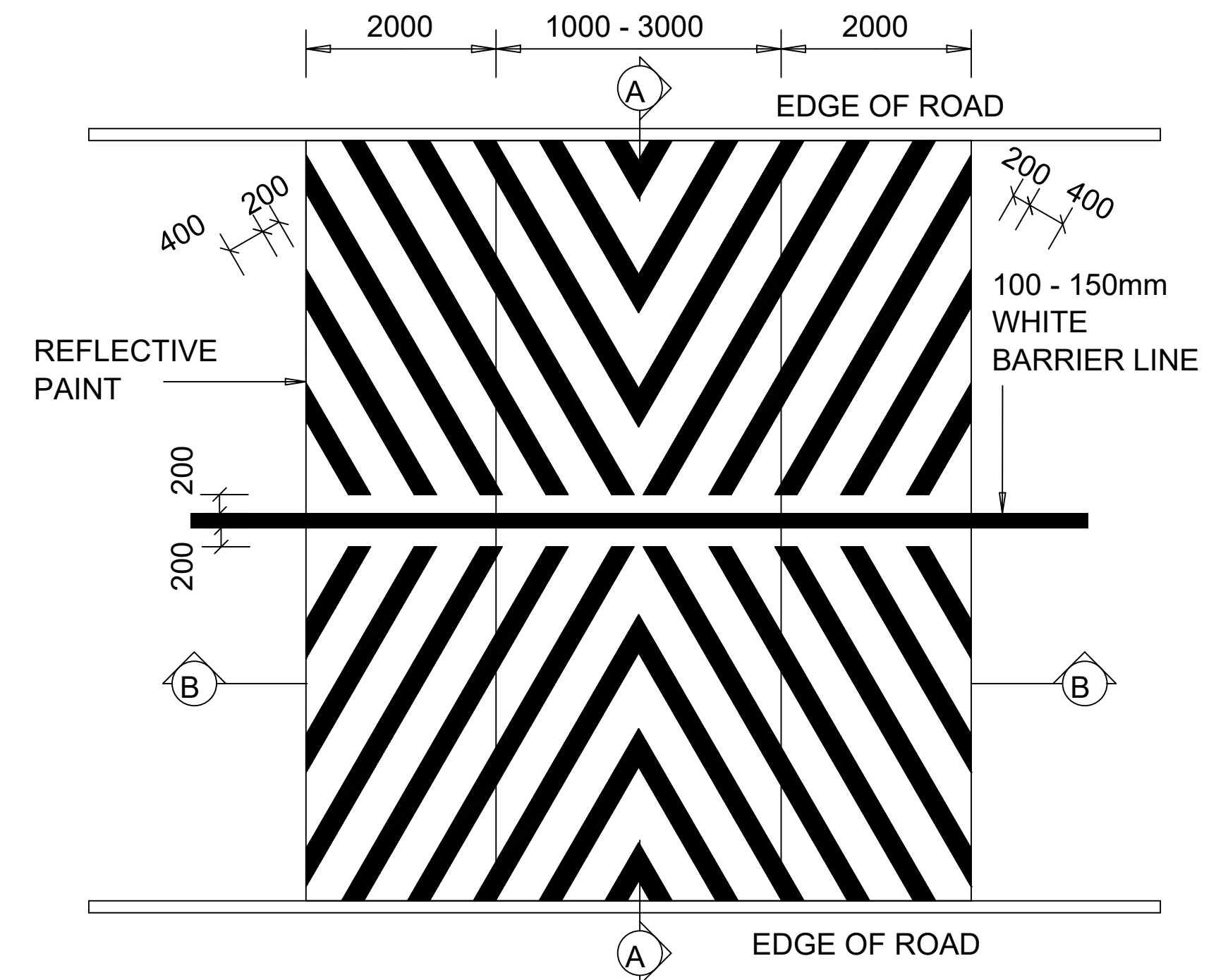
				DESIGNED BY M.K	CONSULTANT	RECOMMENDED	CLIENT	SCALE	CLIENT	MAKHADO LOCAL MUNICIPALITY	TYPE OF PLANNING	PRELIMINARY DESIGN	BID No.
				AGC Consulting Engineers 3A Pierre Street Hampton Court Polokwane 0699			MAKHADO MUNICIPALITY PRIVATE BAG X2596, LOUIS TRICHARDT, 0920	AS SHOWN	PROJECT TITLE	UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND RAVELE VILLAGES			SHEET 1 OF 1
				DRAWN M.K	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT		REVISION	DRAWING TITLE	STANDARD DETAIL			DRAWING No.
				DRAWING CHECKED M.K	DATE:	DATE:		(A)					AGC-CIV-PD-TD-011
No.	DATE	REVISION	REVISED BY	DATE									



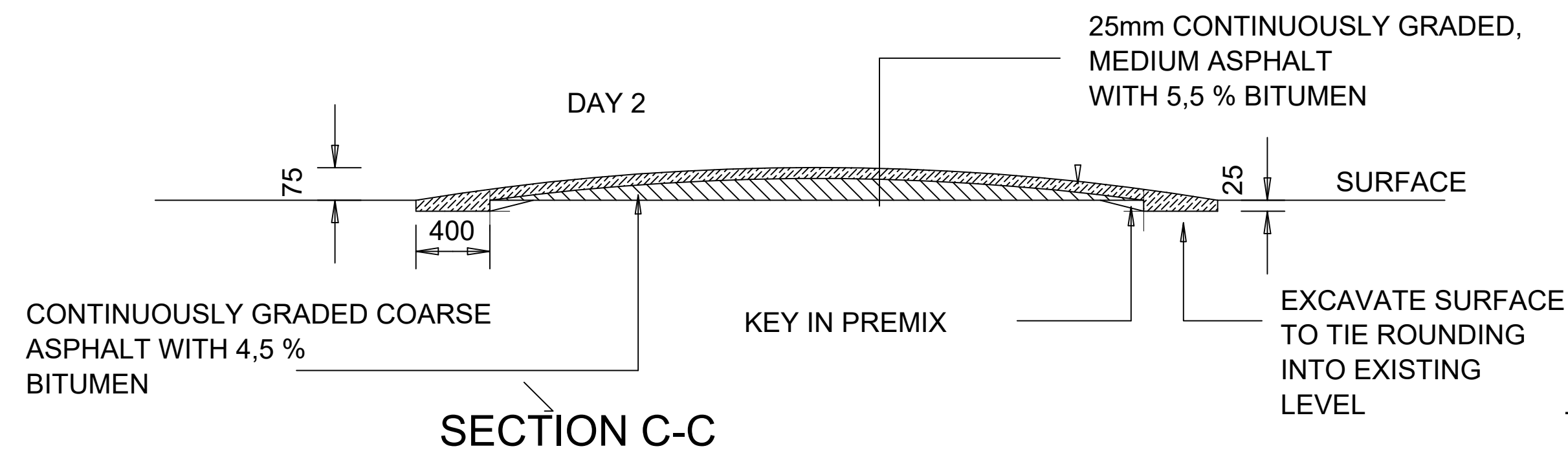
DETAIL OF SPEED HUMP

- NOTES:

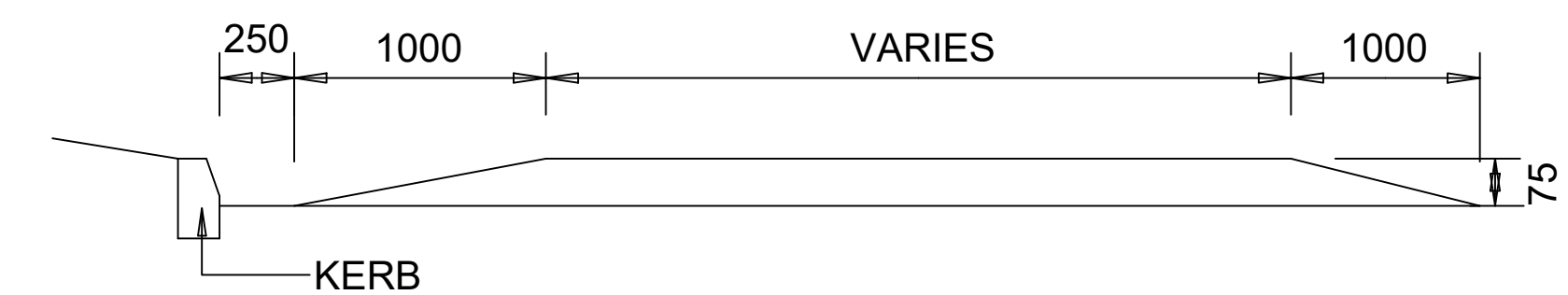
1. SHOULD THE ASPHALT COOL-OFF BEFORE SECOND LAYER IS PLACED, A SECOND LAYER OF TACK COAT SHOULD BE APPLIED.
2. PRIME COAT - 60/70 PEN BITUMEN
3. TACK COAT - 30 % CAT. EMULSION @ 0,55 l/m
4. ALL SIGNAGE TO BE IN ACCORDANCE WITH THE ROAD TRAFFIC SIGNS MANUAL



PLAN OF PLATFORM HUMPS

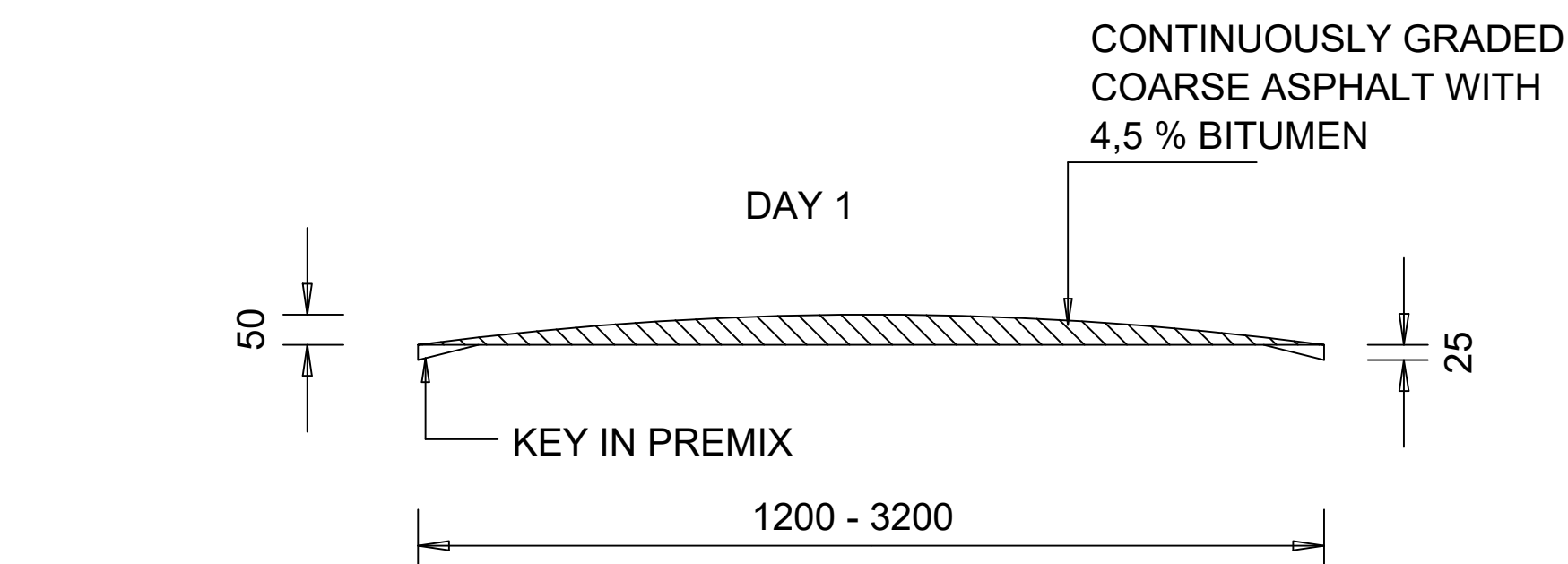


SECTION C-C



SECTION A-A

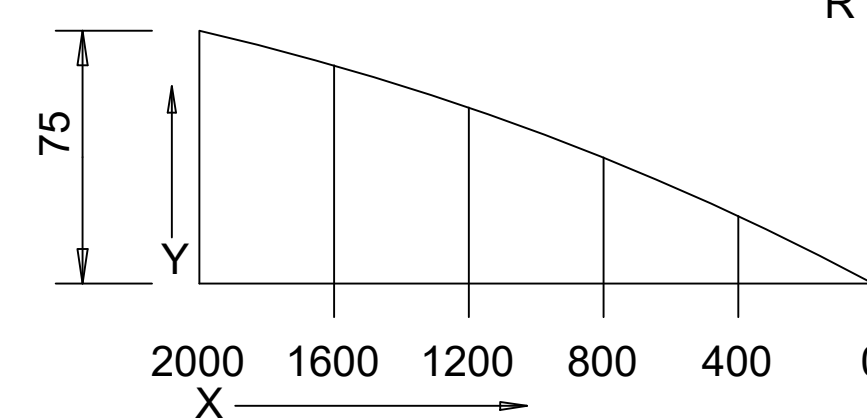
DETAIL OF PLATFORM HUMPS



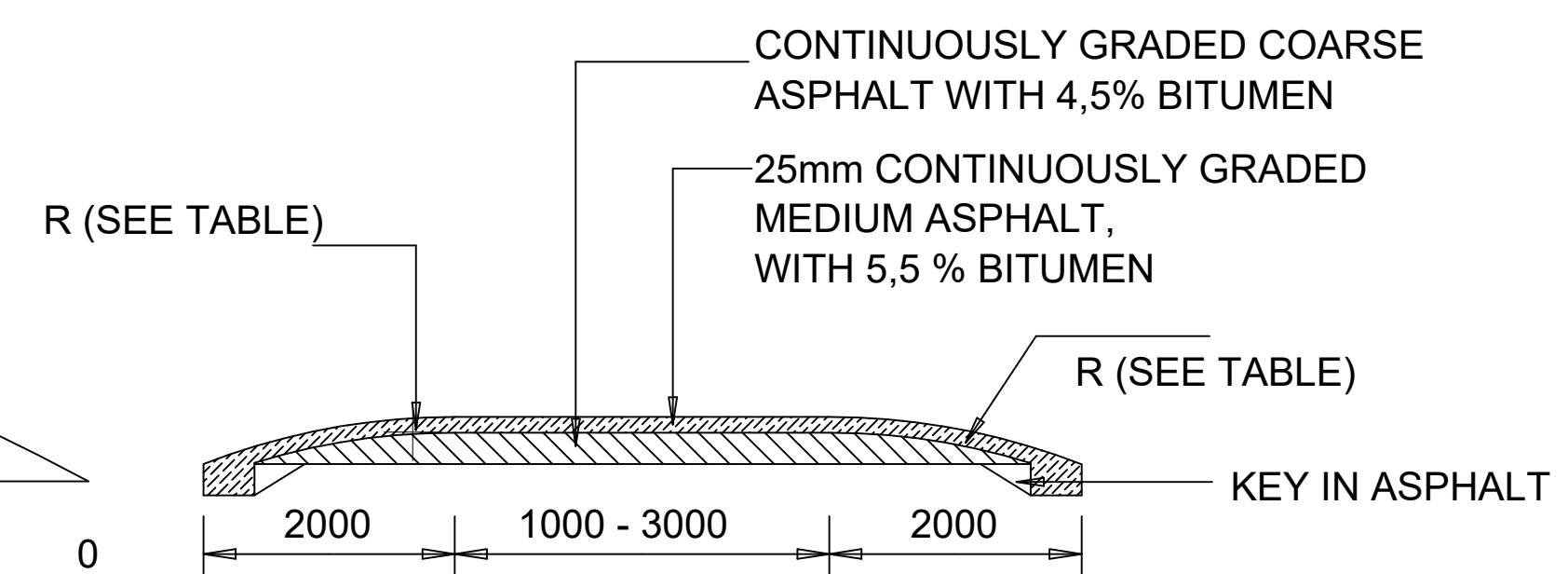
CONSTRUCTION DETAIL OF SPEED HUMP

TABLE R

X(mm)	Y(mm)
0	0
400	27
800	46
1200	63
1600	72
2000	75

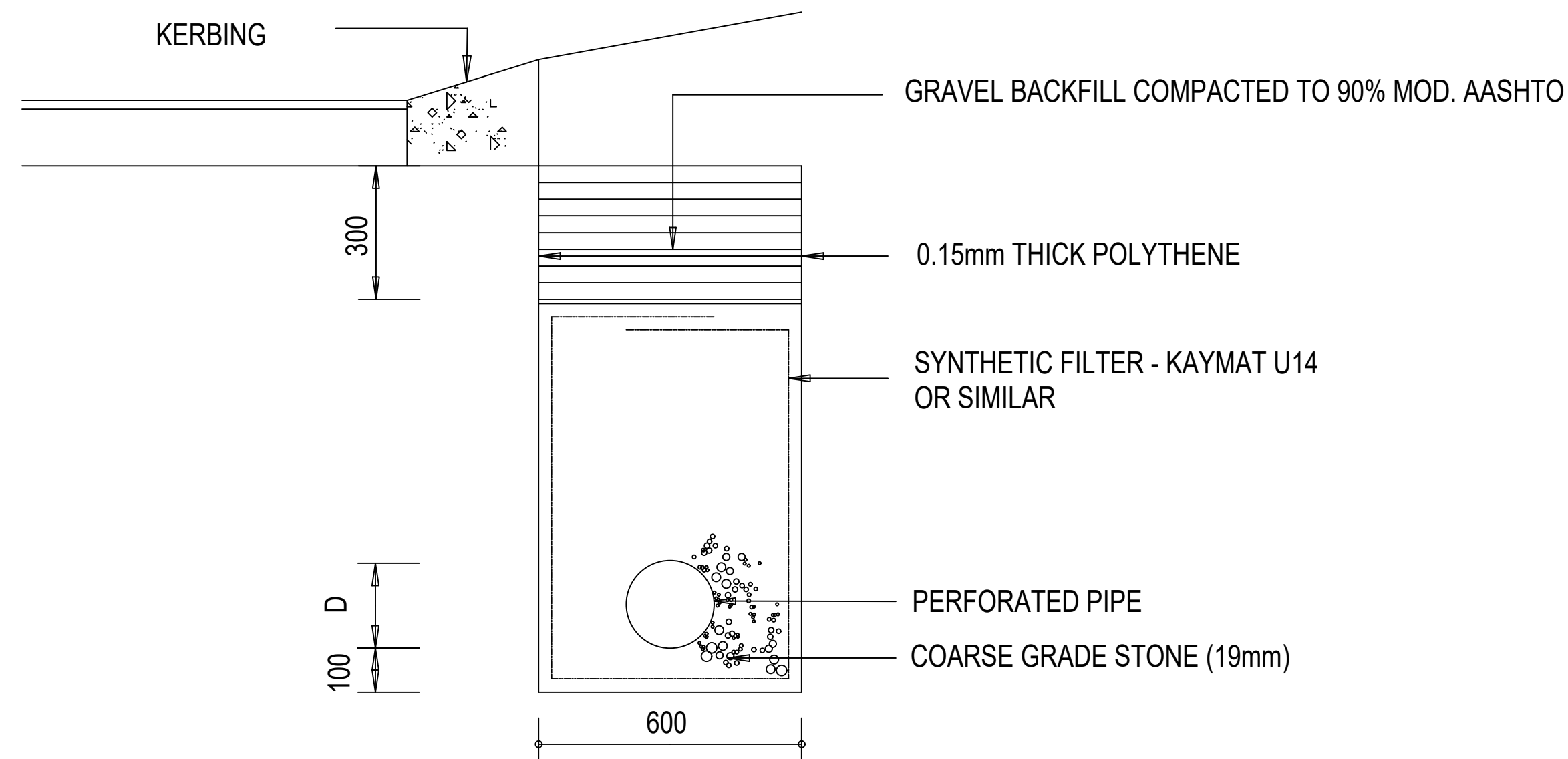


DETAIL OF CURVE

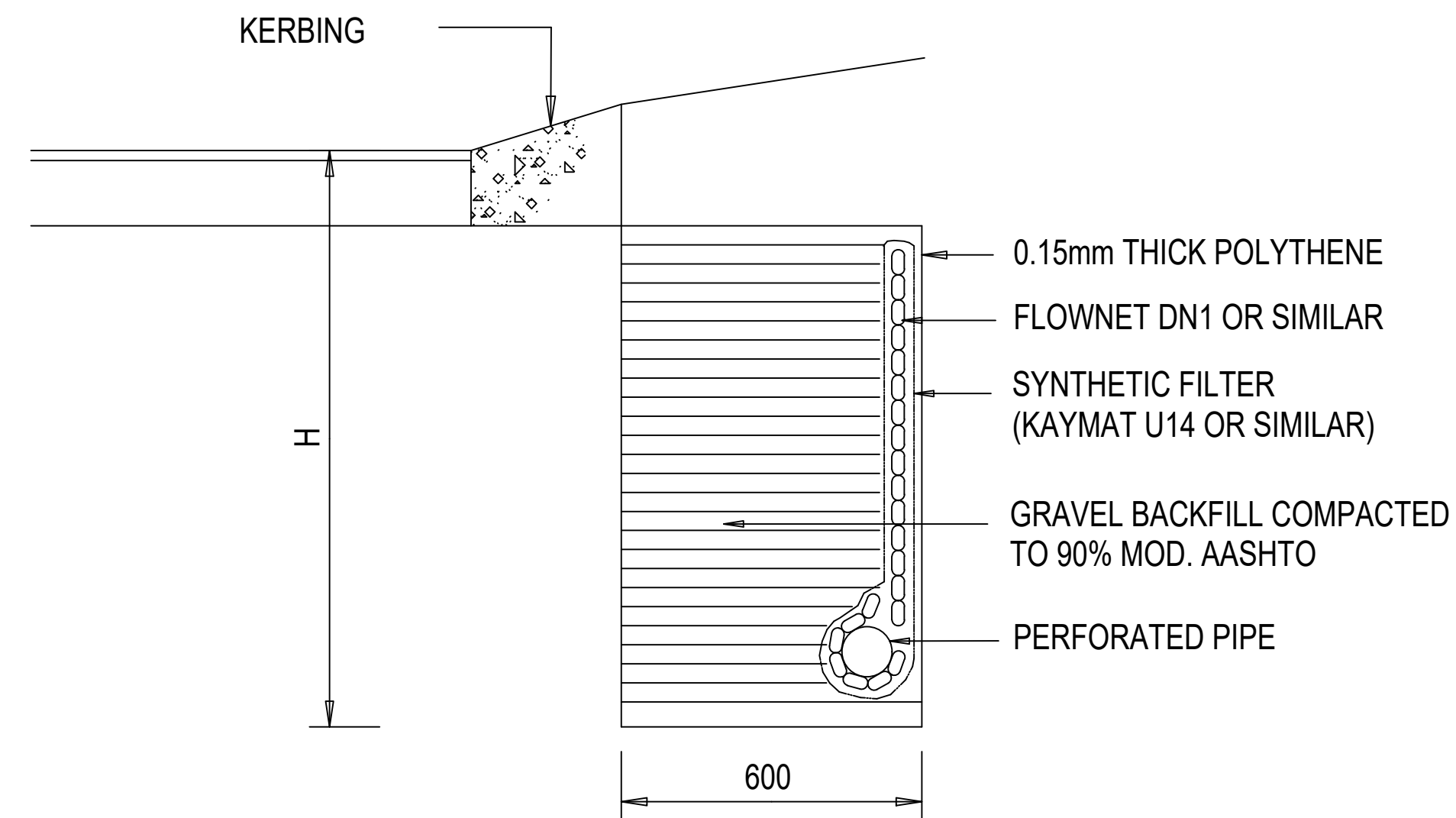


SECTION B-B

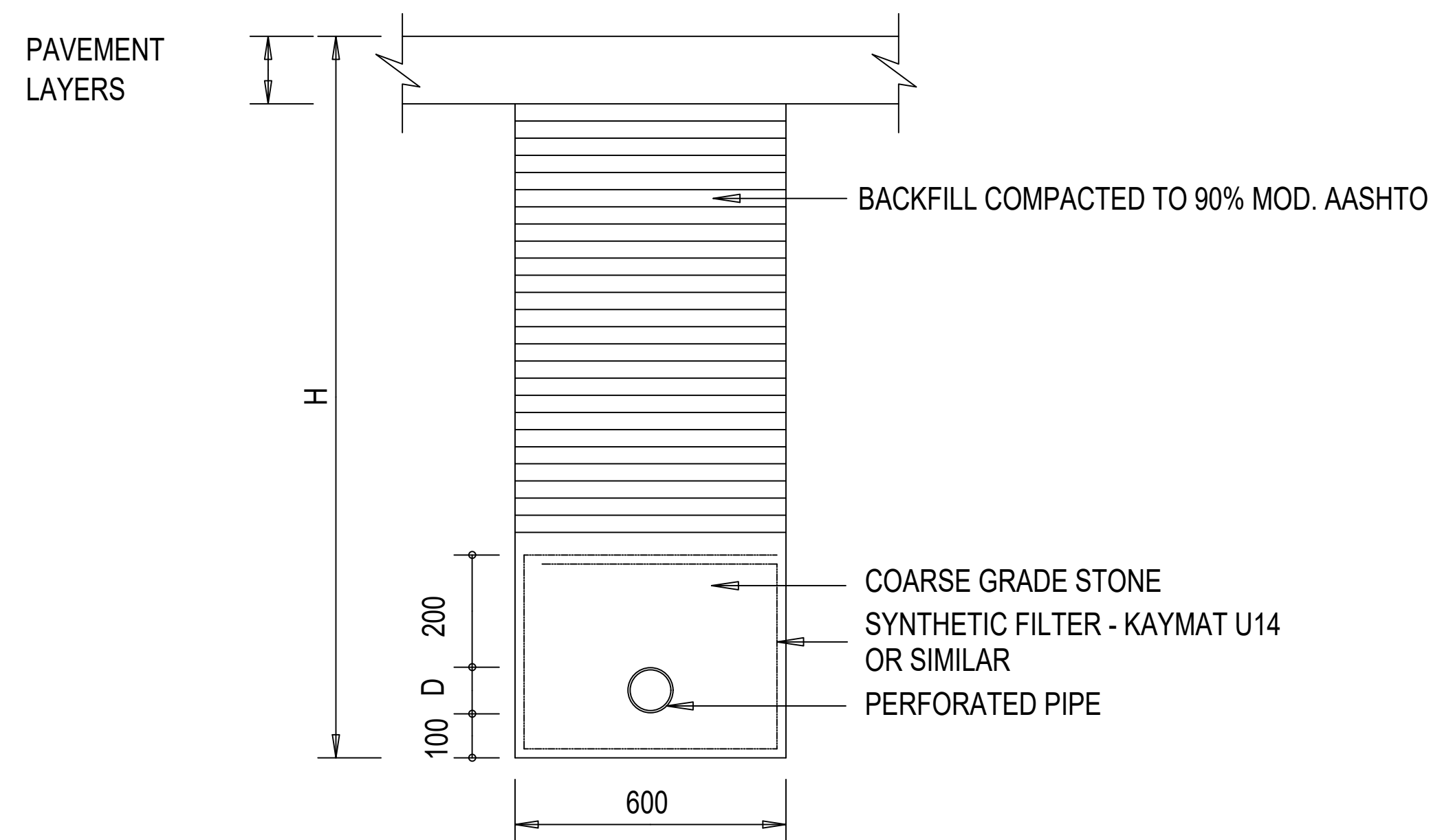
[illegible]



TYPE A: SUBSURFACE DRAIN



TYPE B: SUBSURFACE DRAIN



TYPE C: SUBSURFACE DRAIN

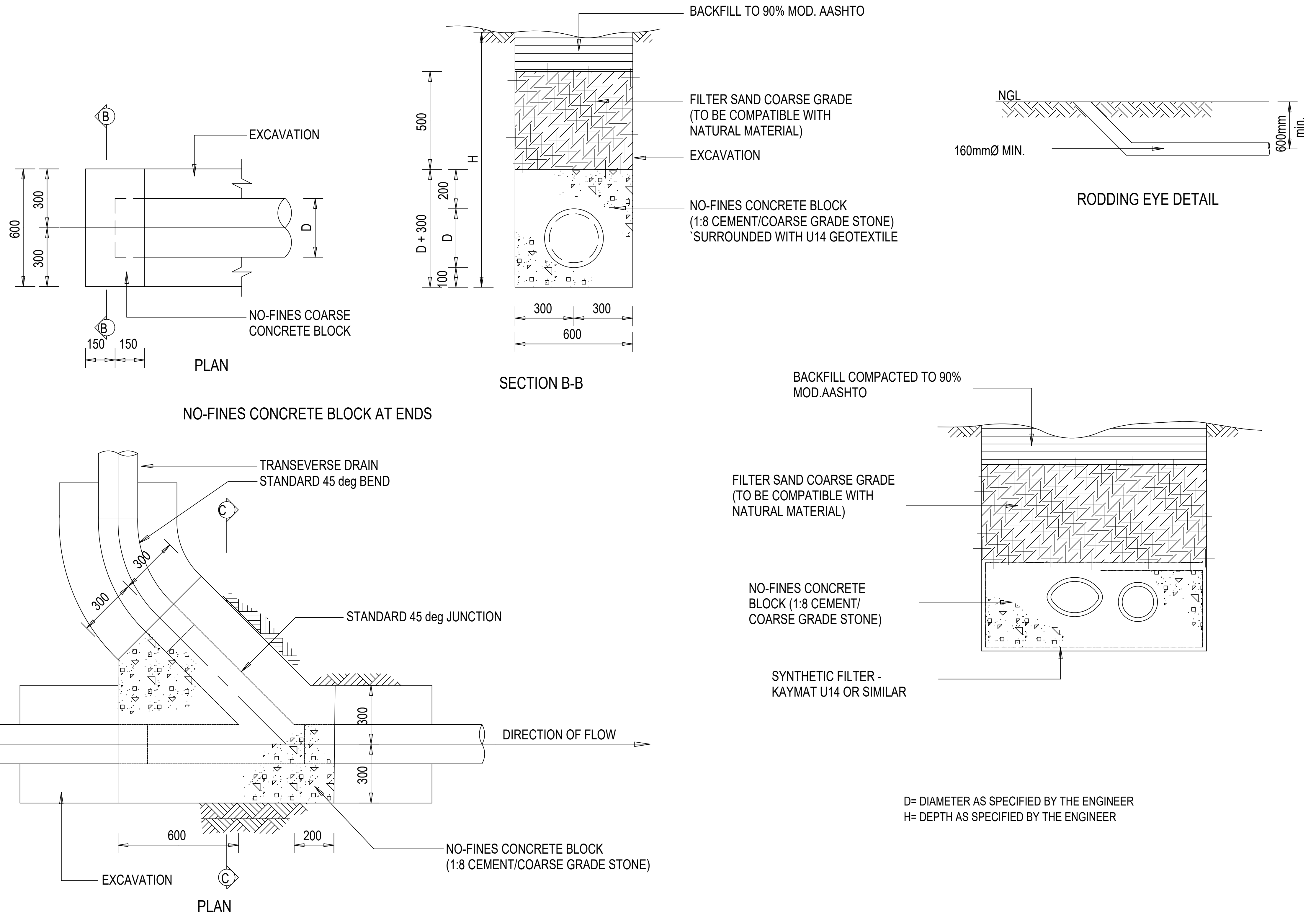
NOTES:

THE APPLICABLE TYPE OF SUBSURFACE DRAIN TO BE USED MUST BE SPECIFIED BY THE ENGINEER. REFER TO TRH 15

D = DIAMETER AS SPECIFIED BY THE ENGINEER

H = DEPTH AS SPECIFIED BY THE ENGINEER

				DESIGNED BY	 AGC Consulting Engineers 3A Pierre Street Hampton Court, Polokwane 0699	DESIGNED M.K	CONSULTANT	RECOMMENDED	CLIENT	SCALE	CLIENT	MAKHADO LOCAL MUNICIPALITY	TYPE OF PLANNING	PRELIMINARY DESIGN	BID No.
						DESIGN CHECKED M.K	..... for CONSULTING ENGINEER	..... for HEAD OF DEPARTMENT	 MAKHADO MUNICIPALITY PRIVATE BAG X2596, LOUIS TRICHARDT, 0920	AS SHOWN	PROJECT TITLE		UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND RAVELE		SHEET 1 OF 1
						DRAWN M.K				REVISION	VILLAGES				DRAWING No.
No.	DATE	REVISION		REVISED BY	DATE	DRAWING CHECKED M.K				(A)	DRAWING TITLE		STANDARD DETAIL		AGC-CIV-PD-TD-013



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WELDED MESH REF.395

150

100

150

D

40

150

450

BALL OF CHICKEN WIRE
TO PREVENT ACCESS
OF RODENTS

850

150

1000

Technical drawing of a drainage structure showing a plan view and a cross-section view.

Plan View Dimensions:

- Overall length: 1070
- Overall width: 86
- Channel width: 150
- Channel depth: 150
- Block width: 150
- Block height: 150

Section View Dimensions:

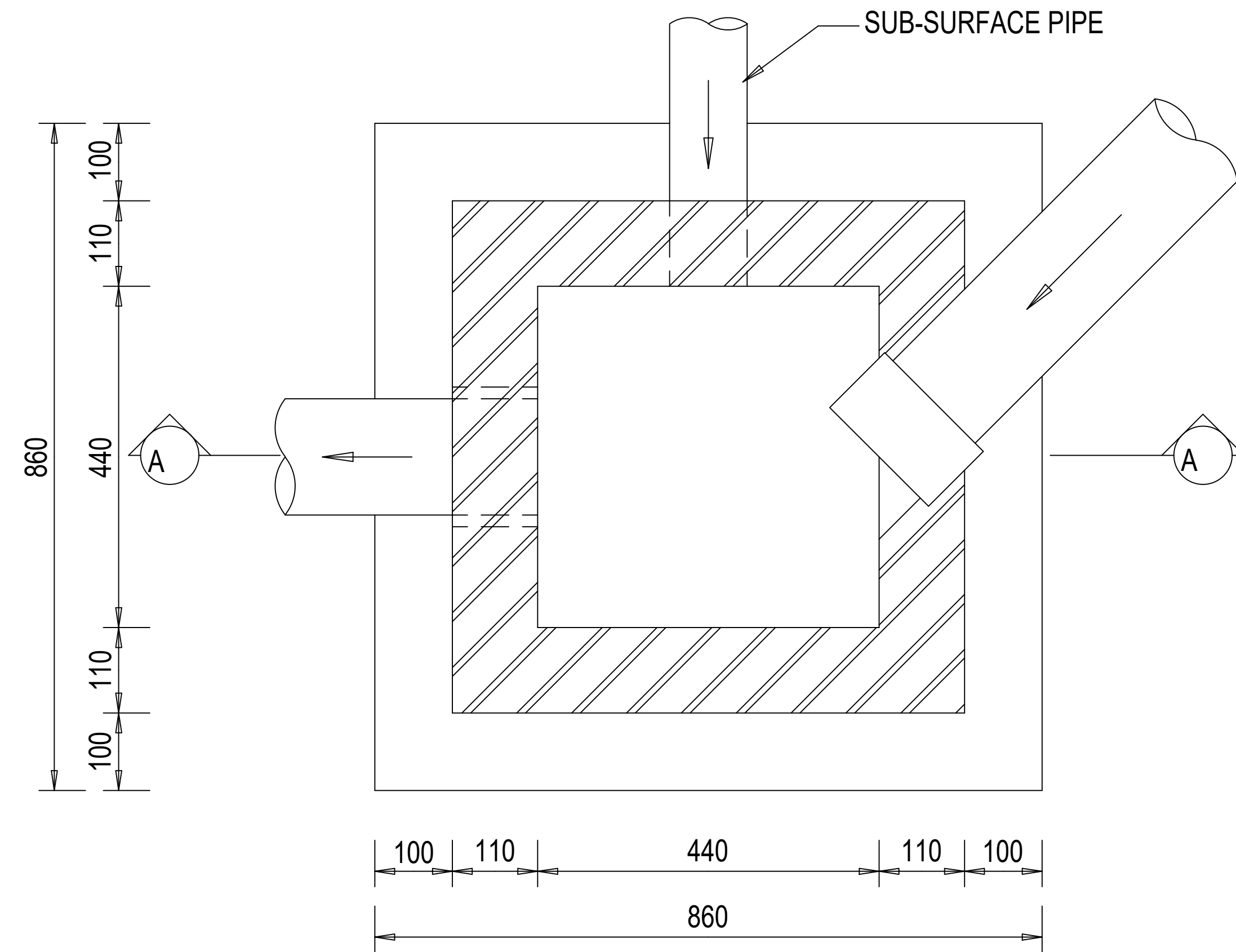
- Top width: 150
- Bottom width: 150
- Channel width: 150
- Channel depth: 150
- Block width: 150
- Block height: 150

Labels and Notes:

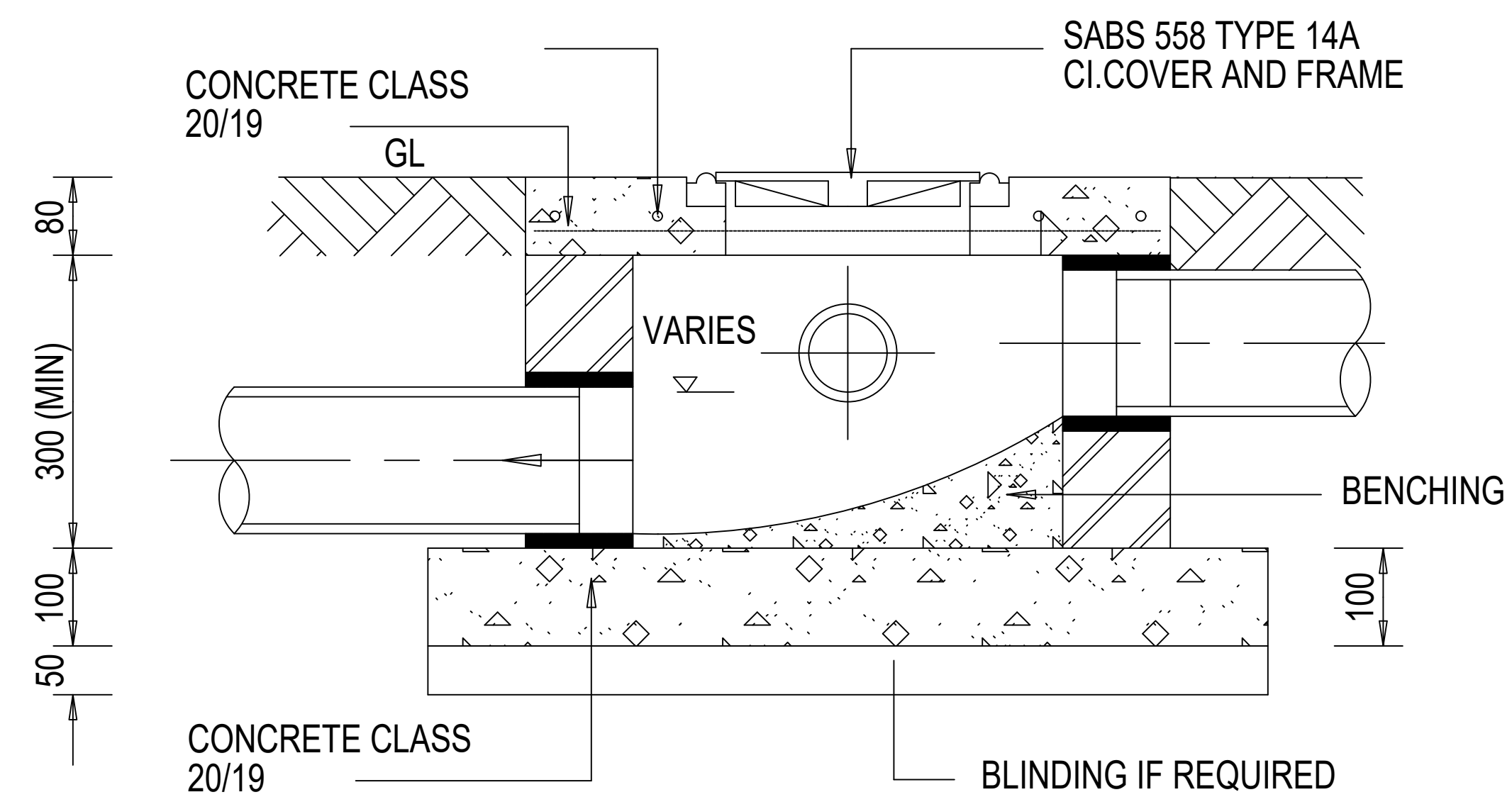
- NO-FINES CONCRETE OR PERFORATED PIPE
- TO BE CLASS 20/19
- ILLED 25mm x 25mm
- SHOULD BE AS PER WOODEN SHUTTER.
- D HEADWALLS MAY BE CONSTRUCTED
- OUT OF ENGINEERING CLASS BRICK,
- BE PLASTERED STOCK BRICKS
- PRECAST 25/19MPa CONCRETE BLOCKS (CONCRETE BLOCKS MAY BE REPLACED WITH PRECAST KERBS OR NATURAL STONE).
- PLAN
- SECTION

1. ALL CONCRETE TO BE CLASS 20/19
2. ALL SIDES BEVELLED 25mm x 25mm
3. CONCRETE FINISH SHOULD BE AS PER WOODEN SHUTTER.
4. WING WALLS AND HEADWALLS MAY BE CONSTRUCTED ALTERNATIVELY OUT OF ENGINEERING CLASS BRICK, BUT MAY NOT BE PLASTERED STOCK BRICKS.

[illegible]



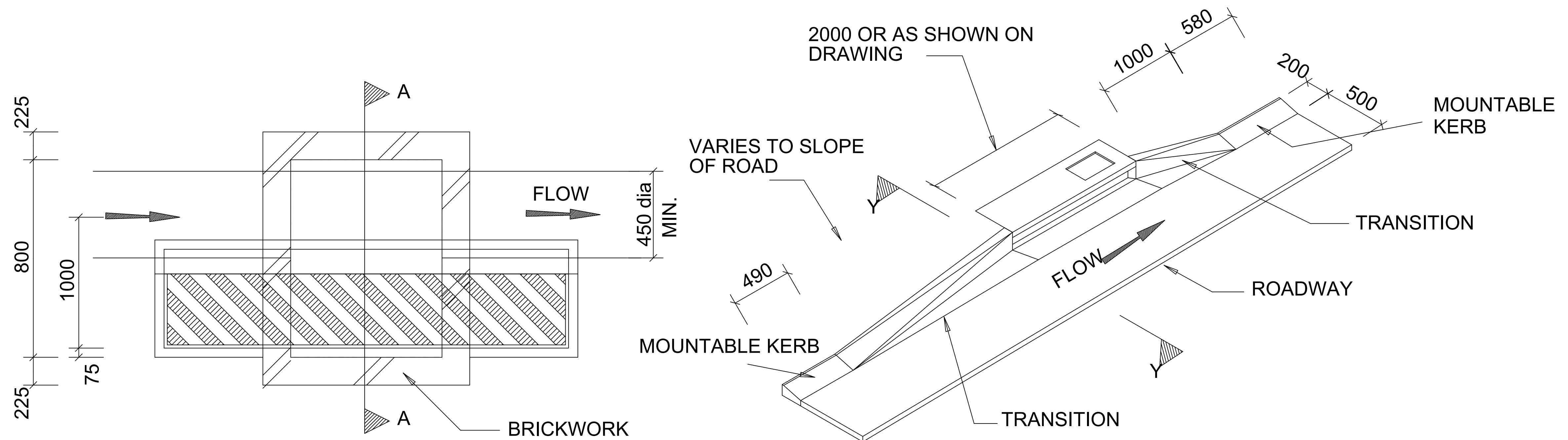
PLAN (COVER NOT SHOWN)



SECTION A-A

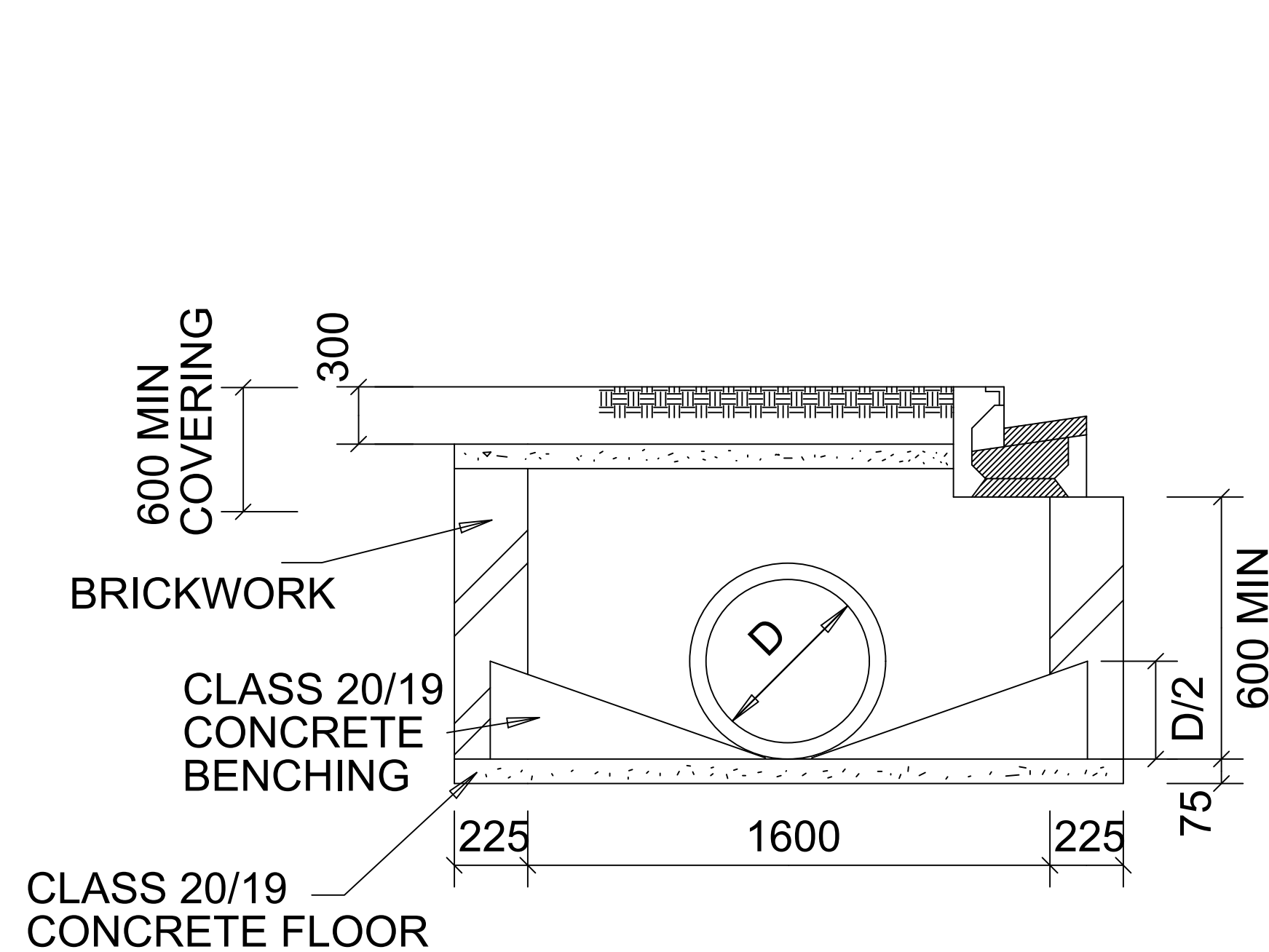
- NOTES
- 1. MAXIMUM DEPTH. OF MANHOLE IS 750mm.
 - 2. ALL BRICKWORK TO BE IN ENGLISH BOND.
 - 3. ALL BRICKS TO BE FBSE 30 TO SABS 227-1986 WITH WATER ABSORTION < 14% AND EFFLORESCENCE <10.

			DESIGNED BY		CONSULTANT		RECOMMENDED		CLIENT		SCALE	CLIENT	MAKHADO LOCAL MUNICIPALITY	TYPE OF PLANNING	PRELIMINARY DESIGN	BID No.	
			 AGC Consulting Engineers		DESIGNED M.K				 MAKHADO MUNICIPALITY PRIVATE BAG X2596, LOUIS TRICHARDT, 0920		AS SHOWN	PROJECT TITLE		UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND RAVELE		SHEET 1 OF 1	
					DESIGN CHECKED M.K						REVISION	DRAWING TITLE		STANDARD DETAIL			DRAWING No. AGC-CIV-PD-TD-016
					DRAWN M.K												
					DRAWING CHECKED M.K												
No.	DATE	REVISION	DESIGNED BY	DATE	for CONSULTING ENGINEER		for HEAD OF DEPARTMENT				(A)						
					DATE:	DATE:		DATE:									

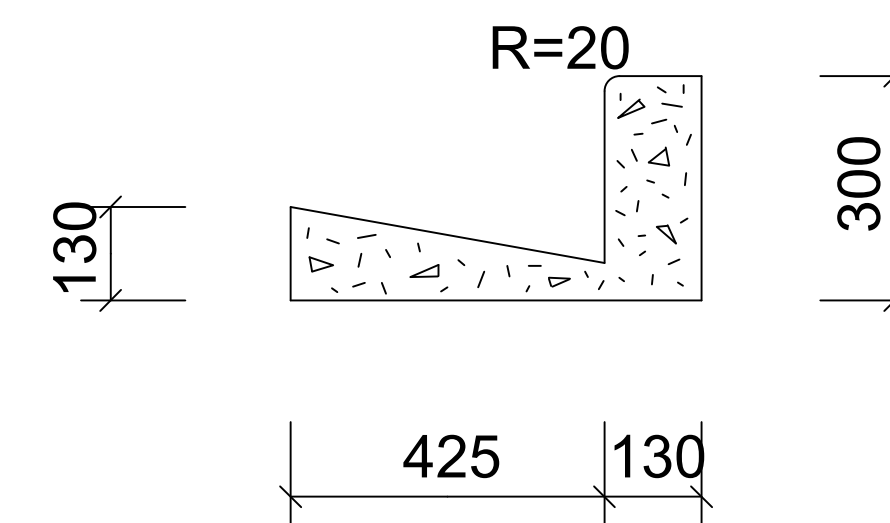


PLAN OF KERB INLET THAT FLOWS INTO MAIN STORMWATER PIPE

ISOMETRIC VIEW OF DOWNSTREAM CROSSING



SECTION A-A

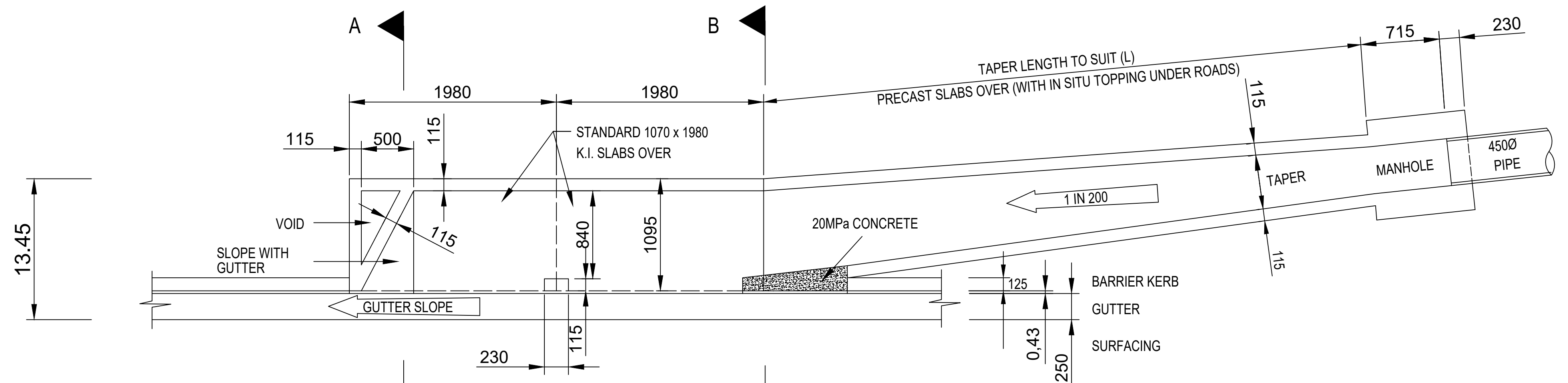


SECTION Y-Y

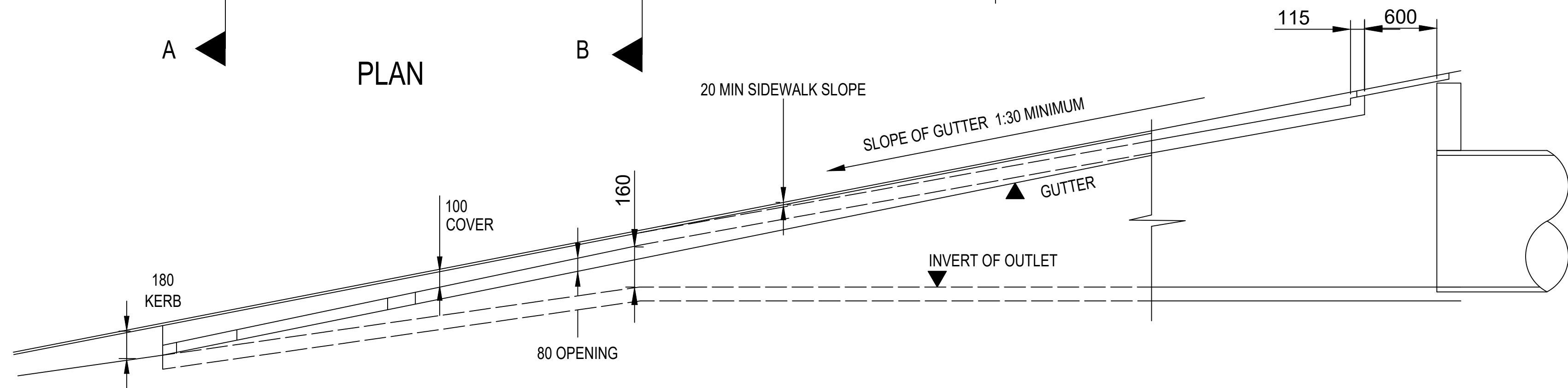
NOTES:

1. TRANSITION LENGTHS
-1.0m IF SLOPE < 4%
-2.0m IF SLOPE < 7%
-3.0m IF SLOPE < 10%
2. KERB INLETS CAN BE SALBERG TYPE, KERBMAN OR SIMILAR APPROVED
3. STORMWATER IN OUTLET STRUCTURE TO BE CHanneled BY CONCRETE BENCHING.
4. THE POSITION OF THE STORMWATER PIPE IN THE OUTLET STRUCTURE MAY VARY

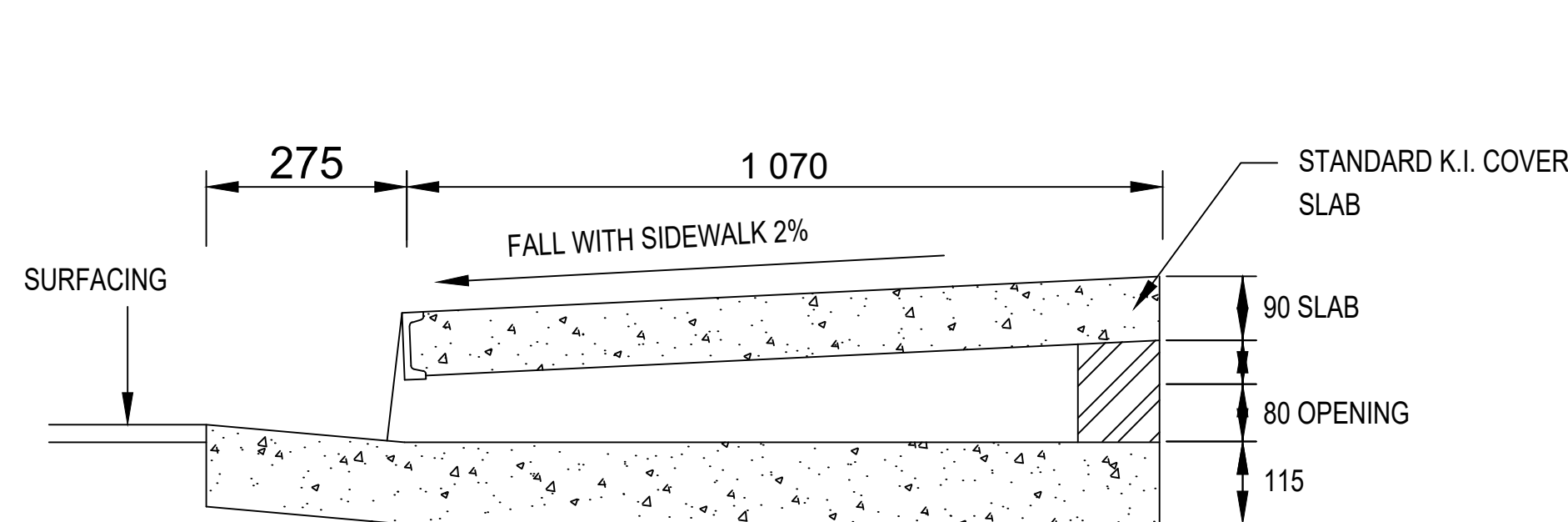
DESIGNED BY				CONSULTANT		RECOMMENDED		CLIENT		SCALE		CLIENT		TYPE OF PLANNING		BID No.	
AGC Consulting Engineers 3A Pierre Street Hampton Court Polokwane 0699				MAKHADO MUNICIPALITY		PRIVATE BAG X2596, LOUIS TRICHARDT, 0920		MAKHADO LOCAL MUNICIPALITY		AS SHOWN		PROJECT TITLE		PRELIMINARY DESIGN		SHEET 1 OF 1	
DRAWN M.K.				for CONSULTING ENGINEER		for HEAD OF DEPARTMENT		UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND RAVELE VILLAGES		REVISION		DRAWING TITLE		STANDARD DETAIL		DRAWING No.	
DATE				DATE		DATE		A								AGC-CIV-PD-TD-017	



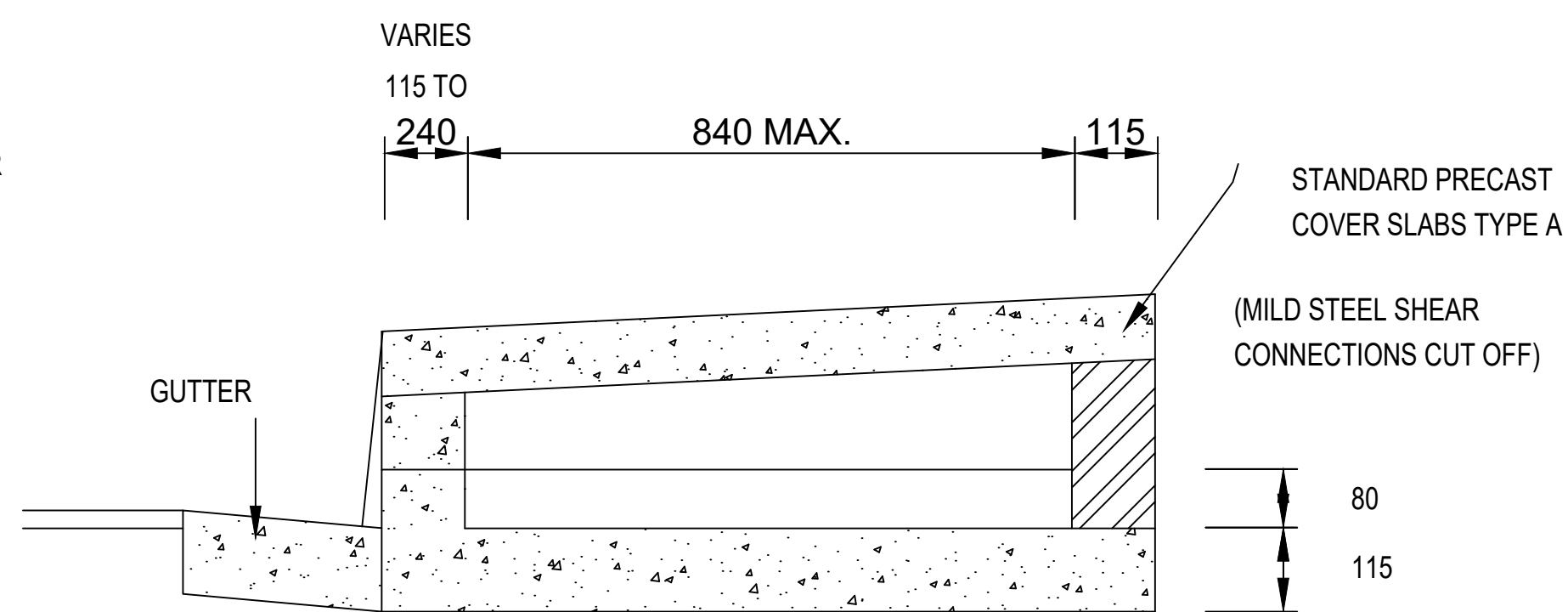
PLAN



ELEVATION AT KERB FACE



SECTION A-A



SECTION B-B

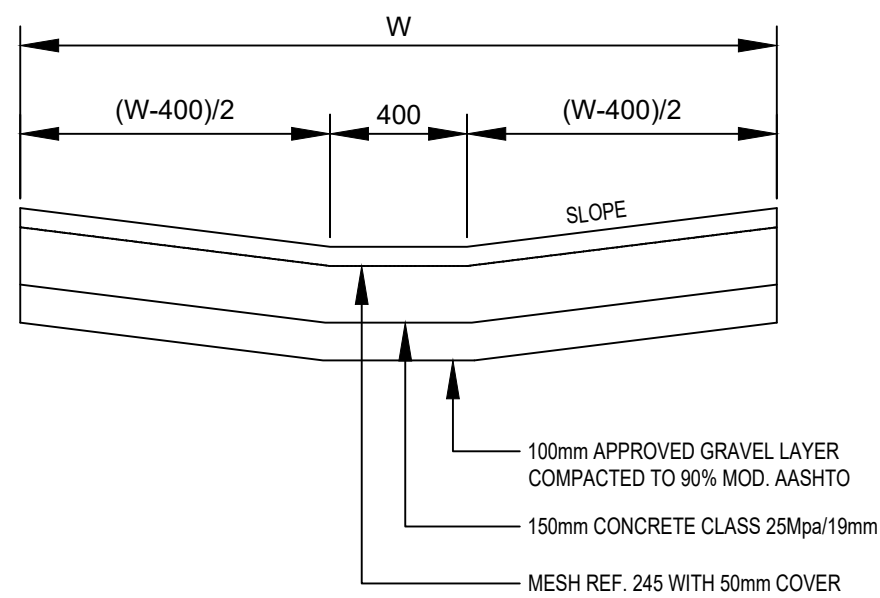
TAPER LENGTHS	
GRADE ALONG SIDEWALK	L (m)
1 : 30	13.76
1 : 25	11.14
1 : 20	8.67
1 : 18	7.72
1 : 16	6.78
1 : 14	5.87
1 : 12	4.98
1 : 10	4.10

NOTES: KERB OULTETS ARE NOT TO BE CONSTRUCTED WHERE THE GUTTER

GRADE IS LESS THAN 1 IN 30.

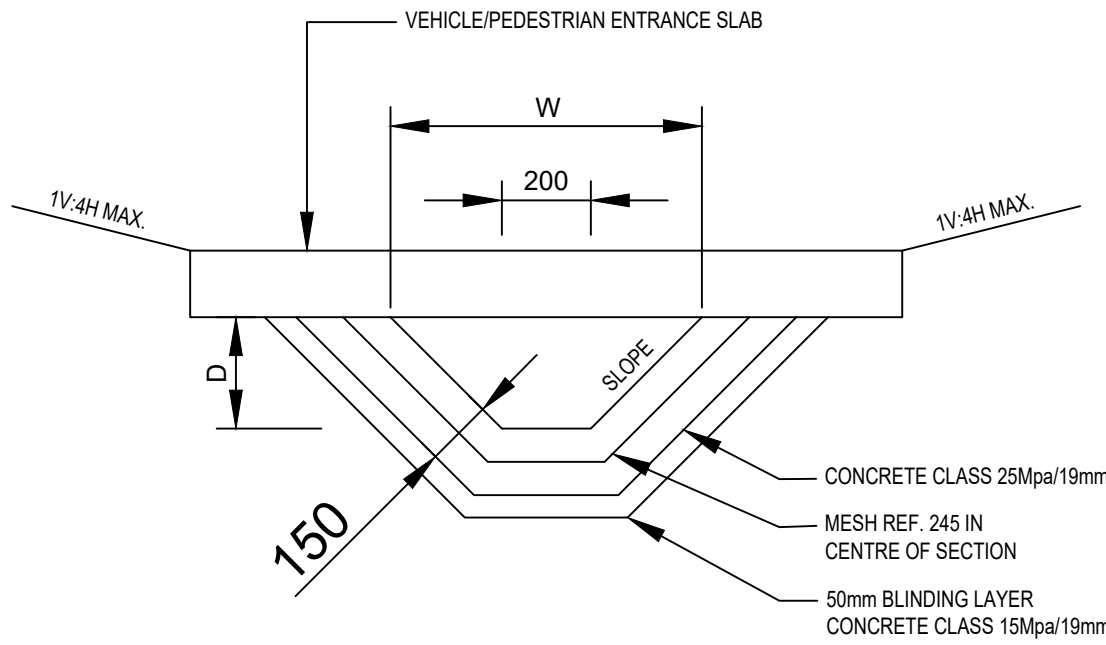
KERB OUTLETS

KERB OUTLETS



TYPE	W	SLOPE
A 2.0	2000	1:8
A 2.8	2800	1:8
A 2.4	2400	1:8
A 2.5	2500	1:12
A 3.0	3000	1:12

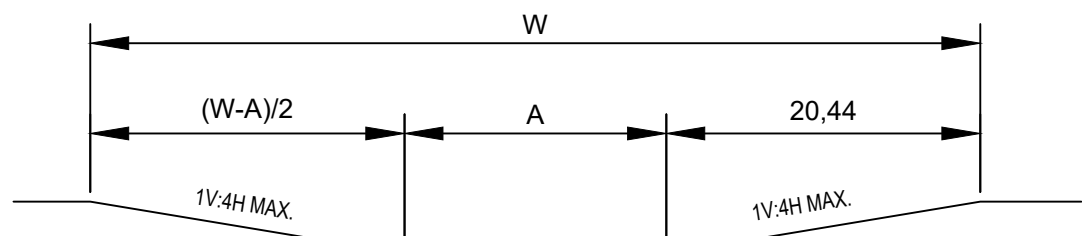
CHANNEL TYPE A AND H
SCALE 1:20



TYPE	W	A	SLOPE
B 2.5	700	250	1:1
B 3.5	900	350	1:1
B 4	1000	400	1:1
B 5	1200	500	1:1
B 6.5	1200	650	1:0.769

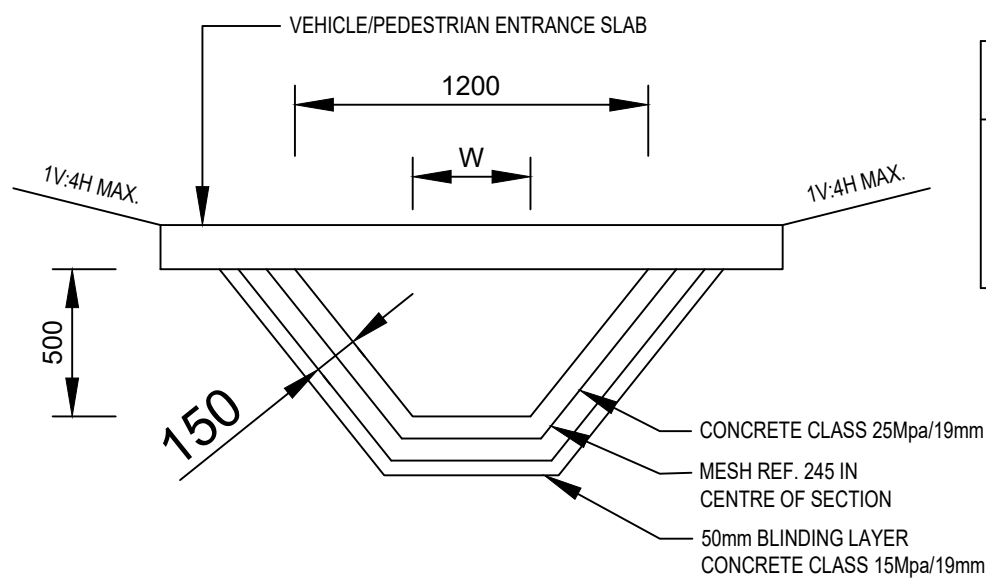
CHANNEL TYPE B (SECTION B-B)
SCALE 1:20

JRA-SD-S022



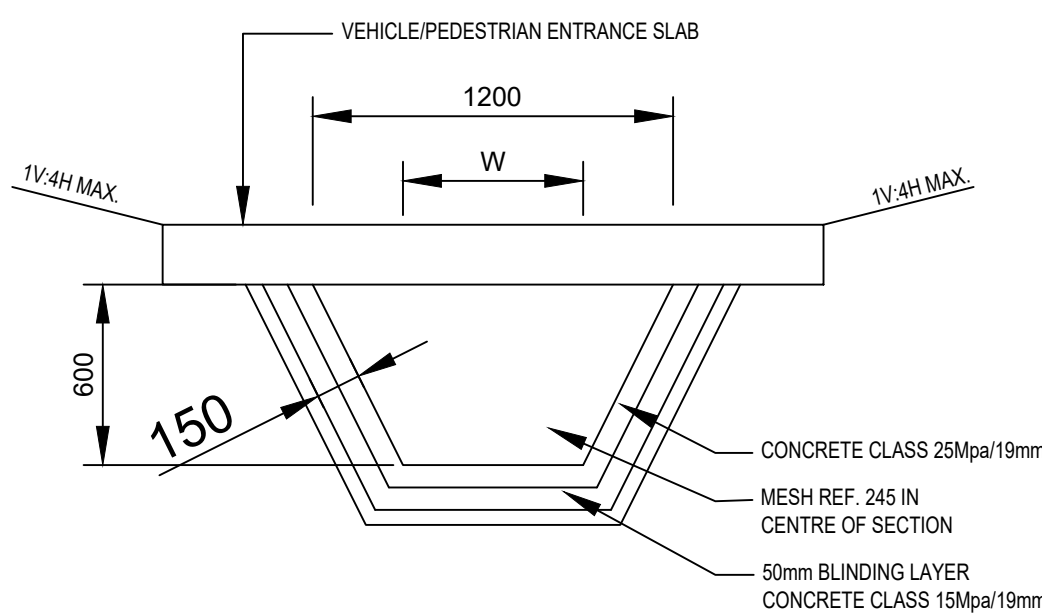
TYPE	W	A	SLOPE
C 1.7	1700	500	1:6
C 2.3	2300	500	1:3
C 4.0	4000	1000	1:3
C 5.0	5000	1000	1:3

CHANNEL TYPE C
SCALE 1:20



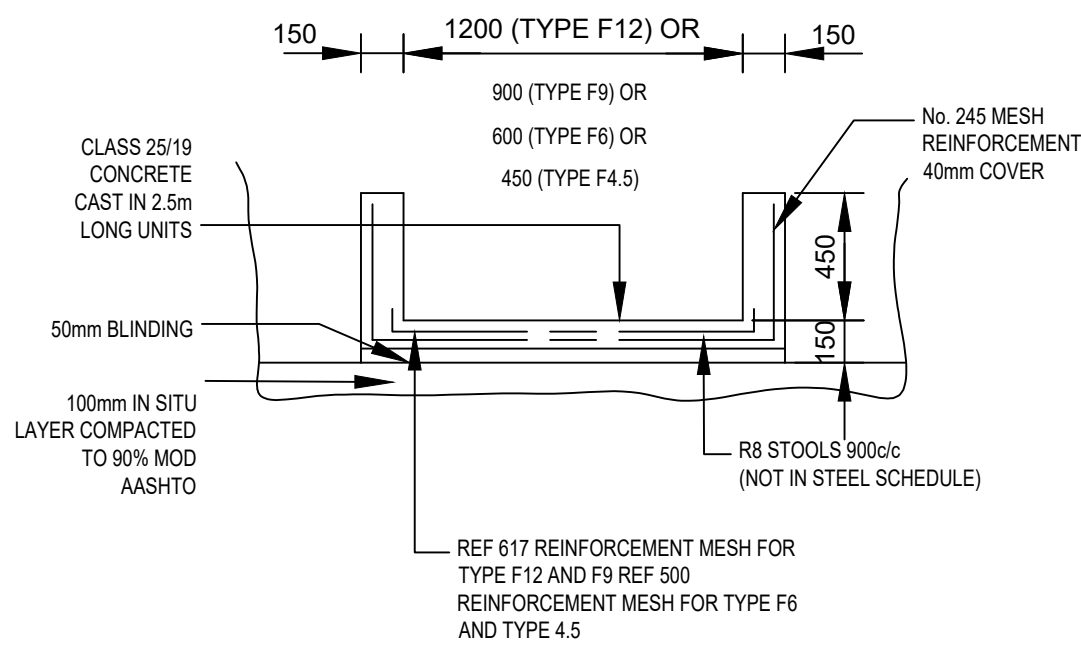
TYPE	W
D 4	400
D 5	500
D 6	600

CHANNEL TYPE D
SCALE 1:20

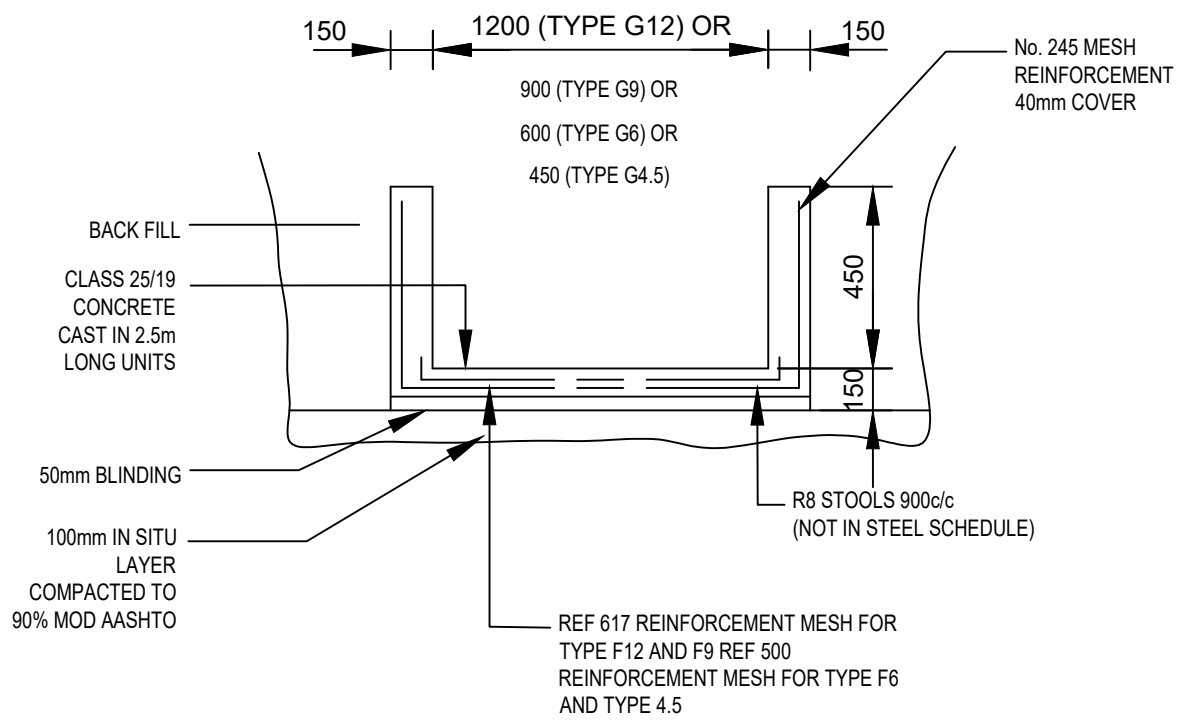


TYPE	W
E 4	600
E 5	700
E 6	800

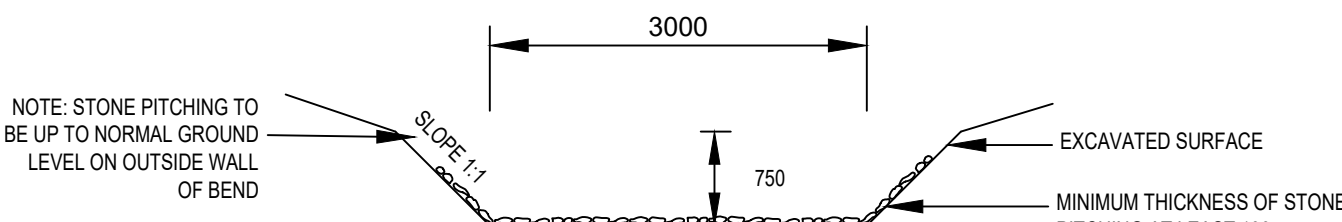
CHANNEL TYPE E
SCALE 1:20



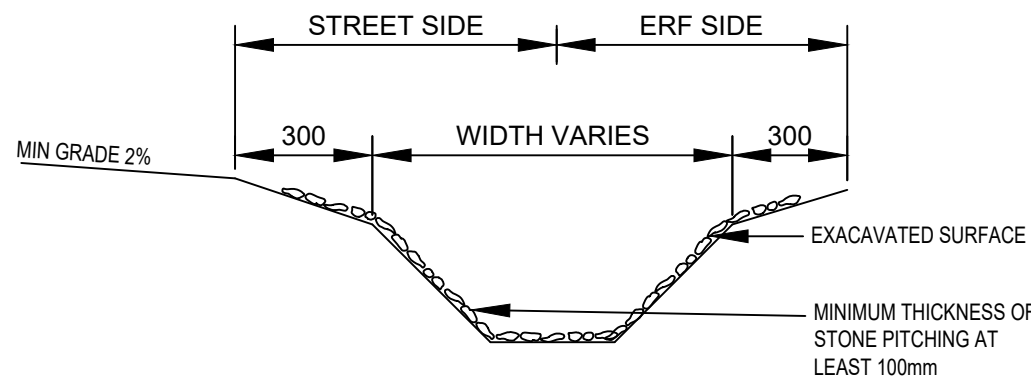
TYPE F CHANNEL
N.T.S.



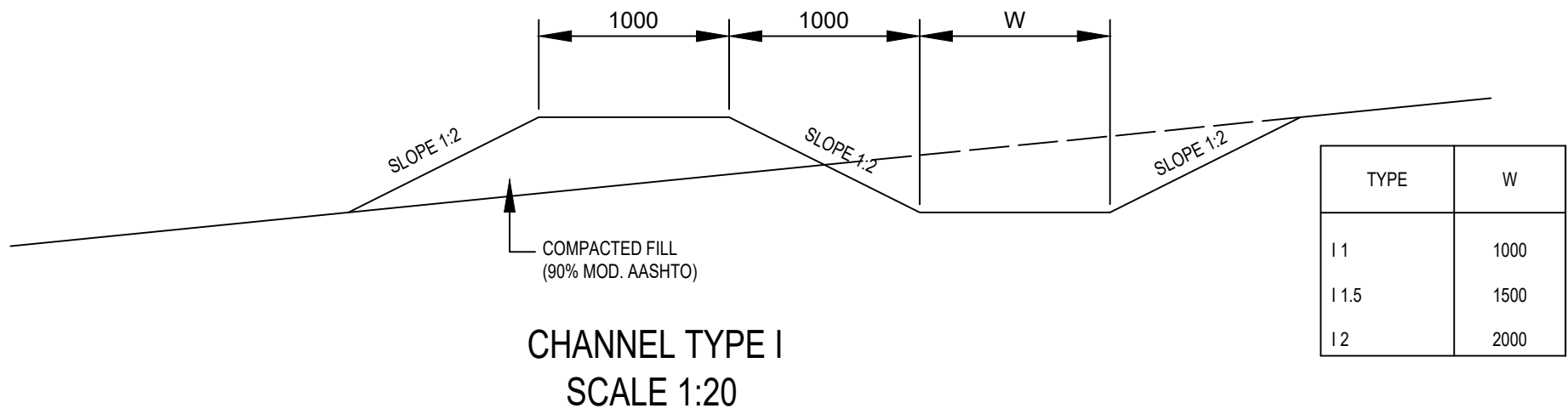
CHANNEL TYPE G
N.T.S.



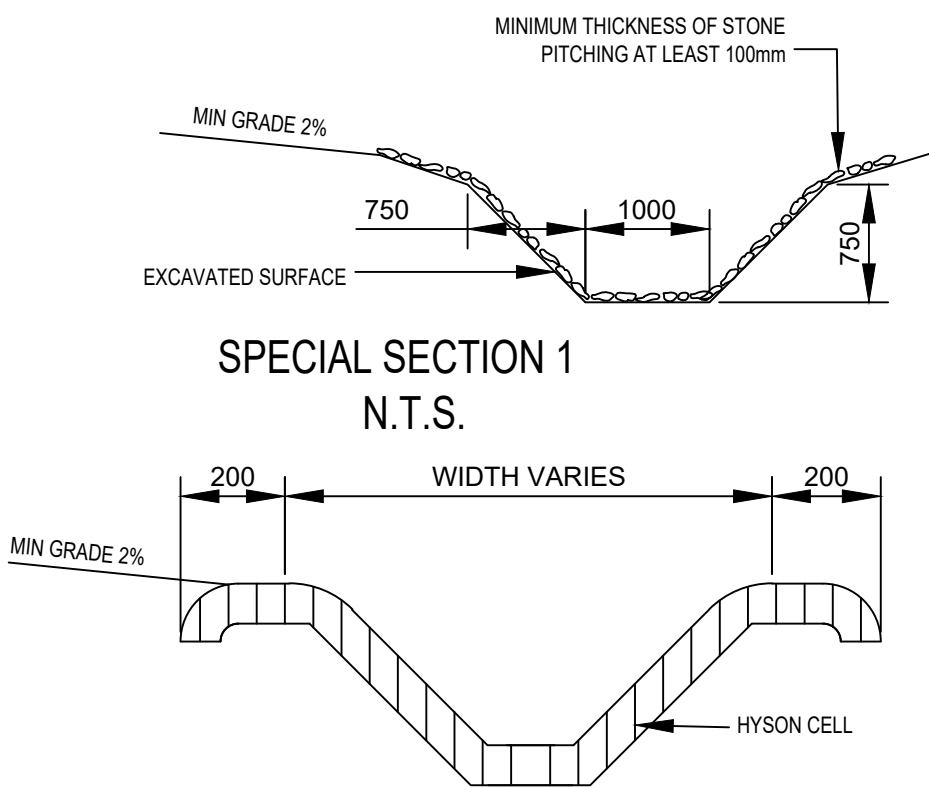
SPECIAL SECTION 2
N.T.S.



TYPE B, D OR E CHANNEL:
GROUTED STONE PITCHING
N.T.S.

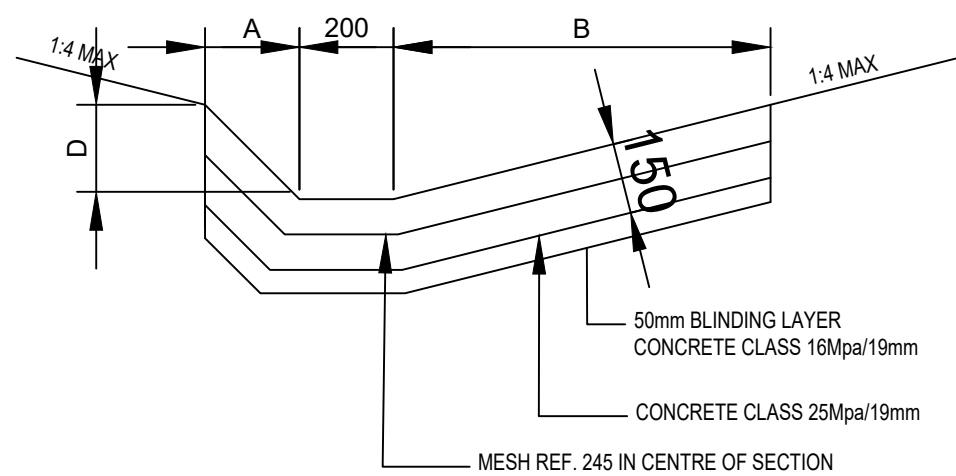


CHANNEL TYPE I
SCALE 1:20



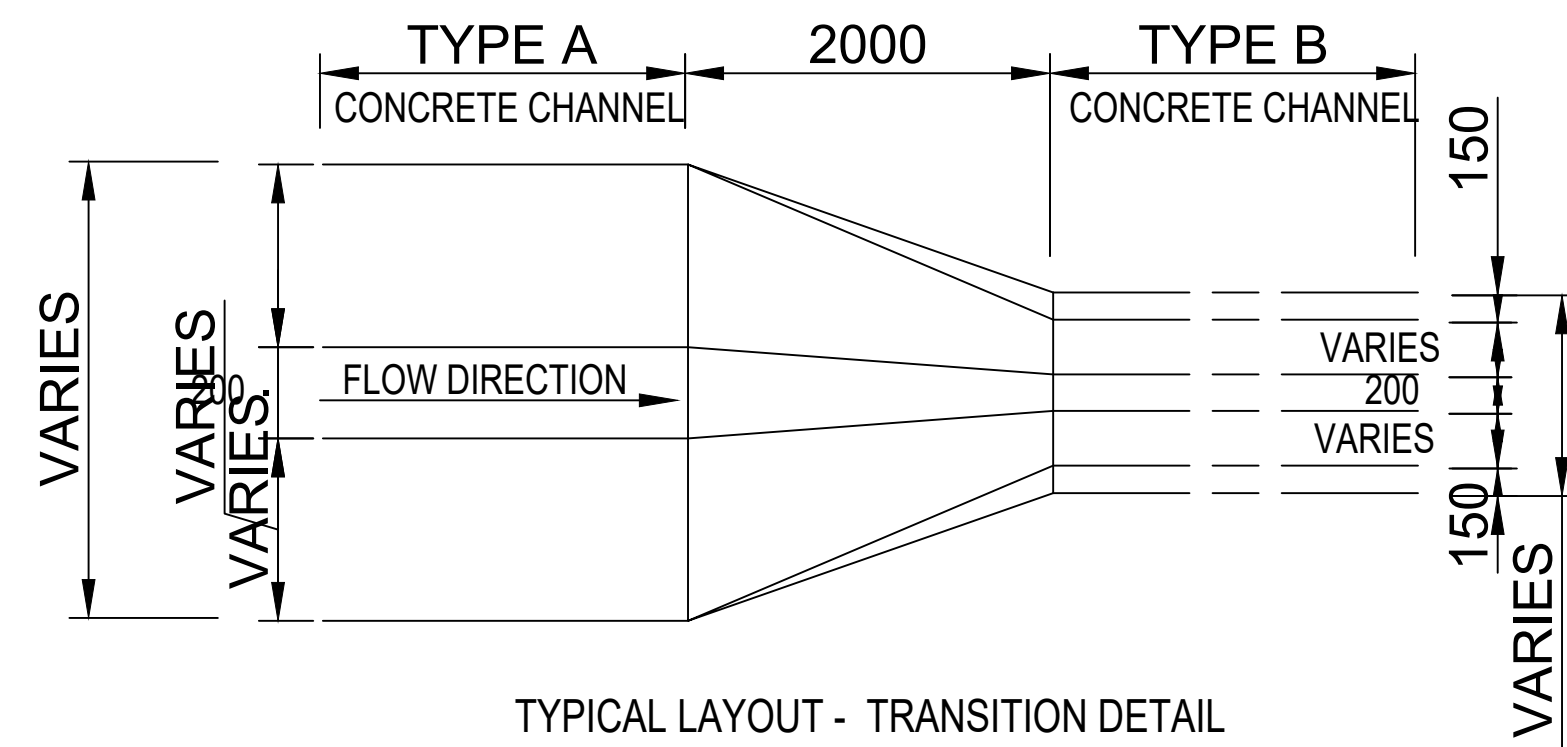
SPECIAL SECTION 1
N.T.S.

TYPICAL DETAILS FOR CHANNELS
CHANNELS IF CONCRETE IS
REPLACED BY HYSOY CELLS
N.T.S.

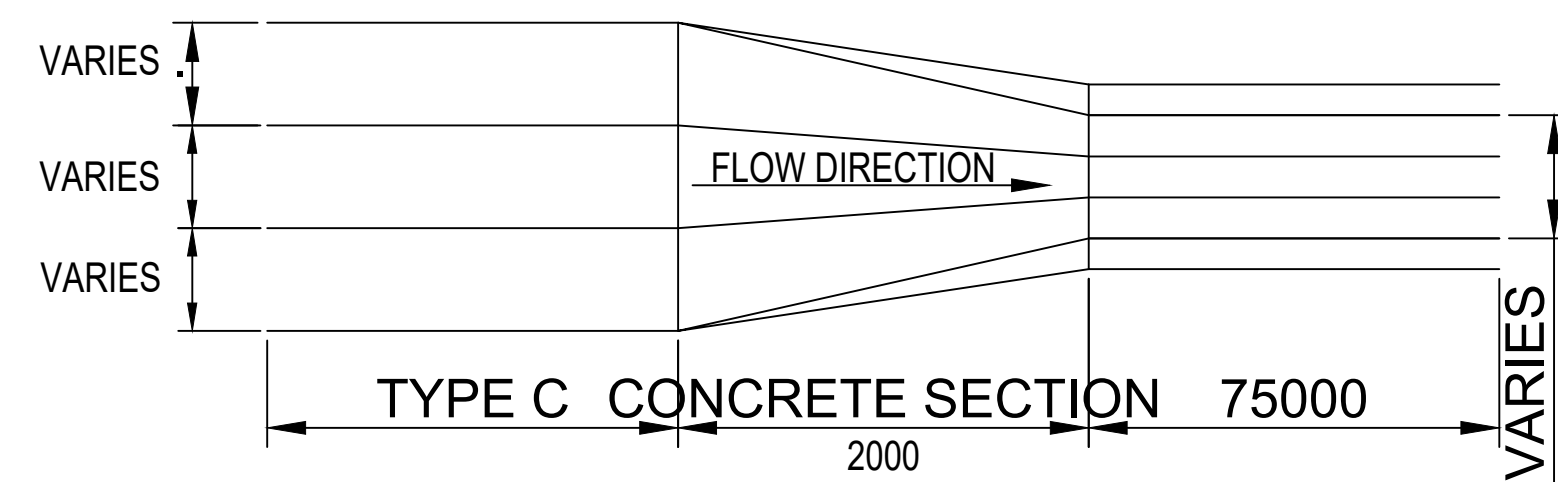


CHANNEL TYPE J (SECTION A-A)
SCALE 1:20

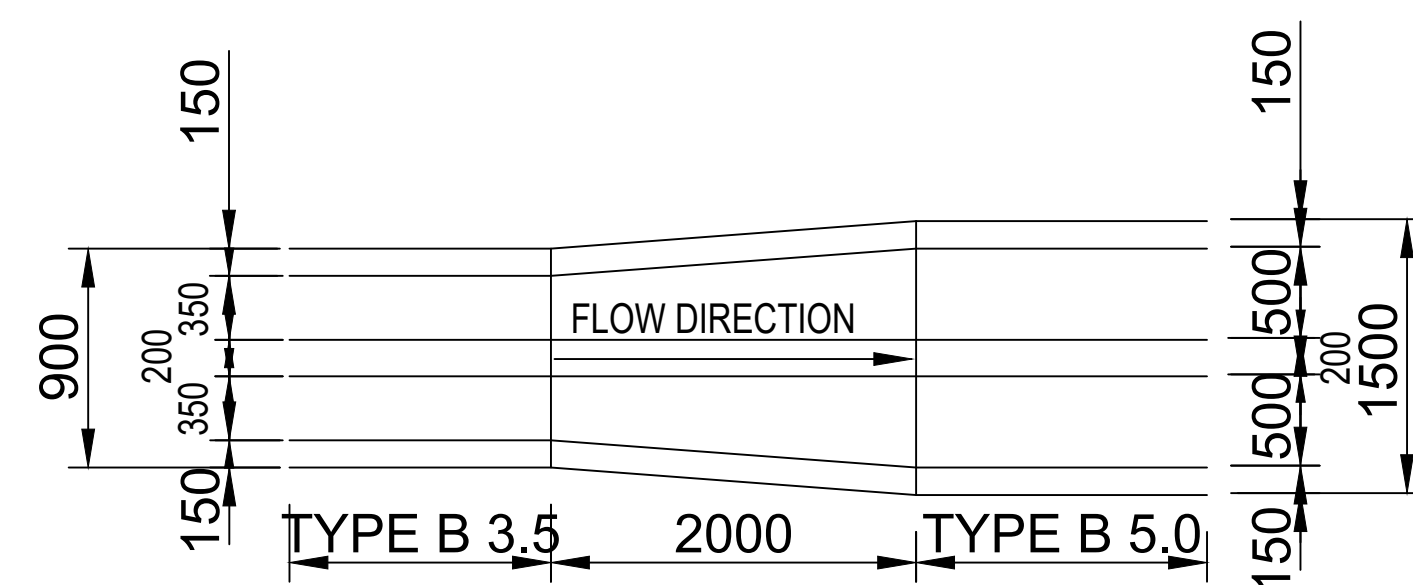
TYPE	A	B	D
J 1	200	800	200
J 2	300	1200	300
J 3	400	1600	400
J 4	500	2000	500



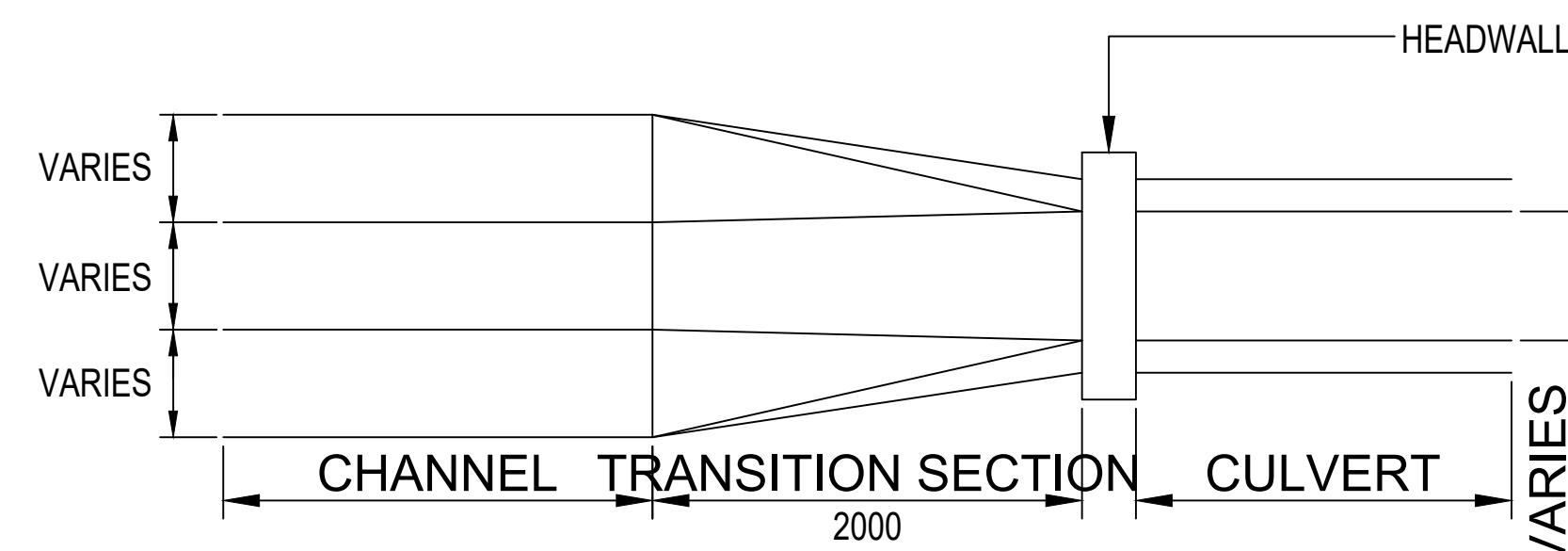
TYPICAL LAYOUT - TRANSITION DETAIL
BETWEEN TYPE A AND TYPE B CHANNEL
N.T.S.



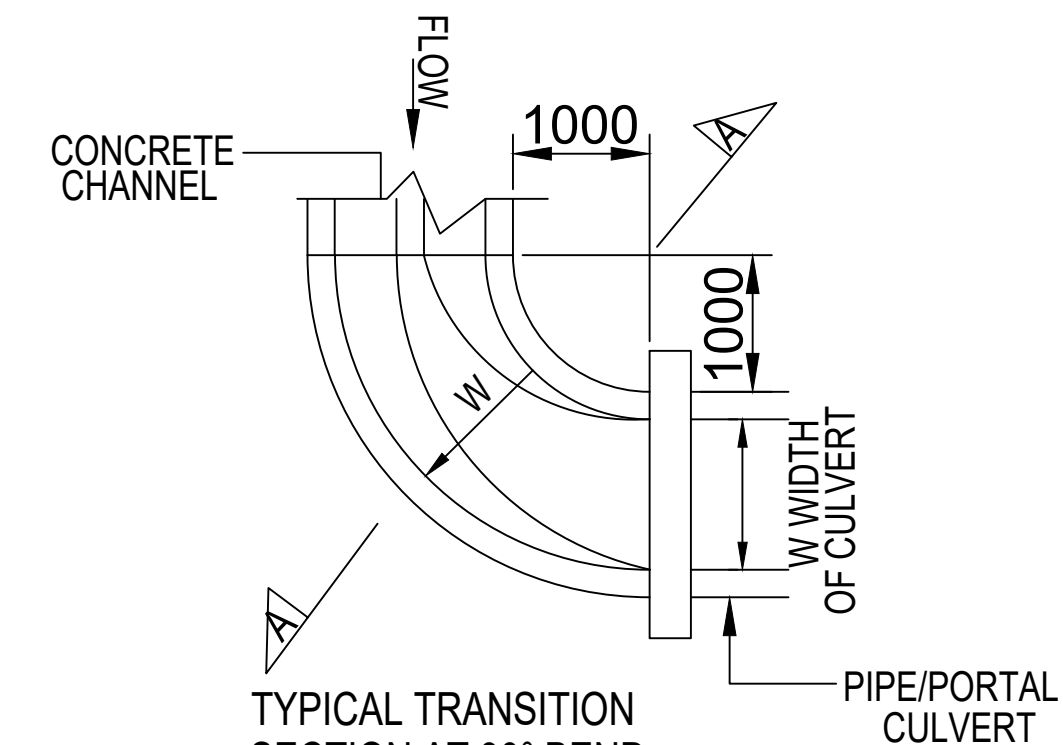
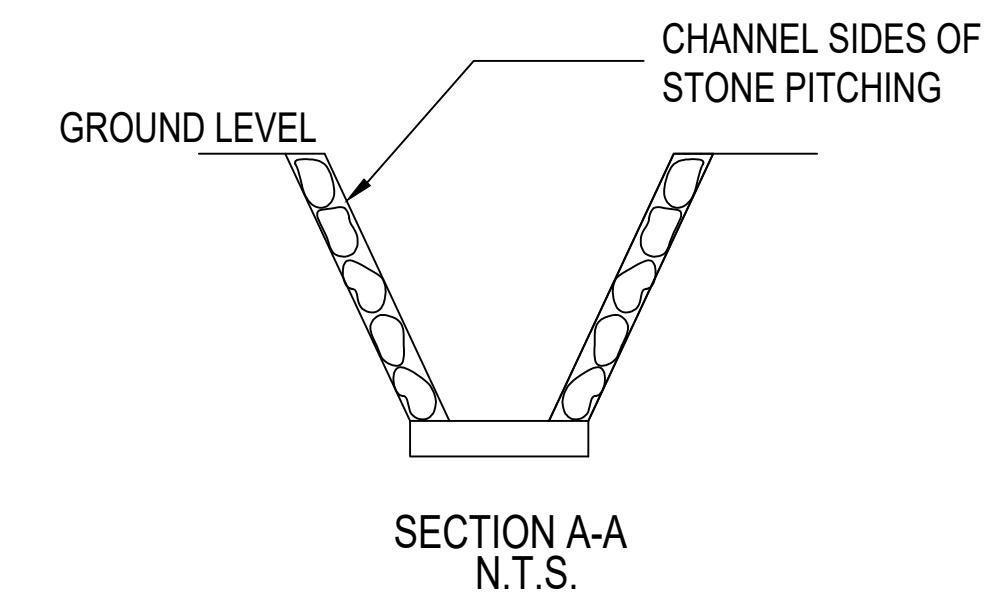
TYPICAL LAYOUT - TRANSITION DETAIL
BETWEEN TYPE A AND TYPE B CHANNEL
N.T.S.



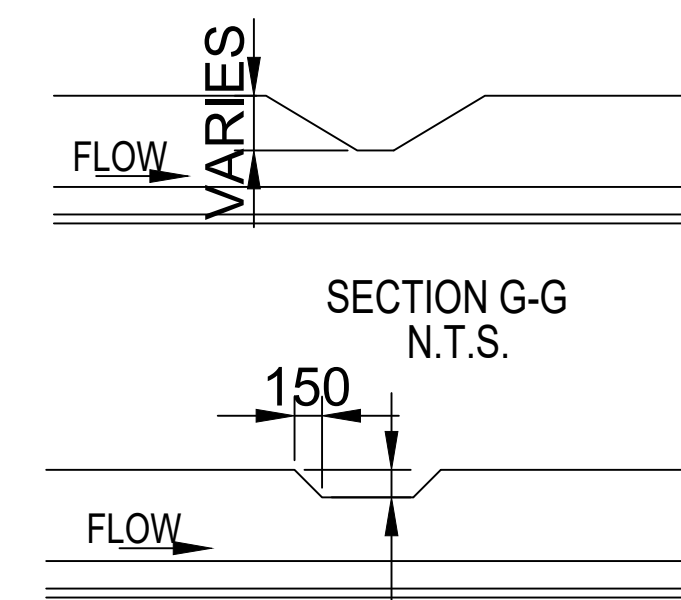
TYPICAL LAYOUT - TRANSITION DETAIL BETWEEN
TYPE B 3.5 AND TYPE B 5.0 CHANNEL
N.T.S.



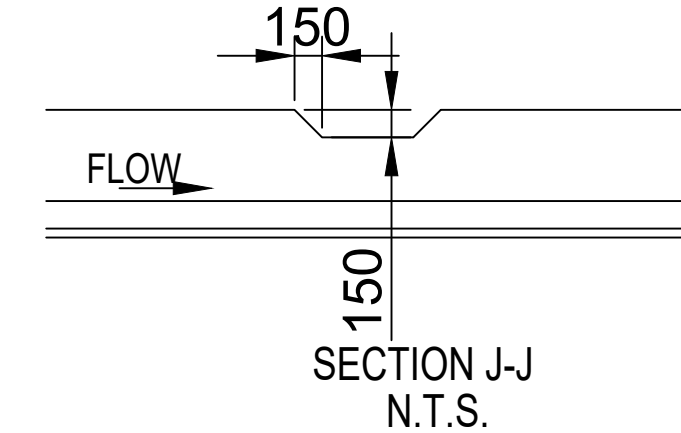
TYPICAL LAYOUT OF TRANSITION SECTION BETWEEN CHANNEL TYPE
A, B, C, D, OR E AND PORTAL OR PIPE CULVERT
N.T.S.



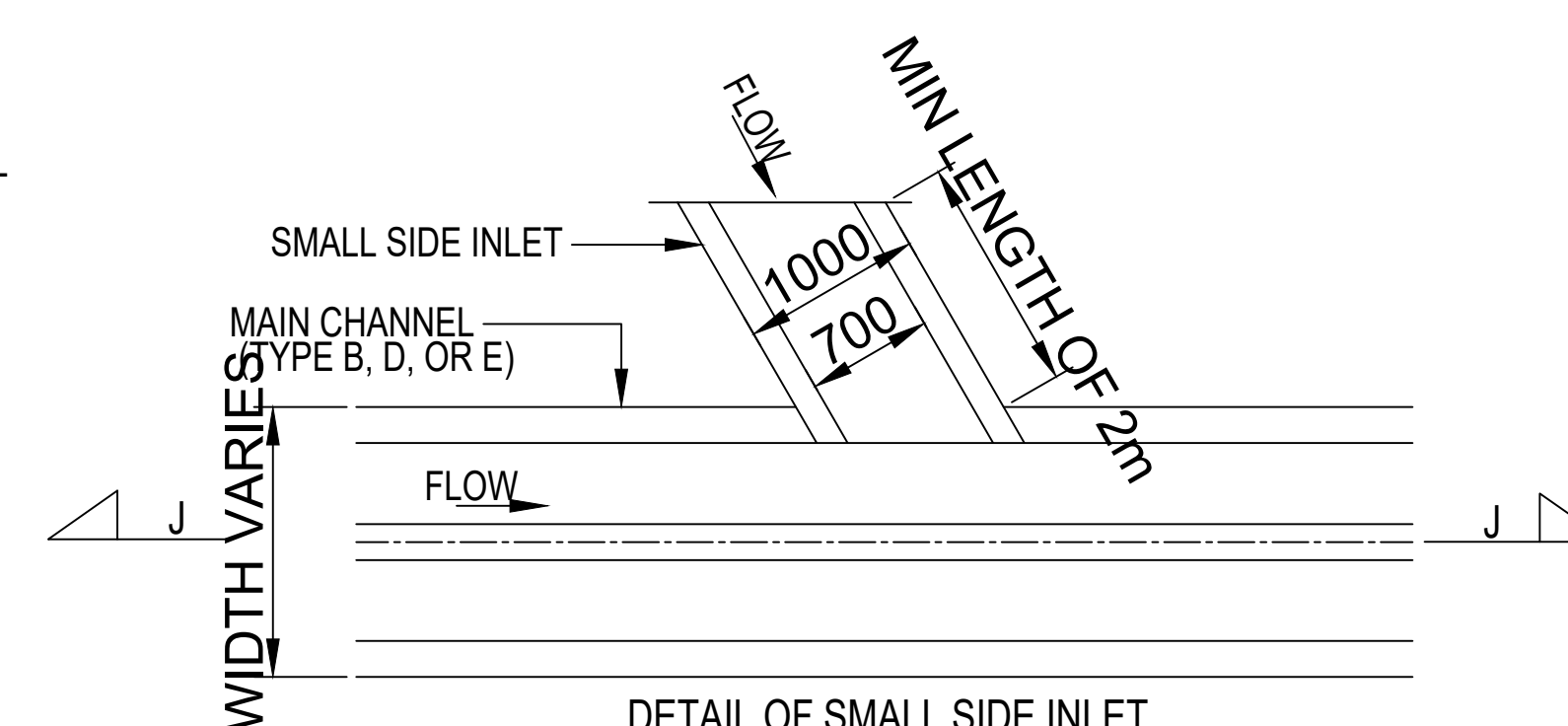
TYPICAL TRANSITION
SECTION AT 90° BEND
N.T.S.



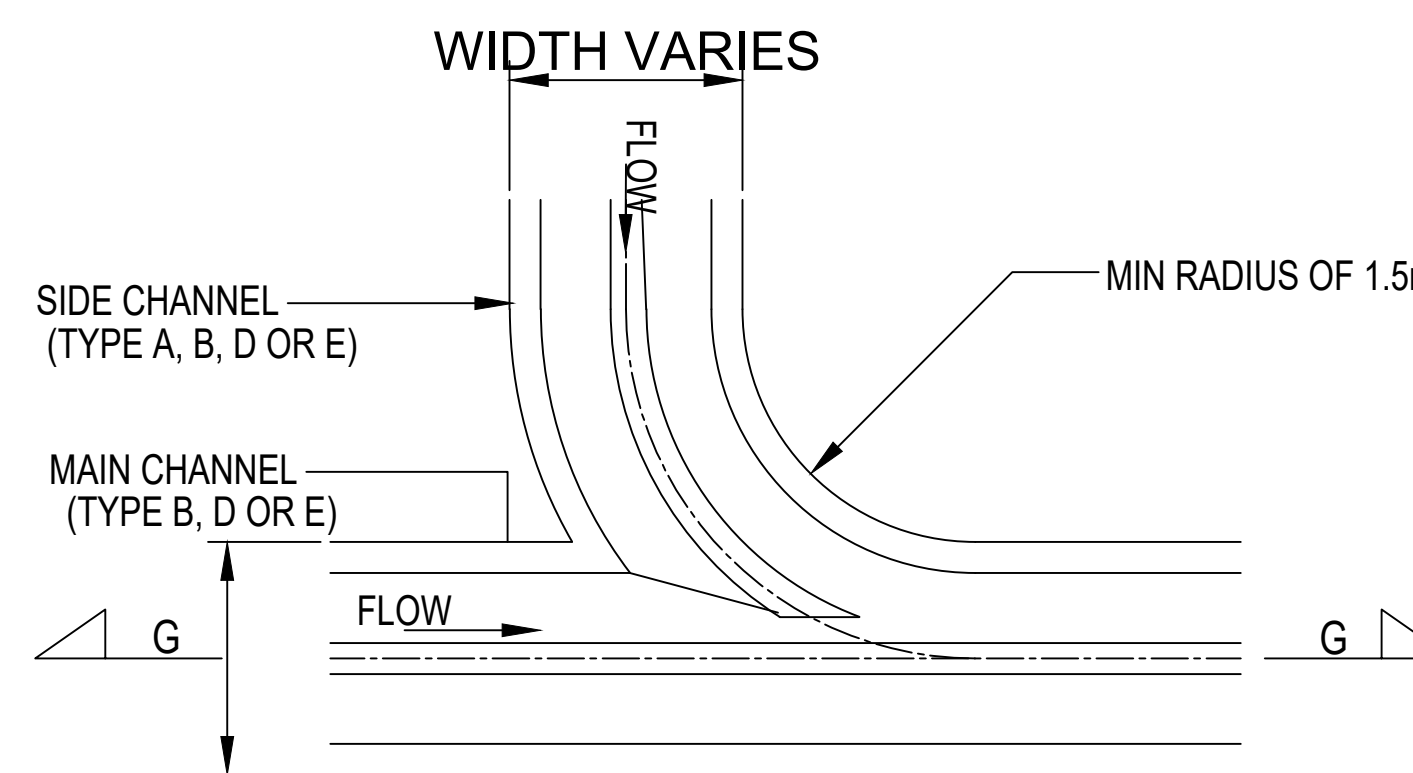
SECTION G-G
N.T.S.



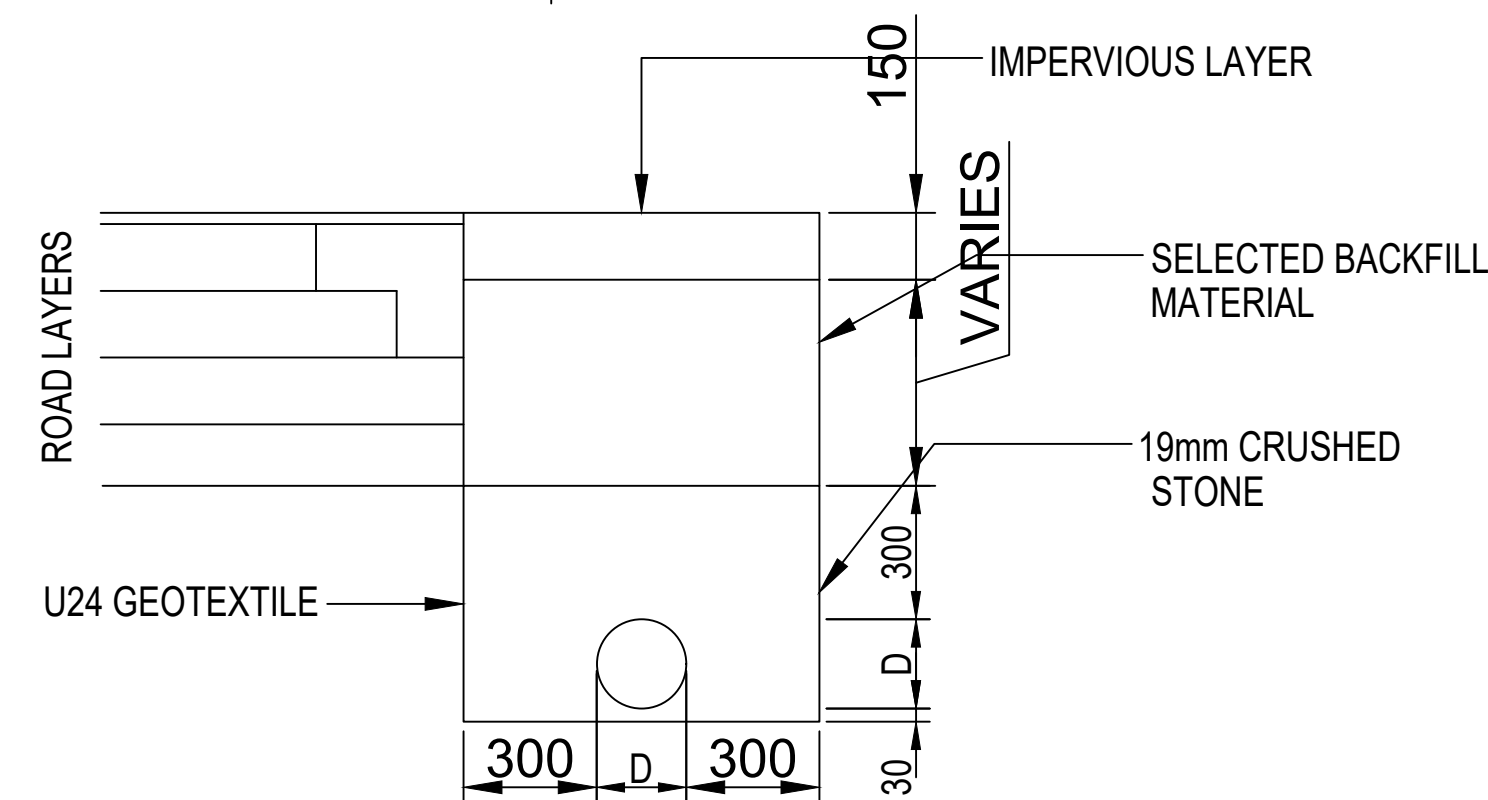
SECTION J-J
N.T.S.



DETAIL OF SMALL SIDE INLET
N.T.S.



CONNECTION TYPE A
JUNCTION BETWEEN 2 CHANNELS
N.T.S.



DETAIL OF SUBSURFACE DRAINAGE
SCALE 1:20

[illegible]

TABLE 2

Ø	TRENCH WIDTH	COVER (m)											
mm	mm	0,6	0,9	1,0	1,2	1,5	1,8	2,0	2,5	3,0	4,0	5,0	6,0
450	950	75D	75D	75D	75D	50D	50D	50D	75D	75D	75D	75D	75D
525	1020	75D	75D	50D	50D	50D	50D	50D	75D	75D	75D	75D	75D
600	1620	75D	50D	50D	50D	50D	50D	75D	75D	75D	100D	100D	100D
675	1710	75D	75D	75D	75D	75D	75D	75D	75D	75D	100D	100D	100D
750	1790	75D	50D	50D	50D	50D	75D	75D	75D	75D	100D	100D	75D
825	1870	75D	50D	50D	50D	50D	50D	75D	75D	75D	100D	100D	100D
900	1950	75D	50D	50D	50D	50D	75D	75D	75D	75D	100D	100D	100D
1050	2120	75D	75D	75D	75D	75D	75D	75D	75D	75D	75D	100D	100D
1200	2280	75D	50D	50D	50D	50D	50D	50D	75D	75D	75D	100D	100D
1350	2450	50D	50D	50D	50D	50D	50D	50D	75D	75D	75D	100D	100D
1500	2610	50D	50D	50D	50D	50D	50D	50D	75D	75D	75D	100D	100D
1650	2760	50D	50D	50D	50D	50D	50D	50D	75D	75D	100D	100D	100D
1800	3260	50D	50D	50D	50D	50D	50D	50D	50D	75D	75D	100D	100D

PIPE CLASSES FOR PIPES UNDER SECONDARY STREETS,
LIGHT ACCESS ROADS, PARKING AREAS, PRIVATE
ENTRANCES AND SIDEWALKS FOR 40kN WHEEL LOAD
WITH DUE ALLOWANCE FOR IMPACT LOADS

Ø	TRENCH WIDTH	COVER (m)											
mm	mm	0,6	0,9	1,0	1,2	1,5	1,8	2,0	2,5	3,0	4,0	5,0	6,0
450	950	75D	100D	100D	100D	100D	100D	100D	100D	100D	75D	75D	75D
525	1020	75D	100D	100D	100D	100D	100D	100D	100D	100D	100D	100D	100D
600	1620	75D	100D	100D	100D	100D	100D	100D	100D	100D	100D	100D	100D
675	1710	75D	100D	100D	100D	100D	100D	100D	100D	100D	100D	100D	100D
750	1790	75D	100D	100D	100D	100D	100D	100D	100D	100D	100D	100D	100D
825	1870	75D	50D	100D	100D	100D	100D	100D	100D	100D	100D	100D	100D
900	1950	75D	50D	100D	100D	100D	100D	100D	100D	100D	100D	100D	100D
1050	2120	75D	50D	100D	100D	100D	100D	100D	100D	100D	100D	100D	100D
1200	2280	75D	50D	100D	100D	100D	100D	100D	100D	100D	100D	100D	100D
1350	2450	75D	50D	100D	100D	100D	75D	75D	100D	100D	100D	100D	100D
1500	2610	75D	50D	100D	100D	100D	75D	75D	100D	100D	100D	100D	100D
1650	2760	50D	50D	100D	100D	100D	100D	100D	75D	100D	75D	75D	75D
1800	3260	50D	50D	100D	50D	75D	75D	75D	75D	100D	100D	100D	100D

PIPE CLASSES FOR PIPES UNDER MAIN ROUTES
FOR H8 - WHEEL LOADS OF EIGHT 80kN WHEEL LOADS
WITH DUE ALLOWANCE FOR IMPACT LOADS

BEDDING (SEE DRG. KB019/JRA/GAU-RS/SDS025)

1. NORMAL BEDDING ACCORDING TO DETAIL 1
2. BEDDING ACCORDING TO DETAIL 2
3. CONCRETE SLAB OVER PIPE ACCORDING TO DETAIL 3
4. CONCRETE BEDDING ACCORDING TO DETAIL 4

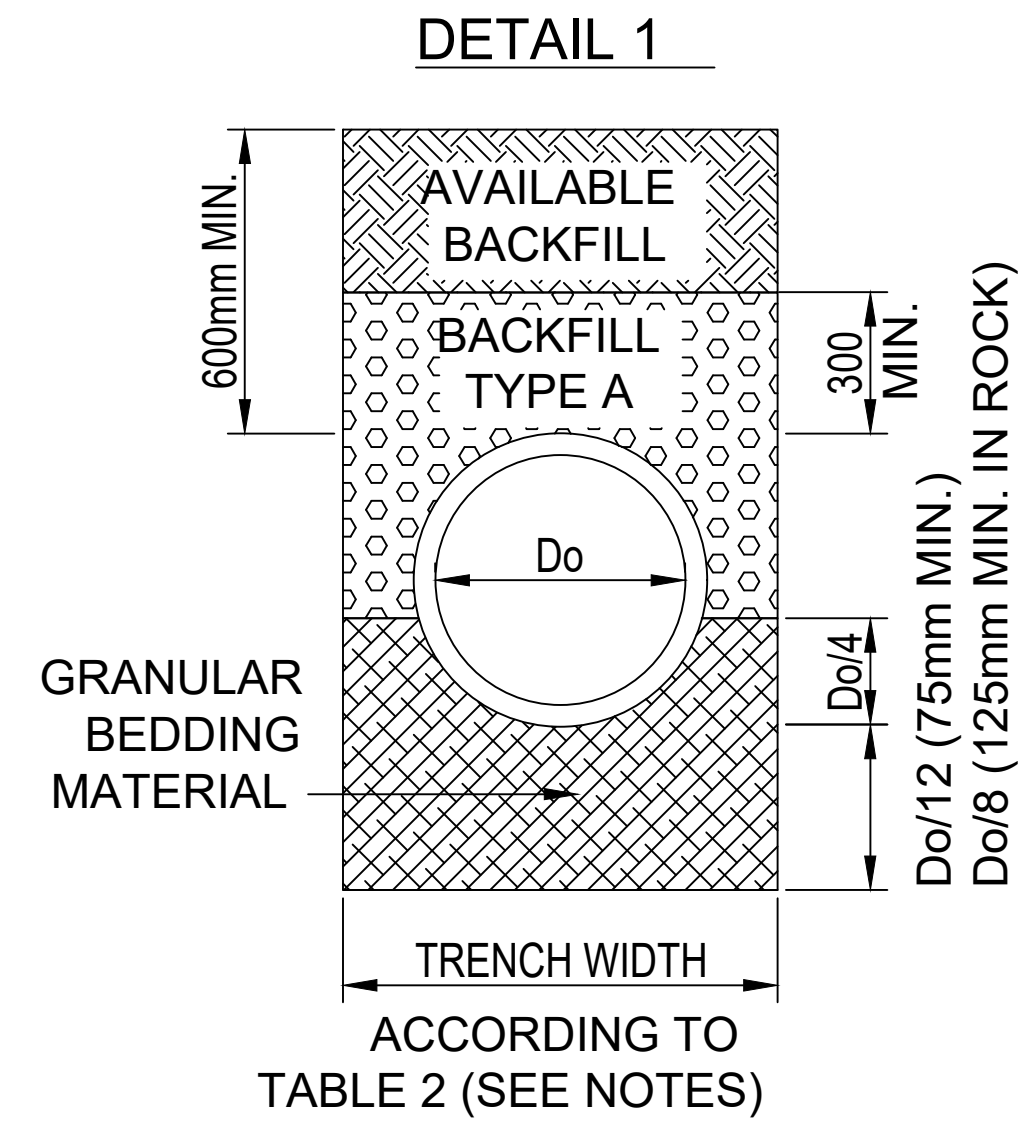
NOTE: IF TRENCHES ARE 200mm WIDER THAN THE
SPECIFIED WIDTH IT MAY BE NECESSARY
TO CHANGE THE PIPE CLASS.

TABLE 1

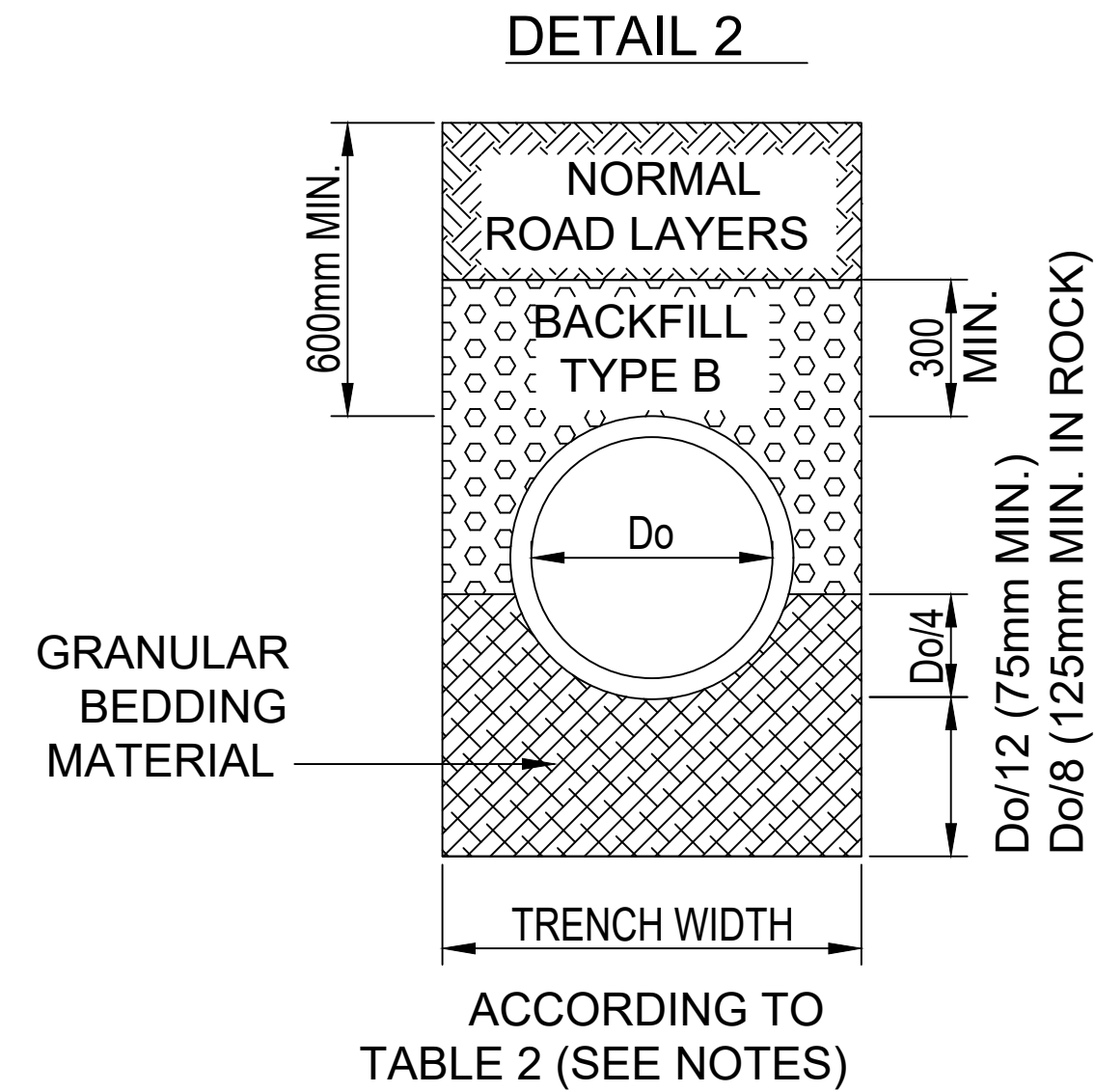
	DEPTH (d)	REINFORCING	MIN. COVER
CONCRETE SLAB: CLASS 25/19CONCRETE			
Do < 900 mm	150mm	REF. No 245 WELDED MESH	40mm
900mm < 0 < 1800mm	200mm	REF. No 311 WELDED MESH	40mm

NOTES

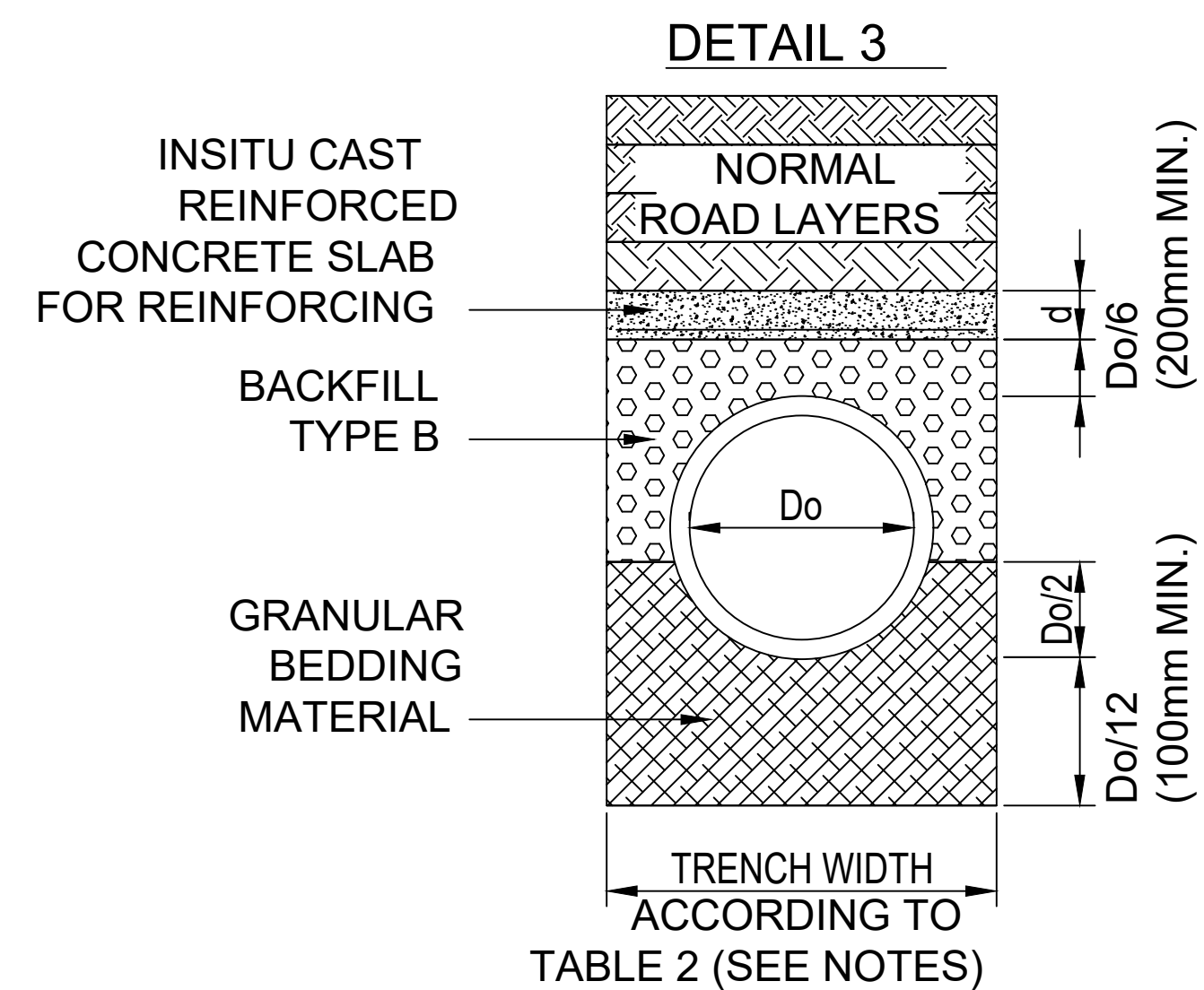
1. BEDDING MATERIAL
THE MATERIAL USED FOR BEDDING CONSISTS OF SELECTED GRAVEL WITH PI < 6 _
MUST BE FREE OF STONES LARGER THAN 20mm, ORGANIC MATERIAL AND CLAY LUMPS.
THE BEDDING MATERIAL AT THE SIDES OF THE PIPE MUST BE COMPACTED TO 90 %
MOD. AASHTO DENSITY AFTER THE PIPE HAS BEEN LAID.
2. BACKFILL TYPE A
THE MATERIAL USED FOR BACKFILL MUST BE UNIFORM AND MUST BE COMPACTED TO
90 % MOD. AASHTO DENSITY IN LAYERS NOT MORE THAN 100mm AND MUST BE FREE OF
(i) ROOTS OF TREES, BUILDING RUBBLE AND ORGANIC MATERIAL
(ii) CLAY LUMPS LARGER THAN 75mm
(iii) STONE LARGER THAN 20mm
3. BACKFILL TYPE B
MINIMUM G9 MATERIAL ACCORDING TO TRH14 CLASSIFICATION COMPACTED TO A MINIMUM
OF 90 % MOD. AASHTO DENSITY IN LAYERS NOT MORE THAN 150mm
4. MINIMUM PIPE SIZE
MINIMUM PIPE SIZE TO BE 450mm DIAMETER
5. ERF CONNECTIONS
CONNECTIONS FROM ERVEN TO MUNICIPAL SYSTEM TO BE 450mm



STORMWATER PIPES UNDER
SIDEWALK)



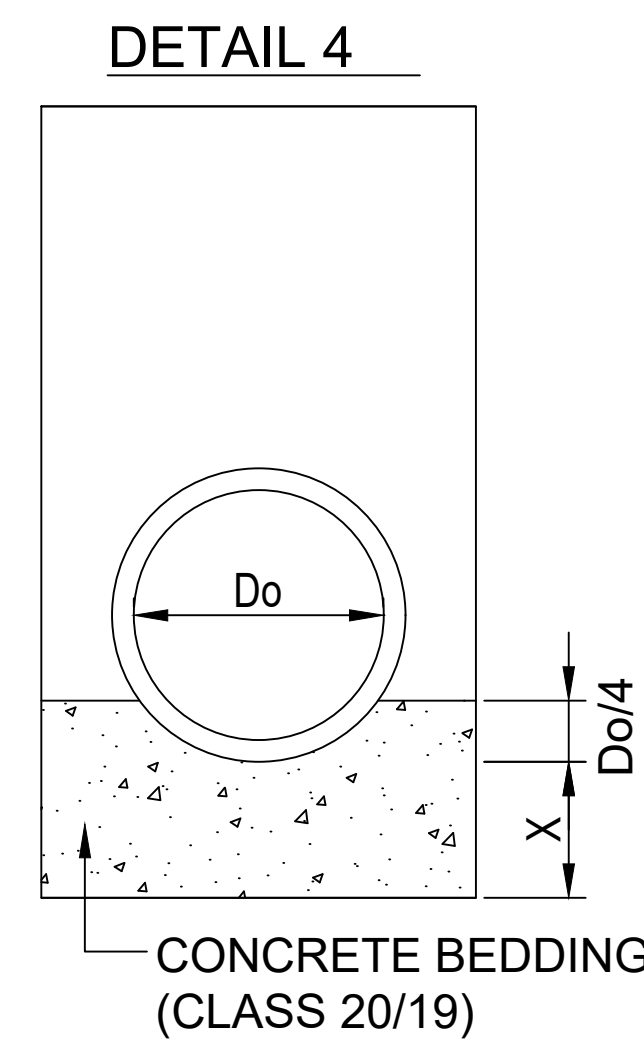
STORMWATER PIPES
UNDERNEATH ROADS,
ACCESS ROADS & PARKING AREAS



SITUATIONS WHERE A CONCRETE SLAB IS REQUIRED

STORMWATER PIPES UNDERNEATH MAIN ROUTES UNDER THE FOLLOWING CIRCUMSTANCES

1. COVER < 800mm FOR Do $\leq 750\text{mm}$
2. COVER < 900mm FOR Do $> 750\text{mm}$



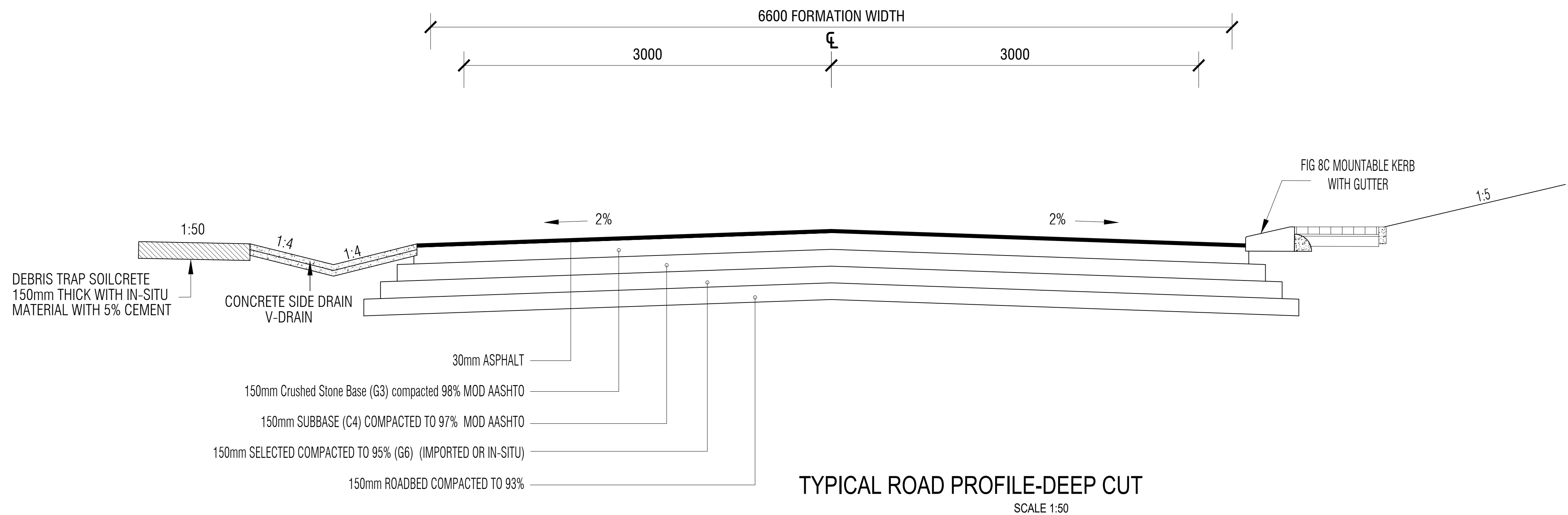
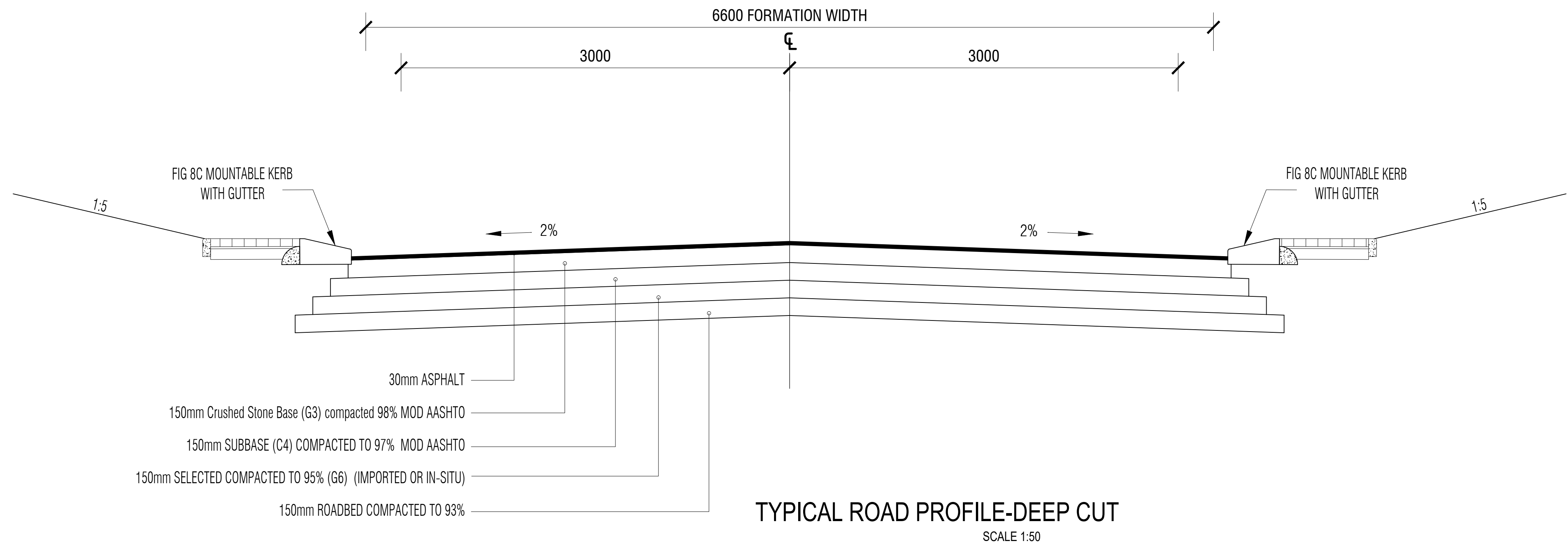
X = $D_o/4$ WHEN TRENCH IS IN GRAVEL-SOIL
X = $D_o/8$ WHEN TRENCH IS IN ROCK

SITUATIONS WHERE A CONCRETE BEDDING IS REQUIRED

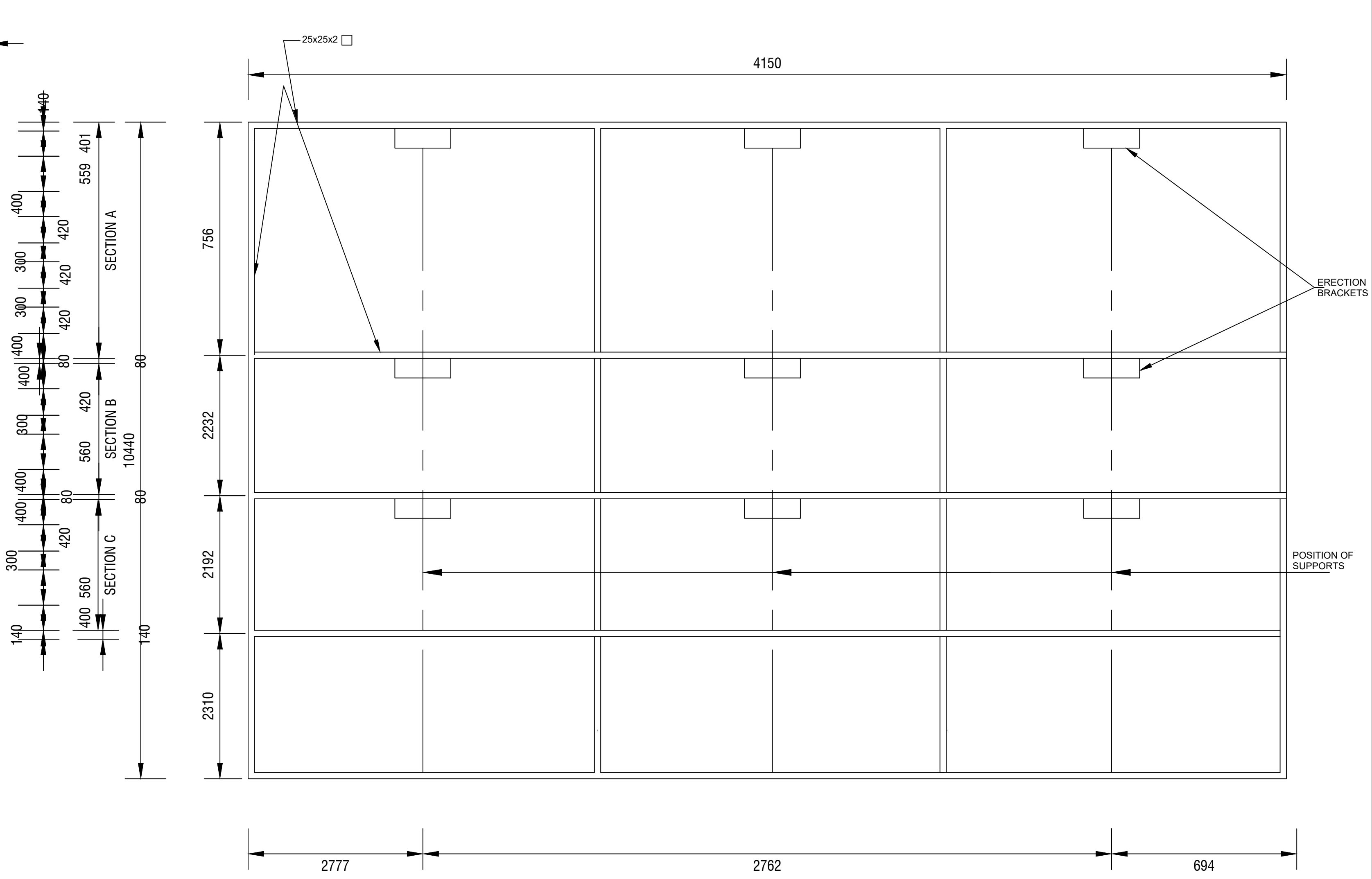
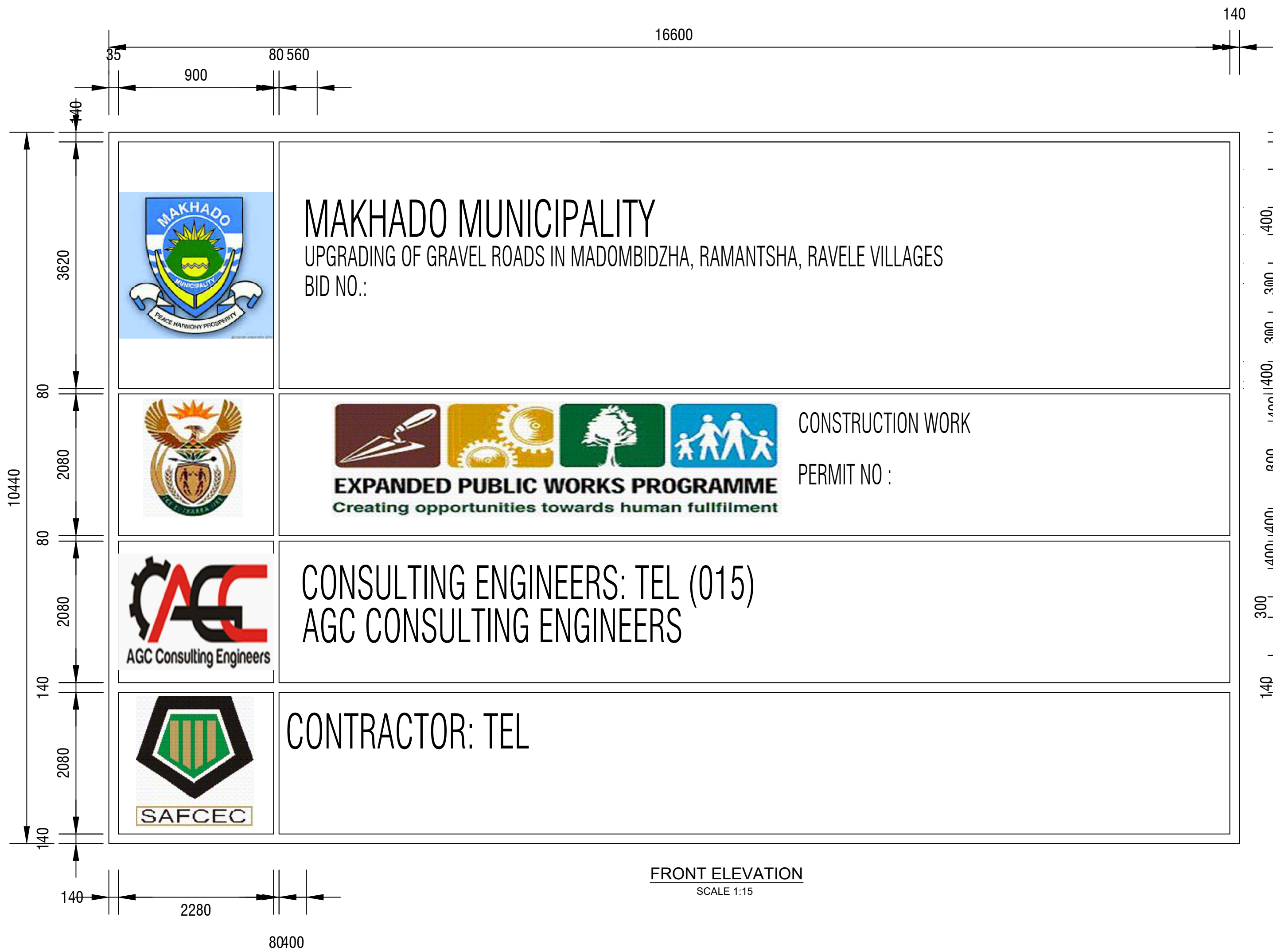
NOTES

1. ALL PIPES BELOW SIDEWALKS & OPEN AREAS TO BE CLASS 50 'D' EXCEPT WHERE COVER < 2.m ON 1200mm Ø AND GREATER THE CLASS OF THE PIPES ARE TO BE INCREASED TO 75 'D'.
2. FOR STORMWATER PIPES BELOW STREETS & MAIN ROUTES SEE TABLE 2 ON DRAWING NO KB019/JRA/GAU-RS/SD-S025A.
3. THE CONTRACTOR SHALL AT ALL TIMES ADHERE TO THE SAFETY PRECAUTIONS AS SET OUT IN SABS 1200 D-1988

[illegible]



					DESIGNED BY		DESIGNED M.K	CONSULTANT	RECOMMENDED	CLIENT	SCALE	CLIENT	MAKHADO LOCAL MUNICIPALITY	TYPE OF PLANNING	PRELIMINARY DESIGN	BID No.
							DESIGN CHECKED M.T				AS SHOWN	PROJECT TITLE	UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND RAVELE			SHEET 1 OF 1
							DRAWN P.C	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT		REVISION		VILLAGES			DRAWING No.
							DRAWING CHECKED A.C	DATE:	DATE:		(A)	DRAWING TITLE	TYPICAL CROSS-SECTION DETAIL			AGC-CIV-PD-TD-001
No.	DATE		REVISION		DESIGNED BY	AGC Consulting Engineers 3A Pierre Street Hampton Court Polokwane 0699				MAKHADO MUNICIPALITY PRIVATE BAG X2596, LOUIS TRICHARDT, 0920						

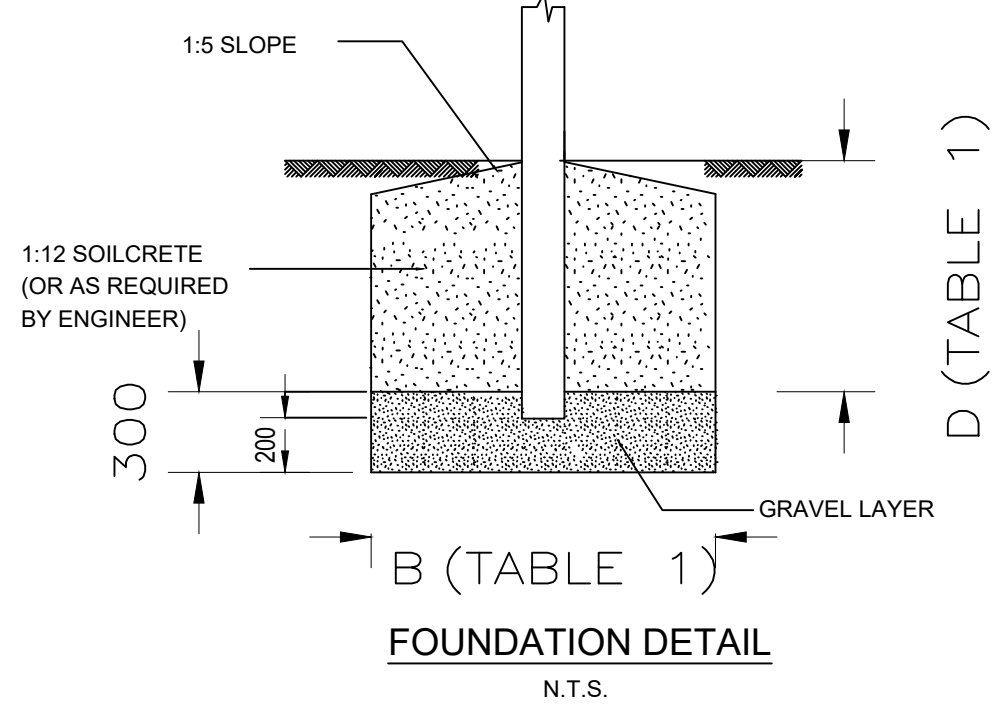


SIGN BOARD DETAIL

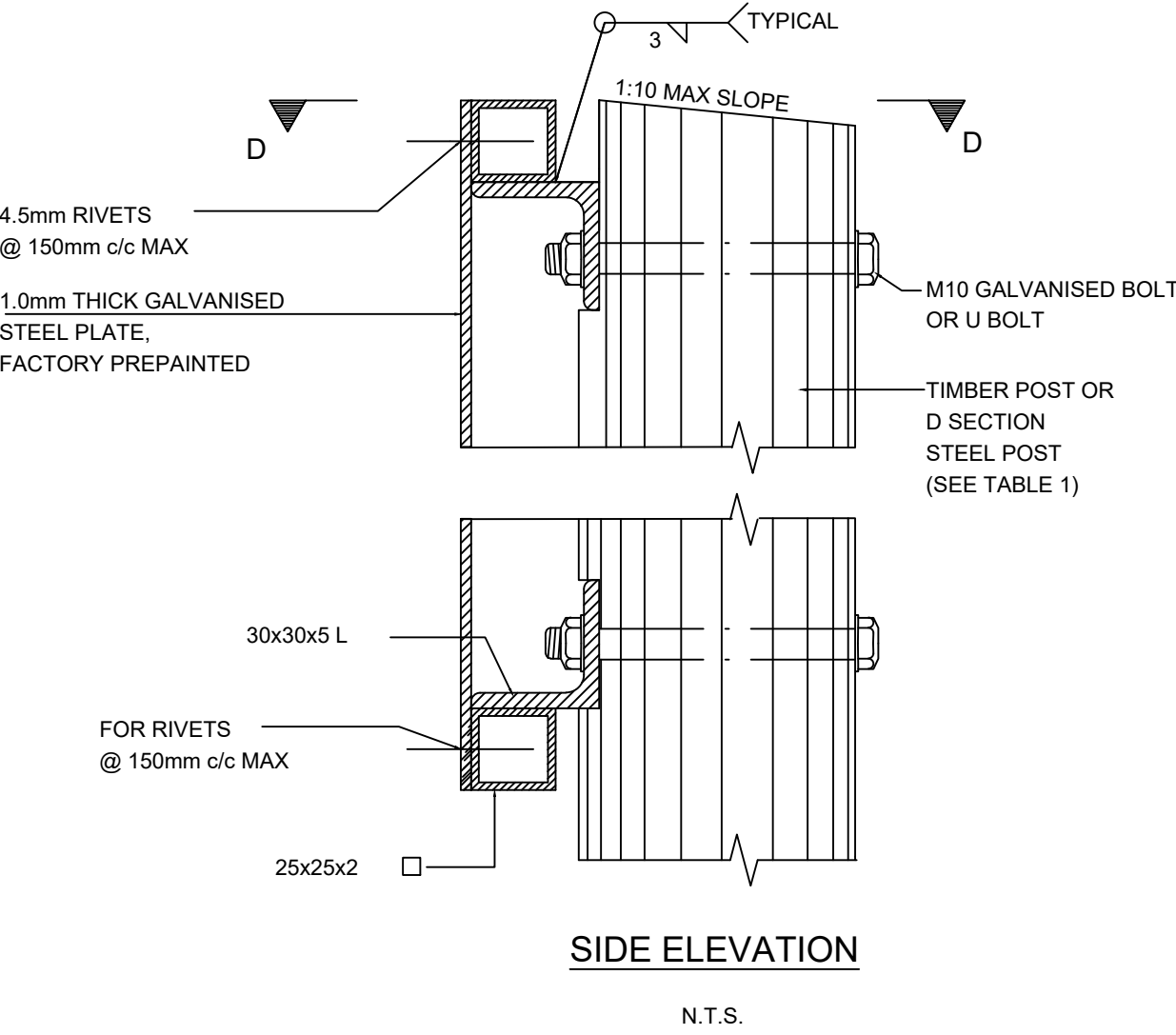
REAR SIDE BRACING
SCALE 1:15

TABLE 1				
ERECTION DETAILS				
TYPE POST	UPRIGHT	STAY	D	B
TIMBER POST AND STAY	80mm	80mm	600mm	750mm
TIMBER POST	160mm	-	900mm	1350mm
D SECTION STEEL POST	100mm x 4mm	-	900mm	1350mm

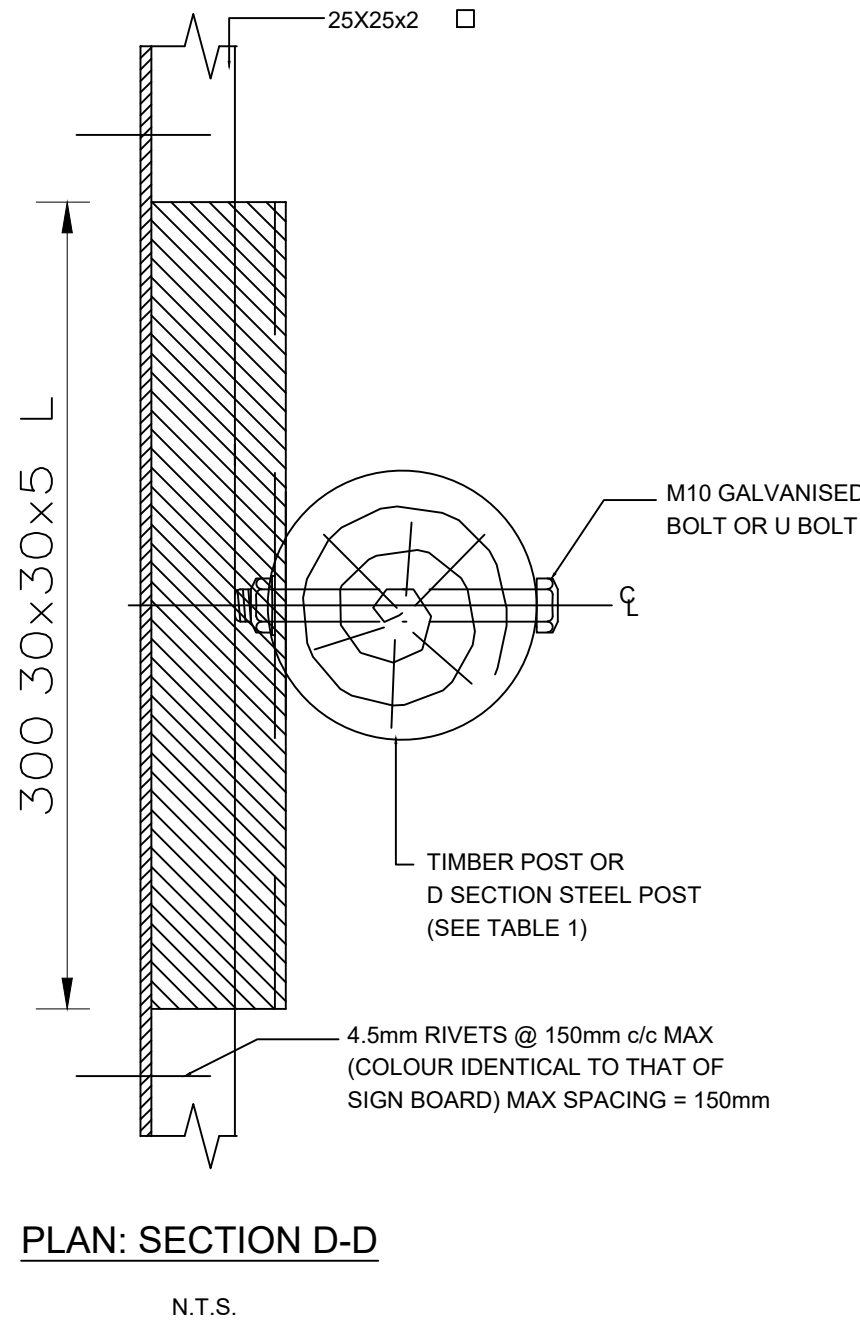
- NOTE:
1. ALL EMBLEMS TO BE DISPLAYED IN FULL COLOUR ON A SEMI-MATT BACKGROUND.
 2. DESCRIPTION: MATT-BLACK, SERIES DIN B LETTERS AND NUMBERS ON A SEMI-MATT SMOKE-GREY BACKGROUND (PANTONE 429U).
 3. BORDER : GREEN NON-REFLECTORIZED.
 4. TWO SIGN BOARDS SHALL BE ERECTED AS DETERMINED BY THE ENGINEER.
 5. DESCRIPTION OF WORK (NUMBER OF KILOMETRES AND TYPE OF WORK, eg "13.5 km RE= CONSTRUCTION OF ROAD 1974"). DESCRIPTION STARTS CENTERED ON THE LEFT-HAND SIDE AND IN THE FIRST 105mm-DIMENSION BELOW "MAKHADO LOCAL MUNICIPALITY".
 6. (a) SAFCEC EMBLEM ONLY, IF CONTRACTOR IS A MEMBER, ALL OTHER CASES, INCLUDING DEPARTMENTAL CONSTRUCTION, REMAIN BLANK.
(b) IF DEPARMENTAL CONSTRUCTION,THE CONTRACTOR AND TELEPHONE ARE REPLACED WITH ROAD AGENCY LIMPOPO (PTY) LTD CONSTRUCTION UNIT : TEL : 0699
 7. SABTACO LOGO TO BE OBTAINED FROM SABTACO, JOHANNESBURG.



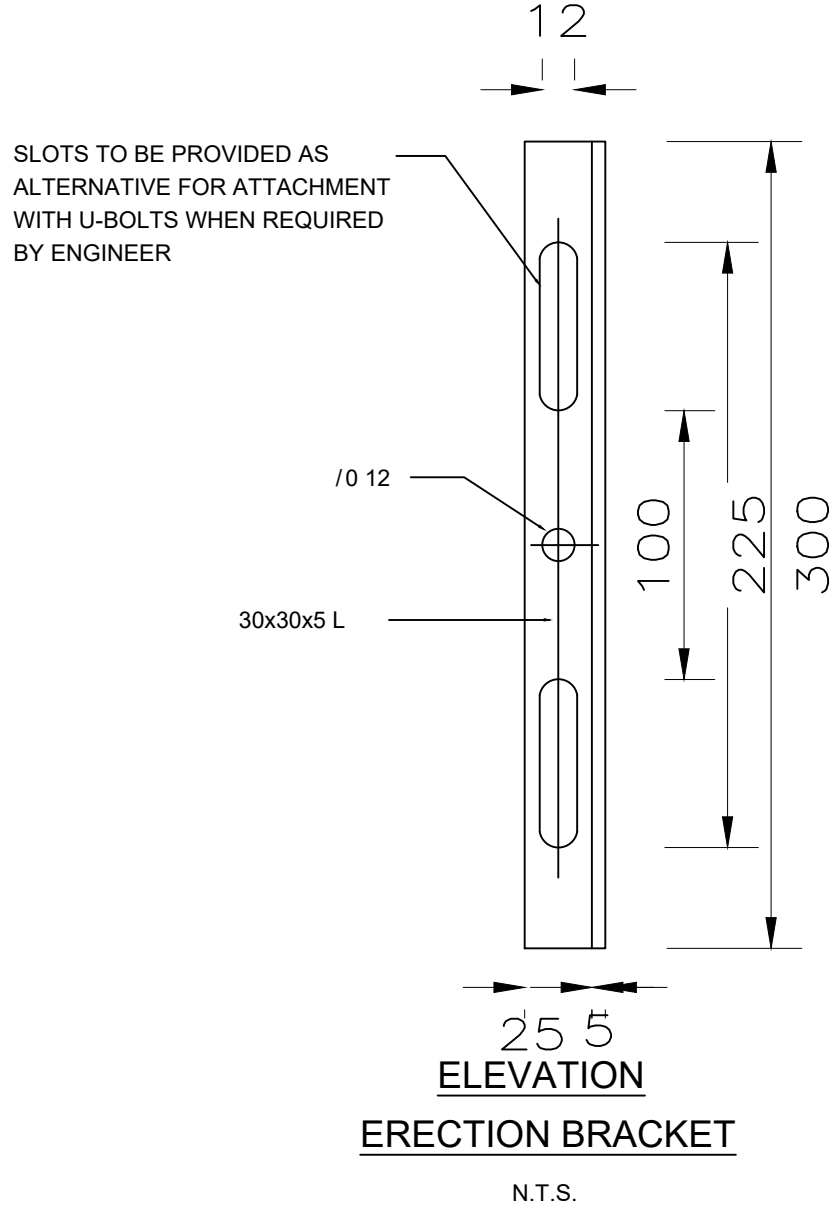
D (TABLE 1)



SIDE ELEVATION
N.T.S.



PLAN: SECTION D-D
N.T.S.



ELEVATION
ERECTION BRACKET
N.T.S.

DESIGNED BY		DESIGNED M.K		CONSULTANT		RECOMMENDED		CLIENT		SCALE		CLIENT		TYPE OF PLANNING		BID No.	
AGC Consulting Engineers 3A Pierre Street Hampton Court Polokwane 0699		DESIGN CHECKED M.K		for CONSULTING ENGINEER		for HEAD OF DEPARTMENT		MAKHADO MUNICIPALITY PRIVATE BAG X2596, LOUIS TRICHARDT, 0920		AS SHOWN		PROJECT TITLE		PRELIMINARY DESIGN		SHEET 1 OF 1	
DRAWN M.K		DRAWING CHECKED M.K		DATE:		DATE:		MAKHADO LOCAL MUNICIPALITY		REVISION		UPGRADING OF GRAVEL ROADS IN MADOMBIDZHA, RAMANTSHA AND RAVELE VILLAGES		NAME BOARD		DRAWING No.	
No.		DATE		REVISION		REVISED BY		DATE		A		AGC-CIV-PD-TD-031					