



DEPARTMENT OF WATER AND SANITATION

DUE AT 11:00 ON

CLOSING DATE: 15 JUNE 2023

DWS07 0523 WTE

WIDENING OF N7 ENTRANCES AT THE RAISING OF CLANWILLIAM DAM FOR CONSTRUCTION SOUTH IN THE WESTERN CAPE – CIDB CONTRACTOR GRADING DESIGNATION OF CIDB 5 CE OR HIGHER

SUBMIT BID DOCUMENTS TO:

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

OR

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

Compulsory Briefing Session

Date: 30 May 2023

Time: 10:00am

Venue: Contractors Site Office Boardroom - Clanwilliam Dam, Construction South
Main Security Gate Entrance GPS Coordinates: 32°11'21.25"S and 18° 52' 26.11"E

BIDDER: (Company Address OR Stamp)

COMPILED BY:
DEPARTMENT OF WATER AND SANITATION: DIRECTORATE CONSTRUCTION SOUTH



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WIDENING OF N7 ENTRANCES AT THE RAISING OF CLANWILLIAM DAM FOR CONSTRUCTION SOUTH IN THE WESTERN CAPE – CIDB CONTRACTOR GRADING DESIGNATION OF CIDB 5 CE OR HIGHER

Tender document compiled date: February 2023

Issued by:

Department of Water and Sanitation
Zwamadaka building
157 Francis Baard Street
Pretoria
0001

Prepared by:

Clanwilliam dam Construction
Raising of Clanwilliam dam Project
Construction South
Department of Water and Sanitation



DEPARTMENT OF WATER AND SANITATION

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Part T1: Tendering procedures



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T1.1 TENDER NOTICE AND INVITATION TO TENDER

It is estimated that Tenderers should have a CIDB Contractor grading designation of **CIDB 5CE** or higher.

Documents may be downloaded from Department of Water and Sanitation website at www.dws.gov.za/Tenders and from National Treasury e-Tender Portal at www.etenders.gov.za.

Queries relating to the issue of these documents may be addressed in writing to e-mail address: bidenquirieswte@gov.za and FrylinckA@dws.gov.za

A compulsory site clarification meeting with representatives of the Employer will take place at Clanwilliam Dam Site at the Contractor Offices Boardroom (Main Security Gate Entrance GPS Coordinates: 32°11'21.25"S and 18° 52' 26.11"E – see Submission Data for further particulars) on 30 May 2023 starting at 10:00am hrs.

The closing time for receipt of tenders is 11:00 hrs on 15 June 2023. Telegraphic, telephonic, telex, facsimile, e-mail and late tenders will not be accepted.

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

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

DEPARTMENT OF WATER AND SANITATION



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T1.2 TENDER DATA

IMPORTANT INFORMATION

PLEASE READ CAREFULLY THROUGH THE ENTIRE TENDER DOCUMENT BEFORE COMPLETING THE DOCUMENT.

TENDER AND CONTRACT STANDARDS CONDITIONS APPLICABLE TO THIS DOCUMENT

SANS ISO 10845-1: 2022 Ed 2	Processes, methods, and procedures.
SANS ISO 10845-2: 2022 Ed 2	Formatting and compilation of procurement documentation.
SANS ISO 10845-3: 2022 Ed 2	Standard conditions of tender.
GCC 2015 Ed 3	The General Conditions of Contract for Construction Works, 3rd Edition (2015), published by the South African Institution of Civil Engineering.

INSTRUCTIONS TO BIDDERS

All recipients of these bid documents, whether they submit a Bid or not, shall treat the details of the documents as PRIVATE AND CONFIDENTIAL.



T1.2.1 TENDER SPECIFIC DATA

The conditions of tender are those contained in the latest edition of SANS ISO 10845-3: 2022 Ed 2, Construction Procurement – Part 3: Standard conditions of tender.

SANS ISO 10845-3:2022 Ed 2 makes 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 provisions of SANS ISO 10845-3: 2022 Ed 2.

Each item of data given below is cross-referenced to the clause in SANS ISO 10845-3:2022 Ed 2 to which it mainly applies.

Clause number	TENDER DATA
3	TERMS AND DEFINITIONS
3.1	Wherever reference is made in the documentation to Bill of Quantities it shall also mean Pricing Schedule or Schedule of Quantities.
3.19	Whenever reference is made in the documentation to Bidder or Tenderer it shall mean is the person or organization that submits a tender offer. (The successful Bidder will be appointed as Contractor as per GCC 2015- Clause 1.1.1.9)
4	GENERAL REQUIREMENTS
4.1	The Employer is the Department of Water and Sanitation: Construction South
4.2	The tender documents issued by the employer comprise the documents listed on the contents page
4.4	The employer's agent email address is: FrylinckA@dws.gov.za
4.4	The language for communications is English.
5	TENDERER'S OBLIGATIONS
5.1	Only those Tenderers who satisfy the following eligibility criteria and who provide the required evidence in their tender submissions are eligible to submit tenders and have their tenders evaluated: An Entity is not eligible to submit a bid if: (a) the Bidder does not comply with the legal requirements of the Department's Procurement; (b) the Entity submitting the bid is under restrictions or has principals who are under restriction to participate in the Department's procurement due to corrupt or fraudulent practices; (c) the Bidder does not have the legal capacity to enter into the contract; (d) the Entity submitting the bid is insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of the foregoing; (e) the Bidder cannot demonstrate that he possesses the necessary professional and technical qualifications and competent, financial resources and other physical facilities, managerial capability, personnel, experience and reputation to perform the contract; (f) the Bidder cannot provide proof that he is in good standing with respect to duties, taxes, levies and contributions required in terms of legislation applicable to the work in the contract; (g) the Bidder has failed to perform on any previous contract and has been given a written notice to this effect; (h) the Bidder or a competent authorized representative of the Entity who submitted the tender has not attended the compulsory clarification meeting or site briefing session if applicable; (i) the bid offer is not signed by a person authorized to sign on behalf of the Bidder;

Clause number	TENDER DATA
	(j) more than one bid has been submitted by a Bidder. Each Bidder shall submit only one bid for the same project, either individually as a Bidder or as a partner in a joint venture. No Entity can be a Sub-contractor while submitting a bid individually or as a partner of a joint venture in the same bidding process. An Entity, if acting in the capacity of Sub-contractor in any bid, may participate in more than one bid, but only in that capacity. A Bidder who submits or participates in more than one bid will cause all the proposals in which the Bidder has participated to be disqualified.
5.1	Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to 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 CIDB 5CE or higher class of construction work, are eligible to have their tenders evaluated. All projects of R60m and above must apply the Standard for Indirect Targeting for Enterprise Development. Joint ventures are eligible to submit tenders provided that: - every member of the joint venture is registered with the CIDB; - the lead partner has a contractor grading designation in the CIDB 4CE or higher class of construction work; and 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 CIDB 5CE 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.
5.7	The arrangements for a compulsory site clarification meeting are as stated in the Tender Notice and Invitation to Tender. (Site clarification meeting is also referred to as site briefing session.) The dam site is situated on the Olifants River, immediately next to the N7 and accessed through a controlled gate approximately 2 km South- West of Clanwilliam Town in the Western Cape province. The gravel site access roads is regularly maintained but can get challenging under abnormal rainfall conditions. Personal Protective Equipment (PPE) such as safety boots will be required before entering the site to examine some aspects of the works A full-time employee of the respondent who is involved in the preparation of submissions shall sign the attendance list in the name of the respondent. Addenda will be issued to, and respondents will be evaluated from only from those respondents appearing on the attendance list.
5.10	Tenderers are required to state the rates and currencies in South African Rand (ZAR).
5.11	No alterations, omissions or additions shall be made to this document, but should it be deemed necessary to do so, the Bidder is at liberty to qualify his bid. Bidders shall be deemed to have waived, renounced and abandoned any conditions printed or written upon any stationery used by them for the purpose of or in connection with the submission of bids which are in conflict with the conditions laid down in this document. Bidders shall not make any alterations or additions to the bid documents, except to comply with instructions issued by the Department, or necessary to correct errors made by the Bidder. All signatories to the bid offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited.
5.12	No alternative tender offers will be considered.
5.13.1	Parts of each tender offer communicated on paper shall be submitted as an original, plus one (1) copy. The tenderer is requested to also provide a PDF (soft) copy of the complete tender submission in electronic format on a flash disk and to include this in their tender submission.

Clause number	TENDER DATA
5.13.2	An Entity is not eligible to submit a bid if the bid offer is not signed by a person authorized to sign on behalf of the Bidder. Each page of the completed document that will be submitted should be initialled by the Bidder at the bottom of the page. State clearly in Form D under T2.2 returnable documents and schedules, the authorised signatories that are liable on the behalf of the Tenderer, with proof from the employer and or company. If the bid is submitted by joint venture of more than one person and/or Companies and/or firms it shall be accompanied by the following: (a) The original or a notarial certified copy of the original document under which such joint venture was constituted which must define precisely inter alia the conditions under which the joint venture will function, its period of duration and the participation of the several constituent persons and/or companies and/or firms. A certificate signed by or on behalf of each participating person and/or company and/or firm authorising the person who signed the bid to do so.
5.13.5 5.15	The ORIGINAL printed, completed tender document together with a cover letter and all supporting documents needs to be placed and sealed in an envelope. The enveloped needs to be clearly marked as below indicated. The details and address for delivery of tender offers and identification details that are to be shown on the envelope: 1) <u>Tender Identical details:</u> Tender reference number: DWS07 0523 WTE Title of Tender: WIDENING OF N7 ENTRANCES AT THE RAISING OF CLANWILLIAM DAM FOR CONSTRUCTION SOUTH IN THE WESTERN CAPE – CIDB CONTRACTOR GRADING DESIGNATION OF CIDB 5 CE OR HIGHER 2) <u>The details and address for delivery of tender offers and closing time are:</u> Location of tender box: THE BID BOX AT THE ENTRANCE Physical address: ZWAMADAKA BUILDING 157 FRANCIS BAARD STREET, PRETORIA, 0001 Closing date & time: 20 June 2023 at 11:00 hrs. 3) <u>Name of the Bidder (shall be clearly shown)</u>
5.13.5	The "ORIGINAL" and "COPY" are to be submitted as separate packages. The PDF soft copy on USB Flash drive to be submitted together with the "ORIGINAL" packages.
5.13.6	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers shall NOT be accepted.
5.15	The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.
5.16	The tender offer validity period is for 120 days.
5.18	Provide, on request by the employer, any other material that has bearing on the tender offer within 5 working days of request.
5.19	The employer reserve the right to arrange access for the following inspections, tests, and analysis at Bidder's facilities.
5.20	The Tenderer is required to submit with his tender a letter of intent from an approved insurer undertaking to provide the Performance Guarantee to the format included in Part C1.3 of this procurement document. (See also GCC 2015: Clause 6.2 – Security.)
6	EMPLOYER'S UNDERTAKINGS
6.1	The Employer will respond to requests for clarification received up to seven (7) working days before the tender closing time.
6.2	The employer shall issue addenda until four (4) working days before tender closing time.
6.4	Tenders will be opened immediately after the closing time for tenders at 11:00 hrs.

Clause number	TENDER DATA
6.11.1	The financial offer will be reduced to a comparative basis using the Tender Assessment Schedule.
6.8	<u>TEST FOR RESPONSIVENESS:</u> Bids will be evaluated in accordance with the new Preferential Procurement Regulations, 2022, using 80/20 preference points system as prescribed in the Preferential Procurement Policy Framework Act (PPPFA, Act 5 of 2000). The lowest acceptable bid will score 80 points for price and a maximum of 20 points will be awarded for the specific goals. Maximum of 100 points will be scored for functionality (quality). Bids received will be evaluated on the five (5) phases namely: (1) Mandatory Requirements, (2) Administrative Compliance, (3) Functionality (5.11.9), (4) Price & Preference (5.11.7 & 5.11.8), & (5) Evaluation Method 4 (5.11.5).
6.8	<u>1) PHASE 1: MANDATORY REQUIREMENTS:</u> Failure to submit any of the documents listed below will render your bid non-responsive and the bid will be disqualified. • CIDB registration in terms of construction industry development board (CIDB) grade. (As per clause 4.1) • Certificate of attendance at the compulsory site briefing session and or sign on the attendance register. • Professional registration as construction manager with SACMP or Civil Engineer with ECSA or Civil Engineering Technologist with ECSA. • Company profile (as below requirement from SANRAL, if a JV is formed company profile of each participating company must be provided).
	<u>APPOINTMENT</u> Take note of the following requirement required from the Client to SANRAL regarding the successful bidder appointment: <i>The appointment of the contractor shall be made in liaison with SANRAL.</i> <i>Documents to be presented by the Employer to SANRAL:</i> a. <i>Company Profile of proposed Bidder (if a JV is formed company profile of each participating company must be provided)</i> b. <i>CIDB registration of Bidder</i> c. <i>CV and Registration of Supervisory Engineer or Technologist (ECSA)</i>

Clause number	TENDER DATA			
6.8	2) <u>PHASE 2: ADMINISTRATIVE COMPLIANCE</u>			
	Bidders are required to comply with the following listed below:			
	No	Criteria	Yes	No
	1	Companies must be registered with National Treasury's Central Supplier Database must submit CSD report.		
	2	Tax compliant with SARS (to be verified through CSD and SARS). Attached a copy of valid Tax Compliance status pin page (to be confirmed through SARS).		
	3	Active registration with Company Intellectual Property Commission (to be verified through CSD and CIPC). Attach copy of Bidder's CIPC / CIPRO certificate.		
	4	A valid copy of B-BBEE Status Level Verification Certificate or a valid and original Sworn affidavit (failure to submit, the Bidder will forfeit the preferential points to be claimed).		
	5	A valid letter of Good Standing with the Compensation Commissioner in terms of the Compensation for Occupational Injuries and Diseases Act No 130 of 1993 and or third parties' insurance registered with Financial Service Board (COIDA).		
	6	Initial and sign Tender data section (T1 & T2) and all required documents to be submitted with tender. Initial each page of section C1, C2 and C3 and sign where required.		
	7	Letter of appointment of duly authorized person to sign bid. Proof of such authority must be submitted with the bid. If by an individual, must be signed by that individual or by someone on his behalf duly authorised thereto and proof of such authority must be produced. If the bid is by a Company, it must be signed by a person duly authorised thereto by a Resolution of a Board of Directors a copy of which Resolution, duly certified by the Chairman of the Company is to be submitted with the bid.		
6.8	8	Complete, sign, submit SBD1, SBD3.2, SBD4, SBD6.1		
	9	Proof of 3 completed tar road construction projects (Completion certificate, Value and reference). Where at least one project to the value of 10 million rand had to be completed in the last 10 years. And at least one of the projects should be have been done directly for SANRAL.		
6.8	3) <u>PHASE 3: FUNCTIONALITY COMPLIANCE</u>			
	As explained in 6.11.9.			
	The Bidder must score a minimum of 70 points out of 100 to allow them to proceed to the next phase of evaluation.			
6.8	4) <u>PHASE 4: PRICE AND PREFERENCE</u>			
	As explained in 6.11.7 & 6.11.8.			

Clause number	TENDER DATA																
6.11.5	5) PHASE 5: EVALUATION METHOD Method 4: Financial offer, quality and preference → This method shall apply for the evaluation of this tender The procedure for the evaluation of responsive tenders is Method 4 (Financial offer, quality and preference). The total number of tender evaluation points (T_{EV}) shall be determined in accordance with the following formula: $T_{EV} = f_1 (N_{FO} + N_P) + f_2 N_Q$ Where: f_1 & f_2 are fractions, f_1 equals 1 minus f_2 ; and f_2 equals 0,5 N_{FO} → is the number of tender evaluation points awarded for the <u>financial offer</u> made in accordance with SANS ISO 10845-3: 2022 Ed 2 clause 6.11.7, (where N_{FO} is maximum 90 points); N_P → is the number of tender evaluation points awarded for <u>preference claimed</u> in accordance with SANS ISO 10845-3: 2022 Ed 2 clause 6.11.8, (where N_P is maximum 10 points); N_Q → is the number of tender evaluation points awarded for <u>functionality (quality)</u> in accordance with SANS ISO 10845-3:2022 Ed2 clause 6.11.9, (where N_Q is maximum 100 points). Example: For example, if a Tenderer scores the following: 63 points for pricing (N_{FO}) out of 80; 18 points for preferencing (N_P) out of 20; and 70 points for functionality (quality) (N_Q) out of 100 And the fractions are f_2 equals 0,5 <table border="1" data-bbox="209 1167 1104 1413"> <tr> <th>Where the weights are:</th><th>Example values scored</th></tr> <tr> <td>Total points for financial offer (N_{FO}) → 80</td><td>63</td></tr> <tr> <td>N_P → 20</td><td>18</td></tr> <tr> <td>N_Q → 100</td><td>70</td></tr> <tr> <th>Calculation:</th><th>Example of calculation</th></tr> <tr> <td>Where: $f_1(N_{FO} + N_P)$</td><td>$0.5 * (63 + 18) = 40.5$</td></tr> <tr> <td>And where: $f_2 N_Q$</td><td>$0.5 * 70 = 35$</td></tr> <tr> <td>Total Tender evaluation points (T_{EV}) → 100</td><td>75.5</td></tr> </table>	Where the weights are:	Example values scored	Total points for financial offer (N_{FO}) → 80	63	N_P → 20	18	N_Q → 100	70	Calculation:	Example of calculation	Where: $f_1(N_{FO} + N_P)$	$0.5 * (63 + 18) = 40.5$	And where: $f_2 N_Q$	$0.5 * 70 = 35$	Total Tender evaluation points (T_{EV}) → 100	75.5
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Total Tender evaluation points (T_{EV}) → 100	75.5																
6.11.7	Price Score: Score for financial offers using the following formula: $N_{FO} = W_1 \times A$ Where: N_{FO} → is the number of tender evaluation points awarded for the financial offer; $A = \left(1 - \left(\frac{P - P_m}{P_m} \right) \right) \quad \text{(As per Preferential Procurement Regulations, 2022)}$ P is the comparative offer of the tender offer under consideration; P_m is the comparative offer of the most favourable comparative offer; and W_1 is the maximum possible number of tender evaluation points awarded for the financial offer which equals 80 where the financial value inclusive of VAT of one or more responsive tenders received have a value in equals or is less than R50 000 000,00.																

Preference Score:

Preferential Procurement Regulations, 2022, Act no. 5 of 2000 will be used to evaluate this proposal as per the applicable threshold value.

Bid proposals will be evaluated based on the 80/20 preference points system in accordance with the PPPFA Act (Act no. 5 of 2000). Where a maximum of 80 points will be awarded in respect of price and a maximum of 20 points will be awarded for specific goals.

N_p shall be calculated to a maximum of 20 points, as claimed in Table 1 below in accordance with Preferential Procurement Regulations, 2022 and described below.

Points claimed will be according to a bidder's specific goals claimed as indicated in Table 1 below.

In terms of Regulation 4(2) and 5(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 tenderer's goals claimed as per Table 1 below. The tenderer goal claimed must be supported by proof / documentation as per Table 2 and the special conditions of this tender where applicable.

Table 1: Specific goals for the tender and points claimed

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system)
Women Ownership	5
Disability Ownership	5
Youth Ownership	5
Location of enterprise (local equals province): Western Cape	2
B-BBEE status level contribution from level 1 to 2 which are QSE or EME	3
TOTAL SCORED POINTS	20

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

"Ownership" means the percentage ownership and control, exercised by individuals within an enterprise.

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

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

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

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

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

Clause number	TENDER DATA																		
	Documents/ information listed on the below Table 2 must be submitted to support and verify points claimed as per Table 1 above. Table 2: Documents required for verification of Tenderer claimed points <table><tr><th>Specific Goal</th><th>Requires Proof Documents</th></tr><tr><td>Women Ownership</td><td>Full CSD Report</td></tr><tr><td>Disability Ownership</td><td>Full CSD Report</td></tr><tr><td>Youth Ownership</td><td>Full CSD Report</td></tr><tr><td>Location of enterprise</td><td>Full CSD Report</td></tr><tr><td>B-BBEE status level contribution from level 1 to 2 which are QSE or EME</td><td> - Valid B-BBEE certificate/sworn affidavit - Consolidated B-BBEE certificate in cases of Joint Ventures - Full CSD Report </td></tr></table> Failure on the part of a bidder to submit proof of documentation required in terms of this tender to claim for specific goals with the bid, will be interpreted to mean that preference points for specific goals are not claimed and will not be allocated.	Specific Goal	Requires Proof Documents	Women Ownership	Full CSD Report	Disability Ownership	Full CSD Report	Youth Ownership	Full CSD Report	Location of enterprise	Full CSD Report	B-BBEE status level contribution from level 1 to 2 which are QSE or EME	- Valid B-BBEE certificate/sworn affidavit - Consolidated B-BBEE certificate in cases of Joint Ventures - Full CSD Report						
Specific Goal	Requires Proof Documents																		
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B-BBEE status level contribution from level 1 to 2 which are QSE or EME	- Valid B-BBEE certificate/sworn affidavit - Consolidated B-BBEE certificate in cases of Joint Ventures - Full CSD Report																		
6.11.9	<u>Functionality (Quality) Score:</u> The score obtained in 6.11.9 (functionality criteria) will be used for the following formula: $N_Q = 100 \times \frac{S_0}{M_s}$ Where $N_Q \rightarrow$ is the number of tender evaluation points awarded for functionality offered; $S_0 \rightarrow$ is the score for functionality criteria (6.11.9) allocated to the submission under consideration; and $M_s \rightarrow$ is the maximum possible score for functionality criteria (100). Functionality is the terminology used to define the technical ability of the Tenderer, based on experience, to deliver the required product in accordance with the specialised quality, reliability and functionality. Points allocated for functionality shall be evaluated in accordance with the criteria as listed below table. An overall minimum threshold of 70 (M_s) points out of total 100 (M_s) must be achieved for the tender to be eligible. See T2 returnable annexure (as indicated below) for applicable documents with detail on point allocation for the sub-criteria's. The quality criteria and maximum score in respect of each of the criteria are as follows: <table><tr><th colspan="2">Functionality criteria</th><th>Maximum number of points</th></tr><tr><td>1</td><td>Schedule of Plant & Equipment</td><td>12</td></tr><tr><td>2</td><td>Past Experience</td><td>15</td></tr><tr><td>3</td><td>Method Statement</td><td>46</td></tr><tr><td>4</td><td>Personal Experience</td><td>27</td></tr><tr><td colspan="2">Maximum possible score for quality (M_s)</td><td>100</td></tr></table> Quality shall be scored by not less than three evaluators in accordance with the following schedules: Annexure G : Ability & Capability The minimum number of evaluation points for functionality (quality) is 70	Functionality criteria		Maximum number of points	1	Schedule of Plant & Equipment	12	2	Past Experience	15	3	Method Statement	46	4	Personal Experience	27	Maximum possible score for quality (M_s)		100
Functionality criteria		Maximum number of points																	
1	Schedule of Plant & Equipment	12																	
2	Past Experience	15																	
3	Method Statement	46																	
4	Personal Experience	27																	
Maximum possible score for quality (M_s)		100																	

Clause number	TENDER DATA				
6.11.9	SCORING OF FUNCTIONALITY:				
	The prompts for judgment and the associated scores used in the evaluation of quality shall be as follows:				
	Each evaluation criteria will be assessed in terms of five indicators – no response, poor, satisfactory, good and very good. Scores of 0, 40, 70, 90 or 100 will be allocated to no response, poor, satisfactory, good and very good, respectively.				
	TABLE: (SANS ISO 10854-3:2022 Ed2 Table A4) Scoring system that shall be used to score this criterion				
	Score	Rating	Qualitative indicator or prompt for judgement		
			Example 1 (Proposed Organization and staffing)	Example 2 (Approach paper)	Example 3 (Knowledge of issues pertinent to the project)
	0	No response	Failed to provide information.	Failed to provide information.	Failed to provide information.
	40	Poor	The organization chart is sketchy, the staffing plan is weak in important areas. There is no clarity in allocation of tasks and responsibilities.	The technical approach and/or methodology is poor/is unlikely to satisfy project objectives or requirements. The tenderer has misunderstood certain aspects of the scope of work and does not deal with the critical aspects of the project.	Key staff have limited experience of issues pertinent to the project
	70	Satisfactory	The organizational chart is complete and detailed, the technical level and composition of the staffing arrangements are adequate.	The approach is generic and not tailored to address the specific project objectives and methodology. The approach does not adequately deal with the critical characteristics of the project. The quality plan, manner in which risk is to be managed, etc. is too generic.	Key staff have reasonable experience of issues pertinent to the project.
	90	Good	Besides attaining the “satisfactory” rating, staff are well-balanced, i.e. they show good co-ordination, complimentary skills, clear and defined duties and responsibilities. Some members of the project team have worked together before on limited occasions.	The approach is specifically tailored to address the specific project objectives and methodology and is sufficiently flexible to accommodate changes that might occur during execution. The quality plan and approach to managing risk, etc. is specifically tailored to the critical characteristics of the project.	Key staff have extensive experience of issues pertinent to the project.
100	Very good	Besides attaining the “good” rating, the proposed team is well-integrated and several members have worked together extensively in the past.	Besides attaining the “good” rating, the important issues are approached in an innovative and efficient way, indicating that the tenderer has outstanding knowledge of state-of-the-art approaches. The approach paper details ways to improve the project outcomes and the quality of the outputs.	Key staff have outstanding experience of issues pertinent to the project.	
The scores of each of the evaluators will be averaged, weighted and then totalled to obtain the final score for quality.					
EXAMPLE OF EVALUATION:					
Criteria	SCORE (out of 0% - 100%)		WEIGHT (POINTS)		TOTAL (A% score x 5 points)
Sub-Criteria	Score according to SANS ISO 10845-3:2022 ed2 Table A.4		Max allowed points for a (per) sub-criteria.		
Example 1	70 score (=70%): Satisfactory		5		= 5 * 70% = 3.5
Example 2	90 score (=90%): Good		20		= 20 * 90% = 18

Clause number	TENDER DATA
6.13	Tender offers will only be accepted if: a) the Tenderer is registered on the Central Supplier Database (CSD) for the South African government (see https://secure.csd.gov.za/) unless it is a foreign supplier with no local registered entity; b) the Tenderer is in good standing with SARS according to the Central Supplier Database; c) the Tenderer submits a letter of intent from an approved insurer undertaking to provide the Performance guarantee to the format included in Part C1.3 of this procurement document; d) the Tenderer is registered with the Construction Industry Development Board (CIDB) in an appropriate Contractor grading designation; e) the Tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; f) the Tenderer has not: i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect; g) the Tenderer has completed the Compulsory Declaration and there are no conflicts of interest which may impact on the Tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process; h) the Tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer; i) the employer is reasonably satisfied that the Tenderer has in terms of the Construction Regulations, 2003, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.
6.17	The number of paper copies of the signed contract to be provided by the employer to the successful Bidder is One (1).



DEPARTMENT OF WATER AND SANITATION

DWS07 0523 WTE

WIDENING OF N7 ENTRANCES AT THE RAISING OF CLANWILLIAM DAM FOR CONSTRUCTION SOUTH IN THE WESTERN CAPE – CIDB CONTRACTOR GRADING DESIGNATION OF CIDB 5 CE OR HIGHER

T2: RETURNABLE DOCUMENTS AND SCHEDULES

CONTENTS

T2.1: LIST OF RETURNABLE DOCUMENTS AND SCHEDULES

T2.2 RETURNABLE DOCUMENTS AND SCHEDULES



T2.1 LIST OF RETURNABLE DOCUMENTS AND SCHEDULES

THE TENDER DOCUMENT MUST BE SUBMITTED AS A WHOLE i.e. All volumes (including the fully priced and extended Provisional Bills of Quantities) as is bound together in one single document herein. All forms must be properly completed in black ink as required, and the document shall not be taken apart or altered in any way whatsoever.

Note: Should any of the below-mentioned documents and/or the entire Tender Enquiry Document not be submitted the tender submission may be viewed as NON-RESPONSIVE.

The tendered must complete the following returnable document/schedules:

RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES THAT WILL BE INCORPORATED INTO THE CONTRACT		
Doc. Ref. Nr.	Document/ Schedule	Completed (Tick)
SBD 1	SBD 1: Invitation to Bid	
SBD 3.2	SBD 3.2: Bill of Quantities – Non - Firm Price (Priced and extended Provisional Bill of Quantities - Part C2.2)	
SBD 4	SBD 4: Declaration of Interest	
SBD 6.1	SBD 6.1: Preference Points Claim Form: General Conditions and Definitions	
FORM A	Certificate of Attendance at Compulsory Clarification Site Meeting	
FORM B	Record of Addenda to Tender Documents	
FORM C	Compulsory Declaration	
FORM D	Certificate Authority of Signatory	
FORM E	Annual Financial Statements Declaration	
FORM F	Pro Forma Form of Offer and Acceptance (Part C1.1)	
FORM G	Contract Data (Part C1.2)	
FORM H	Pro Forma Performance Guarantee (Part C1.3)	
FORM I	Contractor's health and safety declaration	
FORM J	Health and Safety Act agreement	
FORM K	Verification Documentation	
ANNEXURE A	Preferencing Schedule for Broad Based Black Economic Empowerment Status (a valid copy of B-BBEE certificate or a valid and original sworn affidavit)	
ANNEXURE B	Proof of Contractor Registration issued by the Construction Industry Development Board (CIDB)	
ANNEXURE C	Tax Compliance Status Pin page issued by the South African Revenue Services.	



RETURABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES THAT WILL BE INCORPORATED INTO THE CONTRACT		
Doc. Ref. Nr.	Document/ Schedule	Completed (Tick)
ANNEXURE D	Central Supplier Database (CSD) proof of registration containing MAAA number.	
ANNEXURE E	Bidder's proof of CIPC company registration documents listing all members with percentages	
ANNEXURE F	Letter of good standing from COIDA (Compensation for Occupational Injuries & Diseases Act)	
ANNEXURE G	Ability & Capability	
ANNEXURE H	Schedule of Proposed sub-contractor together with a pro-forma sub-contracting agreement signed by both parties	

NOTE: Failure to provide all these listed documents may result in the tender not being evaluated



T2.2 RETURNABLE DOCUMENTS AND SCHEDULES



PART A INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)					
BID NUMBER:	DWS07 0523 WTE	CLOSING DATE: 15 June 2023	CLOSING TIME:	11:00am	
DESCRIPTION	WIDENING OF N7 ENTRANCES AT THE RAISING OF CLANWILLIAM DAM FOR CONSTRUCTION SOUTH IN THE WESTERN CAPE – CIDB CONTRACTOR GRADING DESIGNATION OF CIDB 5 CE OR HIGHER				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
THE BID BOX, AT THE ENTRANCE OF ZWAMADAKA BUILDING					
157 FRANCIS BAARD STREET					
PRETORIA, 0001					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON	Department of Water and Sanitation		CONTACT PERSON	Mr A. Frylinck	
TELEPHONE NUMBER	012 336 6562/8151/7780/8241		TELEPHONE NUMBER	064 761 0506	
FACSIMILE NUMBER			FACSIMILE NUMBER		
E-MAIL ADDRESS	bidenquirieswte@dws.gov.za		E-MAIL ADDRESS	FrylinckA@dws.gov.za	
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX] ☐ Yes ☐ No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT		TICK APPLICABLE BOX] ☐ Yes ☐ No
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]					
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?		☐ Yes ☐ No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?					☐ YES ☐ NO
DOES THE ENTITY HAVE A BRANCH IN THE RSA?					☐ YES ☐ NO
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?					☐ YES ☐ NO
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?					☐ YES ☐ NO



IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?

☐ YES ☐

NO

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.

PART B

TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.**
- 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
- 1.4. **THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).**

2. TAX COMPLIANCE REQUIREMENTS

- 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
- 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED; EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
- 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

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

SIGNATURE OF BIDDER:

.....

CAPACITY UNDER WHICH THIS BID IS SIGNED:

.....

(Proof of authority must be submitted e.g. company resolution)

DATE:

.....



SBD 3.2 PRICING SCHEDULE

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

SBD 3.2 is in section – Contract C2, under C2.2

Complete this document and place back into bid at C2.2



BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

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

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

2. Bidder's declaration

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

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

Full Name	Identity Number	Name of State institution

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



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

2.2.1 If so, furnish particulars:

.....

2.3 Does the Bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:

.....

3 DECLARATION

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

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The Bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium² will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the Bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

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



- 3.5 There have been no consultations, communications, agreements or arrangements made by the Bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the Bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder



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

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

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

1. GENERAL CONDITIONS

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

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

1.2 **To be completed by the organ of state**

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

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

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

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

The maximum points for this tender are allocated as follows:

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

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

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.



2. DEFINITIONS

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

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

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

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

$$\begin{array}{ccc}
 \text{80/20} & \text{or} & \text{90/10} \\
 \\
 Ps = 80 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right) & \text{or} & Ps = 90 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)
 \end{array}$$

Where

- Ps = Points scored for price of tender under consideration
- Pt = Price of tender under consideration
- Pmin = Price of lowest acceptable tender



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

3.2.1. POINTS AWARDED FOR PRICE

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

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

Where

- Ps = Points scored for price of tender under consideration
- Pt = Price of tender under consideration
- Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

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

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.



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

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

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

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Women Ownership	5	
Disability Ownership	5	
Youth Ownership	5	
Location of enterprise (local equals province) Western Cape	2	
B-BBEE status level contribution from level 1 to 2 which are QSE or EME	3	

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;

SBD 6.1



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

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

FORM A



FORM A CERTIFICATE OF ATTENDANCE AT COMPULSORY CLARIFICATION SITE MEETING

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

was represented by the person of (*Bidder*)

of(*address*)

Telephone number

named below at the compulsory meeting held for all Tenderers at (*location*).....

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

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

Having previously studied the documents, I carefully examined the site and equipment. I have made myself familiar with all the equipment likely to influence the work and the cost thereof.

I further certify that I am satisfied with the description of the work and the explanations given by the Department of Water and Sanitation Representative, and I understand perfectly the work to be done, as specified and implied, in the execution of this Contract.

Particulars of person attending the meeting: (Signed on behalf of Bidder) PRINT NAME & SIGNATURE

Name: .. Signature:

Capacity:

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

(PRINTED NAME & SIGNATURE)

Name: .. Signature:

Capacity: Date and Time:

FORM B



FORM B RECORD OF ADDENDA TO TENDER DOCUMENTS

We confirm that the following communications 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 or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		

Attach additional pages if more space is required.

Signed

Date

Name

Position

Tenderer



FORM C COMPULSORY DECLARATION

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

Section 1: Enterprise Details

Name of enterprise:	
Contact person:	
Email:	
Telephone:	
Cell no	
Fax:	
Physical address	
Postal address	

Section 2: Particulars of companies and close corporations

Company / Close Corporation registration number	
---	--

Section 3: SARS Information

Tax reference number	
VAT registration number:	State Not Registered if not registered for VAT

Section 4: CIDB registration number

CIDB Registration number (if applicable)	
--	--

Section 5: National Treasury Central Supplier Database

Supplier number	
Unique registration reference number	

Section 6: Particulars of principals

principal: means a natural person who is a partner in a partnership, a sole proprietor, a director of a company established in terms of the Companies Act of 2008 (Act No. 71 of 2008) or a member of a close corporation registered in terms of the Close Corporation Act, 1984, (Act No. 69 of 1984).

Full name of principal	Identity number	Personal tax reference number

Attach separate page if necessary

FORM C



Section 7: Record in the service of the state

Indicate by marking the relevant boxes with a cross, if any principal is currently or has been within the last 12 months in the service of any of the following:

- | | |
|--|--|
| ☐ a member of any municipal council
☐ a member of any provincial legislature
☐ 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 department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act of 1999 (Act No. 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:

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

*insert separate page if necessary

Section 8: Record of family member in the service of the state

family member: a person's spouse, whether in a marriage or in a customary union according to indigenous law, domestic partner in a civil union, or child, parent, brother, sister, whether such a relationship results from birth, marriage or adoption

Indicate by marking the relevant boxes with a cross, if any family member of a principal as defined in section 5 is currently or has been within the last 12 months been 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 |
|--|---|

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

*insert separate page if necessary

Section 9: Record of termination of previous contracts with an organ of state

FORM C



Was any contract between the tendering entity including any of its joint venture partners terminated during the past 5 years for reasons other than the employer no longer requiring such works or the employer failing to make payment in terms of the contract.

☐ Yes ☐ No (Tick appropriate box)

If yes, provide particulars (interest separate page if necessary)

Section 10: Declaration

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the tendering entity confirms that the contents of this Declaration are within my personal knowledge, and save where stated otherwise in an attachment hereto, are to the best of my belief both true and correct, and:

- i) neither the name of the tendering entity or any of its principals appears on:
 - a) the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004 (Act No. 12 of 2004)
 - b) National Treasury's Database of Restricted Suppliers (see www.treasury.gov.za)
- ii) neither the tendering entity or any of its principals has within the last five years been convicted of fraud or corruption by a court of law (including a court outside of the Republic of South Africa);
- iii) any principal who is presently employed by the state has the necessary permission to undertake remunerative work outside such employment (attach permission to this declaration);
- iv) the tendering entity is not associated, linked or involved with any other tendering entities submitting tender offers
- v) has not engaged in any prohibited restrictive horizontal practices including consultation, communication, agreement, or arrangement with any competing or potential tendering entity regarding prices, geographical areas in which goods and services will be rendered, approaches to determining prices or pricing parameters, intentions to submit a tender or not, the content of the submission (specification, timing, conditions of contract etc) or intention to not win a tender;
- vi) has no other relationship with any of the Tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
- vii) neither the Tenderer or any of its principals owes municipal rates and taxes or municipal service charges to any municipality or a municipal entity and are not in arrears for more than 3 months;
- viii) SARS may, on an on-going basis during the term of the contract, disclose the Tenderer's tax compliance status to the Employer and when called upon to do so, obtain the written consent of any subcontractors who are subcontracted to execute a portion of the contract that is entered into in excess of the threshold prescribed by the National Treasury, for SARS to do likewise.

NOTE 1 The Standard Conditions of Tender contained in SANS 10845-3 prohibits anticompetitive practices (clause 3.1) and requires that Tenderers avoid conflicts of interest, only submit a tender offer if the Tenderer or any of his principals is not under any restriction to do business with employer (4.1.1) and submit only one tender either as a single tendering entity or as a member in a joint venture (clause 4.13.1). Clause 5.7 also empowers the Employer to disqualify any Tenderer who engages in fraudulent and corrupt practice. Clause 3.1 also requires Tenderers to comply with all legal obligations.

NOTE 2: Section 30(1) of the Public Service Act, 1994, prohibits an employee (person who is employed in posts on the establishment of departments) from performing or engaging remunerative work outside his or her employment in the relevant department, except with the written permission of the executive authority of the department. When in operation, Section 8(2) of the Public Administration Management Act, 2014, will prohibit an employee of the public administration (i.e. organs of state and all national departments, national government components listed in Part A of Schedule 3 to the Public Service Act, provincial departments including the office of the premier listed in Schedule 1 of the Public Service Act and provincial departments listed in schedule 2 of the Public Service Act, and provincial government components listed in Part B of schedule 3 of the Public Service Act) or persons contracted to executive authorities in accordance with the provisions of section 12A of the Public Service Act of 1994 or persons performing similar functions in organs of state from conducting business with the State or to be a director of a public or private company conducting business with the State. The offence for doing so is a fine or imprisonment for a period not exceeding 5 years or both. It is also a serious misconduct which may result in the termination of employment by the employer.

NOTE 3: Regulation 44 of Supply Chain Management regulations issued in terms of the Municipal Finance Management Act of 2003 requires that organs of state and municipal entities not award a contract to a person who is the service of the state, a director, manager or principal shareholder in the service of the state or who has been in the service of the state in the previous twelve months.

NOTE: 4: Regulation 45 of Supply Chain Management regulations requires a municipality or municipal entity to disclose in the notes to the annual statements particulars of any award made to a close family member in the service of the state.

NOTE: 5 Corrupt activities which give rise to an offence in terms of the Prevention and Combating of Corrupt Activities Act of 2004) include improperly influencing in any way the procurement of any contract, the fixing of the price, consideration or other moneys stipulated or otherwise provided for in any contract and the manipulating by any means of the award of a tender.

FORM C



NOTE: 6 Section 4 of the Competition Act of 1998 prohibits restrictive horizontal practice including agreements between parties in a horizontal relationship which have the effect of substantially preventing or lessening competition, directly or indirectly fixing prices or dividing markets or constitute collusive tendering. Section 5 also prohibits restrictive vertical practices. Any restrictive practices that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties.

Signed	Date
Name	Position
Tenderer	
.....	

FORM D



FORM D CERTIFICATE AUTHORITY OF SIGNATORY

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

A Company	B Partnership	C Joint Venture	D Sole Proprietor	E Close Corporation
--------------	------------------	--------------------	----------------------	------------------------

A. CERTIFICATE FOR COMPANY

I,, chairperson of the board of directors of
.....,

hereby confirm that by resolution of the board taken on 20.....

Mr/Ms....., acting in the capacity

of, was authorised to sign all documents in connection with this tender for

Contract reference number and any contract resulting from it

on behalf of the company.

As witnesses:-

1.
Witness Chairman

2.
Witness Date

FORM D



B. CERTIFICATE FOR PARTNERSHIP

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

.....

hereby authorise Mr/Ms,

acting in the capacity of to sign

all documents in connection with the tender for Contract reference number

and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

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

FORM D



C. CERTIFICATE FOR JOINT VENTURE

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 for Contract reference number..... and any contract resulting from it on our behalf.

This authorisation is evidenced by the attached power of attorney signed by legally authorised signatories of all the partners to the Joint Venture.

NAME OF FIRM	ADDRESS	AUTHORIZING SIGNATURE, NAME & CAPACITY
Lead Partner		
Partner 1		
Partner 2		
Partner 3		
Partner 4		



FORM D

D. CERTIFICATE FOR SOLE PROPRIETOR.

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

As witnesses:-

1.
Witness Signature: Sole owner
2.
Witness Date



FORM D

E. CERTIFICATE FOR CLOSE CORPORATION

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

.....
.....

hereby authorise Mr/Ms,

acting in the capacity of to sign

all documents in connection with the tender for Contract reference number

and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

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



FORM E ANNUAL FINANCIAL STATEMENTS DECLARATION

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

- 1) The enterprise's financial year end is
 - 2) The enterprise's financial statements have been prepared in accordance with the provisions of the Companies Act of 2008 or the Close Corporation Act of 1984, as applicable
 - 3) The enterprise has compiled its financial accounts [tick one box]:

☐ internally
☐ independently
 - 4) The following statement applies to the enterprise [tick one box and provide relevant information]

☐ enterprise has had its financial statements audited;

name of auditor

☐ enterprise is required by law to have an independent review of its financial statements

name of independent reviewer

☐ enterprise has not had its financial statements audited and is not required by law to have an independent review or audit of such statements
 - 5) The attached income statement and balance sheet is a true extract from the financial statements complying with applicable legislation for the preceding financial year within 12 months of the financial year end.
- [Attach the income statement and the balance sheet contained in the financial statement]*
- 6) The annual turnover for the last financial year is R
 - 7) The total assets as at the end of the last financial year is R
 - 8) The total liabilities as at the end of the financial year is R

I hereby declare that the contents of this Declaration are within my personal knowledge, and save where stated otherwise are to the best of my belief both true and correct.

Signed

Date

Name

Position

Tender

FORM F



FORM F PRO FORMA FORM OF OFFER AND ACCEPTANCE

Pro Forma Form of Offer and Acceptance is in section – Contract C1, under C1.1

Complete this document and place back into bid at C1.1



FORM G CONTRACT DATA

Contract data is in section – Contract C1, under C1.2

Complete this document and place back into bid at C1.2



FORM H PRO FORMA PERFORMANCE GUARANTEE

Pro Forma Performance Guarantee is in section – Contract C1, under C1.3

Complete this document and place back into bid at C1.3

**FORM I CONTRACTOR'S HEALTH AND SAFETY DECLARATION**

In terms of Clause 4(4) of the OHSA 1993 Construction Regulations 2003 (referred to as "the Regulations" hereafter), a Contractor may only be appointed to perform construction work if the Employer is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act No 85 of 1993 and the OHSA 1993 Construction Regulations 2003.

To that effect a person duly authorised by the Tenderer must complete and sign the declaration hereafter in detail.

Declaration by Tenderer

1. I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHSA 1993 Construction Regulations 2003.
2. I hereby declare that my company / enterprise has the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Employer's Health and Safety Specifications.
3. I hereby undertake, if my tender is accepted, to provide a sufficiently documented Health and Safety Plan in accordance with Regulation 5(1) of the Construction Regulations, approved by the Employer or his representative, before I will be allowed to commence with construction work under the contract. I hereby agree that my company/enterprise will not have a claim for compensation for delay or extension of time because of my failure to obtain the necessary approval for the said safety plan.
4. I confirm that copies of my company's approved Health and Safety Plan, the Employer's Safety Specifications as well as the OHSA 1993 Construction Regulations 2003 will be provided on site and will at all times be available for inspection by the Contractor's personnel, the Employer's personnel, visitors, and officials and inspectors of the Department of Labour.
5. I hereby confirm that adequate provision has been made in my tendered rates and prices in the bill of quantities to cover the cost of all resources, actions, training and all health and safety measures envisaged in the OHSA 1993 Construction Regulations 2003, including the cost for specific items that may be scheduled in the bill of quantities.
6. I hereby confirm that I will be liable for any penalties that may be applied by the Employer in terms of the said Regulations for failure on my part to comply with the provisions of the Act and the Regulations as set out in Regulation 30 of the Regulations.
7. I agree that my failure to complete and execute this declaration to the satisfaction of the Employer will mean that I am unable to comply with the requirements of the OHSA 1993 Construction Regulations 2003, and accept that my tender will be prejudiced and may be rejected at the discretion of the Employer.
8. I am aware of the fact that, should I be awarded the contract, I must submit the notification required in terms of Regulation 3 of the OHSA 1993 Construction Regulations 2003 before I will be allowed to proceed with any work under the contract.

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



FORM J HEALTH AND SAFETY ACT AGREEMENT

AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, NO. 85 OF 1993

The Employer and the Contractor hereby agree, in terms of the provisions of Section 37(2) of the Occupational Health and Safety, Act No. 85 of 1993, hereinafter referred to as 'the Act', that the Contractor as an employer in its own right and in its capacity as Contractor for the execution of the works, shall have certain obligations and that the following arrangements shall apply between them to ensure compliance by the Contractor with the provisions of the Act, namely:-

- i) The Contractor undertakes to acquaint the appropriate officials and the employees of the Contractor with all relevant provisions of the Act, and the regulations promulgated in terms of the Act, and
- ii) The Contractor undertake that all relevant duties, obligations and prohibitions imposed in terms of the Act and regulations will be fully complied with, and
- iii) The Contractor hereby accepts sole liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and regulations and expressly absolves the Employer from being obliged to comply with any of the aforesaid duties, obligations and prohibitions.
- iv) The Contractor shall be obliged to report forthwith to the Employer any investigation, complaint, or criminal charge which may arise as a consequence of the provisions of the Act and regulations pursuant to work performed on behalf of the Employer, and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge.

SIGNED at On this day of 20.....

For and on behalf of the Contractor: Name: _____

Company Name: _____

AS WITNESSES:

1. _____

2. _____

for and on behalf of the Employer:

AS WITNESSES:

1. _____

2. _____

NOTE: As and when required; the Contractor will be required to sign project specific agreements in terms of section 37(2) of the Occupational Health and Safety Act no 85 of 1993.



FORM K VERIFICATION DOCUMENTATION

VERIFICATION DOCUMENTATION

The Tenderer shall attach the following documentation in support of the pre-qualification specification of this bid:

A valid copy of B-BBEE Status Level Verification Certificate issued by accredited Verification Agency/s by SANAS, together with their bid to substantiate their B-BBEE rating claims.

A trust, consortium or joint venture (including unincorporated consortia and joint ventures) must submit a consolidated B-BBEE Status Level Verification certificate to substantiate their B-BBEE rating claims.

An EME is required to submit a sworn affidavit confirming their annual total revenue of R10 million or less and level of black ownership to substantiate their EME rating claims.

An EME that is regarded as a Specialized Enterprise is required to submit a sworn affidavit confirming their annual turnover/allocated budget/ gross receipt of R10 million or less and level of percentage of black beneficiaries to substantiate their EME rating claims.

A QSE is required to submit a sworn affidavit confirming their annual total revenue of between R10 million and R50 million and level of black ownership or a B-BBEE level verification certificate to substantiate their QSE rating claims.

NOTE: It is a requirement of this contract that the verification documentation of the names of proposed Sub-contractors for the work must be provided with the Tender.

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

DATE:



ANNEXURE A B – BBEE STATUS VERIFICATION CERTIFICATE

Preferencing schedule: Broad Based Black Economic Empowerment Status

Preamble

Section 10(b) of the Broad-Based Black Economic Empowerment Act of 2003 (Act No. 53 of 2003) states that “Every organ of state and public entity must take into account and, as far as is reasonably possible, apply any **relevant code of good practice** issued in terms of this Act in developing and implementing a preferential procurement policy.”

A number of codes of good practice have been issued in terms of Section 9(1) of the B-BBEE Act of 2003 including a generic code of good practice and various sector codes. The sector codes vary the metrics, weightings and targets used in the generic code of good practice to establish the overall performance of an entity and its B-BBEE status. The B-BBEE status needs to be assessed in accordance with the applicable code.

1 Conditions associated with the granting of preferences

Tenderers who claim a preference shall provide sufficient evidence of their B-BBEE Status in accordance with the requirements of section 2 in respect of the applicable code as at the closing time for submissions, failing which their claims for preferences will be rejected.

2 Sufficient evidence of qualification

2.1 Exempted micro enterprises

Sufficient evidence of qualification as an Exempted Micro-Enterprise is a :

- a) a sworn affidavit - B-BBEE Exempted Micro Enterprise (see www.thedti.gov.za/gazettes/Affidavit_EME.pdf)

2.2 Enterprises other than micro exempted enterprises

Sufficient evidence of B-BBEE Status is:

- a) A copy of the certificate issued by a verification agency accredited by the South African National Accreditation System (SANAS); or
 b) a sworn affidavit – B-BBEE Qualifying Small Enterprise (see www.thedti.gov.za/gazettes/BBEE_QUALIFYING_SMALL_ENTERPRISE.pdf)

3 Declaration

The Tenderer declares that

- a) the tendering entity is a level contributor as stated in the submitted evidence of qualification as at the closing date for submissions
 b) the tendering entity has been measured in terms of the following code (*tick applicable box*)
- ☐ Generic code of good practice
- ☐ Other – specify
- c) the contents of the declarations made in terms of a) and b) above are within my personal knowledge and are to the best of my belief both true and correct

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.

ANNEXURE A



Signature :

Name :

Duly authorised to sign on behalf of :

Telephone :

Fax: Date :

Name of witness Signature of witness

- Note:** 1) Failure to complete the declaration will lead to the rejection of a claim for a preference
2) Supporting documentation of the abovementioned claim for a preference must be submitted with the tender submission to be eligible for a preference

NOTE: ATTACHED TOGETHER WITH PREFERENCING SCHEDULE THE FOLLOWING:

Attached B-BBEE Status level as a copy of B-BBEE certificate issued in accordance with the revised Notice of Clarification published in the Notice 44 of 2015 published in Government Gazette 38799 on 15 May 2015 by the Department of Trade and Industry.

Attached hereto this page is my / our B-BBEE Status Level verification Certificate/ sworn affidavit. My failure to submit the certificate or sworn affidavit with my / our tender document may result in the award of 0 (zero) points allowable for this specific goal.

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

DATE:

**ANNEXURE B CIDB PROOF OF REGISTRATION****CONTRACTOR'S PROOF OF REGISTRATION WITH CIDB**

Attached to this page: Proof of Contractor Registration issued by the Construction Industry Development Board (CIDB).

Note: Only proof of grading for specified category **5CE** or higher are acceptable. Applications, or acknowledgement of applications by CIDB, will only be acceptable if it is certain that the application will be successful, and registration is confirmed within 21 days from the bid closing date before award of the contract.

Attached hereto this page is my / our proof of Registration with CIDB. My failure to submit proof that the company is registered with CIDB on the required grading with my / our tender document at the closing of the bid will lead to the conclusion that I am / we are not registered with the CIDB and therefore will not be eligible to tender.

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

DATE:

ANNEXURE C



ANNEXURE C TAX COMPLIANCE STATUS PIN PAGE

CONTRACTOR'S TAX COMPLIANCE STATUS PIN

Attached to this page: A copy of valid Tax Compliance Status pin page (to be confirmed/verified through SARS).

Attached hereto this page is my / our copy of valid Tax compliance status pin page. My / our failure to submit Tax compliance status pin page with my / our tender document and also to maintain a tax compliance status on CSD during the tendering period may lead to the conclusion that I am / we are not eligible to be awarded this tender.

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

DATE:

ANNEXURE D



ANNEXURE D CENTRAL SUPPLIER DATABASE

CONTRACTOR'S CENTRAL SUPPLIER DATABASE (CSD) PROOF OF REGISTRATION

Attached to this page: Central Supplier Database (CSD) proof of registration containing MAAA number.

Attached hereto this page is my / our Proof of Registration with National Treasury's Central Supplier Database (CSD).

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

DATE:

ANNEXURE E



ANNEXURE E COMPANY INTELLECTUAL PROPERTY COMMISSION CERTIFICATE

CONTRACTOR'S COMPANY INTELLECTUAL PROPERTY COMMISSION (CIPC/CIPRO) PROOF OF REGISTRATION

Attached to this page: Copies of Bidder's CIPC / CIPRO company registration documents listing all members with percentages.

Attached hereto this page is my / our Proof of CIPC/CIPRO active registration certificate.

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

DATE:

ANNEXURE F



ANNEXURE F LETTER OF GOOD STANDING FROM COIDA

CONTRACTOR'S LETTER OF GOOD STANDING FROM COIDA

Attached to this page: A valid letter of Good Standing with the Compensation Commissioner in terms of the Compensation for Occupational Injuries and Diseases Act No 130 of 1993 and or third parties insurance registered with Financial Service Board

Attached hereto this page is my / our Letter of Good Standing from COIDA.

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

DATE:



ANNEXURE G ABILITY & CAPABILITY

ABILITY & CAPABILITY

[MAX POINT 100]

The documents to be submitted with the tender for this Annexure is to evaluate the ability of the Contractor to perform the work according to specification.

The minimum allowed total points for Functionality – Ability & Capability is of 70 out of 100 will be allowed for this evaluation phase to go through to the next phase. The tenderer shall attach his proposed Ability & Capability:

SCHEDULE OF PLANT AND EQUIPMENT:

[MAX 12 POINTS]

A fully completed and signed schedule list of major items of relevant equipment that the bidder own or will lease and have for this contract must be provided.

Plant for hauling, excavation, placing, compacting, trimming, sealing, marking, concreting and lifting of road construction materials needs to be included.

Proof of at least the following plant and equipment available to be used at least to complete the project shall be provided on a company head letter sign off by the delegated person:

- 1 1 x 20 Ton excavator
- 2 4 x 20 / 25 Ton load capacity articulated dump trucks (ADT) OR ridge 10 m3 road tripper trucks
- 3 1 x grader of operation 14 ton or larger,
- 4 1 x 10 Ton vibrator roller compactors
- 5 1 x 6000 litre capacity water truck
- 6 1 x Front end loader with the capacity of flywheel gross power of 120kw

This scoring system as indicated Table G.1 shall be used to score these criteria.

COMPANY EXPERIENCE

[MAX 15 POINTS]

Attached to this page proof at least a minimum of 3 projects:

- Signed completion certificates (Final IPC) together with client reference letters for similar works projects complete
- These final signed completion certificates (Final IPC) conducted in the recent 10 years for projects where **similar** work was carried out must be for the value of R 10 million or more.
- Of which at least one project should have been done directly for SANRAL.

Tenderer can provide more than 3 signed **completion certificates** for relevant work completed, together with at least 3 client reference letters for 3 of these completion certificates submitted. The three client letters will be used to do reference checks on the contractor.

With proof of value together with completion certificates of previous projects completed, where the value of the projects is stated in other currencies, state the exchange rate at the time of project execution.

The client reference should have the following:

- Description of the project / title of project,
- Scope of work completed,
- Period of the contract / time frame,
- Contract amount/value of work done,
- Client Name, &
- Client contact details (Telephone number, Cell phone number and E-mail Address),
- Reference letter to be sign by client/employer

ANNEXURE G



Only the following will be considered as similar work conducted:

Completed projects that dealt with relevant work done on South African National Roads, will be accepted for evaluation. The following suggested combination of methods that could have been used, but not limited to, are as followed:

- • Accommodation of traffic
- • Mass Earthworks, pavement layers and stabilization
- • Crushed Stone Base
- • Bituminous Single Seal with Slurry (Cape Seal)
- • Road furnishings (i.e road marking, road signs, guardrails, culvers/drains, remove existing concrete, environmental rehabilitation next to roads etc.)

will count for relevant work done and therefor will be accepted for evaluation.

This scoring system as indicated Table G.1 shall be used to score these criteria.

METHOD STATEMENT FOR WIDENING OF N7 ENTRANCES AT CLANWILLIAM DAM

[MAX 46 POINTS]

The tenderer must acquaint themselves with the scope of work (Section C3) before writing the preliminary method statement.

It is a requirement that the Contractor will submit a preliminary Method Statement that adequately details all activities, durations, equipment and materials and any associated risks in terms of operations envisaged on this contract, with full details will be required for the following but not limited to:

- Site Establishment – typical layout with a of proposed site facilities must be submitted with tender
- Preliminary program
- Environmental matters (Hazard waste removal, Spillages, pollution prevention, etc.)to be include in the MS (like an environmental plan)
- Organogram, H&S Legal appointments and Possible Environmental officer to be appointment
- Accommodation of traffic
- Overhaul of materials
- Clearing and Grubbing
- Opening of Drains
- Installation of Prefabricated Culvers including in situ concrete work
- Removing existing Concrete
- Mass Earthworks
- Pavement layers of Gravel Material
- Stabilization
- Crushed Stone Base
- Bituminous Single Seal with Slurry (Cape Seal)
- Guardrails
- Fencing
- Road signs
- Road Marking
- Finishing Road and Road Reserve
- Testing Materials and Workmanship

ANNEXURE G



The following should also be addressed in the method statement:

- Indicated the quality management system intent to use, and provide sample record sheets
- Indicate H&S system to be used and file structure of documents
- Baseline Health, safety and environmental Risk assessment
- Adequately details all activities to be conducted, durations of activities, equipment and materials to be used

Max 10-20 pages recommended.

This scoring system as indicated Table G.1 shall be used to score these criteria.

PERSONAL EXPERIENCE:

[MAX 27 POINTS]

The Bidder shall attach his proposed management organogram, key personal structure, and human resource plan for the execution of the works.

1. Organogram (showing site management reporting to top management)
2. CV's (inclusive certified certificates of qualifications) of key personnel showing applicable experience.
3. Proof of qualifications, and accreditation / affiliations for experience key personnel / staff.

With the following identified key project team members (but not limited to) required proof of experience, qualifications/training, and where applicable registration:

Professional Contract Manager Must have:

- Civil Engineering BTech **OR** Degree qualification **together with**,
- SACPCMP registration with 10 years work experience post registration **OR**
- A valid Professional Engineering (PR.Eng. / PR Eng. Tech) registration with ECSA as a Civil Engineer or Technologist or Technician with at least 10 years post registration work experience
- as a contracts manager experience in field of road construction (layering and sealing).

Proof of qualification, registration, applicable certificate, together with a detailed/full CV to be submitted.

Construction Manager (Site Agent): Must have:

- 10 years' experience in field of road construction (layering and sealing).

Proof of any applicable qualifications, registrations and certificates together with a full detailed CV to be submitted.

Foreman Must have:

- 10 years' experience in field of road construction (layering and sealing)

Proof of any applicable qualifications, registrations and certificates together with a full detailed CV should to be submitted.

This scoring system as indicated Table G.1 shall be used to score these criteria.

ANNEXURE G



TABLE G1: Evaluation and scoring of Ability & Capability

NO.	CRITERIA	DELIVERABLES	MAXIMUM POINTS
1	Schedule of Plant and Equipment	Proof of equipment/plant available to be used to complete the work inform of a company head letter signed of by the delegated person to be submitted. Max 12 Points] At least 6 machines/ equipment to be listed, of which the following is suggested to be included but not limited to : • Tipper trucks [Max 2 Points] • Excavator [Max 2 Points] • Vibratory Compaction Rollers [Max 2 Points] • Water truck [Max 2 Points] • Grader [Max 2 Points] • Front End Loader [Max 2 Points] <i>Provide the locations where the Plant may be inspected on request</i>	12
2	Company Experience	Provide a minimum of 3 client reference letter and IPC for whom similar work was carried out and completion certificates is submitted in the last 10 years for the contract value of R10 million or more. At least one project should have been done directly for SANRAL. Providing of at least 3 x client reference letters (as per above requirements) together with the relevant signed completion certificates for 10 or more projects signed completion certificates for similar work completed (as describe above). [15 points] Providing of at least 3 x client reference letters (as per above requirements) together with the relevant signed completion certificates for 6 or more but less than 10 projects signed completion certificates for similar work completed (as describe above). [10 points] Providing of at least 3 x client reference letters (as per above requirements) together with the relevant signed completion certificates for 3 or more but less than 6 projects signed completion certificates for similar work completed (as describe above). [5 points] Less than 3 project [0 points] If less than 3 completed projects to the above requirements is submitted, it will mean that the bidder is non-responsive.	15
3	Method Statement	It is a requirement that the Tenderer shall attach a preliminary Method Statement, that adequately details all activities, and any associated risks in terms of operations envisaged on this contract in line with the requirements as described in Section C3 and in Annexure G. This method statement should cover Health and Safety, Environmental and quality management system aspects. Project Program [MAX: 8 points] Environmental [MAX: 5 points] Health & Safety [MAX: 5 points] Methodology [MAX: 25 points] Preliminary Site Layout [MAX: 3 points] Score as per SANS ISO 10854-3:2022 Ed2 Table A4	46

ANNEXURE G



4	Personal Experience	Demonstrated skills and experience for this project by submission of organization and staffing proposals with resume (CV) of each key project team member; CV to include experience, accreditation / affiliation. Proof of qualifications and registration is required. Professional Contract Manager: (Either SACPCMP or ECSA) Proof that Contracts Manager has more than 20 years of relevant work experience. [9 points] Proof that Contracts Manager has 15 years or more but less than 20 years of relevant work experience. [6 points] Proof that Contracts Manager has less than 15 years but or more than 10 years of relevant work experience. [3points] If the Contracts manager has less than 10 years will mean that the Bidder is non-responsive. [0 points] NOTE: In the case of registered as both, the highest score will take preference. COMPLETE ANNEXURE J & J-1 AND ATTACHED CV'S (proven relevant experience, qualifications & registration) Construction Manager (Site Agent): Proof that construction manager has more than 20 years of relevant work experience. [9 points] Proof that construction manager has 15 years or more but less than 20 years of relevant work experience. [6 points] Proof that construction manager has 10 years or more but less than 15 years of relevant work experience. [3 points] If construction manager has less than 10 years will mean that the bidder is non-responsive. [0 points] COMPLETE ANNEXURE J & J-1 AND ATTACHED CV'S (proven relevant experience, qualification& registration) Foreman: Proof that Foreman has more than 20 years of relevant work experience. [9 points] Proof that Foreman has 15 years or more but less than 20 years of relevant work experience. [6 points] Proof that Foreman has 10 years or more but less than 15 years of relevant work experience. [3 points] If Foreman has less than 10 years will mean that the bidder is non-responsive. [0 points] COMPLETE ANNEXURE J & J-1 AND ATTACHED CV'S (proven relevant experience, qualifications & registration).	27
	TOTAL		MAX 100 MIN 70

Attached hereto this page is my / our documents as listed above.

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

DATE:

ANNEXURE H



ANNEXURE H SCHEDULE OF PROPOSED SUB-CONTRACTORS

SCHEDULE OF PROPOSED SUB-CONTRACTORS

COMPLETE AND ATTACHED: Schedule of Proposed Sub-contractor together with a pro-forma sub-contracting agreement signed by both parties

In accordance with the General Conditions of Contract the Bidder shall state hereunder the names of Sub-contractors he proposes to employ for the execution of certain sections of the Works.

ITEM (Please specify)	PROPOSED SUB-CONTRACTOR	ADDRESS TELEPHONE AND FAX NUMBER WHERE MANUFACTURE INSPECTION AND TESTS WOULD BE EXECUTED	B-BEE LEVEL OF SUB-CONTRACTOR (B-BEE Certificate or sworn affidavit from DTI must be attached)

ANNEXURE H



DID YOU ATTACH A COPY OF VALID TAX COMPLIANCE STATUS PIN PAGE OF ALL SUB-CONTRACTORS AS LISTED ABOVE?

YES ☐ NO ☐

FAILURE BY THE BIDDER TO ATTACH LISTED SUB-CONTRACTORS' COPY OF VALID TAX COMPLIANCE STATUS PIN PAGE, THE BID MAY BE REGARDED AS NON-RESPONSIVE

DID YOU ATTACH CERTIFIED COPIES OF VALID B-BBEE CERTIFICATES OF ALL SUB-CONTRACTORS' AS LISTED ABOVE?

YES ☐ NO ☐

FAILURE BY THE BIDDER TO ATTACH LISTED SUB-CONTRACTORS' CERTIFIED COPIES OF VALID B-BEE CERTIFICATES OR IN CASE OF EMEs A SWORN AFFIDAVIT THE BID MAY BE REGARDED AS NON-RESPONSIVE

DID YOU ATTACH CERTIFIED COPIES OF VALID ID DOCUMENTS OF OWNERS OF ALL SUB-CONTRACTORS' AS LISTED ABOVE?

YES ☐ NO ☐

FAILURE BY THE BIDDER TO ATTACH LISTED SUB-CONTRACTORS' CERTIFIED COPIES OF VALID ID DOCUMENT, THE BID MAY BE REGARDED AS NON-RESPONSIVE

DID YOU ATTACH CERTIFIED COPIES OF INCORPORATION OF THE COMPANY (CIPC CERTIFICATES) OF ALL SUB-CONTRACTORS AS LISTED ABOVE?

YES ☐ NO ☐

FAILURE BY THE BIDDER TO ATTACH LISTED SUB-CONTRACTORS' CERTIFIED COPIES OF INCORPORATION OF COMPANY (CIPC CERTIFICATES), THE BID MAY BE REGARDED AS NON-RESPONSIVE

NAME OF BIDDER: _____

COMPANY NAME: _____

SIGNATURE OF BIDDER: _____ DATE: _____



DEPARTMENT OF WATER AND SANITATION

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C1: AGREEMENT AND CONTRACT DATA

CONTENTS

C1.1 PRO FORMA FORM OF OFFER AND ACCEPTANCE

C1.2 CONTRACT DATA

C 1.2.1 GENERAL CONDITIONS OF CONTRACT

C 1.2.2 SPECIAL CONDITIONS OF CONTRACT

C 1.2.3 CONTRACT SPECIFIC DATA

C1.3 PRO FORMA FORM OF GUARANTEE

FORM F – PRO FORMA FORM OF OFFER AND ACCEPTANCE

C1.1 PRO FORMA FORM OF OFFER AND ACCEPTANCE - RENDERING OF SERVICES (as per GCC 2015)

OFFER

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

WIDENING OF N7 ENTRANCES AT THE RAISING OF CLANWILLIAM DAM FOR CONSTRUCTION SOUTH IN THE WESTERN CAPE – CIDB CONTRACTOR GRADING DESIGNATION OF CIDB 5 CE OR HIGHER

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.

For the Tenderer:

Signature(s): _____

Name(s): _____

Capacity: _____

Date: _____

Name and address of organisation:

Signature and names of witness:

Signature(s):

Name(s):

Capacity:

Date:

ACCEPTANCE

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the Tenderer's offer. In consideration thereof, the Employer shall pay the 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 T1: Tender Data
- Part T2: Returnable Schedules and Documents
- Part C1: Contract Data
- Part C2: Pricing Data
- Part C3: Scope of Work
- Part C4: Site Information

and drawings and documents or parts thereof, which may be incorporated by reference into Part T1 to Part C4 above.

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

For the Employer:

Signature(s): _____

Name(s): _____

Capacity: _____

Date: _____

Name and address of organisation:

Signature and names of witness:

Signature(s): _____

Name(s): _____

Capacity: _____

Date: _____

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 _____

By the duly authorised representatives signing this Agreement, 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:

FOR THE EMPLOYER

_____	Signature(s)	_____
_____	Name(s)	_____
_____	Capacity	_____
Name and address of organisation		Name and address of organisation
_____		_____
_____		_____
_____		_____
_____	Witness signature	_____
_____	Witness Name	_____
_____	Date	_____

C1.2 CONTRACT DATA

C1.2.1 GENERAL CONDITIONS OF CONTRACT

The Contract shall be governed by the "General Conditions of Contract for Construction works, Third Edition, 2015, published by the South African Institution of Civil Engineering, Private Bag X200, Halfway House, 1685 and is obtainable from www.saice.org.za. It is supplemented with the Special Conditions of contract for the GCC and the Contract Data for GCC.

The only variations from these General Conditions of Contract shall be given in the Special conditions of Contract below. Whenever there is a conflict, the provisions in the Special Conditions and contract specific data of Contract shall prevail.

C1.2.2 SPECIAL CONDITIONS OF CONTRACT

C1.2.2.1 GENERAL

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, to the extent specified below, and shall take precedence and shall govern.

C1.2.2.2 AMENDMENT TO THE GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION WORKS. (3rd Edition 2015) (GCC)

The clauses of the Special Conditions hereafter are numbered "SCC" followed in each case by the number of the applicable clause or sub clause in the General Conditions of Contract for Construction Works (3rd Edition 2015), and the applicable heading. 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.

The pro forma annexures included in the General Conditions of Contract for Construction Works (3rd Edition 2015) are deleted for the purpose of this Contract and are replaced with the forms bound into this document

SCC 1(1) Definitions

The definitions contained in Clause 1(1) are hereby amended and/or supplemented as follows:

SCC 1.1.1 In the contract defined as:

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the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires:

SCC1.1.1.15 "Employer" means the Department of Water and Sanitation: directorate Constructions South acting on behalf of the Government of the Republic of South African and shall include the Employer's duly authorised representative.

SCC1.1.1.16 "Employers Agent" means Contract Manager Department of Water and Sanitation: Construction South or any other person appointed from time to time by him and notified in writing to the Contractor.

SCC 6.5 Day works: Delete in entirety

- SCC 8.6.1 Change paragraph to read “Except if provided otherwise in the Contract Data, the Contract, without limiting his obligations in terms of the Contract, shall as part of the documentation required before commencing with the works in accordance with Clause 5.3.1, at his own cost, effect and maintain the following insurances in the name of the Contractor.”
- SCC 8.6.1.1 Delete
- SCC 8.6.1.1.1 Delete with sub-clauses
- SCC 8.6.1.3 Change paragraph to read “Liability insurance that covers the Contractor against its respective liability for the death of, or injury to any person, or loss of, or damage to property arising from or in the course of the fulfilment of the Contract, from the Commencement Date to the issue of the Certificate of Completion for a limit of indemnity covering the risks of the Contractor for an amount not less than stated in the Contract Data.”
- SCC 8.6.6 Delete
- SCC 8.6.7 Delete

C1.2.3 CONTRACT SPECIFIC DATA

The General Conditions of Contract for Construction Works, Third Edition, 2015 published by the South African Institution of Civil Engineering, Private Bag X200, Halfway House, 1685, is applicable to this Contract and copies of these Conditions of Contract may be obtained from the South African Institution of Civil Engineering (Tel 011 805 5947), www.saice.org.za.

The General Conditions of Contract make several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the General Conditions of Contract.

The following contract specific data, referring to the General Conditions of Contract for Construction Works Third Edition (2015), are applicable to this Contract:

PART 1 COMPULSORY DATA PROVIDED BY THE EMPLOYER

Clause	Description	Information
1.1.1.13	Defects and liability period	12 Months
1.1.1.14	The time for practical Completion	6 Months from commencement date
1.1.1.15	The name of Employer	Department of Water and Sanitation: Construction South
1.2.1.2	The address of the Employer	Department of Water and Sanitation Construction South 4-6 Alkmaar Str. Paarl
1.1.1.26	The Pricing Strategy	Re-measurable
3.2.3	Specific approval of the Employer required	5.7.3 Acceleration 5.12.3 Extension of Time 6.3.1 Variations 9.1 Termination of Contract 9.2 Termination by Employer 10 Claims and Disputes
5.1.1.1	Special non-working days	1. Statuary holidays as declared by National or Regional Government. 2. Three weeks annual Builders holiday December to January (dates to be confirmed) 3. The last Friday of every month.
5.8.1	The non-working days	Sundays
5.3.1	The documentation required before commencement with works execution:	Health and Safety plan (Clause 4.3) Initial programme (Clause 5.6) Security (Clause 6.2) Insurance (Clause 8.6) Method Statements (as required by the applicable Specifications) Environmental Plan

		Other documents as specified in C3
5.3.2	The time to submit the documentation required before commencement with Works execution	28 days
5.4.2	The access and possession of the Site	Shall not be exclusive to the Contractor but as set out in the Site Information
5.13.1	The penalty for failing to complete the Works	R10 000,00 per working day
5.14.1	Requirements for practical completion	On submission and signage of all test results and inspections by SANRAL
5.16.3	The latent defect period	10 years
6.8.2	The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values: $(1 - x) \left[\frac{aL_t}{L_o} + \frac{bP_t}{P_o} + \frac{cM_t}{M_o} + \frac{dF_t}{F_o} - 1 \right]$	x = 0,10 (Fixed) Values of coefficients are: a = 0.15 Labour b = 0.30 Contractors Equipment c = 0.45 Material d = 0.10 Fuel Total of all coefficients must equal 1.0
6.8.2	The definition and source of: "L_t" is the "labour Index", "P_t" is the "Plant Index" "M_t" is the "Materials Index" "F_t" is the Fuel Index	As per Statistics South Africa and published by SAFCEC from time to time. Labour (Lt): Statistical Release P0141, Table A – Consumer Price Index: Main Indices, Geographic indices. Plant (Pt): Statistical Release P0151.1, Table 4 – Mining and construction plant and equipment index, Plant and equipment. Materials (Mt): Statistical Release P0151.1, Table 6 – Civil engineering material indices, Civil engineering total. Fuel (Ft): Statistical Release P0142.1, Table 1 – PPI for final manufactured goods.
6.8.2	The base month	The base month used for the calculation will be 30 days before the closing date of the bid.
6.5.1.2.3	The percentage allowance on the net cost of materials actually used in completed work	15%
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works	0%
6.10.3	The limit of retention money	5% of the Contract Value

8.6.1.1.2	Value of plant and materials supplied by the employer to be included in the insurance sum	0
8.6.1.1.3	Amount cover professional fees for repairing damage and loss to be included in the insurance sum	R 200 000,00
8.6.1.3	The limit of indemnity for liability insurance	R 50 000 000,00
10.5.3	The number of Adjudication Members to be appointed by the Contractor	Three (3)
10.7.1	The determination of disputes	Legal Process

FORM G CONTRACT DATA		
C1.2 CONTRACT DATA		
PART 2: DATA PROVIDED BY THE CONTRACTOR		
Clause	Description	Information
1.1.1.9	The name of the Contractor	
1.2.1.2	The address of the Contractor	Physical address: Postal address: E-mail address:
6.2.1	The security to be provided by the Contractor	Performance guarantee of 10% of Contract sum.
6.8.3	Price adjustments for variations in the costs of special materials are allowed	Special Material(s) Unit Rate

(End of Section C1)


FORM H PRO FORMA PERFORMANCE GUARANTEE
C1.3 PRO FORMA PERFORMANCE GUARANTEE
Tender Reference No:
General Conditions of Contract for Construction Works, Third Edition (2015)
**PRO FORMA
PERFORMANCE GUARANTEE**

For use with the General Conditions of Contract for Construction Works, Third Edition (2015).

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

Physical address:

"Employer" means:

"Contractor" means:

"Employer's Agent" means:

"Works" means:

"Site" means:

"Contract" means: The Agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.

"Contract Sum" means: The accepted amount inclusive of tax of R

Amount in words:

"Guaranteed Sum" means: The maximum aggregate amount of R

Amount in words:

 Type of Performance Guarantee: *(Insert Variable or Fixed)*

 "Expiry Date" means: *(Give date)* or any other later date set by the

Contractor and/or Employer provided such instruction is received prior to the Expiry Date as indicated here.

CONTRACT DETAILS

Employer's Agent issues: Interim Payment Certificates, Final Payment Certificate and the Certificate of Completion of the Works as defined in the Contract.

1. VARIABLE PERFORMANCE GUARANTEE

1.1 Where a Variable Performance Guarantee has been selected, the Guarantor's liability shall be limited during the following periods to diminishing amounts of the Guaranteed Sum as follows:

1.1.1 From and including the date of signing the Performance Guarantee up to and including the date of the interim payment certificate certifying, for the first time, more than 50% of the Contract Sum:

R.....(Amount in words.....)

1.1.2 From the day following the date of the said interim payment certificate up to and including the Expiry Date, or the date of issue by the Employer's Agent of the Certificate of Completion of the Works, whichever occurs first:

R.....(Amount in words.....)

1.2 The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the interim payment certificate certifying, for the first time, more than 50% of the Contract Sum, has been issued and the date on which the Certificate of Completion of the Works has been issued.

2. FIXED PERFORMANCE GUARANTEE

2.1 Where a Fixed Performance Guarantee has been selected, the Guarantor's liability shall be limited to the amount of the Guaranteed Sum.

2.2 The Guarantor's period of liability shall be from and including the date on which the Performance Guarantee is signed, up to and including the Expiry Date, or the date of issue by the Employer's Agent of the Certificate of Completion of the Works, or the date of payment in full of the Guaranteed Sum, whichever occurs first.

2.3 The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.

3. CONDITIONS APPLICABLE TO VARIABLE AND FIXED PERFORMANCE GUARANTEES

3.1 The Guarantor hereby acknowledges that:

3.1.1 Any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship.

3.1.2 Its obligation under this Performance Guarantee is restricted to the payment of money.

3.2 Subject to the Guarantor's maximum liability referred to in 1.1 or 2.1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 3.2.1 to 3.2.3:

3.2.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 3.2.2;

3.2.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 3.2.1 and the sum certified has still not been paid;

3.2.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 3.2.

3.3 Subject to the Guarantor's maximum liability referred to in 1.1 or 2.1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:

3.3.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 3.3; or

- 3.3.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 3.3; and
- 3.3.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.
- 3.4 It is recorded that the aggregate amount of payments. required to be made by the Guarantor in terms of 3.2 and 3.3 shall not exceed the Guarantor's maximum liability in terms of 1.1 or 2.1.
- 3.5 Where the Guarantor has made payment in terms of 3.3, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
- 3.6 Payment by the Guarantor in terms of 3.2 or 3.3 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
- 3.7 Payment by the Guarantor in terms of 3.3 will only be made against the return of the original Performance Guarantee by the Employer.
- 3.8 The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may consider fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
- 3.9 The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
- 3.10 This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 1.1.2 or 2.2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
- 3.11 This Performance Guarantee, with the required demand notices in terms of 3.2 or 3.3, shall be regarded as a liquid document for the purposes of obtaining a court order.
- 3.12 Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrates' Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at:

Date:

Guarantor's signatory (1):

Capacity:

Guarantor's signatory (2):

Capacity:

Witness signatory (1):

Witness signatory (2):



DEPARTMENT OF WATER AND SANITATION

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WIDENING OF N7 ENTRANCES AT THE RAISING OF CLANWILLIAM DAM FOR CONSTRUCTION SOUTH IN THE WESTERN CAPE – CIDB CONTRACTOR GRADING DESIGNATION OF CIDB 5 CE OR HIGHER

C2 PRICING DATA

CONTENTS

C2.1 PRICING INSTRUCTIONS

C2.2 BILL OF QUANTITIES

C2.1 PRICING INSTRUCTIONS

1. GENERAL

The Bill of Quantities forms part of the Contract Documents and must be read and priced in conjunction with all the other documents comprising the Tender Documents which include the Conditions of Tender, Conditions of Contract, the Specifications (including the Project Specification), and the Drawings.

2. DESCRIPTION OF ITEMS IN THE SCHEDULE

The short descriptions of the items in the Bill of Quantities are for identification purposes only and the measurement and payment clause of the Standardised Specifications and each Particular Specification, read together with the relevant clauses of the Project Specification and directives on the drawings, set out what ancillary or associated work and activities are included in the rates for the operations specified.

3. QUANTITIES REFLECTED IN THE SCHEDULE

The quantities given in the Bill of Quantities are estimated quantities only and will be subject to re-measuring during the execution of the work. Where quantities or sums are indicated as "Provisional, the Employer reserves the right to adjust the quantity or sum upwards or downwards as necessary, or the item can be omitted altogether. The Contractor shall obtain the Employers Agent's detailed instructions for all work before ordering any materials or executing work or making arrangements for it.

The Works as finally completed in accordance with the Contract shall be measured and paid for as specified in the Bill of Quantities, and the contract price for the completed contract shall be computed at the relevant unit rates and prices, all in accordance with the General and Special Conditions of Contract, the Specifications and Project Specifications, and the Drawings, et.. Unless otherwise stated, items are measured net in accordance with the Drawings, and no allowance has been made for waste.

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

4. PRICING OF THE SCHEDULE

The prices and rates to be inserted by the Tenderer in the Bill of Quantities shall be the full inclusive prices to be paid by the Employer for the work described under the several items, and shall include full compensation for all costs and expenses that may be required in and for the completion and maintenance during the defects liability period of all the work described and as shown on the drawings as well as all overheads, profits, incidentals and the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the Tender is based. Reasonable unit rates and prices shall be entered in the Bill of Quantities as these will be used for the assessment of payment for any additional work that may have to be carried out.

Each item shall be priced and extended to the "Total" column by the Tenderer, with the exception of the items for which "rate only" is required or items which already have Prime Cost or Provisional Sums affixed thereto. If the Contractor omits to price any items in the Bill of Quantities, then these items will be considered to have a nil rate or price.

All items for which terminology such as "inclusive" or "not applicable" have been added by the Tenderer will be regarded as having a nil rate which shall be valid irrespective of any change in quantities during the execution of the Contract.

All rates and amounts quoted in the Bill of Quantities shall be in Rand and shall include all levies and taxes (other than VAT). VAT will be added in the summary of the Bill of Quantities.

5. CORRECTION OF ENTRIES

Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry, and the alteration must be initialled by the Tenderer.

6. MONTHLY PAYMENTS

Unless otherwise specified in the Specifications and Project Specifications, progress payments in Interim Certificates, referred to in Clause 6.10 of the General Conditions of Contract 2015 (Third edition), in respect of "sum" items in the Schedule of Quantities shall be by means of interim progress instalments assessed by the Employers Agent and based on the measure in which the work actually carried out relates to the extent of the work to be done by the Contractor.

7. UNITS OF MEASUREMENT

The units of measurement described in the Bill of Quantities are metric units for which standard international abbreviations are used. Abbreviations used in the Bill of Quantities, including some non-standard abbreviations, are as follows:

Non-Standard Abbreviations	
%	percent
No.	number
Prov sum	Provisional sum
R/only	Rate only
Sum	lump sum
Standard Abbreviations	
kPa	kilopascal
M	metre
m ²	square metre
m ³	cubic metre
MN	meganewton
MN.m	meganewton-metre
MPa	megapascal
T	ton (1000 kg)

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

Unit:	The unit of measurement for each item of work
Quantity:	The number of units of work for each item.
Rate:	The agreed payment per unit of measurement.
Amount:	The product of the quantity and the agreed rate for an item.
Lump-sum:	An agreed amount for an item, the extent of which is described in the Bills of Quantities but the quantity of work of which is not measured in any units.

8. ARITHMETICAL ERRORS

Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.

If a bill of quantities (or schedule of quantities or schedule of rates) applies and there is a discrepancy between the unit rate and the line-item total resulting from multiplying the unit rate by the quantity, the line item total shall govern and the rate shall be corrected. However, in exceptional cases where, in the opinion of the Employer, there is an obviously gross misplacement of the decimal point in either the unit rate or line total, or where the error was obviously not a result of incorrect arithmetic but rather the result of a writing error, the Employer reserves the right to correct either the tendered rate or the line total as the case may be, subject to clarification in terms of SANS 10845 -3 Clause 4.10.

Where there is an error in the total of the prices, either as a result of other corrections required by this checking process or in the Tenderer's addition of prices, the total of the prices shall be adjusted to obtain the correct tender value.

DEPARTMENT OF WATER AND SANITATION

DWS07 0523 WTE



WIDENING OF N7 ENTRANCES AT THE RAISING OF CLANWILLIAM DAM FOR CONSTRUCTION SOUTH IN THE WESTERN CAPE – CIDB CONTRACTOR GRADING DESIGNATION OF CIDB 5 CE OR HIGHER

C2.2 BILL OF QUANTITIES

SBD 3.2

PRICING SCHEDULE – NON-FIRM PRICES (PURCHASES)

Name of Bidder..... Bid number.....
Closing Time 11:00 Closing date.....

OFFER TO BE VALID FOR 120 DAYS FROM CLOSING DATE OF BID PROJECT DURATION TO BE CONSIDERED WHEN PRICING IS 6 MONTHS

Pricing for this Bid shall be as per the Standard Specification for Road and Bridge Works for State Road Authorities – 1998 Edition (COLTO)

N7 Section 3 Olifants-Doorn Water Resource Development Project

					SECTION 1300
Number	Item Description	Unit	Quantity	Rate	Amount R
13.00	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				
13.01	Contractor's general obligations				
	(a) Fixed obligations	L/sum	1.0		
	(b) Value-related obligations	L/sum	1.0		
	(c) Time-related obligations	L Sum	1.0		
Total Carried Forward To Summary					

N7 Section 3 Olifants-Doorn Water Resource Development Project					
					SECTION 1500
Number	Item Description	Unit	Quantity	Rate	Amount R
15.00	ACCOMMODATION OF TRAFFIC				
15.01	Accommodating traffic and maintaining temporary deviations	km	2.0		
15.02	Earthworks for temporary deviations				
	(a) Shaping of temporary deviations	km			Rate Only
	(b) Cut and borrow to fill	m ³			Rate Only
	(c) Cut to spoil	m ³			Rate Only
15.03	Temporary traffic-control facilities				
	(a) Flagmen	man-day	132.0		
	(b) Portable STOP and GO-RY signs	No	2.0		
	(c) Temporary traffic-control signals as specified or as shown on the drawings	No	2.0		
	(d) Amber flicker lights	No	4.0		
	(e) Road signs R and TR series, (size indicated on drawing)				
	(1) Type R				
	(i) R1 - Stop	No	2.0		
	(2) Type TR				
	(i) TR104	No	2.0		
	(ii) TR201-60	No	2.0		
	(iii) TR201-80	No	8.0		
	(iv) TR201-100	No	7.0		
	(v) TR214	No	8.0		
	(f) Road signs W and TW series, (size indicated on drawing)				
	(1) Type W				
	(i) W409 - T - Junction Chevron	No	2.0		

	(2) TW series				
	(i) TW336	No	14.0		
	(ii) TW336-WA	No	4.0		
	(iii) TW344	No	2.0		
	(iv) TW344 - WC	No	2.0		
	(v) TW345	No	2.0		
	(vi) TW345 - WC	No	2.0		
	(vii) TW411	No	2.0		
	(g) Road signs, STW-, DTG-, TGS- AND TG-series (excluding delineators and barricades)				
	(1) TGS series				
	(i) TGS 133	No	2.0		
	(ii) TGS 134	No	2.0		
	(2) TIN series				
	(i) TIN 11.2	No	8.0		
	(ii) TIN 11.3	No	10.0		
	(iii) TIN 11.4	No	4.0		
	(h) Delineators (DTG50J) (size indicated):				
	(1) Single size 250 x 1000mm (TW401)	No	38.0		
	(2) Mounted back to back size 250 x 1000mm (TW402)	No	35.0		
	(i) Two-way communication devices	No	2.0		
15.13	In situ preparation and compaction of existing gravel shoulders to 93% of modified AASHTO density	m ³	115.0		
Total Carried Forward To Summary					

[illegible]

SECTION 1600

16.00	OVERHAUL
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Quantity

16.01

$$\mathfrak{m}^3$$

2 250.0

16.02

m³-km

11 250.0

[illegible]

SECTION 1700

17.00	CLEARING AND GRUBBING
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17.01	Clearing and grubbing
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ha

0.3

17.04	Clearing and grubbing at inlets and outlets of hydraulic structures
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$$\overline{m^2}$$

10.0

17.05	Cleaning out of hydraulic structures
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(a) Pipes with an internal diameter up to and including 750 mm

$$\overline{m^3}$$

17.0

(b) Pipes with an internal diameter exceeding 750 mm

$$\overline{m^3}$$

Rate Only

(c) Box culverts up to and including 1,5 m vertical dimension

$$\overline{m^3}$$

Rate Only

(d) Box culverts exceeding 1,5 m vertical dimension

$$\overline{m^3}$$

10.0

0.00

Total Carried Forward To Summary

[illegible]

SECTION 2100

21.00	DRAINS				
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21.01	Excavation for open drains:				
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	(c) Executing soft material situated				

(a) Excavating soft material situated within the following depth ranges below the surface level:									
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	(1) 0 m up to 1,5 m	m³	90.0		
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	(2) Filing 15 days before 20	3			Part of

	(2) Exceeding 1,5 m and up to 3,0 m	m³			Rate Only

	(b) Extra over subitem 21.01(a) for	m ³	15.0		
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	(5) Extra over subitem 2101(a) for excavation in hard material, irrespective of depth	m	15.0		
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0.00	0.00	0.00	0.00	0.00	0.00

21.02	Clearing and shaping existing open drains	m ³	10.0		

21.19	Selected backfill material under concrete	m ³	67.5		
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21.19	Selected backfill material under concrete-lined side drains compacted to 97% of	lin-	07.5	
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modified AASHTO density				
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Total Carried Forward To Summary				
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N7 Section 3 Olifants-Doorn Water Resource Development Project					
					SECTION 2200
Number	Item Description	Unit	Quantity	Rate	Amount R
22.00	PREFABRICATED CULVERTS				
22.01	Excavation				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(1) 0 m up to 1.5 m	m ³	130.0		
	(2) Exceeding 1,5 m and up to 3,0 m	m ³	20.0		
	(3) Exceeding 3,0 m and up to 4,5 m	m ³	110.0		
	(b) Extra over subitem 22.01(a) for excavation in hard material, irrespective of depth	m ³	150.0		
22.02	Backfilling:				
	(a) Using the excavated material	m ³	10.0		
	(b) Using imported selected material	m ³	65.0		
	(c) Extra over subitems 22.02(a) and (b) for soil cement backfilling				
	(1) with 3% Cement	m ³	0.0		
	(2) with 5% Cement	m ³	15.0		
22.03	Concrete pipe culverts:				
	(b) On class B bedding				
	(3) 600mm dia. Type 100D	m	10.0		
	(6) 1050mm dia. Type 100D.	m	5.0		
22.05	Portal and rectangular culverts:				
	(a) Complete with prefabricated floor slabs				
	(15) 2100mm x 1500mm Type	m	6.0		
22.07	Cast in situ concrete and formwork				
	(c) In inlet and outlet structures, skewed ends, catchpits, manholes, thrust and anchor blocks, excluding formwork but including class U2 surface finish				

<u>N7 Section 3 Olifants-Doorn Water Resource Development Project</u>					
					SECTION 3300
Number	Item Description	Unit	Quantity	Rate	Amount R
33.00	MASS EARTHWORKS				
33.01	Cut and borrow to fill, including free-haul up to 0.5km				
	(a) Gravel material in compacted layer thickness of 200 mm and less:				
	(1) Compacted to 93% of modified AASHTO density	m ³	9 660.0		
33.03	Extra over item 33.01 for excavating and breaking down material in:				
	(b) Hard excavation	m ³	520.0		
33.04	Cut to spoil, including free-haul up to 0,5 km. Material obtained from:				
	(a) Soft excavation	m ³	600.0		
	(c) Hard excavation	m ³	120.0		
	(e) Boulder excavation class B	m ³	35.0		
33.07	Removal of unsuitable material (including free-haul of 0.5 km):				
	(a) In layer thicknesses of 200 mm and less:				
	(1) Stable material	m ³			Rate Only
	(2) Unstable material	m ³			Rate Only
	(b) In layer thicknesses exceeding 200mm				
	(1) Stable material	m ³	35.0		
	(2) Unstable material	m ³	35.0		
33.09	Material bladed to windrow	m ³	15.0		
33.10	Roadbed preparation and the compaction of material				
	(a) Compaction to 90% of modified AASHTO density	m ³	500.0		
33.11	Three-roller-passes compaction:				

[illegible]

[illegible]

SECTION 3400

34.00	PAVEMENT LAYERS OF GRAVEL MATERIAL				
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34.01	Pavement layers constructed from gravel taken from cut or borrow, including free haul up to 1,0 km				
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(a) Gravel selected layer compacted to:				
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	(1) 93% of modified AASHTO density (specify compacted layer thickness)	m ³	550.0		
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	(2) 95% of modified AASHTO density (specify compacted layer thickness)	m ³	500.0		
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[illegible]

SECTION 3600

36.00	CRUSHED STONE BASE				
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36.01	Crushed-stone base				
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	(c) Generated from type G1 material				

	(a) Constructed from type G1 material obtained from commercial sources and compacted to 88% of apparent relative density				
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	(1) 37mm nominal maximum size stone	m³	400.0		
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26.03	Cracked stone base trial section (thickness	m ²	100.0		
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36.03	Crushed-stone base trial section (thickness indicated) constructed in accordance with the provisions of clause 3603	m ²	100.0		
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Total Carried Forward To Summary				
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<u>N7 Section 3 Olifants-Doorn Water Resource Development Project</u>					
					SECTION 5400
Number	Item Description	Unit	Quantity	Rate	Amount R
54.00	GUARDRAILS				
54.01	Guardrails on timber posts:				
	(a) Galvanised	m			Rate Only
54.04	End treatments:				
	(a) End wings	No			Rate Only
	(b) Bull noses	No			Rate Only
	(d) End treatments in accordance with the drawings where single guardrail sections are used	No	2.0		Rate Only
54.05	Additional guardrail posts:				
	(a) Timber	No			Rate Only
54.06	Reflective plates	No	50.0		
54.07	Removing existing guardrails	m	500.0		
54.08	Renovating guardrail material:				
	(a) Guardrails and end treatments	m	100.0		
	(b) Posts	No	10.0		
54.09	Re-erection of guardrails with recovered and/or new material:				
	(a) Single guardrail	m	500.0		
54.10	Re-erection of end treatments with recovered material:				
	(a) End wings	No	2.0		
	(b) Bull noses	No	2.0		
Total Carried Forward To Summary					

N7 Section 3 Olifants-Doorn Water Resource Development Project					
					SECTION 5500
Number	Item Description	Unit	Quantity	Rate	Amount R
55.00	FENCING				
55.01	Clearing the fence line, 2m wide strip	km	0.7		
55.02	Supply and erect new fencing material for new fences and for supplementing material in existing fences which are being repaired or removed:				
	(a) Zinc-coated barbed wire (SABS 675)				
	(1) High-tensile-grade, single-strand 3,15mm x 2,50mm oval-shaped wire				
	(i) Galvanised, Class A	km	5.6		
	(b) Zinc-coated smooth wire				
	(1) 4,0mm dia,mild steel straining wire, Grade C galvanised	km	0.1		
	(g) Standards				
	(1) 1,86m x 2,5 kg/m mild steel y section	No	65.0		
	(h) Droppers				
	(1) 1,4m x 0,56 kg/m mild steel ridge back section	No	250.0		
	(i) Straining posts, stays and anchors:				
	(a) Vertical				
	(2) Timber straining posts (diameter indicated)	No	10.0		
55.04	Moving existing fences and gates:				
	(a) Fences:				
	(1) Stock-proof fences	km	1.0		
55.05	Dismantling existing fences:				
	(a) Fences:				
	(1) Stock-proof fences	km	1.0		
Total Carried Forward To Summary					

<u>N7 Section 3 Olifants-Doorn Water Resource Development Project</u>					
					SECTION 5600
Number	Item Description	Unit	Quantity	Rate	Amount R
56.00	ROAD SIGNS				
B56.01	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:				
	(e) Aluminium sheet regulatory warning and information signs				
	(1) Octagonal				
	(iv) 1220 mm	No	2.0		
	(4) Rectangular (LxH)				
	(i) 3600 mm x 600 mm	No	1.0		
	(ii) 2700 mm x 450 mm	No	1.0		
	(iii) 1800 mm x 2400 mm	No	4.0		
B56.02	Extra over item 56.01 for using:				
	(a) Background of retro-reflective material of:				
	(i) Class I	m ²	13.5		
	(ii) Class II	m ²	0.0		Rate Only
	(iii) Class III	m ²	0.0		Rate Only
	(b) Lettering, symbols, numbers, arrows, emblems and borders of retro-reflective material:				
	(i) Class I	m ²	10.0		
56.03	Road sign supports (overhead road sign structures excluded):				
	(b) Steel tubing, 76mm D-section with 3mm wall thickness	t	0.2		Rate Only
	(c) Timber				
	(1) 150 mm dia.	m	18.0		

N7 Section 3 Olifants-Doorn Water Resource Development Project					
					SECTION 5700
Number	Item Description	Unit	Quantity	Rate	Amount R
57.00	ROAD MARKINGS				
57.01	Road marking paint:				
57.02	Retro-reflective road marking paint:				
	(a) White lines (broken or unbroken)				
	(1) 100 mm wide	km	1.5		
	(2) 150 mm wide	km	0.5		
	(3) 200 mm wide	km	0.5		
	(4) 500 mm wide	km	0.1		
	(b) Yellow lines (broken or unbroken)				
	(1) 100 mm wide	km	0.0		Rate Only
	(2) 150 mm wide	km	1.0		
	(d) White lettering and symbols	m²	44.0		
	(e) Yellow lettering and symbols	m²	12.0		
	(f) Transverse lines, painted island and arrestor bed markings (any colour)	m²	830.0		
57.05	Road studs				
	(a) Uni-directional				
	(1) Stimsonite or similar	No	50.0		
	(2) Armourlite or similar	No	0.0		Rate Only
	(b) Bi-directional				
	(1) Stimsonite or similar	No	64.0		
57.06	Setting out and premarking the lines (Excluding traffic-island markings, lettering and symbols)	km	3.0		
57.07	Re-establishing the painting unit at the end of the maintenance period	L/sum	1.0		
57.08	Removal of existing, temporary or permanent road markings by:				
	(a) Sandblasting	m²	320.0		
57.09	Removal of existing roadstuds	No	0.0		Rate Only
Total Carried Forward To Summary					

[illegible]

<u>N7 Section 3 Olifants-Doorn Water Resource Development Project</u>					
					SECTION 5900
Number	Item Description	Unit	Quantity	Rate	Amount R
59.00	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS				
59.01	Finishing the road and road reserve:				
	(b) Single carriageway road	km	1.0		
Total Carried Forward To Summary					

<u>59.00N7 Section 3 Olifants-Doorn Water Resource Development Project</u>					
					SECTION 8100
Number	Item Description	Unit	Quantity	Rate	Amount R
81.00	TESTING MATERIALS AND WORKMANSHIP				
81.02	Other special tests requested by the engineer	Prov sum	1.0		
81.03	Providing testing equipment:				
	(a) Rolling straight-edge	No	1.0		
	(b) Core drill	No	1.0		
Total Carried Forward To Summary					

SECTION 8100

Number	Item Description	Unit	Quantity	Rate	Amount R
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81.00	TESTING MATERIALS AND WORKMANSHIP
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81.02	Other special tests requested by the engineer	Prov sum	1.0		
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81.03	Providing testing equipment:
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(a) Rolling straight-edge	No	1.0		
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(b) Core drill	No	1.0		
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Total Carried Forward To Summary

<u>N7 Section 3 Olifants-Doorn Water Resource Development Project</u>		
	SUMMARY OF SECTIONS	
Section	Description	Amount R
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	
1500	ACCOMMODATION OF TRAFFIC	
1600	OVERHAUL	
1700	CLEARING AND GRUBBING	
2100	DRAINS	
2200	PREFABRICATED CULVERTS	
3300	MASS EARTHWORKS	
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL	
3500	STABILIZATION	
3600	CRUSHED STONE BASE	
4600	BITUMINOUS SINGLE SEAL WITH SLURRY (CAPE SEAL)	
5400	GUARDRAILS	
5500	FENCING	
5600	ROAD SIGNS	
5700	ROAD MARKINGS	
5800	LANDSCAPING AND PLANTING PLANTS	
5900	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	
8100	TESTING MATERIALS AND WORKMANSHIP	
SUBTOTAL EXL. VAT		
ADD 10% CONTINGENCIES		
Add 15% VAT		
TOTAL INCL. VAT		

NOTE: ALL FIELDS ON THIS FORM SHOULD BE COMPLETED IN FULL. IF A FIELD IS NOT APPLICABLE, THE FIELD SHOULD BE INDICATED AS "NOT APPLICABLE".

Required by:

Department of Water and Sanitation

- Service basis.
(See note here under)

CONSTRUCTION SOUTH
CLANWILIAM DAM IN THE WESTERN
PROVINCE

- Period required before service after receipt of order:

Name and addresses of the supplier where the product is sourced from?

-

-

Country of origin

- Delivery period:

*FIRM / NOT FIRM

- Is the price firm?

*FIRM / NOT FIRM

Location (Country of origin) where product is sourced from (factory/depot)

Are you the manufacturer of the product offered?

*YES / NO

Does the offer comply with the specification (s) ?:

* YES / NO

If **not** to specifications, indicated deviations(s):

Period required for delivery after receipt of order:

PRICE ADJUSTMENTS

A NON-FIRM PRICES SUBJECT TO ESCALATION

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

$$(1 - x) \left[\frac{aL_t}{L_o} + \frac{bP_t}{P_o} + \frac{cM_t}{M_o} + \frac{dF_t}{F_o} - 1 \right]$$

Where:

X = Fixed 10% (0,10) of the original bid price. Is portion of the bid price remains firm, it is not subject to any price escalations.

a = Factor of the bid price for Labour

b = Factor of the bid price for Contractors Equipment

c = Factor of the bid price for Material

d = Factor of the bid price for Fuel

The total of the various factors "a", "b", "c", "d" must add up to 100%

"Lt", "Pt", "Mt" & "Ft" = The indices are available from the STATS SA website **(As defined in C1.2.3 – Clause 6.8.2):**

Labour (Lt): Statistical Release P0141, Table A – Consumer Price Index: Main Indices, Geographic indices.

Fuel (Ft): Statistical Release P0142.1, Table 1 – PPI for final manufactured goods, Diesel (there is only 1 value for diesel since January 2018 , not split anymore).

Materials (Mt): Statistical Release P0151.1, Table 6 – Civil engineering material indices, Civil engineering total.

Plant (Pt): Statistical Release P0151.1, Table 4 – Mining and construction plant and equipment index, Plant and equipment.

- The following index/indices must be used to calculate your bid price: **(As per C1.2.3 Contract data: THE INDICES BASED DATE WILL BE 30 DAYS BEFORE TENDER CLOSING DATE- CLAUSE 6.8.2)**

All index's based date (closing of tender) : Date _____

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

FACTORS	PERCENTAGE OF BID PRICE
a	15%
b	30%
c	45%
d	10%
TOTAL	100%

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=		
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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

I / we fully agree to these price escalation adjustment.

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



DEPARTMENT OF WATER AND SANITATION

DWS DWS07 0523 WTE

WIDENING OF N7 ENTRANCES AT THE RAISING OF CLANWILLIAM DAM FOR CONSTRUCTION SOUTH IN THE WESTERN CAPE – CIDB CONTRACTOR GRADING DESIGNATION OF CIDB 5 CE OR HIGHER

C3: SCOPE OF WORKS

CONTENTS

C3.1 STANDARD SPECIFICATION

C3.2 PROJECT SPECIFICATION

C3.3 PARTICULAR SPECIFICATIONS

C3.1 STANDARD SPECIFICATION

3.1.1 APPLICABLE STANDARD SPECIFICATIONS

The scope of this bid shall be executed as per the Standard Specification for **Road and Bridge Works for State Road Authorities – 1998 Edition (COLTO)**. Any reference in the Standard Specification to the Engineer shall be interpreted as the Employers Agent as defined under sub clause 1.1.1.16 of the General Conditions of Contract.

3.1.2 AMENDMENTS TO STANDARD SPECIFICATION

A number of amendments to the Standard Specifications were made and are included in this Bid VO(Bid). Where the Specification of this VO (Bid) is silent on a particular matter, the Particular Specification of the Main Contract shall apply.

STANDARD SPECIFICATIONS - Road and Bridge Works for State Road Authorities – 1998 Edition (COLTO).

SECTIONS:

B1200: GENERAL REQUIREMENTS AND PROVISION

B1300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

B1500: ACCOMMODATION OF TRAFFIC

B1600: OVERHAUL

B2100: DRAINS

B2200: PREFABRICATED CULVERTS

B3300: MASS EARTHWORKS

B3400: PAVEMENT LAYERS OF GRAVEL MATERIAL

SECTION B1200: GENERAL REQUIREMENTS AND PROVISION

B1204 PROGRAMME OF WORK

a) General requirements

Add the following as a continuation of the first paragraph:

“In drawing up the programme the contractor shall make allowance for the following:

- i) The following embargo hours and days will apply:
 - The period starting half an hour before sunset to half-an-hour after sunrise the following day.
 - From 12h00 on the Thursday before Easter Friday to sunrise on the Tuesday following Family Day.
 - The day before Christmas Eve to sunset on the day after New Year's Day.
 - For School holidays
 - From 12:00pm on the day of the closure for the holiday until 07:00am on the following day.
 - From 12:00pm on the day preceding the opening of schools until 07:00am on the day of the opening
 - For Long weekends and public holidays.
 - From 12:00pm on the day preceding the commencement of the long weekend or public holiday until 07:00am on the day following the long weekend or public holiday.
- ii) The following restricted working conditions will apply:
 - Restricted working conditions due to the traffic accommodation requirements as specified in Section 1500 of the Standard Specifications and Section B1500 of these project specifications, or as required to accommodate traffic safely to suit the Contractors' chosen work methods and the construction equipment being used on the site of the works.
 - Two-way traffic shall be maintained at all times over the length of this project and STOP-GO operations will not be permitted.
 - Work at night will not be permitted.
 - Possible delays due to low temperatures during the winter months.
 - Complying with the requirements of the EMP.

B1206 THE SETTING OUT OF WORK AND PROTECTION OF BEACONS

Delete the first paragraph

Add the following at the end of the fourth paragraph:

“Road markings, particularly the divergent/convergent lines of ramp interchanges and no overtaking barriers are also elements of the road that require proper setting out. The contractor shall prove to the Employer’s Agent Representative (EAR) that critical reference points have been satisfactorily recorded for later reinstallation before any work commences that will obliterate the existing markings.”

B1207 NOTICES, SIGNS AND ADVERTISEMENTS

Remove this part of the sentence from the first paragraph

“... or as approved advertisements for the contractor’s establishment.”

Delete the third paragraph and replace with the following:

“All signboards erected in accordance with the drawings shall be removed at the same time as the disestablishment of the contractor’s camp. Payment under sub item 13.01 for the final instalment of 15% of the tendered lump sum shall not be made unless all the advertisements, notices and temporary signs have been removed.

B1209 PAYMENT

(b) Rates to be inclusive

Add the following to the first paragraph:

“VAT shall be excluded from the rates.”

(c) The meanings of certain phrases in payment clauses

Procuring and furnishing ... (material)

Add the following:

“Payment for procuring and furnishing material from commercial sources shall include all transport costs, irrespective of distance hauled”.

Add the following sub-clauses:

“(g) Work in confined areas

Except where provided for in the specification and the Pricing Schedule no extra payment shall be made nor shall any claim for additional payment be considered for construction in confined areas. The omission of standard pay items from the schedule of quantities shall be taken to be deliberate and any additional costs incurred shall be included in the bulk rate.”

B1210 CERTIFICATE OF PRACTICAL COMPLETION OF THE WORKS

Remove this part of the sentence from the first paragraph

“... ..in terms of clause 54 of the general conditions of contract”

Add the following to sub-clause (e) before the semicolon:

“(including road studs)”

Add the following paragraphs after item (h):

“Notwithstanding that there might be natural or programmed sections of the works that will result in them being completed in their entirety before other sections, no consideration shall be given to the issuing of practical completion certificates for portions of the works. The use of any completed roadway or portions of the work, whether for unhindered use by the public or for accommodation of traffic while other portions are being constructed, shall not constitute use or occupation by the Employer.

In addition to the listed specified items of work and regardless of the degree of beneficial occupation by the Employer, the works shall be considered for practical completion only if the following criteria also have been met:

- (i) The written list of outstanding items of work can be completed within 28 days of the list having been accepted in writing by the contractor.
- (ii) Any information in the contractor’s possession, which is required by the engineer and has been requested in writing, has been supplied.

B1215 EXTENSION OF TIME RESULTING FROM INCLEMENT WEATHER

Remove this sub-clause in it’s entirety and replace it with Project Specification PS1.12 CLIMATIC CONDITIONS in the Main Contract

“... ..

B1229 SANS CEMENT SPECIFICATIONS

Add the following to this clause:

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

SANS 50197-1: 2000: Cement compositions, specifications and conformity criteria Part 1: Common cements.

On this contract CEM II 32, 5 shall be used for stabilisation purposes.

The specific type of cement will be determined through testing once materials from commercial sources are known as well as the availability of cement”

“B1230 MATERIALS (New Clause)

The contractor, when using materials that are required to comply with any standard specification, shall, if so ordered, furnish the engineer with certificates showing that the materials do so comply.

The contractor shall satisfy himself that any quarry selected for use provides the necessary mined material in accordance with the specification.

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

B1303 PAYMENT

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

B13.01 The contractor's general obligations

Add the following pay sub-item:

“(d) Health and safety obligation.....month”

Delete the third paragraph commencing “Should the final value of the work”.

Delete “in terms of clause 49 of the general conditions of contract ” in the 4th, 8th and 10th paragraphs.

In the 11th paragraph, the following amendments apply:

- *Start the paragraph to read “The tendered rate per month for all time related pay items represent full compensation ...”; and*
- *Delete “received the letter of acceptance in terms of clause 12” and replace with “date of Commencement of the Works.”*
- *In the last line, delete “...as provided in clause 45 of the general conditions of contract”.*

SECTION B1500: ACCOMMODATION OF TRAFFIC

B1501 SCOPE

Add the following:

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

The rehabilitation of the N7 will be carried out while maintaining two-way traffic; this will be achieved by the provision of temporary road widening which is incorporated in the final roadway. (Refer to drawing 2380.50.00.GZA.03D002).

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

B1502 GENERAL REQUIREMENTS

(a) Safety

Add the following:

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

(f) Approval of temporary deviations

Add the following:

“If, after any temporary deviation has been constructed, any changes are considered necessary or desirable, the proposal shall be submitted to the EAR for his approval.”

(i) Traffic Safety Officer

Add the following to the end of the second paragraph:

“The contractor shall submit a CV of the candidate to the engineer for approval before the candidate is appointed as the traffic safety officer. “

Insert the following as the opening phrase to sub-sub-clause (i):

“make himself available to discuss road safety and traffic accommodation matters whenever required by the EAR and shall be responsible...”

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

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

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

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

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

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

Add the following sub-sub-clauses:

- “(ix) The traffic safety officer shall be equipped with a cellular telephone and shall have a vehicle and sufficient labour at his disposal 24 hours a day, including all prescribed non-working days. He shall be directly answerable to the contractor’s site agent. The traffic safety vehicle shall be a truck with a capacity of 3 tons and shall be equipped with a high visibility rear panel in accordance with the requirements of the SADCRTSM. The words TRAFFIC CONTROL shall be written on a warning sign in highly legible letters, not less than 150mm high, and the sign shall be mounted on the vehicle at least 1,5m above ground level. The proposed sign and letter dimensions shall be submitted to the engineer for his approval.

The vehicle shall also be equipped with an amber-coloured flashing light of the rotating parabolic reflector type with a minimum intensity of 100W. The warning light shall be switched on at all times and the sign shall be displayed when the vehicle is used on site.

The traffic safety officer shall have a direct line of communication at all times with the police and traffic officers responsible for the area within limits of the contract.

The provision of the road safety vehicle, driver, fuel, maintenance cost, labourers and the cost of the cellular telephone shall be deemed to be included in the rates tendered for the contractor's establishment on site.

- (x) Ensure that all obstructions related to the contractor's activities be removed before nightfall where applicable as instructed by the engineer and that the roads are safe for night time traffic.
- (xi) The traffic safety officer shall, in addition to the duties listed in paragraph 1502(i), also be responsible for the removal of broken down vehicles off the roadway and implementing actions requested by the traffic authorities with regard to the work to be carried out, be responsible for the erection and maintenance of all traffic signs necessary for the accommodation of traffic.
- (xii) In the event of an accident the traffic officer shall record in a written report the details of the accident, record the position of all temporary road signs, barricades, delineators, flagmen and any other devices used for traffic accommodation. In addition the report shall include a neat dimensional sketch, photographs, identifiable permanent features, and any other relevant information.
- (xiii) The traffic safety officer shall carry out four inspections at night between the hours of 19h00 and 06h00 and shall complete the necessary documentation and reports as required by the EAR."

(k) Site personnel

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

(l) Failure to comply with provisions

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

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

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

Accommodation of public traffic on the works or any delays as a result thereof, as well as any suspensions due to failure on the part of the Contractor to comply with the provisions for accommodation of traffic, shall not be regarded as reason to claim for extension of time and time related costs.

B1503 TEMPORARY TRAFFIC-CONTROL FACILITIES

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

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

Replace the third paragraph with the following:

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

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

(a) Road signs and barricades

Add the following:

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

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

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

(b) Channelisation devices and barricades

Add the following:

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

Delineators shall:

- (i) comply with the manufacturing and reflective requirements of the SADCRTSM and the blades shall be reversible with dimensions as indicated on the drawings;
- (ii) have smooth and round edges and be mounted on a post and base. All components shall be of durable plastic material with a height of 1200mm;
- (iii) have the lower edge of the reflective part of the delineator mounted not lower than 200mm above the road surface;
- (iv) be capable of withstanding the movement of passing vehicles and gusting winds up to 60 km/h in typical working conditions without falling over. To achieve this, the base shall be at least 0,18m² and ballasted by sandbags with sand;
- (v) together with its mounting be designed such that it will collapse in a safe manner under traffic impact.
- (vi) Will be removed from service if the height is less than 80% of the original height (720mm).

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

(e) Warning devices

Add the following:

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

- (i) Vehicle mounted flashing lights

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

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

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

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

(ii) Sign mounted flashing lights

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

(a) Road Markings

Add the following new paragraphs:

"Temporary road markings shall be applied before opening to traffic:

- temporary deviations, and
- completed sections of the permanent works.

Temporary road markings shall consist of pre-marking, and/or retro-reflective road marking paint, and/or temporary road studs, as directed by the engineer.

Temporary road studs shall be installed at double the spacing (48m) and shall consist of Stimsonite "66" or similar approved, and shall be fixed to the road with bitumen-rubber crack sealant to allow for easy removal by application of gentle heat.

Spray plastic, retro-reflective type paints shall be used for temporary road markings on deviations that will be demolished or resurfaced.

Temporary road marking for demarcation of temporary traffic lanes on the final road surface shall only be allowed if approved by the engineer. Should temporary road markings lines be approved, it shall consist of one of the following as directed by the engineer:

- (i) Construction grade tape for temporary road marking which can be removed from the road surface by applying gentle heat. The tape shall be foil backed, adhesive, reflective tape, as manufactured by the 3M Corporation, or equal approved.
- (ii) The length of the skip lines may be shortened within the standard 12m module length. However, the start of the shortened skip line shall coincide with the start of the final, full-length skip line of the permanent markings. This will ensure that the temporary skip line is painted over when the final markings are applied.
- (iii) Removable traffic paint TRP10 by Plascon (or similar approved). Removal of TRP10 paint shall be done using paint remover TRP20 by Plascon (or similar approved)."

Add the following sub-clauses:

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

The EAR may instruct the contractor to provide any other road sign, reflective tape, etc not measured in standard pay items. Such road signs shall conform to the requirements of the SADCRTSM, or specification provided by the EAR. Similarly, in order to ensure that the travelling public is kept fully informed and warned on matters relating to the accommodation of traffic, construction sign posting and the effect of the construction on the free flow of traffic through the site, the EAR may arrange for advertising in the press and/or for other forms of publicity.

(h) Flagmen

Flagmen shall be provided where shown on the drawings or required by the specification. During the daytime, at least two flagmen shall be provided at each traffic control point in addition to the STOP/GO sign operator (if approved), one flagman at the 80 km/h sign and a second roving flagman to indicate to the traffic at the end of the queue to stop. At night time only one roving flagman equipped with a Stromberg Lightman xenon strobe, or similar approved, and a torch is required at each traffic control point as well as the traffic light operator. Where the shoulder of the road is closed to traffic, a flagman shall be provided at the leading end of the closure during daytime. This flagman shall be provided at the 80-km/h sign to warn

the traffic about the closure. No flagman shall be on duty for a period of more than 10 hours per day.

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

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

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

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

B1517 MEASUREMENT AND PAYMENT

Amend item 15.01 to read as follows:

“Item	Unit
B15.01 Accommodating traffic and maintaining temporary deviations:	
(a) On the Road	kilometre (km)

Replace the first paragraph with the following:

“The unit of measurement shall be the kilometre, measured along the centre lines of the road, the ramps from the noses and the cross roads where work is carried out. Accommodation of traffic shall be measured once only, that is no separate payments shall be made for lane and shoulder rehabilitation, slurry, reseal, asphalt overlay, side drains, etc. The bypass for abnormal vehicles and gravel service roads shall not be measured. Only the net distance of the road shall be measured and overlapping distances during staged rehabilitation shall not be measured.

In the second paragraph, replace the comma after “deviations” at the start of the third line with a full stop and delete the remainder of this first sentence. Also delete the whole of the second sentence, which refers to compensation for the traffic safety officer.

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

SECTION B1600: OVERHAUL

B1602 DEFINITIONS

Add the following sub clause:

“(f) Cleaning of public roads

Where material is spoiled on public roads during the hauling of material, the road shall be cleaned immediately. Claims by the public for any damages to vehicles due to material spilled on the road surface will be recovered from the Contractor.

SECTION B2100: DRAINS

B2104 SUBSOIL DRAINAGE

(a) Materials

(i) Pipes

Amend this sub-clause by adding the following to the end of the third paragraph:

“(category-heavy duty) or SABS 1601 (stiffness class 350)

The pipes to be used shall be either slotted u PVC pipes or perforated HDP pressure pipes, 100mm ID.”

(ii) Natural permeable material

Add the following to the 3rd paragraph:

“The crushed stone shall be fine (13.2mm nominal) or coarse (19mm nominal) and shall be washed clean of all fines”

(iii) Synthetic-fibre filter fabric

Under item (4) Selection, of this sub-clause, replace the 1st paragraph with the following:

“The filter-fabric used for subsoil drains shall be grade as (or similar approved) and shall satisfy the criteria for a grade 2 geotextile as given in Table 2104/2.”

(b) Construction of subsoil drainage systems

Add the following sub-clause:

“(v) Proving of pipes in subsoil drainage systems

On completion of the pipe laying and prior to backfilling, all pipe joints shall be surveyed as proof of their installation to line and level. After backfilling the pipes shall be proved by pulling through a cylindrical cleaning brush followed by a wooden mandrill $\pm 400\text{mm}$ long and 5mm in diameter less than the bore of the pipe. Proving of pipes shall not be paid for separately and the cost thereof shall be deemed to be included in the rate tendered for laying the pipe.”

B2107 MEASUREMENT AND PAYMENT

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

B21.01 Excavation for open drains

Add the following to the penultimate paragraph:

“The tendered rate shall also include full compensation for trimming the open drains”

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

B21.03 Excavation for subsoil drainage systems

Add the following sub item:

“(c) Extra-over item 21.03(a) for excavating through stabilised
layers of existing pavement cubic metre (m³)

Add the following to the second paragraph:

“Excavation in stabilised pavement material shall be paid only in sub item (c) and shall not be paid as an extra over for hard material in sub item (b). For sub item (c), the tendered rate shall also include full compensation for backfill with soilcrete.”

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

**B21.12 Concrete outlet structures, manhole boxes, Junction boxes,
and cleaning eyes for subsoil drainage systems number (No)”**

Add the following:

“The tendered rate shall also include full compensation for procuring and finishing the galvanised woven wire mesh, cutting, waste, installing the wire mesh at outlets and keeping the wire mesh in the pipe openings clean for the duration of the contract period.”

SECTION B2200: PREFABRICATED CULVERTS

B2203 MATERIALS

(b) Portal and rectangular prefabricated concrete culvert units

Replace this sub-clause with the following:

"Precast concrete units shall comply with the requirements of the latest SANS 986:2006 specification.

Prior to the manufacture of any units the manufacturer shall submit his Quality Plan to be approved by the engineer before delivery of any units to site. As part of the Quality Plan submitted for approval copies of calibration certificates of both gauges used for proof loads and cover meters used at the factory shall be supplied to the engineer. The originals of these certificates shall at all stages also be available for inspection at the factory premises. The manufacturer shall check each precast unit for cover compliance, and random checking of units shall not be permitted. The engineer's representative may visit the factory at any stage to ascertain adherence to the quality plan as well as to check covers before delivery to site. Any substandard cover shall result in the batch being rejected. Should the manufacturer not be adhering to their Quality Plan the engineer may exercise the right to reject the use of products from the manufacturer concerned. The employer shall also be informed in all such cases.

For durability requirements due to the reduced cover provided for pre-cast culverts all durability testing shall be done in accordance to Clause B6404(h) shall fall within the severe category. For units within the 5km zone from the coast the very severe category shall be used and increased cover shall be as specified by the engineer."

SECTION B3300: MASS EARTHWORKS

B3302 MATERIALS

(b) Fill

Add the following under item (iv):

“The maximum swell at 100% Mod AASHTO compaction shall not be more than 2%.”

SECTION B3400: PAVEMENT LAYERS OF GRAVEL MATERIAL

B3402 MATERIALS

(a) General

Add the following at the end of the second paragraph:

"For chemically stabilised layers the material shall conform to the requirements in table B3402/5."

Add the following after the second paragraph:

"Distinction shall be made between crushed and natural G4, G5 and G6 materials. Where the crushing and/or screening of these materials has been specified, the combined grading shall conform to the grading limits specified for G4 class material in Table 3402/1."

Replace Table 3402/5 with:

"TABLE B3402/5: REQUIREMENTS FOR CHEMICALLY STABILISED LAYERS"

Classification	C1	C2	C3	C4
Material before treatment	At least G2 quality	At least G4 quality	At least G5 quality	At least G6 quality
PI after treatment	Non-plastic	Non-plastic	6 max. *(1)	6 max. *(1)
UCS (MPa) *(2)	6 min.	4 min.	1,5 min	0,75 min.
ITS (kPa) *(3)	-	-	250 min.	200 min.
WDD (% loss)	5 max.	10 max.	20 max.	30 max.

Note:

- * (1) For materials derived from the basic crystalline rock group, the Plasticity Index after stabilisation shall be non-plastic.
- * (2) Unconfined Compressive Strength @ 100% Mod. AASHTO density
- * (3) Indirect tensile Strength @ 100% Mod. AASHTO density
- * (4) Wet/Dry Durability according to Method B 8110"

(b) Compaction requirements

Delete this clause and replace with the following:

"The minimum in situ dry density of gravel material shall be as specified hereinafter for the respective layers in terms of a percentage of modified AASHTO density.

Lower selected subgrade: 93%

Upper selected subgrade: 95%

Stabilised subbase (C3): 97%

Add the following new sub-clauses:

”(d) Durability of Material to be used in Subbase Layers

G5 quality material to be used in the subbase layer shall have a durability (when stabilised at the specified application rate with the specified stabilisation agent) such that the maximum aggregate loss after 12 cycles, when a 150mm diameter sample of the material is tested according to Clause B8107 (g) is 20% for the C3 layer.

(e) Indirect Tensile Strength (ITS) of Stabilised Subbase Layers

In preparing the sample for the indirect tensile testing specified in Table 3402/5, all material retained on the 37,5mm sieve shall be scalped off and discarded rather than crushed and blended into the sample. Samples shall be cured using the rapid curing method described in the Employer's M2 manual.

(f) Field Moisture Content Correction

The field moisture content of samples taken for the above tests from the layer during construction shall be adjusted to within 1% of the materials Optimum Moisture Content (OMC) prior to compaction in the laboratory.

(g) Grading and CBR of Subbase Material

All material to be used in the C3 (G5 quality material) subbase layer, whether imported from commercial sources, crushed and screened from one or more of the designated borrow pits or blended with crushed rock or material from the existing pavement layers, shall fall within the grading limits specified in Table B3402/6 prior to compaction.

TABLE B3402/6: SUBBASE GRADING

SIEVE SIZE (mm)	PERCENTAGE PASSING (by mass)
53,0	100
37,5	85 – 100
19,0	65 – 90
4,75	35 – 65
2,00	25 – 50
0,425	15 – 30
0,075	8 – 15

In addition, the following minimum CBR values shall apply to the material prior to stabilisation:

G5 (for C3 layer) - 45 @ 95% Mod. AASHTO density.”

B3403: CONSTRUCTION

Add the following sub clauses:

“(f) Temporary stockpiling of material

Replace the table in the sub clause with the following:

“	<u>D₉₀</u>	<u>D_{max}</u>	<u>D_{average}</u>
Selected layers	25mm	35mm	8mm
Subbase layers	18mm	24mm	5mm
Base layers	15mm	22mm	5mm
Shoulders and wearing course	20mm	30mm	0mm

B3405 CONSTRUCTION

a) Level

Replace the table in the sub clause with the following:

“	^H ₉₀	^H _{max}
Selected layers	25 mm	33 mm
Subbase layers	15 mm	20 mm
Base layers	12 mm	15 mm
Shoulders		25 mm”

Add the following:

“Level control for the various pavement layers shall be done at the following intervals in longitudinal direction:

Layer	Interval
Selected layer, subbase, shoulders and wearing course	20 m
Base	10 m

a) Layer thicknesses

Replace the table in the sub-clause with the following:

“	^D ₉₀	^D _{max}	^D _{ave}
Selected layers	25 mm	35 mm	8 mm
Subbase layers	18 mm	24 mm	5 mm
Base layers	15 mm	22 mm	5 mm
Shoulders		30 mm	0 mm”

(f) Surface irregularity

Replace the second and third paragraphs with the following:

“(i) The average number of irregularities per 100m equal to or exceeding 5mm when taken over 300m to 600m lengths.....3

“(ii) The number of irregularities equal to or exceeding 5mm when taken over 100m lengths.....4”

Add the following:

“The construction tolerances of clause B3405 shall apply to layers constructed from reprocessed material, but when a gravel layer is placed on top of an existing layer without the existing layer being trimmed to prescribed levels, the tolerances of sub clause (b) do not apply.”

B3406: QUALITY OF MATERIALS AND WORKMANSHIP

Add the following after the second paragraph:

“The test results and measurements will be judged in accordance with the provisions of Section 8200”

B3407: MEASUREMENT AND PAYMENT

Add the following immediately after the first paragraph:

“Payment for layer works will be made as follows:

(a) Lower Selected Layer (G9)

Payment shall be under either Item 34.01 or Item 34.03 as applicable.

(b) Upper Selected Layer (G7)

The portion of the layer falling outside the existing road prism (after the removal of topsoil) shall be paid under Item 34.01 or Item 34.03 as applicable. The portion of the layer falling within the existing road prism (reworked existing pavement layer(s)) shall be paid under Item 34.04. The full layer width shall however be constructed simultaneously.

(c) Subbase Layer (C3)

Payment shall be under Item 34.01. The entire layer (in half widths) including the unstabilised shoulder portion shall be constructed in one operation.

Item

B34.01 (d) Gravel subbase (chemically stabilized material):

In sub item (ii), substitute “96%” with “97%”.

SECTION B3500: STABILISATION

B3502 MATERIALS

(a) Chemical stabilising agents

Delete sub-clauses (ii) Ordinary Portland cement and (iii) Portland blast-furnace cement and replace with the following:

"Cement shall comply with the relevant requirements of SANS 50197-1:2000. The use of strength classes greater than 32,5 shall not be permitted.

On this contract CEM II (B-L)-32.5 shall be used for stabilisation purposes."

B3503 CHEMICAL STABILISATION

(h) Curing the Stabilised work

Add the following to paragraph:

"Method (iii) and (iv) shall not be applicable."

(i) Construction limitations

In Table 3503/1, delete "8 hours for ordinary Portland cements and cement blends" and replace with "6 hours"

Add the following:

"No stabilisation shall be done with falling air temperatures when the air temperature falls to below 7°C, or during rising air temperatures, when the air temperature is below 3°C.

Moisture content tests shall not be undertaken more than one day in advance of in-situ stabilisation operations. Care shall be taken to ensure that samples are representative of the in-situ material. Checks shall be conducted when wet weather occurs between initial testing and work commencing on any section."

In Table 3503/1, delete "8 hours for ordinary Portland cements and cement blends" and replace with "6 hours".

B3504: MECHANICAL MODIFICATION

(b) Mixing materials from various sources

Delete the contents of this clause and replace with:

“The mixing of materials from various sources requires the natural gravel material from borrow pits and material recovered from existing pavement layers, where it does not meet the requirements of a parent G5 material, to be blended with crushed G1/G2 quality material obtained from weathered rock and blasted materials to achieve an equivalent parent G5 material. This shall be achieved by tipping onto the road, preparing, breaking down and evenly spreading, after which the two materials shall be thoroughly mixed as described in subclause 3208(a): Spraying and mixing.”

B3506 TOLERANCES

(b) Uniformity of mix (chemical stabilisation)

Method (ii) will be applicable in this contract.

Add the following:

“The coefficient of variation shall not exceed 0.3 (30%) for mixing in place and 0.2 (20%) for plant-mixed material, calculated as follows:

$$\frac{S_n \times 100}{X_n}$$

Where:

X_n is the average, and

S_n is the standard deviation of stabilizer.”

B3507 CONSTRUCTION OF TRIAL SECTION

In the second paragraph, replace “2000m²” with “500m²”.

Add the following to the last paragraph:

“The fact that the EAR has approved the mixing process shall not relieve the contractor of his obligations in respect of the mixing specified elsewhere in the specifications. It will serve only as a guideline to ensure that the specified mixing requirements can actually be met.”

B3509 QUALITY OF MATERIALS AND WORKMANSHIP

Add the following after the second paragraph:

“The test results and measurements will be judged in accordance with the provisions of Section 8300.”

B3510 MEASUREMENT AND PAYMENT

Item

B35.01 Chemical stabilization extra over unstabilized compacted layers

Replace the first paragraph with the following:

“The unit of measurement shall be the netto cubic metre of stabilized material, the quantity of which shall be determined in accordance with the final in-situ authorized dimensions of the layers treated as instructed. Additional material pre-shaped to allow for finishing by cutting/trimming, will not be included in the measurement.”

Item

Unit

B35.02 Chemical Stabilising Agents

Replace sub item (a) with the following:

“(a) Common cements to SANS 50197-1:2000

(h) CEM II (B-L) A Grade 32.5ton (t)

Item

B35.02 Chemical stabilizing agent

Replace the third paragraph with the following:

“Subject to the provisions of clause 1220, the quantity of stabilizer will be determined in accordance with the authorized rate of application and netto layer dimensions. Extra stabilizer added for wastage and higher pre-shaping levels will not be included in the quantity and the cost thereof shall be deemed to be included for in the rates.”

Delete items 35.04 and 35.05. Curing of stabilised layers will not be measured separately and the cost thereof will be deemed to be included in the rate tendered for item 35.01.

Add the following:

“Chemical stabilising agents for use in the temporary deviations shall be measured under item B35.02.”

SECTION B3600: CRUSHED-STONE BASE

B3602 MATERIALS

(a) Requirements for crushed aggregate

After the first sentence delete the remainder of the paragraph and replace with the following:

"The aggregate shall not contain more than 0,1% by mass of unwanted material such as wood, coal or similar organic material.

Aggregates containing mica, such as granite, gneiss, mica schist, pegmatite, sandstone shall not contain more than 2% by mass of free mica, especially muscovite, when assessed by visually separating the particles, or more than 4% by volume when assessed by means of microscopic slides. Aggregate containing easily detectable quantities (more than 1%) of olivine, serpentine and sulphide minerals such as pyrites and marcasite, must be considered with caution, and may warrant additional evaluation to the satisfaction of the engineer. Argillaceous rocks may only be used if specified in the project specifications, or with the engineer's written approval.

Soft or weathered particles shall be controlled by the Durability Mill Index values specified in B3602(e) Durability.

Provision has been made in clause B8108(b)(iii), calculation, for the determination and calculation of the Apparent Density for aggregates with a total water absorption greater than 1,5%, when total water absorption is determined according to TMH1 methods B14 and B15."

(c) Grading requirements

Replace entire clause with the following:

"The target grading, after compaction, shall be as near as possible to the mean of the specified grading envelope listed in table 3602/1 and shall be continuous with no marked gaps or excessive quantities of any particular size. The mean grading of each lot (minimum of 4 but preferably 6 test points per lot) shall conform to the approved target grading plus or minus the tolerances specified in table 3602/4."

Add the following new sub-clause:

"(e) Durability

The durability property of aggregates derived from the basic crystalline group shall be assessed by means of the Ethylene Glycol Durability Index. When

tested in accordance with the method prescribed in B 8105(g) the Durability Index shall not exceed four. In addition, the 10% FACT value obtained after soaking in ethylene glycol for four days shall not be less than 50% of that obtained on the unsoaked sample. Where any values are obtained that fall outside the above requirements, a detailed assessment of the quarry shall be undertaken together with a specialist mineralogical evaluation of both the coarse as well as fine fractions in order to assess the long-term durability properties of the material.

For Basic crystalline rocks, Arenaceous rocks, Argillaceous rocks and Diamictites the Durability Mill Index (DMI) shall be less than 125. For all other rock types the Durability Mill Index (DMI) shall not be more than 420, subject to the % passing the 0,425mm sieve not increasing by more than 8 percentage points during the Durability Mill test.”

Table 3602/1

In table 3602/1 delete “85% of bulk relative density” and replace with:

“88% of Apparent Relative Density”.

(f) Water

Water used in the compaction and/or slushing of crushed stone base layers shall comply with the criteria specified in Clause B1219.”

B3604 CONSTRUCTION

(b) Compaction

Add the following at the end of the first paragraph:

“The specified density shall also be obtained in the upper 50mm of the layer.”

B3605 PROTECTION AND MAINTENANCE

Replace “moisture content of the layer” in the first paragraph with “moisture content of the upper 50mm of the layer.”

Add the following to the end of the second sentence:

“as determined according to TMH 1 method A7.”

B3607 QUALITY AND WORKMANSHIP

Delete “or 8300” in the second paragraph.

B3608 MEASUREMENT AND PAYMENT

Delete the first paragraph and replace it with the following:

“Note: No additional or extra over payment shall be made for work in restricted or confined areas.”

SECTION B4600: BITUMINOUS SINGLE SEAL WITH SLURRY (CAPE SEAL)

B4602 GRADES OF BINDER TO BE USED

(a) Tack coat

(iii) Homogeneous modified binders

Delete “(1) 5% latex cationic emulsion” and replace with: “Binder Class S-E1

B4603 CONSTRUCTION BEFORE SLURRY APPLICATION

(a) Application of tack coat and aggregate

Add after the first paragraph:

“If the bituminous binder used for the tack coat is of Class S-E1/S-E2, the 19mm aggregate for the first layer shall be pre-coated with a bituminous based pre-coating fluid, at 12 l/m³ as specified in sub-clause 4302(d).

If the bituminous binder used for the tack coat is the 70% polymer modified spray grade emulsion of Class SC-E1/SC-E2, no pre-coating of the 19mm aggregate shall be required. A second application of 35% cationic bitumen emulsion shall then be applied to the surface of the 19mm aggregate.

The aggregate to be used with the tack coat shall conform to the grading requirements for a 19,0mm nominal size Grade 1 surfacing aggregate.”

(b) Initial rolling

Replace “sub-sub-clause 4307(b)(ii)” with:

“Sub-sub-clause B4307(b)(ii)”

(c) Broom drag and final rolling of aggregate

Replace “sub-sub-clause 4307(b)(iii)” with:

“Sub-sub-clause B4307(b)(iii)”

B4604 SLURRY

(c) Composition of slurry

Add the following:

“The aggregate used for slurry shall comply with the requirements of Table 4302/11. The first slurry shall be a fine slurry “coarse” to “medium grade” and the second slurry shall be fine slurry “fine grade”. For tender purposes the mix proportions of the slurry shall be based on mass.”

After the second paragraph add the following:

“The slurry consistency when measured in accordance with ASTM D3910 Section 6.1 shall be between 30mm and 40mm.”

(e) Application of slurry

In the first sentence of the third paragraph insert the words:

"one or" before "two layers".

Replace the fifth and sixth paragraphs with:

"The measurement of slurry application rate shall be the dry mass of aggregate in kg/m² applied per m² of surfacing and the total nominal rate of application shall be 13 kg/m² if only the 1st slurry layer is applied, and 15 kg/m² in total if the 1st and 2nd slurry layers are applied. Payment for slurry application variations shall be based only on the actual total rate of slurry application of the completed Cape Seal."

Add the following after the eighth paragraph (now the seventh paragraph):

"Both the first and second layer of slurry shall be spread to the full final width of the primed surface."

Change the eighth line of the tenth paragraph as follows:

"..... pneumatic – wheeled roller. However, each layer of slurry shall be...."

B4605 MEASUREMENT AND PAYMENT

Item

Unit

B46.01 Bituminous seal with 19,0mm aggregate and slurry

In the heading to this item add the words:

"(excluding 2nd application of binder)."

Delete the unit and add the following sub items:

"(a) Single 19mm seal with stone for seal from commercial sources and first (coarse to medium grade) slurry layer with a tack coat comprising

(i) 70% polymer modified cationic spray-grade emulsion of Class SC-E2	square metre (m2)
--	-------------------

(ii) Hot applied polymer modified bitumen binder of Class S-E1	square metre (m2)
---	-------------------

(b) Single 19mm seal with stone for seal from borrowpit crushed by the Contractor

(c) Extra over (a) for 2nd fine slurry layer	square metre (m2)"
--	--------------------

In the measurement paragraph delete the word "complete", and after the word "slurry" insert;

"(excluding 2nd application of binder)".

Add the following at the end of the payment clause for this item:

"The cost of providing the slurry seal over the final primed width shall be included in the rate for providing the seal with slurry over the bituminous surfaced width."

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

B46.03 Bituminous binder variations

Amend (l) to read:

"(l) modified spray grade emulsion of Class SC-E1/SC-E2 (65/70	litre (ℓ)"
--	------------

Add the following subitem:

"(m) Hot applied modified bitumen binder of Class S-E1/S-E2	litre (ℓ)"
---	------------

Add the following items:

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

B46.11 Second application of binder consisting of 35% spray grade cationic emulsion	litre (ℓ)
--	------------------

The unit of measurement shall be the litre of emulsion sprayed as specified and measured of the application temperature.

The tendered rate shall include full compensation for procuring and furnishing the binder and applying the second application of binder as specified."

SECTION B5400: GUARDRAILS

B5405 REMOVING, RENOVATING AND RE-ERECTING GUARDRAILS

(a) Removing the guardrails

In the 3rd line of the 1st paragraph, after "150mm layers," delete the full stop and add" of suitable G7 quality material."

B5406 MEASUREMENT AND PAYMENT

Item	Unit
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B54.07 Removing existing guardrails	metre (m)
--	------------------

Add the following:

"The tender rate shall also include for the backfill of the holes with suitable G7 quality material."

SECTION B5500: FENCING

B5501 SCOPE

Add the following:

“This section also covers the repairing of existing fences that form part of the permanent work and/or routine maintenance”

SECTION B5600: ROAD SIGNS

B5601 SCOPE

Replace “South African Road Traffic Signs Manual” in the second paragraph with:

“SADC Road Traffic Signs Manual”

B5603 MANUFACTURING OF ROAD SIGN BOARDS AND SUPPORTS

(a) Road signboards

Add the following:

“The contractor shall make every effort to ensure that signboards are correct in all respect and before dispatching the boards from the manufacturer’s factory shall provide the engineer with a 100mm x 150mm colour photograph of each sign face for approval of the correctness of the legend. Such approval will not imply final acceptance of the board. If the contractor is in any doubt as to the correctness of the sign detail, the sign designer shall be contacted for verification.”

(ii) Steel profile road signboards

Add the following:

“Chromadek section shall be assembled in accordance with the details of Standard Plans SP-B-12-Sheets 4 and 5 and SP-B-4-Sheets 33E and 34E.

Where the letter or legends cross the horizontal joints of the sign panels, the letter shall be cut on the joint and both ends folded around the radius.

Retro-reflective material to adjoining Chromadek panels on a sign shall be practical visual match of the specified colour.”

B5604 ROAD SIGN FACES AND PAINTING

Add the following sub-clause:

“(e) Application of retro-reflective material

All sign faces shall be faced with retro-reflective material. Painted front sign faces shall not be used.

Where applied to Chromadek sections, retro-reflective material shall be applied as specified for aluminium section in Clause 5603(d) of the Standard Specification, and of Clause B5603(a)(ii) of this project Specification.”

B5605 STORAGE AND HANDLING

Add the following:

“The following shall not be allowed on the sign face:

- Drilling of holes, except for the fastening of overlays
- Application of any form of adhesive
- Cleaning with any chemicals that are not specifically approved by the manufacturer of the retro-reflective material.
- Covering the sign face with an impermeable material that does not allow free circulation of air.”

B5606 ERECTING ROAD SIGNS

(c) Erection

Add the following:

“After erection the signboard shall be thoroughly cleaned with a cleaning agent approved by the retro-reflective material’s manufacturer.

All vegetation obstructing the new or replaced sign board shall be removed and disposed of as instructed by the engineer.”

B5608 DISMANTLING, STORING AND RE-ERECTING EXISTING ROAD SIGNS

Add the following:

“Existing overhead and ground mounted road signs that are being replaced by new signs shall be dismantled and disposed of by the Contractor. Where possible the dismantling of the signs shall not be before the replacement sign is erected and displayed. Where dismantling of the sign is required before erection of the replacement sign, the dismantling shall not take place until immediately before work is to commence on the replacement, and the replacement shall be completed and the new sign displayed as soon as possible thereafter (within 72 hours).

Dismantling shall include sign panels and ground mounted sign supports.

Ground mounted sign supports shall be cut off just below ground level. Material excavated for removal of buried poles shall be replaced, and any depression made good using excess material from excavation for new signs.

Payitems are provided in the Pricing Schedule. Payment will differentiate between different types of sign panels.”

B5609 MEASUREMENT AND PAYMENT

Item	Unit
B56.01 Road sign boards with painted or coloured semi-matt background. Symbols, lettering, and borders in semi-matt black or in Class I retroreflective material, where the sign board is constructed from:	

Amend the last two lines of the second paragraph to read:

“completion, delivery, installation of the road sign board complete as specified, and the removal and disposal of all vegetation obstructing the motorists’ view of the new or replaced sign board.”

SECTION B5700: ROAD MARKINGS

B5701 SCOPE

Replace “South African Road Traffic Signs Manual” in the second paragraph with:

“SADC Road Traffic Signs Manual”

B5702 MATERIALS

(b) Roadstuds

Replace the second sentence with the following:

“All square roadstuds shall have a footprint of 100mm x 100mm and a height of 20mm. Round roadstuds shall be 100mm in diameter and 20mm in height. Only non-metallic products with glass as reflective material shall be used. Shank roadstuds shall be used on the outside slow lane shoulders and only where the pavement layers are appropriate.”

B5706 SETTING OUT THE ROAD MARKINGS

Add the following:

“Where road markings are to be replaced after milling/overlay seal, it is essential that all existing barrier lines and other road marking lines be accurately referenced before commencement of milling or other operations which will obliterate the existing road markings. The position of barrier lines shall be re-assessed on site by the engineer before the contractor commences with the road marking.”

B5707 APPLYING THE PAINT

Replace the last paragraph with the following:

“The centre-line shall be painted immediately after 2km of continuous road has received a new asphalt layer, or 4km of continuous road has received a new seal surfacing or where, in the opinion of the engineer, conditions are unsafe.

The Contractor’s establishment on site and general obligation shall be deemed to fully include the establishment of the road-marking team, irrespective of the number of times the road-marking team is required to be on site or is required to move within the site.”

B5711 GENERAL

Insert the following into the last sentence of the last paragraph between “black paint” and “or chemical paint remover”:

“, bituminous emulsion, slurry”

Add the following to the last paragraph:

“Where black paint is used, it shall be matt.”

Add the following clause:

“B5715 REMOVAL OF EXISTING ROAD STUDS

The existing road studs shall be removed from the road surface prior to milling.”

B5714 MEASUREMENT AND PAYMENT

Item	Unit
B57.06 Setting out and pre-marking the lines (excluding traffic island markings, lettering and symbols)	kilometre(km)

Add the following:

“Referencing of existing barrier lines and other road marking lines prior to milling and other operations, shall be included in the tendered rate for setting out and pre-marking.”

C3.2 PROJECT SPECIFICATION

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C3.2 PROJECT SPECIFICATION

PS 1 PROJECT DESCRIPTION

The Department of Water and Sanitation's Construction Division has been appointed to undertake the raising of the Clanwilliam dam.

The raised dam wall will be approximately 370 m in length and 49 m in maximum height. At full supply level the reservoir will cover a surface area of approximately 2 022 ha and capacity of 344,3 million cubic metre

The works include:

- addition of concrete on the downstream, left and right side of the existing dam wall,
- extending the apron,
- river outlet control house as well as various other pipe outlet structures on the downstream side,
- short tunnel and coffer dam works on the upstream side
- construction of a free-standing intake tower on the up-stream side,

This work must be done without interfering with the day to day operation of the dam.

PS 2. LOCATION AND ACCESS TO SITE

The dam site is situated on the Olifants river, in the Western Cape, approximately 2 km South- West of Clanwilliam town in the Western Cape Province.

The site is immediately next to the N7 and accessed through a controlled gate. The gravel site roads will be regularly maintained but could get challenging under abnormal rainfall conditions

PS 3. SCOPE OF WORK

PS 3.1 SCOPE

The scope form part of Variation Order No. 1 for the "Raising of Clanwilliam Dam" and consist of activities to **upgrade 2 existing intersections** at $\pm$ Km 122.05 and Km 125.96 on the National Route 7, Section 3: Olifants water resource development project: Raising of Clanwilliam Dam.

Work at the two intersections namely:

- a. Northern Intersection - N7 – SV 125830 to SV 126060**
- b. Southern Intersection – N7 – SV 121800 to SV 122300**

consists mainly of:

- Accommodation of traffic
- Overhaul of materials
- Clearing and Grubbing
- Opening of Drains
- Installation of Prefabricated Culvers including in situ concrete work
- Removing existing Concrete
- Mass Earthworks
- Pavement layers of Gravel Material
- Stabilization
- Crushed Stone Base
- Bituminous Single Seal with Slurry (Cape Seal)
- Guardrails

- Fencing
- Road Signs
- Road Markings
- Finishing Road and Road Reserve
- Testing Materials and Workmanship.

PS3.2 Site Preparation

Before any demolition and/or surfaces preparation work commences, the Employer's Agent must arrange inspection and arrange written approval that such work may commence. Specific attention shall be given to environmental issues. Once the Employers Agent is satisfied that all the required precautions and preparations have been met, the work may be proceeded.

PS 3.3 Protection against structures

Where so specified, existing structural members shall be protected against damage by falling debris.

PS 4. FACILITIES

PS 4.1 Site office and storage area

A storage area to the east of the N7 will be provided as part of the site establishment area. If the Contractor requires more area or any other area it must be specified in his document and be negotiated with the Employer.

A Site Office and suitably positioned areas for use by his / her workers on site during resting and eating periods and storage for equipment and plant and must be provided for by the successful Bidder.

PS 4.2 Accommodation for employees

No housing is available for the contractor's employees and the contractor shall make his / her own arrangements to house his /her employees and to transport them to the site. No informal housing or squatting shall be allowed on the site.

PS 4.3 The supply of water and electrical power

The Contractor shall make his own arrangements to provide his own power supply. Failure or interruption of the power supply shall not relieve the Contractor of any of his obligations under the Contract.

PS 5. CONSTRUCTION MATTERS

PS 5.1 General Responsibilities

The Site and all services are under the control of the Employers Agent and therefore the Employer expects the Contractor to liaise regularly with the Employers Agent in order to ensure smooth execution and integration of activities.

Non-performance of the Employers Agent shall not relieve the Contractor of any of his obligations under the Contract.

Due to the specialised nature of the Works the Employers Agent shall ensure that qualified technical staff is available on site to carry out the necessary work. The contractor must liaise in time with the Employers Agent on his requirements.

PS 5.2 Contractors Methods and Materials (Equipment)

It is a requirement of this contract that final work procedures must be approved before commencement of work. Method statements with full details concerning the methods, equipment and materials are required.

A preliminary method statements must be submitted with the tender to evaluate the ability of the Contractor to perform the work according to specification, as part of the returnable documents under section T2.

PS 5.3 Quality Management

The Contractor shall be responsible under the Contract for the quality materials, workmanship and production processes in fulfilment of the Contract. The Contractor shall have a Quality Management system in place which details the following in order to satisfy the Specification relevant to each operation to the works in accordance with the Contract

- Quality control procedures;
- Personnel responsibilities;
- Testing procedures
- Hold points in production for inspection;
- Rejection and rectification procedures;
- Documentation and communication;

When the Contractor propose to use services of an external lab, the lab needs to be approved by the Employer.

PS 5.4 Provision of Materials and Goods

The Contractor shall be responsible under the Contract for the provision of quality materials or equipment, workmanship and production processes in fulfilment of the Contract.

All plant required to perform the scope of works and needs to be included in the pricing for this bid.

PS 5.5 Competence of Workmen

The-Contractor shall ensure that only competent personnel are employed in operations involving particular skills affecting the quality of the works. Should the competence of any member of the Contractor's workforce be in doubt, the Employers Agent may order that the member be sent for additional training at the Contractor's account and/or that member be replaced with a competent person to perform that work.

PS 5.6 Contractor's Returns

Records and returns shall be reported to the Employers Agent in an agreed format:

(a) Weekly

The Contractor shall keep accurate daily records detailing work carried out on the works and shall submit them to the Employers Agent prior to the weekly progress meeting or at such other times as the Employers Agent may require. The records shall include the following for each portion of the works separately and in sufficiently detail to establish the person- hours and equipment hours expended:

- Extent of work done;
- The numbers of each category of workmen and supervising staff;
- The numbers and types of Contractor's Equipment used;
- The time and duration of any significant delays or breakdowns of any Contractor's Equipment; and
- Any other events relevant to progress of the Works.

The Contractor shall also provide such further information as may be requested by the Employers Agent.

(b) Day work and Similar Records

Records shall be kept daily of labour, materials and equipment where there is an agreement to pay by day works. Such records shall be valid only when signed by both parties.

In cases where there is any dispute or uncertainty on payment procedure, sheets shall be signed daily by both parties as an agreed record of work done but shall not imply any commitment concerning payment. These sheets shall be annotated "For record purposes only".

PS 6. CONSTRUCTION PROGRAMME

PS 6.1 Contract Programme Maintenance and Progress Monitoring

a. Contract Program by Employer:

A construction programme in Construction Computer Software for Windows (CCS/ Candy)) format, used by the Employer for the construction programming of the Clanwilliam dam will be used to determine the requirements and work areas. The program is dependant, on all contract activities and will be managed by the Employer.

The Contractor shall take all necessary and required steps to ensure that his / her staff and personnel adhere to the construction programme requirements.

The Contractor shall not be allowed extension of time due to any mechanical failure of his / her equipment; provision must be made for standby equipment.

b. Preliminary Program by Bidder:

A **preliminary programme** in the form of a Gant chart must be submitted with the tender. The following must be shown:

- The proposed sequence of the various activities.
- The dependencies that exist between the activities and whether these are time related or resource limited.
- Any shutdown periods proposed by the contractor.
- Any slack time built into various activities or sub-phases.
- The critical path of the work to be undertaken.

This programme shall be in sufficient detail so that it can form the basis of a more detailed construction programme to be prepared after the Contract has been awarded.

Note: Previous experience proofed that it is beneficial for all if the surface removal activity are being utilized before other construction activities takes place.

c. Detail Contract Programme by Contractor:

A Detail Contract Programme shall be developed using the latest version of Construction Computer Software for Windows (MS Project - Microsoft Project or Construction Computer Software – (CCS/ Candy) by the Contractor.

Five working days before the monthly progress meeting the Contractor shall submit to the Employers Agent a programme update that reflects the actual progress against current programmes and the effect on future activities.

The Contractor shall also submit a narrative report with each monthly update including a description of current and anticipated programme related problem areas, current and anticipated delaying factors and their impact, and an explanation of corrective actions taken or proposed.

All variances from the Contract Programme shall be promptly reported and the future impact of such variations shall be determined and analysed by the Contractor and necessary corrective measures established, subject to the approval of the Employers.

PS 6.2 Progress Meetings

The Contractor will be required to attend regular site meetings with the Employers Agent where the progress of construction will be reviewed. Such meetings will normally be held monthly. The Contractor shall also attend weekly meetings with the Employers Agent and provide, prior to each meeting as required by the Employers Agent, detailed programmes showing separately the various activities of the Contractor anticipated over the forthcoming two week period.

PS 7. WORKING TIMES

PS 7.1 DWS – Construction South - Clanwilliam Dam Working Hours

Summer Working Time (October to March):

Monday to Thursday from 6:30 to 16:15

Friday from 06:30 to 15:00

Winter Working Time (April to September):

Monday to Thursday from 7:00 to 16:45

Friday from 07:00 to 15:30

Days Site will be closed:

- (i) All public holidays and Sundays
- (ii) The Annual Builders Holliday, usually 11 December to 9 January.
- (iii) Last Friday of each month

PS 7.2 Sunday Working

Sunday work shall not be permitted except for necessary maintenance, repairs and emergencies and shall only be undertaken with the prior written approval of the Employer.

PS 7.3 Last Friday of Month

The last Friday of the month is regarded as the pay day of the Employers personnel. This is a non-working weekend for Employers personnel, and the Contractor will only be allowed to work with special permission on this day

PS 7.4 Builders Holiday and Public Holidays

The site will close for the end of the year's Builders Holiday period. Work will not normally be permitted on Public Holidays, except when approved by the Employer.

PS 7.5 24 Hour Working Days

The Contractor could be requested to perform work at night. Responsible and qualified supervisory staff shall always be present and sufficient light must be available to conduct the work safely.

PS 8. PAYMENT

Payments will be made monthly on receipt of specified tax invoices.

Payment will not be made for consignment unless supported by delivery notes duly signed by the official checking the delivery.

Escalation will only be paid if stipulated in the Special Conditions of Contract.

Payment will be done within 30 days of receipt of original invoice by depositing the payment directly into the bank account of the successful Tenderer. No cash payment or cheque payment will be done.

PS 9. SOCIAL-ECONOMICAL DEVELOPMENT

PS 9.1 Local Socio-Economic Development Participation Objectives

The following shall be applicable to this Contract as per particular specification CWD 68:

The Department of Water and Sanitation (DWS, also referred to as the “Employer”) is committed to transformation within the construction industry and water sector through the optimisation of socio-economic benefits within its sphere of business influence in terms of the Broad-Based Black Economic Empowerment Act, (Act No. 53 of 2003). The general principles, upon which the implementation of the Olifants-Doorn River Water Resources Project (ODRWRP) is based, are:

1. Contribute to local and regional economic development by optimising the use of locally available skills, materials and resources - Local Socio-Economic Participation and Development (LSEPD);
2. Promote transformation, technology and skills transfer within the infrastructure development industry through employment creation, preferential procurement, enterprise development, training and skills development objectives - Socio-Economic Empowerment (SEE);
3. Ensure the project is implemented in a socially responsible and sustainable manner, and
4. Ensure economic access for Black people living in rural areas by incorporating them into the mainstream economy.

The Contractor must adhere to the minimum requirements and to report monthly on the implementation and compliance of the performance monitoring criteria of this specification (CWD68). The Employer will audit the Contractor's compliance to this specification and notify the Employer's Agent to direct the Contractor on any non-compliance.

The cost for all personnel recruitment/administration and training in respect to compliance of this specification shall form part of the SAFSEC rates.

PS 9.2 Appointment of Labour

The Labour Desk which will be established by the Employer will be responsible for the recruitment of local labour. The Contractor shall advise the labour desk or CLC – Community liaison Committee in writing of the numbers of each category of temporary workers, which is required, and the period for which they are required.

The Contractor shall pay his employees and shall ensure that his Sub-contractors pay their employees rates of remuneration not less than prescribed by legislation and applicable to the area of the Works and shall observe conditions of employment which are no less favourable than those which are customary in the area in which the works are to be constructed for those trades and occupations involved in the fulfilment by the Sub-Contractor of his obligations under the Contract. The Sub-Contractor shall also practice and ensure that his Sub-contractors practice a policy of equal remuneration, conditions of employment and benefits for people of equal skills and productivity.

Local employment targets for local labour from designated groups to be comply with, as per CWD 68 (Table CWD68.4.1), is as follow:

Designated Groups	Skilled or permanent staff target (%)	Local labour minimum target (%)
Black people	75	90
Women	10	15
Youth	5	20
People with disabilities	2	1

PS 9.3 Local Procurement

The Contractor is to support Enterprises and Business in the local Clanwilliam Town and in Municipality area, including the township and rural areas, for goods or services.

PS 9.4 Training and Skills Development

The Employer is committed to the development of labour from the local area as well as elsewhere in SA. To achieve this objective, the Contractor shall implement a formal skills plan by following accredited SETA training programmes.

The Contractor is required to invest a minimum of 0,5% of the accepted Tender Amount on accredited SETA site training and development programmes.

The bidder should acquaint themselves with the requirements of particular specification CWD 68, and that the contractor will adhere to these requirements at all time thorough out the contact period.

PS 10. HEALTH AND SAFETY

PS 10.1 General

Occupational Health and Safety Specification must be read together with the Particular Specification CWD65 and CWD01 HS – OHS Specification which will be provided in electronic format.

For this contract the Contractor will be the mandatory of the Employer (Client), as defined in the Act (OHSA 1993), which means that the Contractor, as employer in his own right in respect of the contract, will be responsible for all the duties and obligations of an employer as set out in the Act (OHSA 1993) and the Construction Regulations 2003. Furthermore, the Contractor shall comply with any additional current statutory requirements of any relevant Government Departments regarding health and safety and specifically environmental health issues.

Nothing specified in this document shall relieve the Contractor of any obligations or responsibilities with regard to health and safety responsibilities.

Where safety precautions are not being observed, the Employer may order the Contractor to comply with minimum safety requirements at the Contractor's expense, and compliance with such an order will not absolve the Contractor from any of his responsibilities and obligations under the Contract.

Before commencement of work under the contract the Contractor shall:

1. Enter into an agreement with the Employer (Client) to confirm his status as mandatory (employer) for the contract under consideration.
2. Submit a Health and Safety Plan to the Employer within 28 days after the Commencement Date. The Contractor shall immediately implement the policy and any amendments, and keep it in operation for the full duration of the Contract.
3. Submit a risk assessment of the contract works as part of the Health and Safety Plan and which is to include;
 - Identification of the risks and hazards;
 - Analysis and evaluation of the risks and hazards identified;
 - A documented plan of safe work procedures;
 - A monitoring plan; and

- A review plan.

The Contractor is required to keep health and safety records (which shall include audit reports) on site in an orderly filing system which shall be handed over to the Employer on completion of construction.

Failure by the Contractor to comply with safety requirements will entitle the Employer to reduce payment of the relevant Bill of Quantity items and/or order a temporary halt of work within the affected areas until the specified requirements are met, without any extension of time being granted and without any additional payment

Refer to CWD01 HS Health and Safety Specification in the Particular Specification Document.

A Pro-Forma Health and Safety plan must be submitted with the Tender.

PS 10.2 Audits

The Contractor shall arrange for health and safety audits at monthly intervals to be carried out. The results and details of these audits shall be submitted to the Employer within the first week of the next month.

The Employer will monitor compliance by the Contractor with the Health and Safety Policy by means of Audits, and may give instructions for improvements.

The Contractor shall note that independent health and safety audits (or if considered suitable by the Employer combined audits with the Contractor's auditor) will be carried out as considered necessary by the Employer.

PS10.3 Works Health and Safety Committee

For the purpose of implementing and monitoring the Health and Safety Plan the Contractor shall put in place a Health and Safety Committee.

The Committee shall meet at least at monthly intervals. Minutes of the meeting shall be kept by the Contractor and copied to Employer within 7 days of the meeting.

PS10.4 Health and Safety Officers

The Contractor shall appoint a full time permanent Health and Safety Officer on the commencement of the works. On the commencement of shift working he shall appoint at least one deputy with the same duties. The Health and Safety Officer and his deputy (or deputies) shall be employed exclusively on health and safety matters, and at least one of them shall always be available on Site so that health and safety matters receive 24-hour coverage for the full duration of the Contract. The Health and Safety Officer, or his deputy shall carry out regular and random checks of all parts of the Site where work is taking place.

PS 10.5 First Aid Provisions

The Contractor shall provide a first aid station. The Contractor shall institute and operate a basic first aid training programme to ensure that at least each foreman or work crew leader is trained in first aid and possesses a valid certificate to that effect issued by the Red Cross Society of South Africa, or equivalent qualification within 3 months of his appointment. There shall be a person certified in first aid in each work crew.

PS 10.6 Accident Reporting

The Contractor, through the Health and Safety Officer or his deputy, shall keep the Employer informed at the time, or as soon thereafter as is practical but not later than 12 hours, of any occurrence during the course of work, whether on or off the Site, if the said occurrence affected or may have affected the health or safety of any person employed on the Site or of any member of the public.

The Contractor shall submit to the Employer at the end of each month reports and statistics in spreadsheet format approved by the Employer on all accidents involving any person employed on or visiting the works.

PS 10.7 Workman's Compensation Act

By accepting the Contract, the Contractor warrants that all his and his Sub-Contractor's workmen are covered in terms of the Compensation for Occupational Injuries and Diseases Act (Act no 130 of 1993) which covers shall remain in force whilst any workman is present on the Site.

PS 11. ENVIRONMENTAL REQUIREMENTS

PS 11.1 General

The main project, Raising of Clanwilliam dam, has been environmentally authorised under a Record of Decision (ROD). The ROD requires that all activities conducted by the Employer and Sub-contractors are within the framework of the Environmental Management Plan (EMP) and Rehabilitation Specifications (RS) of the Site. This document is available from the Employer.

The Contractor and his staff must be familiar with the EMP & RS and execute the project in such a way that it complies with the requirements of the EMP and RS. The Employers Agent will regularly inspect the Contractor's site. In the event that the Contractor does not comply with the requirements the deviation must be rectified as recommend by the Employer at the Contractor's cost.

The Contractor shall construct and/or implement all the necessary environmental protection measures in each area before any production work will be allowed to proceed. The Employer may suspend the works at any time should the Contractor, fail to implement, operate or maintain any of the environmental protection measures adequately. The costs of such suspension shall be to the Contractor's account.

The Contractor shall submit a Method Statement containing details of all site layouts and environmental protection measures proposed to the Employer for review and approval.

PS 11.2 Temporary Services and Facilities

All fuel storage tanks shall be bunded to 110 % of the total storage capacity. Fuel dispensing areas and workshop areas shall be provided with concrete slabs draining to oil separators. This will also apply to other areas with pollution potential.

Vehicle cleaning shall be undertaken in designated wash bays, which have an impermeable floor and are bunded to contain runoff and direct in onto a sump. Oil and diesel will be skimmed off the sump water and recycled or disposed of in the correct manner. The design and layout of this sump shall be submitted to the Employer for approval before construction commences.

Vehicles worked on outside the wash bays will have portable drip trays placed under them to catch oil and diesel which may leak from the vehicles.

PS 11.3 Protection of Rivers, Streams and Watercourses

All rivers, streams and watercourses shall be protected from direct or indirect spills of pollutants such as garbage, sewage, cement, oils, fuels, chemicals, aggregate tailings, wash and waste water or organic material resulting from the Contractor's activities. In the event of a spill prompt action shall be taken to clear polluted or affected areas.

The Contractor shall not work within streams, watercourses and wetlands without the written approval or as required for the execution of the work.

PS 11.4 Refuse and Waste Control

The management of solid waste on site shall be strictly controlled and monitored. The Contractor shall adhere to and implement the following:

- Labelled recycling bins shall be used and waste separated where possible. In addition, a recycled-material collection schedule shall be established and the bins shall be collected regularly;
- Eating areas for the construction staff shall be designated and supplied with waste bins to control litter;
- No on-site burying or dumping or unauthorised burning of any waste materials, vegetation, litter or refuse shall occur;

Solid waste shall be disposed of off site, at an approved landfill site. The Contractor shall supply the Employer with a certificate of disposal; and waste shall be separated into domestic waste, building/construction rubble, scrap metal, oil and grease and hazardous waste and dealt with in the following manner:

- **Recycling**
Suitable recycling bins, all with lids, shall be provided by the Contractor for his own buildings. Recycling shall be collected and removed from all facilities on the Site at least twice per week. Recycling waste shall be transported to the approved refuse disposal site off site in covered containers or covered trucks.
- **Domestic waste**
Suitable refuse bins, all with lids, shall be provided by the Contractor for his own buildings. Refuse shall be collected and removed from all facilities on the Site at least twice per week. Domestic waste shall be transported to the approved refuse disposal site off site in covered containers or covered trucks.
- **Organic waste**
Refuse from food preparation and eating areas shall be collected and removed daily. Organic waste shall be disposed of as per Domestic waste.
- **Building/Construction waste**
Inert building/construction rubble shall be disposed of by burying in the dam basin in borrow pits, at a site and in such a way as approved by the Employer.
- **Scrap metal**
Scrap metal shall be disposed of offsite.
- **Used oil and grease**
Used oil and/or grease shall be removed from site and sold to an approved used oil recycling company.
- **Hazardous waste**
All hazardous waste shall be disposed of in an approved hazardous waste disposal site and a disposal certificate supplied to the Employer.

PS 11.5 Protection of Flora

The removal, damage and disturbance of indigenous flora is prohibited. The Contractor shall request permission before removal of any vegetation on the designated work area and undertake to demarcate and protect flora outside the designated work area.

PS 11.6 Protection of the Fauna

The Contractor shall protect fauna living within the Site and shall ensure that hunting, snaring, poisoning, shooting, nest raiding or egg-collecting and disturbance does not occur. The Contractor is to ensure that his employees are instructed not to feed wild animals and no domestic pets or livestock are permitted on site.

The use of pesticides is prohibited unless approved by the Employer.

PS 11.7 Preservation of Topsoil

The Contractor shall get approval from the Employer before the removal of any topsoil. The top soils will be stored in designated areas.

PS 11.8 Erosion Control and Storm Water Management

The Contractor shall include in his/hers works layout of the site works measures to prevent erosion resulting from his actions on the site. The Contractor shall take appropriate and active measures to prevent erosion resulting from his works, operations and activities which shall be agreed with the Employer even when such potential erosion may take place or occur beyond the limits of the Site because of the actions of the Contractor.

PS 11.9 Dealing with Dust

The contractor shall comply with the requirements of Particular CWD67 to control and reduce the dust levels.

PS 11.10 Environmental Management Plan

Aquatic ecosystems management

- 1.1. **Aspect** – Water quality, especially turbidity and PH in the Olifants River immediately downstream of the construction site may deteriorate due to construction related activities. Furthermore, pollutants may find their way into the river system. Typical sources of pollution include oils and fuels from construction vehicles and construction material such as cement, detergents, paints and other chemicals.
- 1.2. **Impact** - Any pollutants which find their way into the river system could damage the riparian habitat, lead to increased siltation (water quality deteriorated) and adversely affect aquatic biota (e.g. Clogging of gills, influence of movement).
- 1.3. **Objective** – Ensure that all reasonable measures are taken to prevent any impacts on the characteristics of the water courses associated with the development area.
- 1.4. **Target** – The downstream flow regime must remain unchanged and downstream quality of water to remain within acceptable as prescribed by the Resource Water Quality Objectives.

C3.3 PARTICULAR SPECIFICATIONS

1. **Refer to SANRAL letter** Reference W11/2/3-7/3-14 date 28 August 2020 attached below.

Reference: W11/2/3-7/3-14 Fax Number: +27 (0) 21 910 1699
Date: 28 August 2020 Direct Line: +27 (0) 21 957 4600
Email: nunkel@nra.co.za Website: www.nra.co.za



e-mail: Craig.Botha@bigengroup.com

Mr C Botha
Bigen
PO Box 63796
Green Acres
PORT ELIZABETH
6057

Dear Mr Botha

**NATIONAL ROUTE 7 SECTION 3: OLIFANTS-DOORN WATER RESOURCE DEVELOPMENT PROJECT:
RAISING OF THE CLANWILLIAM DAM: DETAIL DESIGN FOR THE PROPOSED UPGRADE OF TWO EXISTING
INTERSECTIONS AT ±KM 122,05 AND KM 125,96**

Thank you for the detail design drawings received on 3 July 2020.

The South African National Roads Agency SOC Limited (SANRAL) approved your application on 28 August 2020, in terms of The South African National Roads Agency Limited and National Roads Act, 1998 (Act 7 of 1998), subject to the following conditions:

1. Design of the Intersection

- 1.1 The design of the intersections upgrade as shown on drawings no 2380.50.00.GZA.03.A001 and 2380.50.00.GZA.03.A002, is herewith approved.
- 1.2 The layer works for the two intersection upgrades must be the same as that of the N7/3 specifications as provided to you by ERO Engineers on 12 August 2020.
- 1.3 Please note that the approval of the design is for procedural and administrative review purposes only and does not attract legal liability or liability of any kind from whatsoever cause or however arising. The aforementioned to emphasize that SANRAL acknowledges the scope and detail of the design but the technical correctness thereof and / or compliance to specific standards and specifications remain the design liability (in all respects) of Bigen.

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Directors: Mr T Mhambi (Chairperson), Mr S Macozoma (CEO), Mr R Harwell, Ms L Madala, Mr T Matosa, Mr A Moemi, Ms A Halstead | Company Secretary: Ms A Mathew

Reg. No. 1998/009584/00. An agency of the Department of Transport.

- 2.15 The applicant guarantees the work within the national road reserve for 1 (one) year where after SANRAL shall accept responsibility thereof and maintain it at its own cost. Should any maintenance be required during the first year, it shall be undertaken by the contractor under the supervision of the consulting engineer.
3. The Design Consultants, Bigen has to submit a brief report in the form of a letter describing the design decisions and the standards used that led to the proposal submitted for approval. The following needs to be addressed in the report:
- Taper lengths;
 - Length of deceleration and acceleration lanes;
 - Stacking length of right turn refuges; and
 - Radius at the bell mouths.

4. Safety

The applicant shall, in consultation with the local traffic authority, arrange for the safe control of traffic during the construction of the upgrade of the intersection.

4. Costs and Indemnity

- 4.1 All costs in connection with the construction of the intersection, whether inside or outside the national road reserve, shall be borne by the applicant.
- 4.2 The applicant accepts debit for all costs which may be incurred by SANRAL for any works within the national road reserve necessitated by the upgrade of the intersection, excluding future maintenance referred to in paragraph 2.15 above.
- 4.3 SANRAL reserves the right to direct at any time in the interest of road safety that the intersection be closed, altered or shifted. Should this remain the applicant shall have no claim against SANRAL for the cost incurred as a result of the improvements herewith approved.
- 4.4 SANRAL shall not accept any financial responsibility or liability for any claim from the applicant which may arise from:
- the erection, establishment, closing or alteration to the intersection
 - the lapsing of the authority
 - the amendment or cancellation of any condition or the imposition of any new condition
 - any alteration to the national road.
- 4.5 The applicant indemnifies SANRAL against, and holds it harmless from, any claim or damage which may be instituted or suffered by any person, including legal costs incurred, as a result of:
- the erection or establishment on the site
 - the failure by the applicant to properly maintain and safeguard the entrance, exit or gate or other works on the site, or the non-compliance of the applicant with any condition to which this permission relates
 - the amendment or cancellation of any condition pertaining thereto or the imposition of any new condition
 - the lapsing of the approval
 - any alteration to the national road.

5. Other Legal Requirements

- 5.1 This approval shall bind any successor-in-title to the land on which the intersection has been established.
- 5.2 This approval does not exempt the applicant from the provisions of any Legislation, or any other Act or Directive published under the Disaster Management Act, 2002: Amendment of Regulations issued in terms of Section 27(2). The applicant must further ensure compliance with the Consolidated COVID-19 Directive on Health and Safety in the Workplace, No. 43400 and the Risk Adjusted Strategy Regulation, No. 480 during the State of Disaster.

6. Validity Period

This approval shall lapse unless the construction of the improvements herewith approved commences within 6 months from the date of this approval or if any of the aforementioned conditions are not being complied with, provided that the applicant may apply for the extension of any period mentioned in this approval prior to the expiry thereof.

7. Acceptance of Conditions

Any action taken by the applicant in terms of this approval shall be regarded as an acceptance of and compliance with the aforementioned conditions including the indemnity.

Yours Sincerely



R CABLE
REGIONAL MANAGER

cc. Mr J Daniels & J Buys, Daveng – jeff@daveng.co.za & jerome@daveng.co.za
Ms P Theron, SANRAL

#N7-3 OUFANTIS-DOORN RAISING CLANWILLIAM DAM

NB(**Par 2** with heading **Construction** regarding the **Appointment of the Contractor** has reference.

2.1 The construction of the intersection as per above mentioned design shall be undertaken by a reputable contractor (with suitable CIDB grading). The appointment of the contractor shall be made in liaison with SANRAL.)

More applicable Particular Specifications:

CWD 01HS	HEALTH AND SAFETY
CWD 65	OCCUPATIONAL HEALTH AND SAFETY
CWD 67	ENVIRONMENTAL
CWD 68	LOCAL SOCIO-ECONOMIC PARTICIPATION AND DEVELOPMENT
CWD EMP	ENVIRONMENTAL MANAGEMENT PLAN

NB: All relevant Particular Specifications, will be made available in electronic format.



DEPARTMENT OF WATER AND SANITATION

DWS DWS07 0523 WTE

WIDENING OF N7 ENTRANCES AT THE RAISING OF CLANWILLIAM DAM FOR CONSTRUCTION SOUTH IN THE WESTERN CAPE – CIDB CONTRACTOR GRADING DESIGNATION OF CIDB 5 CE OR HIGHER

C4: SITE INFORMATION

CONTENTS

- C4.1 DESCRIPTION OF THE PROJECT**
- C4.2 THE SITE CONDITIONS**
- C4.3 FACILITIES PROVIDED BY EMPLOYER TO THE CONTRACTOR**
- C4.4 FACILITIES PROVIDED BY CONTRACTOR FOR WORKS**
- C4.5 CLIMATIC CONDITIONS**
- C4.6 DRAWINGS**

C4.1 DESCRIPTION OF THE PROJECT

The raising of Clanwilliam dam, which will be the first phase of the Olifants-Doorn River

Water Resources Project (ODRWRP), will increase the yield of the dam by about 70 Mm³ per annum to augment the water supplies to the Olifants river irrigation scheme situated in the north-western part of the Western Cape province, as well as to assist in the development of resource-poor farmers.

Clanwilliam dam is located on the Olifants river, in the Western Cape, approximately 2 km south west of the town of Clanwilliam. The original dam was constructed in 1932-1935 (38m high from the base). The existing structure is a concrete gravity dam, consisting of a controlled ogee gravity spillway with 13 vertical crest gates. The length of the wall is 255 m. The total spillway length is 117,58 m, including the piers between the gates. The dam was raised in 1964 with vertical crest gates. Tensioned cables were supplied to ensure stability of the dam wall.

Currently water is released downstream via the Olifants river to Bulshoek weir from where the water is diverted into the dilapidated irrigation canal situated on the left bank. Water is also released from the existing outlet works situated on the right bank into an irrigation canal situated on the right bank, to the pump station on the right bank supplying water to the town of Clanwilliam, and to the hydropower plant situated downstream on the right bank.

The feasibility investigation for raising the dam was completed at the end of 2007 and the Record of Decision (ROD) was issued on 12 May 2009 by the Department of Environmental Affairs. Approval by the Minister for raising the dam by 13 m was issued on 18 August 2010.

In order to comply with current dam safety standards, the Department of Water and Sanitation is also required to implement remedial measures with the raising in the height of the dam wall.

The raised dam wall will be approximately 370 m in length and 49 m in maximum height. At full supply level the reservoir will cover a surface area of approximately 2 022 ha and capacity of 344,3 million cubic metre. The works include addition of concrete on the downstream side, extending the apron, construction of a free standing intake tower, river outlet control house, a power generating house, short tunnel and coffer dam works on the upstream side, as well as various other pipe outlet structures on the downstream side. This work must be done without interfering with the day to day operation of the dam.

C4.2. THE SITE CONDITIONS

C4.2.1 Location and access to site

The dam site is situated on the Olifants river, in the Western Cape, approximately 2 km South- West of Clanwilliam town in the Western Cape province. -32°11'07.2" South; 18°52'24.1" East.

The site is immediately next to the N7 and accessed through a controlled gate. The gravel site roads will be regularly maintained but could get challenging under abnormal rainfall conditions.

C4.2.2 Weather

The Clanwilliam dam site is situated in the Western province in the winter rainfall region with hot summers and cold wet winters. Average summer maximum and minimum temperatures are in the order of 39°C and 11°C respectively. Corresponding winter temperatures are 31°C and 4°C.

Relevant detailed meteorological information was obtained for the site from Weather Station No 00846710 at Clanwilliam dam, situated at RL 103 m. Average monthly minimum and maximum temperatures obtained from that station are listed in Table 1. These records will be used for tender purposes and will be compared to information from a weather station to be installed at the dam site before construction commence. The prevailing wind direction(s) is South East and North West.

Table 1: Average Minimum and Maximum Temperatures (°C) Measured at Clanwilliam

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max	41	40,5	39	37	32	27	26	29	33	35	40	41
Min	13,5	13	11	8	5	3	2	2,5	5	7	10	12

The Clanwilliam dam catchment has a mean annual precipitation (MAP) of 575 mm. The area has a winter rainfall pattern.

C4.3 FACILITIES PROVIDED BY EMPLOYER TO THE CONTRACTOR

C4.3.1 Contractors Yard

A Storage area to the east of the N7 will be provided as part of the main site establishment area. If the Contractor requires more area or any other area, it must be specified in his document and be negotiated with the Main Contractor.

The Contractor must make arrangements for its own water distribution required in the performance of its duties

C4.4 FACILITIES PROVIDED BY CONTRACTOR FOR WORKS

C4.4.1 Electrical Power and Distribution

The Contractor shall make his own arrangements to provide his own power supply. Failure or interruption of the power supply shall not relieve the Contractor of any of his obligations under the Contract

C4.4.2 Water Supplies

The Contractor shall be responsible for making his own arrangements for the supply of water that he may require for construction purposes. Subject to quality, water can be abstracted from the Olifants river. A record of abstraction must be kept on a daily basis and must be submitted on a monthly basis with contractor's returns.

Failure or interruption of any source of water shall not relieve the Contractor of any of his obligations under the Contract.

C4.4.3 Communications

The Contractor shall make his own arrangement with regards to his required communication requirements.

C4.4.4 Accommodation and Site Facilities

The Contractor must supply his own offices, storage facilities and workshop if applicable. The Main Contractor will indicate available areas for site establishment. **A typical layout of proposed site facilities must be submitted with tender.**

The Contractor shall make his own arrangements for accommodation for his staff. No accommodation is allowed on the site in terms of the Environmental EMP.

C4.4.5 Laboratory

The Contractor must provide for his own site testing facilities.

C4.4.6 Resting and eating areas

The contractor shall provide sufficient and suitably positioned areas for use by his workers on site during resting and eating periods. Sufficient refuge bins, tables and seating must be provided. Existing and new permanent structures for the raised dam wall may not be used as resting and eating areas.

C4.4.7 Sanitation and cleaning

The Contractor shall provide at or within 200m of each work place chemical toilet facilities with toilet paper, potable water, soap and towels together with industrial soaps and barrier creams as appropriate. He shall maintain them in a clean and sanitary condition and shall take all necessary precautions to prevent pollution of the Site. The sewage will be disposed of at a registered disposal facility and the disposal certificate will be kept on record.

The Contractor shall ensure that there are adequate and sufficient refuse bins in and around the working area and that these shall be emptied frequently. All refuse bins shall be placed on a concrete base, which shall, from time to time, be sprayed with insecticide. All refuse collection, removal and disposal on site shall be the responsibility of the Contractor. All refuse shall be disposed of at a licensed landfill site only, and certificates of receipt shall be kept on record.

The Contractor shall clear away and remove all traces of the toilets and restore the sites to their original condition as soon as the toilets are no longer required.

C4.4.8 Access control and security

The Employer will be responsible for access control and security for the site. The Contractor will abide by the access control measures. The Contractor is responsible for the safe guarding and protection of his own contractor's yard and his equipment and plant on site. The Employer does not take any liability for the Contractor in terms of security what so ever.

C4.5 CLIMATIC CONDITIONS

C4.5.1 Rainfall data

The rainfall data to be used for extension of time arising from abnormal rainfall is presented in the table: rainfall record.

Table: Rainfall Record

Rainfall Station No:00846710 Clanwilliam

Period: 1992-2012

Month	AVE	STD DEV	N DAY RAIN	NUM MON	MAX DAY R	MAX RAIN DATE
January	0,0	0.26	0,05	19	13,8	5/1/2004
February	0,25	0.53	0.11	20	10,8	23/2/2010
March	0,45	0.89	0.14	20	29	26/3/1997
April	0,85	1.38	0.33	20	21.4	26/4/2007
May	2,05	3.05	0.76	19	25	8/5/1998
June	3,03	3.98	1.35	18	54.5	8/6/1997
July	2,67	3.23	1.05	18	29.4	26/7/2007
August	2,03	2.80	0.58	18	27.8	18/8/2003
September	0,95	1.35	0.37	18	11.5	12/9/1996
October	0,52	0.91	0.22	18	12.6	19/10/2011
November	0,67	1.16	0.21	18	29.4	8/11/2009
December	0,52	1.11	0.21	18	19.6	24/12/2007

Explanation of headings:

'AVE' represents the average rainfall for the month = R_n

'STD DEV' represents the standard deviation from the normal

'N DAY RAIN' represents the average number of rain days per month exceeding 10 mm = N_n

'NUM MON' represents the number of months used in the calculation

'MAX R DAY' represents the maximum rainfall that occurred over a 24-hour period (08:00-08:00)

'MAX RAIN DATE' represents the date on which the maximum 24 hour rainfall occurred

C4.5.2 Extension of time arising from abnormal rainfall

Extension of time in terms of the Conditions of Contract arising from abnormal rainfall shall be calculated separately for each calendar month or part thereof in accordance with the formula given below. It shall be calculated for the whole period until completion of the contract including any extension thereof:

$$V = (N_w - N_n) + 0,050 (R_w - R_n)$$

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

The symbols shall have the following meanings:

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

N_w = Actual number of days during the calendar month on which a rainfall of 10 mm or more has been recorded.

R_w = Actual rainfall in mm for the calendar month under consideration.

N_n = Average number of days, as derived from existing rainfall records provided in

Table 1.12.1, on which a rainfall of 10 mm or more has been recorded for the calendar month.

R_n = Average rainfall in mm for the calendar month, as derived from the rainfall records supplied in Table 1.12.1

The total extension of time shall be the algebraic sum of the monthly totals for the period under consideration. Extensions of time for part of a month shall be calculated using pro rata values of N_n and R_n .

The factor $(N_w - N_n)$ shall be considered to represent a fair allowance for variations from the average number of days during which rainfall exceeds 10 mm.

The factor $0,050 (R_w - R_n)$ shall be considered to represent a fair allowance for variations from the average in the number of days during which the rainfall does not exceed 10 mm but wet conditions prevented or disrupted work.

Accurate rain gauging shall be taken at the weather station to be supplied by the Main Contractor at a suitable point on Site as indicated by the Engineer.

C4.6 TENDER DRAWINGS

The drawings issued to the tenders as part of the tender documents must be regarded as provisional and preliminary for the tenderer's benefit to generally assess the scope of work.

The work shall be carried out in accordance with the latest available revision of the drawings approved for construction (AFC).

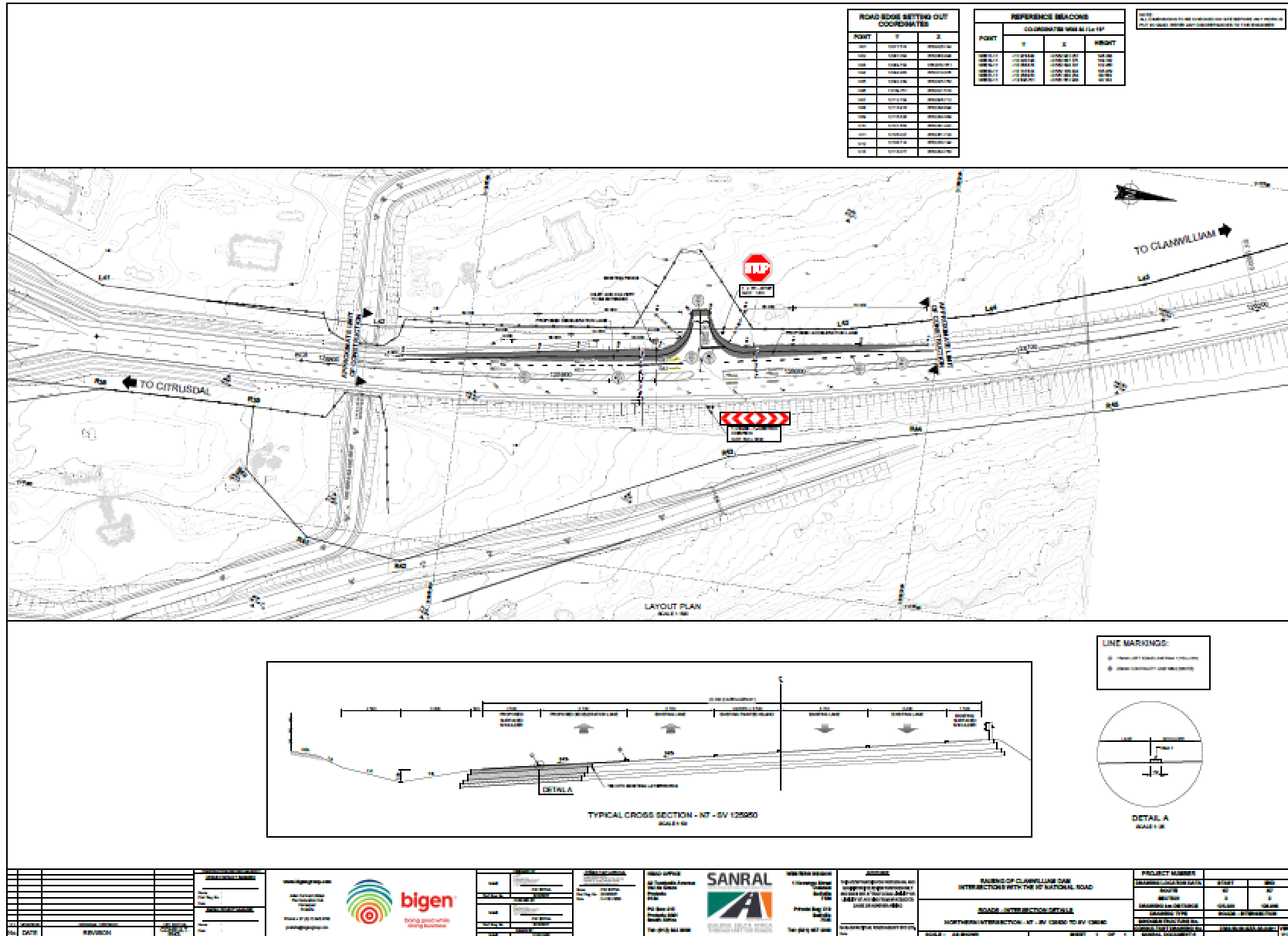
At commencement of the contract, the Employer shall deliver to the Contractor copies of the AFC drawings and any instructions required for the commencement of the works. From time to time thereafter during progress of the works,

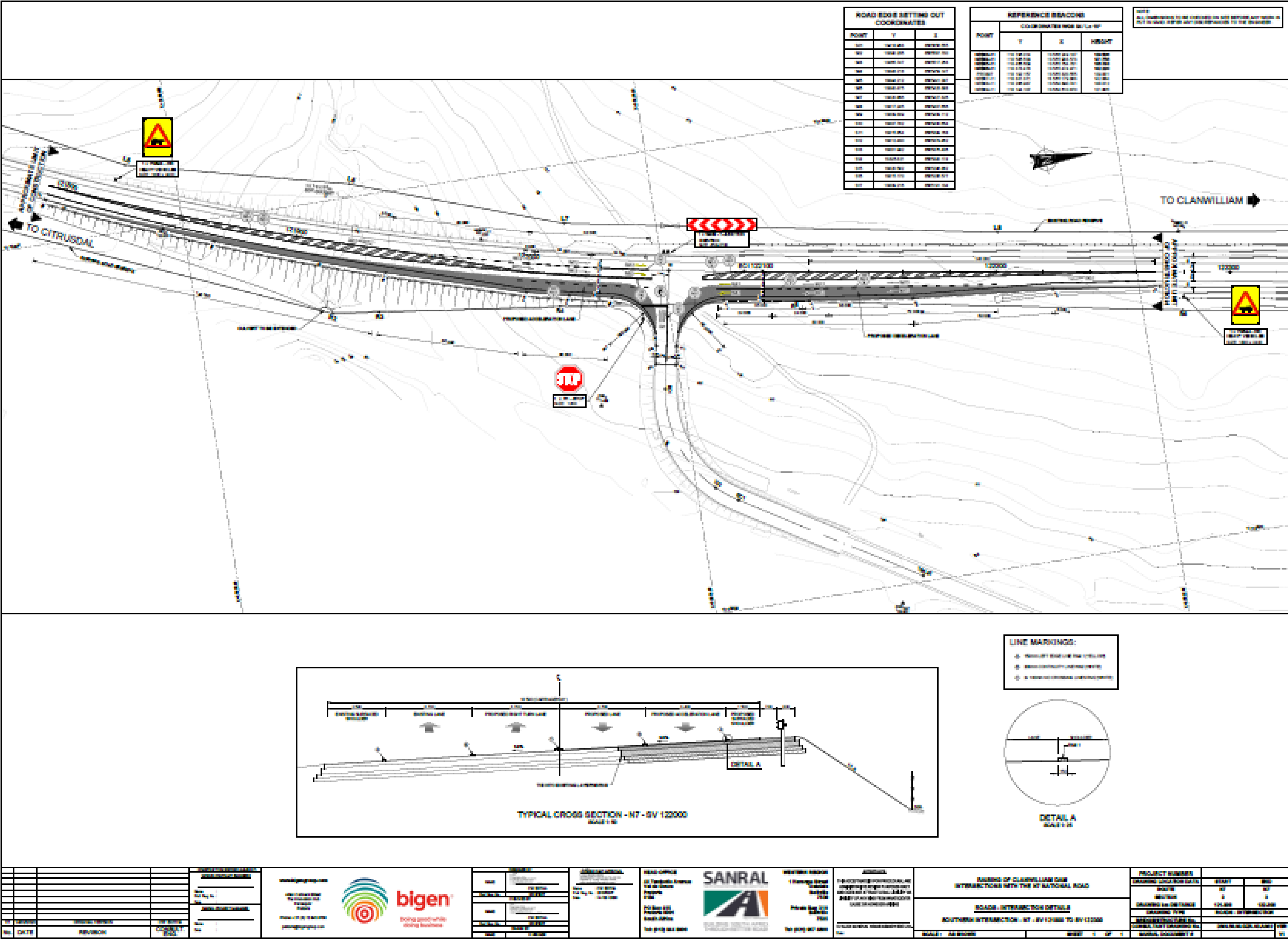
the Employer may issue further drawings for construction purposes as may be necessary for adequate construction, completion and defects correction of the works.

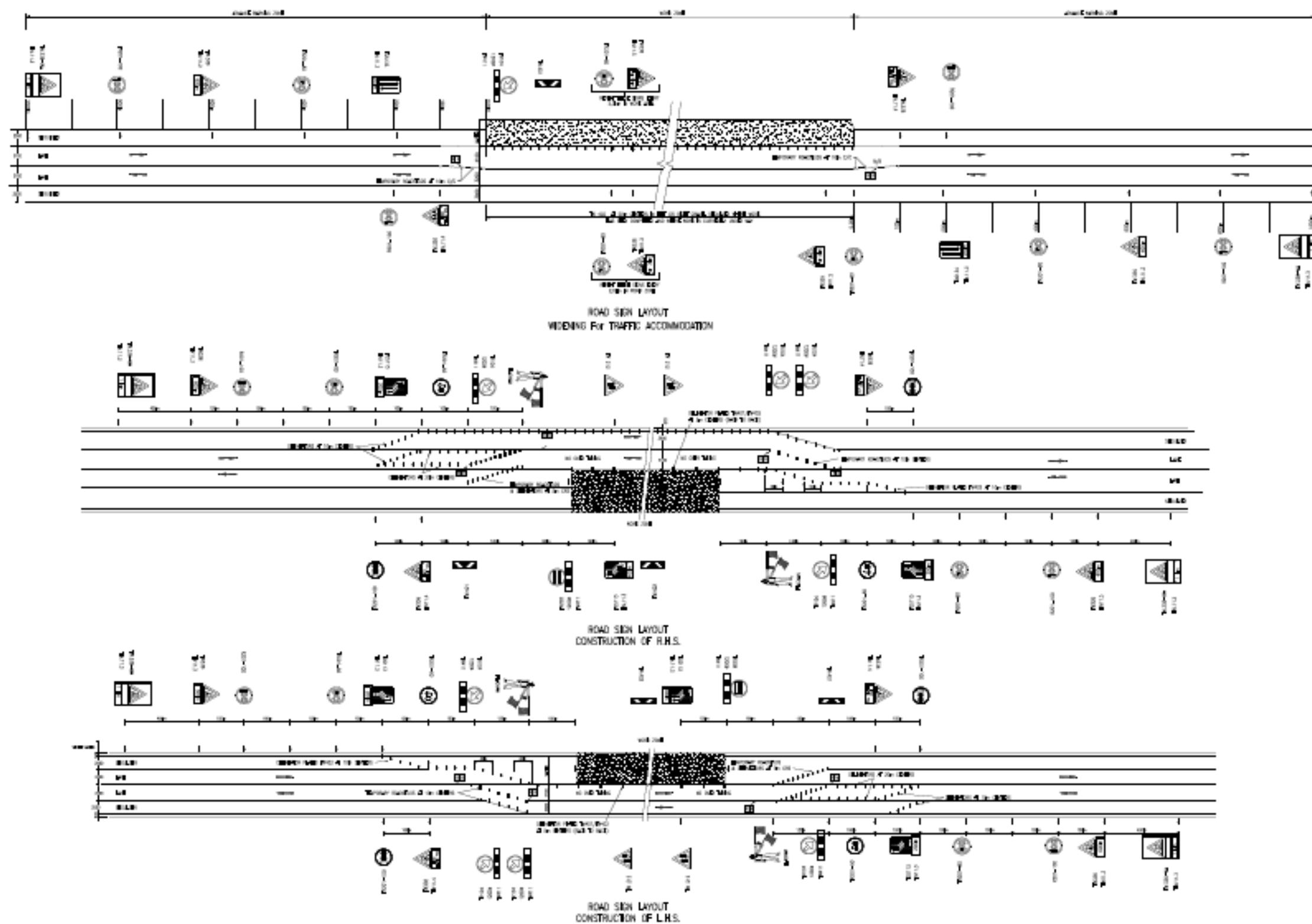
All drawings and specifications and copies thereof remain the property of the Employer, and the Contractor shall return all drawings and copies thereof to the Employer at the completion of the contract.

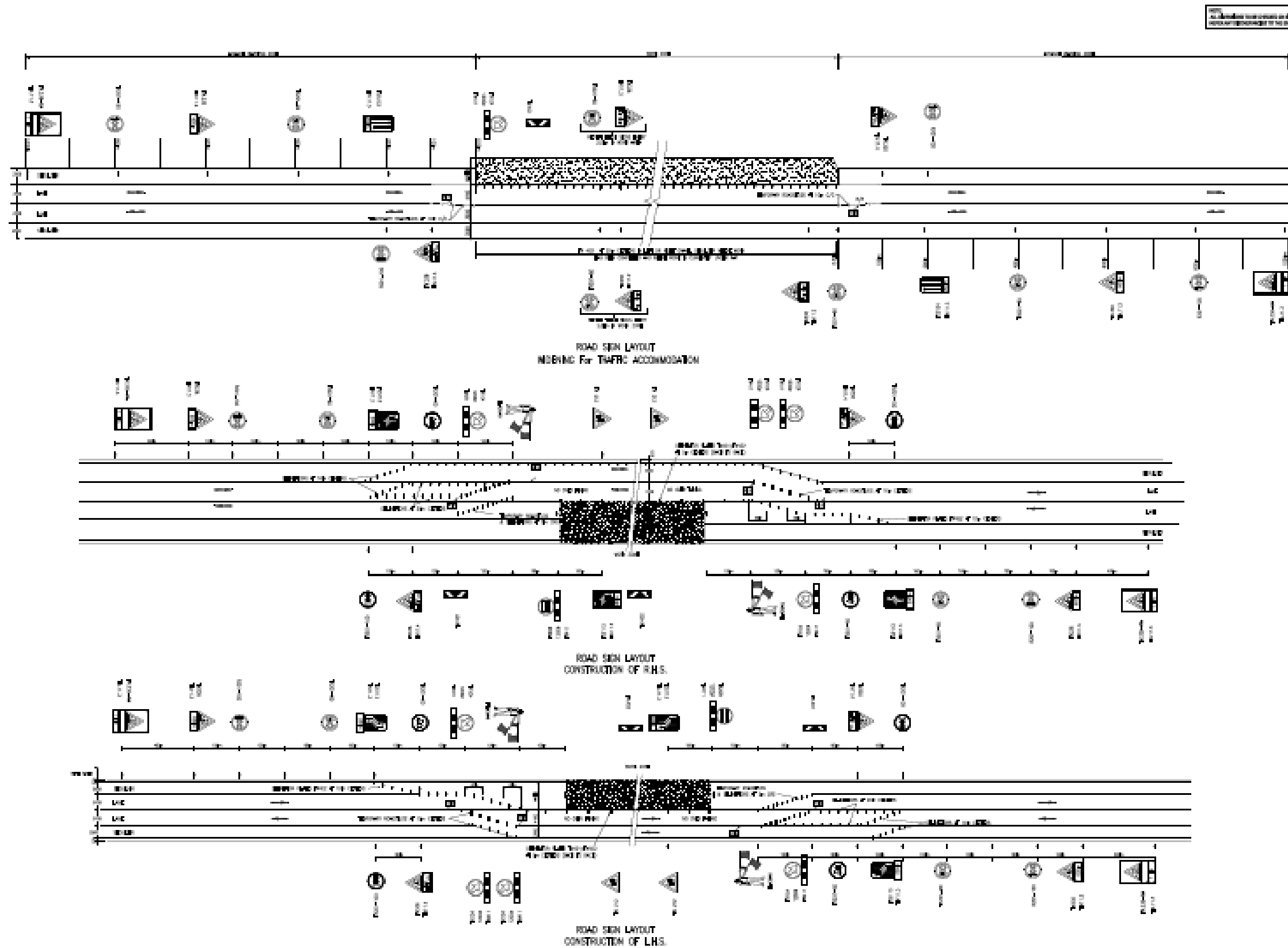
LIST OF DRAWINGS - CLANWILLIAM N7 INTERSECTIONS

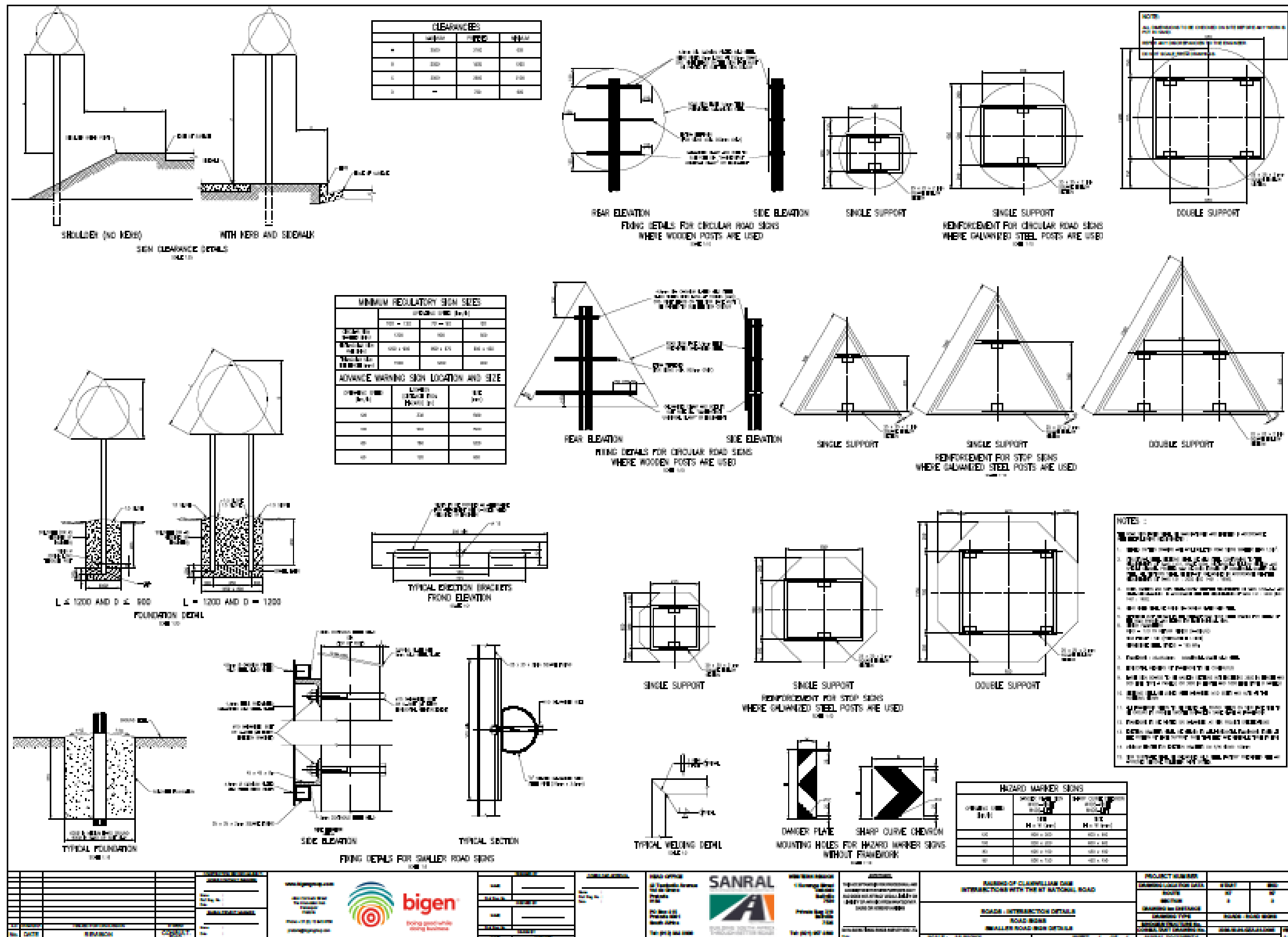
DRAWING NR	TITLE	
• 2380.50.00.GZA.03.A001	Northern intersection	V2
• 2380.50.00.GZA.03.A002	Southern intersection	V1
• 2380.50.00.GZA.03.D001	Cross Section and Details	V1
• 2380.50.00.GZA.03.D002	Traffic Accommodation	V1
• 2380.50.00.GZA.03D004	Temporary Road sign details	A0
• 2380.50.00.GZA.03D005	Road Sign Details	A0
• 2380.50.00.GZA.03D006	Road Sign Guide Sign Details	A0
• 2380.50.00.GZA.03D007	Road Marking Details	A0
• 2380.50.00.GZA.03D008	Road Marking Longitudinal Lines	A0
• 2380.50.00.GZA.03D009	Road Marking line combinations	A0
• 2380.50.00.GZA.03D010	Reference Marker Boards	A0
• 2380.50.00.GZA.03D011	Service Ducts & Marker Details	A0
• 2380.50.00.GZA.03D012	Guardrail Details	A0
• 2380.50.00.GZA.03D013	Fencing details 6 strand	A0

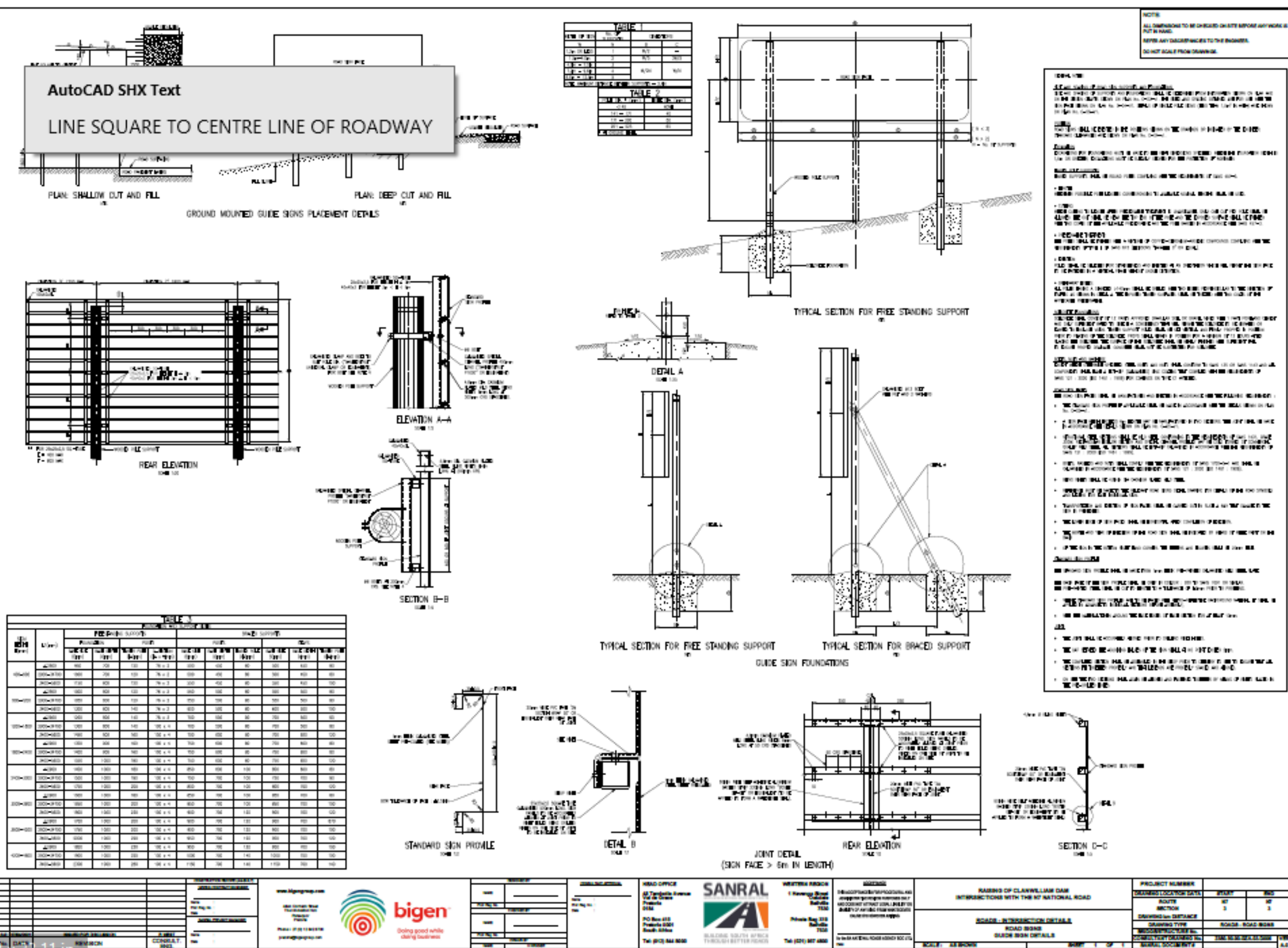




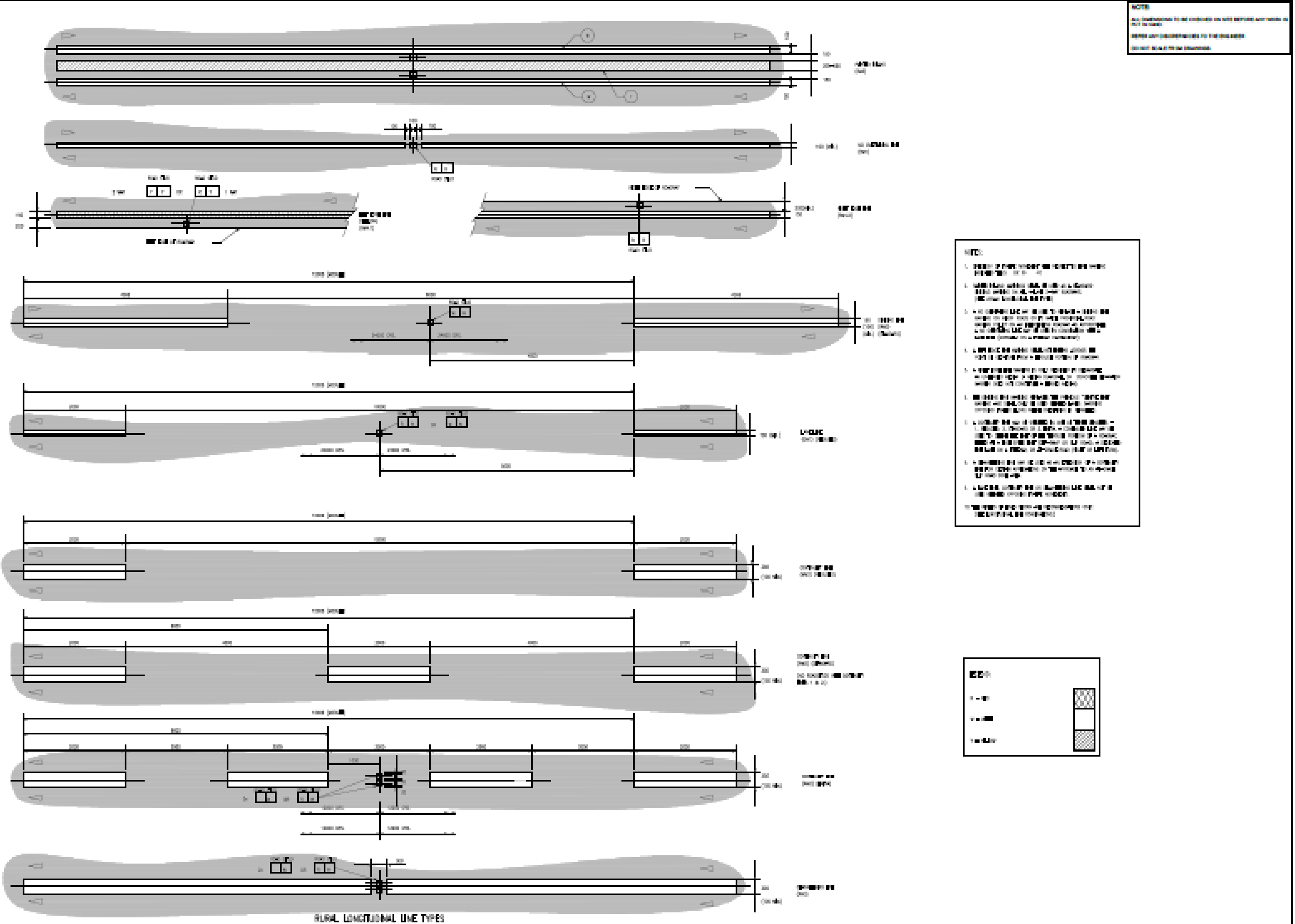
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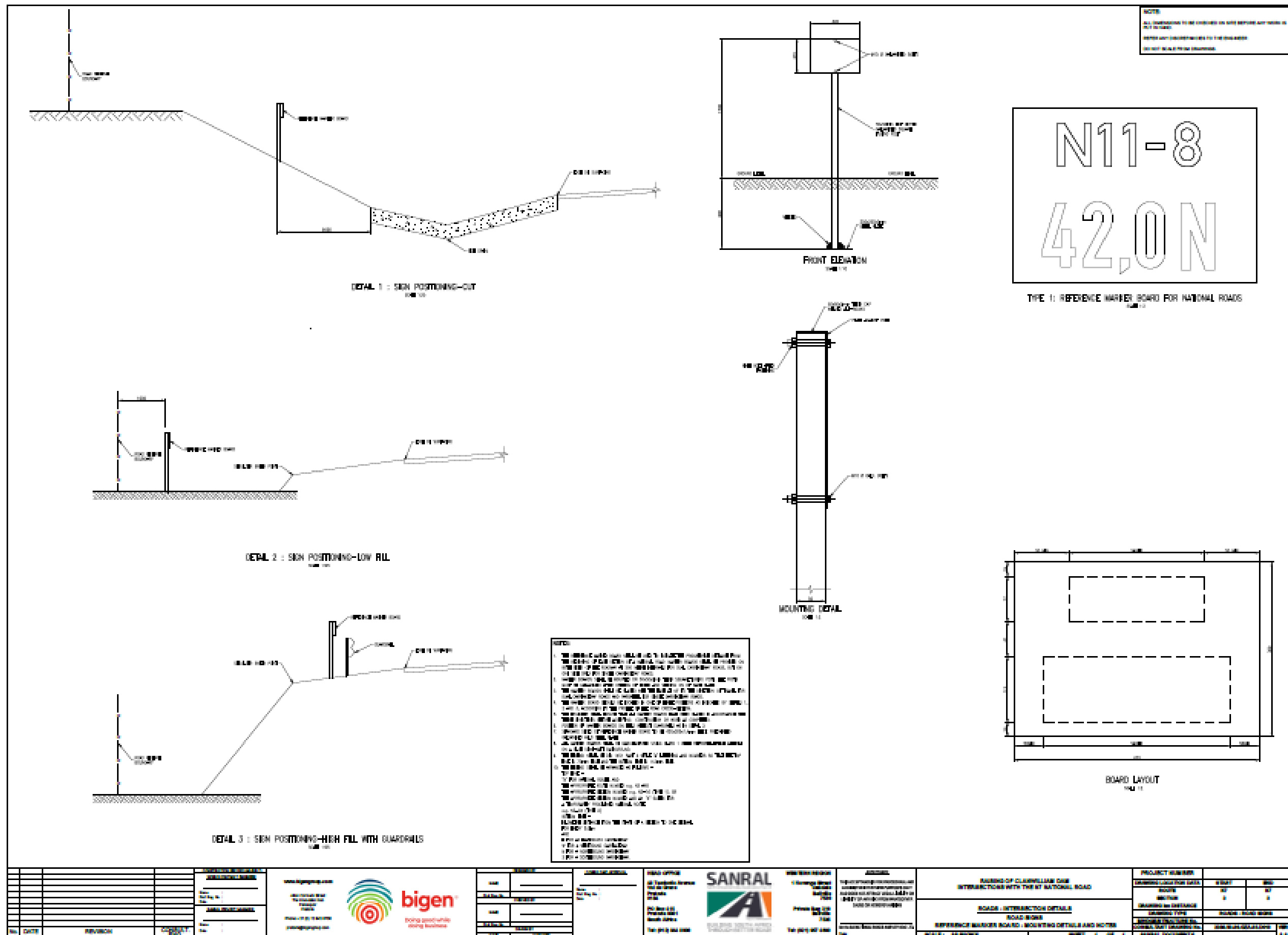


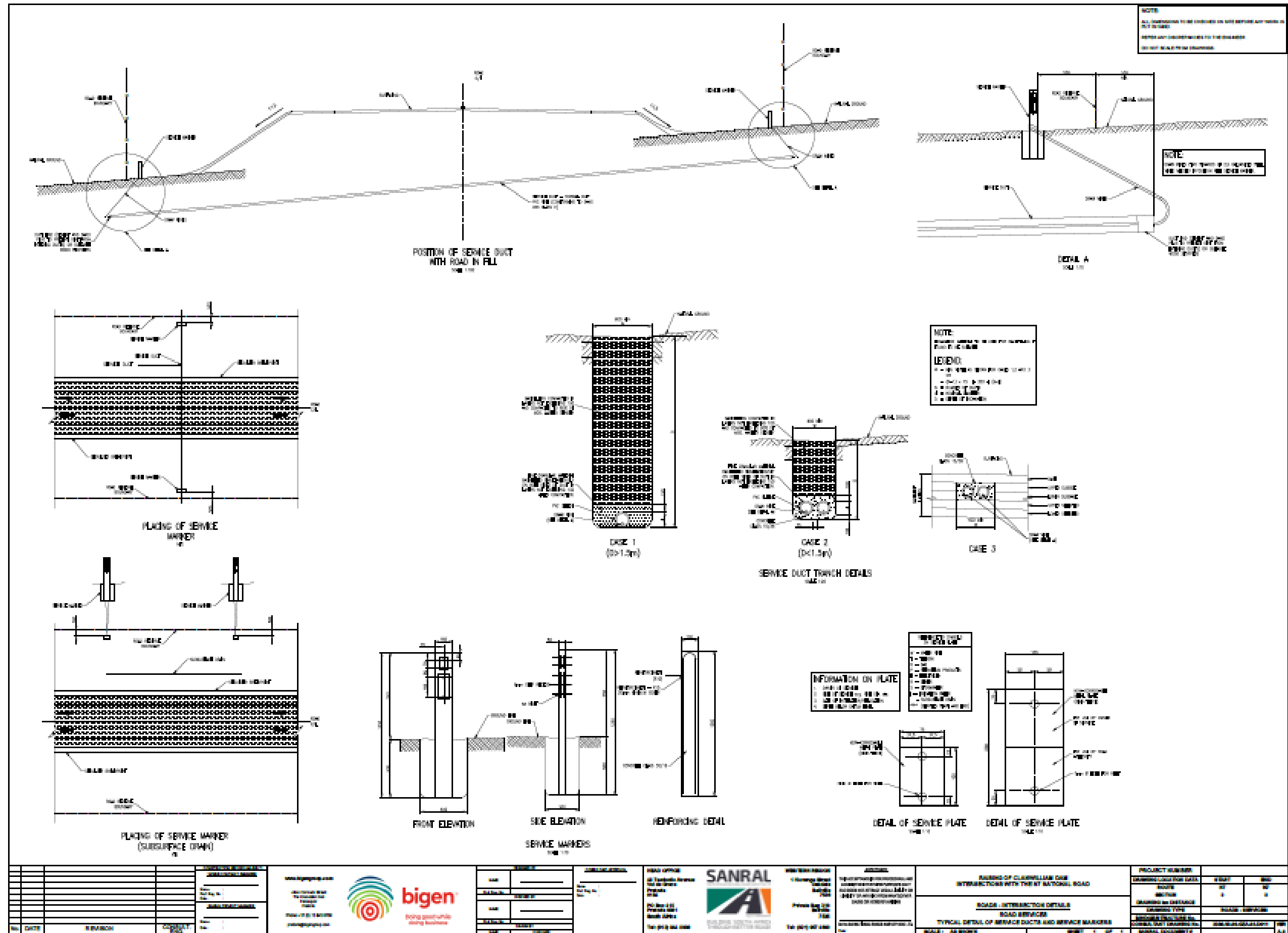


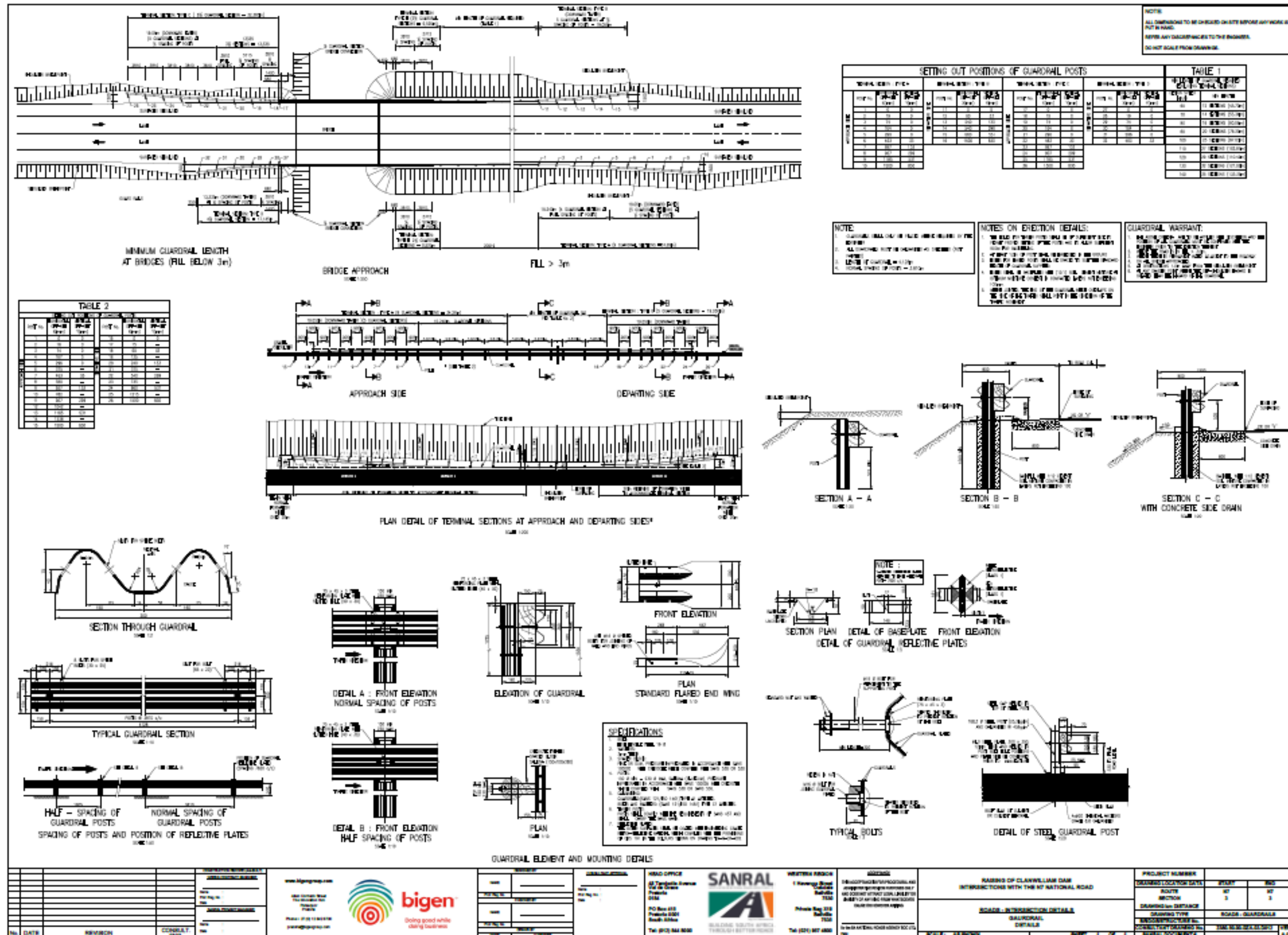
2380.50.00.GZA.03.D008 – Road Marking Longitudinal Lines

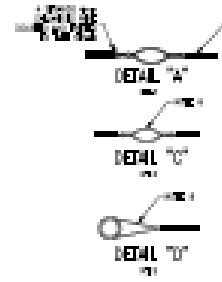
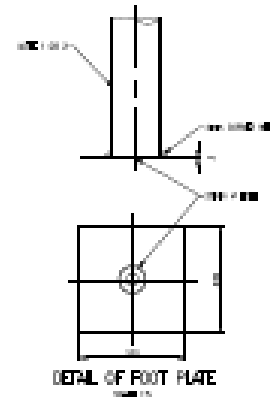
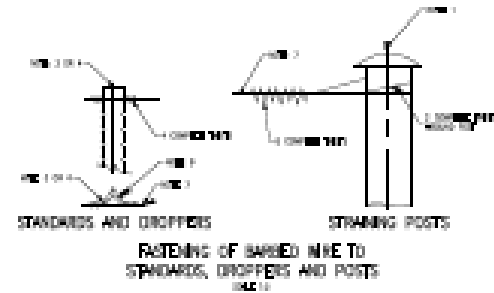
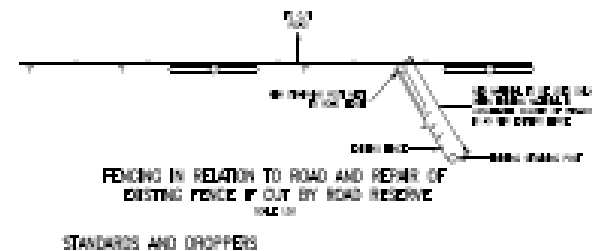
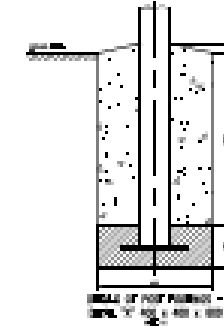
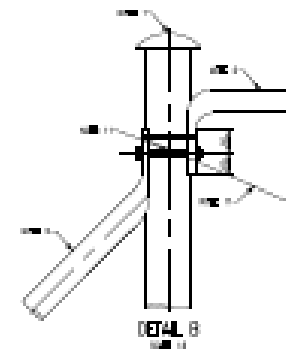
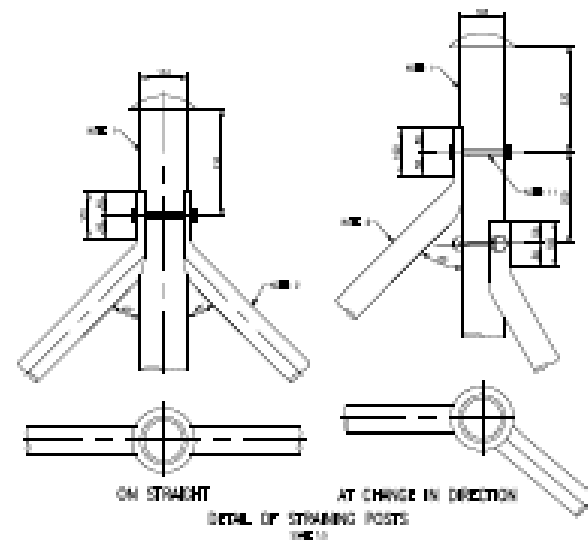
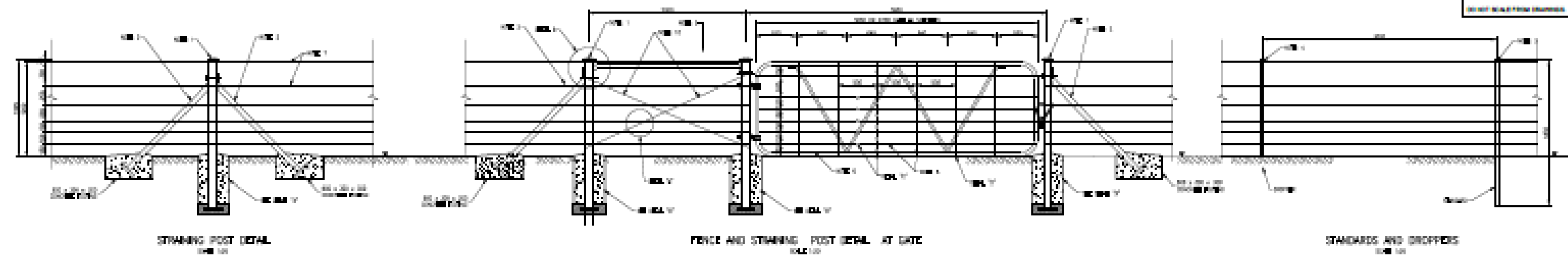
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