Contract 2334-10-05/ID01

Part C1: Agreement and Contract Data Section C1.1: Form of Offer and Acceptance



For the Employer:						
Signature(s)						
Name(s)						
Canacity						
Capacity						
Name and address of	organisatio	on:				
Signature and Names	of witness	AS:				
olgitature and Names	or withess	c 3.				
Signatures						
Names						
Date:						
Contractor Wi	tness 1	Witness 2	Em	ployer	Witness 1	Witness 2

Contract 2334-10-05/ID01

Part C1: Agreement and Contract Data Section C1.1: Form of Offer and Acceptance



CONFIRMATION OF RECIEPT

The Tenderer, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this agreement, including the Schedule of Deviations (if any) today:

The	(da	ay)				
of	(m	onth)				
20 (year)						
For the Contractor:						
Signature(s)						
Name(s)						
Capacity						
Signature and Names	of witnes	sses:				
Signatures						
Names						
		ENI	D OF SE	CTION		
Contractor Wi	itness 1	Witness 2	C1.8	Employer	Witness 1	Witness 2



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PORTION 2: CONTRACT

Section C1.2
Contract Data

ı						
Į	Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Part C1: Agreements and Contract Data

Section C1.2: Contract Data



Northern Cape Department of Co-operative Governance, Human Settlement and Traditional Affairs

LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5 CONTRACT DATA

CONDITIONS OF CONTRACT

The General Conditions of Contract for Construction Works, Third Edition (2015), published by the South African Institution of Civil Engineering, is applicable to this Contract.

The General Conditions of Contract are not bound into this document, but are available at the Contractor's expense from the Secretary of the South African Institution of Civil Engineering, Private Bag X200, Halfway House, Midrand, 1685 or www.saice.org.za.

CONTRACT SPECIFIC DATA

In terms of clause 1.1.1.8 of the General Conditions of Contract for Construction Works, Third Edition (2015), the following contact specific data, referring to the General Conditions of Contract for Construction Works, Third Edition (2015) are applicable to this Contract:

The Contract Data consists of two parts. Part 1 contains information provided by the Employer, while Part 2 contains information to be provided by the Contractor.

Part 1: Data Provided by the Employer

Clause	Contract Data
1.1.1.3	Delete the contents of the clause and insert the following:
	"Certificate of Completion" means the certificate issued by the Employer's Agent stating the date on which completion of the Works was achieved. Certificates of Completion will not be issued for portions or phases of the Works.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
		_			



Clause	Contract Data							
1.1.1.13	The Defects Liability Period for the Works shall be 365 calendar days.							
1.1.1.14	Add the following to the end of this definition:							
	This clause shall apply <i>mutatis mutandis</i> to any portion or phase of the Works that may be described in the Scope of Works or in the Contract Data, or agreed subsequently between the Contractor and the Employer, and committed to writing.							
	The time for achieving Practical Completion, including the 28 days allowance for finalisation of documentation in terms of Clause 5.3.2 and Clause 5.3.3, is 365 days							
1.1.1.15	The Employer is the Northern Cape Department of Co-operative Governance, Human Settlement and Traditional Affairs.							
1.1.1.16	The Employer's Agent means any Principal, Associate Principal or Registered Professional appointed generally or specifically by the management of the firm Bigen Africa Services (Pty) Ltd to fulfil the functions of the Employer's Agent in terms of the Conditions of Contract.							
1.1.1.26	The pricing strategy is Re-measurement Contract							
1.2.1	Add the following to the clause:							
	1.2.1.3 Sent by facsimile, electronic or any like communication irrespective of it being during office hours or otherwise.							
	1.2.1.4 Posted to the Contractor's address, and delivered by the postal authorities.							
	1.2.1.5 Delivered by a courier service or messenger, and signed for by the recipient or his representative.							
1.2.1.2	The address and telephone number of the Employer is:							
	JS du Plooy Building, 9 Cecil Sussman Street, Kimberley, 8301							

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
		C1			
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Clause	Contract Data
	Private Bag X5005 Kimberley 8300 Tel: +27 (0) 53 830 9400 Fax: +27 (0) 53 831 2904
	The address and telephone number of the Employer's Agent is:
	Bigen Africa Services (Pty) Ltd 4 Jacobus Smit Street Labaram
	Kimberley, 8301
	PO Box 110092 Kimberley 8306
	Tel: +27 (0) 53 831 2935 Fax: +27 (0) 86 518 5094
	e-mail: Louis.Gertenbach@bigengroup.com Attention: Mr LG Gertenbach
2.4.1	Delete the contents of the clause and insert the following:
	The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence, listed from highest to lowest priority:
	(a) Form of Offer and Acceptance
	(b) Contract Data
	(c) General Conditions of Contract
	(d) Drawings

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Contractor	_	Witness 1	Witness 2	='	Employer	='	Witness 1	Witness 2
				C1 3				
				C1.5				
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Clause	Contract Data								
	(e) Variations and Additional Clauses to Particular Specifications and Standard Specifications								
	(f) Particular Specifications								
	(g) Standard Specifications								
	(h) Bill of Quantities								
	(i) any other documents forming part of the Contract								
	If an ambiguity or discrepancy between the documents is found, the Employer's Agent shall provide the necessary clarification or instruction.								
3.2.3	The Employer's Agent is, in terms of his appointment by the Employer for the design and administration of the Works included in the Contract, required to obtain the specific approval of the Employer for the execution of the following duties:								
	3.2.3.1 The issuing of an order to suspend the progress of the Works, the extra cost resulting from which order is to be borne by the Employer in terms of Clause 5.11 or the effect of which is liable to give rise to a claim by the Contractor for an extension of time under Clause 5.12 of these conditions.								
	3.2.3.2 The issuing of an instruction or order to vary the nature or quantity of the Works in terms of Clause 6.3, the estimated effect of which will be to increase the Contract Price by an amount exceeding R100 000, the evaluation of all variation orders in terms of Clause 6.4 and the adjustment of the sum(s) tendered for General Items in terms of Clause 6.11.								
	3.2.3.3 The approval of any claim submitted by the Contractor in terms of Clause 10.1.								
4.1.2	Add the following to the clause:								
	The Contractor shall provide the following to the Employer's Agent for retention by								

Contractor	Witness 1	,	Witness 2	Employer	Witness 1	Witness 2	



Clause	Contract Data
	the Employer or his assignee in respect of all works designed by the Contractor:
	4.1.2.1 A Certificate of Stability of the Works signed by a registered Professional Engineer confirming that all such works have been designed in accordance with the appropriate codes of practice.
	4.1.2.2 Proof of registration and of adequate and current professional indemnity insurance cover held by the designer(s).
	4.1.2.3 Design calculations should the Employer's Agent request a copy thereof.
	4.1.2.4 Engineering drawings and workshop details (both signed by the relevant professional engineer), in order to allow the Employer's Agent to compare the design with the specified requirements and to record any comments he may have with respect thereto.
	4.1.2.5 "As-Built" drawings in DXF electronic format after completion of the Works.
	The Contractor shall be responsible for the design of the Temporary Works.
4.3.3	Add the following new clause:
	The Contractor shall comply with the Occupational Health and Safety Specification prepared by the Employer in terms of the Construction Regulations, 2014 promulgated in terms of Section 43 of the Occupational Health and Safety Act (Act No. 85 of 1993).
	Without limiting the Contractor's obligations in terms of the Contract, the Contractor shall before commencement of the Works or any part thereof, be in the possession of an approved Health and Safety Plan.
	The Contractor shall submit an approved Health and Safety Plan to the Employer's Agent within 14 days from the Commencement Date.
4.3.4	Add the following new clause:
	Contractor's liability as mandatory

				_		_	
Contractor	Witness 1	Witness 2	Employer		Witness 1	-	Witness 2



Clause	Contract Data
	Notwithstanding any actions which the Employer may take, the Contractor accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and all its regulations, including the Construction Regulations, 2014, for which he is liable as mandatory. By entering into this Contract it shall be deemed that the parties have agreed in writing to the above provisions in terms of Section 37 (2) of the Act.
4.3.5	Add the following new clause:
	Contractor to notify Employer
	The Employer retains an interest in all inquiries conducted under this Contract in terms of Section 31 and/or 32 of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and its Regulations following any incident involving the Contractor and/or Sub-Contractor and/or their employees. The Contractor shall notify the Employer in writing of all investigations, complaints or criminal charges which may arise pursuant to work performed under this Contract in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and Regulations.
4.3.6	Add the following new clause:
	Contractor's Designer
	The Contractor and his designer shall accept full responsibility and liability to comply with the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and the Construction Regulations, 2014 for the design of the Temporary Works and those part of the Permanent Works which the Contractor is responsible to design in terms of the Contract.
5.3.1	The documentation required before commencement with Works Execution are:
	 Health and Safety Plan (Refer to Clause 4.3.3) Initial programme (Refer to Clause 5.6) A detailed cashflow forecast (Refer to Clause 5.6.2.6) Security (Refer to Clause 6.2) Insurance (Refer to Clause 8.6)

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



Clause	Contract Data
5.3.2	The time to submit the documentation required (Refer to Clause 5.3.1) before commencement with Works execution is 14 days.
5.3.3	Replace both periods of "7 days" in Clause 5.3.3 with "14 days".
5.4.2	The access and possession of Site shall not be exclusive to the Contractor but as set out in the Scope of Works and/or Site Information.
5.6.1	Add the following to the clause:
	In this regard the Contractor shall have regard for the phases and sub-phases (if applicable) for the Works, which shall also be the order in which the Permanent Works shall be constructed, unless otherwise agreed between the parties and committed to writing. If phased construction is applicable, the phases and sub-phases will be described in the Scope of Works and/or will be indicated on the Phasing Plan which forms part of the Drawings.
5.7.1	Delete the last paragraph of the clause and replace with the following:
	No instruction by the Employer's Agent to the Contractor to improve his rate of progress in this regard will qualify for additional compensation, unless the instruction explicitly states that the Contractor is entitled to additional compensation and cites the amount of such compensation or the basis upon which it is to be determined.
5.8.1	The non-working days are Sundays.
	Special non-working days shall be all South African statutory public holidays and the year end break (which commences on 16 December and ends on 05 January).
5.12.5	Add the following new clause:
	Extension of time due to Abnormal Rainfall
	Extension of time for Practical Completion of the Contract in the event of abnormal rainfall shall only be allowed in accordance with the following formula. No additional extension of Time for Practical Completion caused by abnormal climatic conditions will be allowed, irrespective of the cause thereof or the effect it

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
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Clause			Contract Data					
	may have	may have on the execution of the Works:						
	V	=	$(N_w - N_n) + (R_w - R_n)/20$					
	Where:							
	V	=	Extension of time in calendar days for the calendar month under consideration					
	Nw	=	Actual number of days during the calendar month under					
			consideration on which a rainfall of 10mm and more is recorded					
	R _w	=	Actual total rainfall in mm recorded during the calendar month					
			under consideration					
	Nn	=	Average number of days, derived from rainfall records, on which					
			a rainfall of 10mm and more was recorded during the relevant					
			calendar month as per the data tabulated hereinafter					
	Rn	=	Average total rainfall in mm for the relevant calendar month,					
			derived from rainfall records, as tabulated hereinafter					
	Where the extension of time due to abnormal rainfall has to be calculated for portion of a calendar month, pro rata values shall be used. Should V be negative for any particular month, and should its absolute value exceed the corresponding value of N_n , then V shall be taken as being equal to minus N_n . The total extension of time to be granted shall be the algebraic sum of all the monthly extensions, provided that if this total is negative then the time for completion shall not be reduced due to subnormal rainfall.							
	Rainfall records for the period of construction shall be taken on Site. The Contractor shall provide and install all the necessary equipment for accurately measuring the rainfall. The Contractor shall also provide, erect and maintain a security fence plus gate, padlock and keys at each measuring station, all at his own cost. The Employer's Agent or his Representative shall take and record the daily rainfall readings. The Contractor shall be permitted to attend these readings in the company of the Employer's Agent's Representative. Access to the							



Clause	Contract Data							
	measuring gauge(s) shall at all times be under the Employer's Agent's control. The rainfall records applicable to this Contract are those recorded at Weather Station KIMBERLY 0290468 4. The following values of N _n and R _n shall apply:							
		Month	R _n (mm)	N _n (days)				
		January	57	9.8				
		February	76	9.8				
		March	65	10.2				
		April	49	7.6				
		May	16	3.3				
		June	7	2.5				
		July	7	1.5				
		August	7	1.8				
		September	12	3.1				
		October	30	6.1				
		November	42	7.7				
		December	46	7.9				
		TOTAL	414	71				
	-							
5.13.	Delete th	e contents of the	he clause and	insert the followi	ng:			
	5.13.1		-	•	etion Date to complete the			
			• •		is identified in the Scope of			
					terms of Clause 5.14.2 to			
				-	on for the Works, then the			
	Contractor shall be liable to the Employer for the sum(s) stated below as (a) penalty(ies) for every day which shall elapse between the Due Completion Date for the Works or the specific portion of the Works and							
		•		•	the Works or of the specific			
		portion.	nic of Fractical	Compiction of	the works of of the specific			
		The penalty for	or delay shall b	oe: <mark>[Monetary va</mark>	lue per day] per day.			

Witness 1 Witness 1 Witness 2 Contractor Witness 2 Employer



Clause		Contract Data					
	5.13.2	If before the issue of a Certificate of Practical Completion for the whole of the Works, or for any specific portion thereof that is identified in the Scope of Works, any further part of the Works has been:					
	5.13.2.1	certified as complete in terms of a Certificate of Practical Completion; or					
	5.13.2.2	occupied or used by the Employer, his agents, employees or other contractors (not being employed by the Contractor);					
		then the appropriate penalty for delay referred to in Clause 5.13.1 above shall be reduced by the amount which is determined by the Employer's Agent to be appropriate under the circumstances.					
	5.13.3	The imposition of penalties in terms of Clause 5.13.1 shall not relieve the Contractor from his obligation to complete the Works, nor from any of his obligations and liabilities under the Contract.					
	5.13.4	All penalties for which the Contractor becomes liable in terms of Clause 5.13.1 shall be accumulative. The Employer may, without prejudice to any other method of recovery, deduct the amounts of all such penalties from any monies in his possession that are or may become due to the Contractor.					
	5.13.5	The imposition of any penalties in terms of Clause 5.13.1 shall not limit the right of the Employer's Agent of the Employer to act in terms of Clause 9.2.					
5.13.6	Add the f	following new Clause:					
	Agent, in of Work the maxing	If the Contractor shall, without the prior written permission of the Employer's Agent, in respect of any portions of the Works which are prescribed in the Scope of Work to be executed using labour intensive construction methods, or for which the maximum size and capacity of mechanical plant and equipment is restricted in terms of the Contract:					
	la	til to execute such portions of the Works, or any parts thereof, utilising abour intensive construction methods strictly in accordance with the rovisions of the Contract; or					

Contractor	Witness 1	Witness 2		Employer	Witness 1	Witness 2
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Clause	Contract Data
	 utilise in the execution of such portions of the Works, or any parts thereof, mechanical plant or equipment which is in conflict with the terms of the Contract; or
	utilise in the execution of such portions of the Work, workers drawn from sources other than those allowed in terms of the Contract;
	then the Contractor shall be liable to the Employer for the percentage stated below of the value of the Works so executed in conflict with the provisions of the relevant Scope of Work, as a penalty for non-compliance.
	The penalty for non-compliance is: 15% of the value of Works specified.
	The imposition of penalties in terms of this clause shall not relieve the Contractor from his obligation to complete the Works, nor from any of his obligations and liabilities under the Contract.
5.16.3	The latent defect period is 10 years after the issue of the Final Approval Certificate.
6.2.2	Delete the contents of the clause and insert the following:
	If the Contractor fails to select the security to be provided, or if the Contractor fails to provide the selected security within the time period stated in Clause 5.3.2, or if the performance guarantee shall differ substantially from the pro forma, it shall legally be deemed that the Contractor has selected a security of a Cash deposit of 10% of the Contract Sum plus retention of 10% of the value of the Works without limiting the Employer's right to terminate the Contract in terms of Clause 9.2.
6.2.3	Delete the contents of the clause and insert the following:
	If the Contractor has selected a performance guarantee as security, he shall ensure that it remains valid and enforceable until the Certificate of Completion is issued. A fixed expiry date performance guarantee will not be accepted.
	The performance guarantee shall be provided by a Bank or Insurance Company approved by the Employer. Guarantees submitted must be issued by either an

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
		C1.			
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Clause	Contract Data
	insurance company duly registered in terms of the Short-Term Insurance Act, 1998 (Act 35 of 1998) or by a bank duly registered in terms of the Banks Act, 1990 (Act 94 of 1990) on the pro forma attached as Annexure A to the Contract Data. No alterations or amendments of the wording of the pro forma will be accepted.
6.8.2	The application of a Contract Price Adjustment factor will apply to this Contract. Refer to Contract Price Adjustment Schedule for details
6.8.3	Price Adjustments for variations in the cost of special materials will be allowed. The Contractor will be required to provide full details in Part 2 of the Contract Data.
6.8.4	In line 8 delete the words "between the Employer and the Contractor".
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is 80%.
6.10.3	The limit of retention money is 5% of the Contract Sum.
6.10.4	In line 4 delete the word "said" and insert the word "correct".
6.11.1.3	Delete "15 per cent" and replace it with "25 per cent".
8.6.1.3	The limit of indemnity for liability insurance is R20 Million per event, the number of events being unlimited.
10.5.3	The number of Adjudication Board Members to be appointed is one (1)

Contractor	Witness 1	Witness 2	=	Employer	=	Witness 1	-	Witness 2



	CONTRACT PRICE ADJUSTMENT SCHEDULE							
Clause	Contract Data							
1.1	The application of a Contract Price Adjustment factor will apply to this Contract. The price adjustment formula provided in the General Conditions of Contract will apply, together with the following coefficients and the definition of the relevant indices indicated below;							
	X=0,1 a=0,21 b=0,27 c=0,42 d=0,1							
1.2	The following definitions of the relevant indices shall apply to this Contract: "L" is the "Labour Index" and shall be the Consumer Price Index CPI for the province of Northern Cape, as published by Statistics South Africa in the Statistical Release, P0141, Table A - Consumer Price Index: Main indices; Geographic indices. "P" is the "Plant Index" and shall be the "Plant and Equipment" indices, as							
	published by Statistics South Africa in the Statistical Release, P0151.1 Table 4 - Mining and construction plant and equipment price index. "M" is the "Materials Index" and shall be the "Civil engineering material- total" as published by Statistics South Africa in the Statistical Release, P0151.1 Table 6 -							
	Civil engineering material price indices. "F" is the "Fuel Index" and shall be the "Diesel" indices as published by Statistics South Africa in the Statistical Release, P0142.1, Table 1 - PPI for final							
1.3	manufactured goods; Coke, petroleum, chemical, rubber and plastic products. The base month shall be the month before the close of tender.							

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2		
Contractor	Williess i			Williess	Williess 2		
C1.13							

Contract 2334-10-05/ID01 Part C1: Agreements and Contract Data Section C1.2: Contract Data



Part 2: Data provided by the Contractor

Clause	Contract Data	
1.1.1.9	The name of the Contractor is:	
1.2.1.2	The address of the Contractor is:	
6.2.1	The security to be provided by the Contractor shall be one of	the following:
	Type of Security	Contractor's choice. Indicate "Yes" or "No"
	Cash deposit of 10% of the Contract Sum plus retention of 10% of the value of the Works.	
	Performance guarantee of 10% of the Contract Sum plus retention of 10% of the value of the Works.	
6.8.3	The variation in cost of special materials is:	
Contractor	Witness 1 Witness 2 Employer Witness	s 1 Witness 2

C1.14

Contract 2334-10-05/ID01

Part C1: Agreements and Contract Data Section C1.2: Contract Data



Special Material	Method	Price for Base Month

END OF SECTION

Witness 1 Witness 2 Contractor Witness 2 Employer Witness 1



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PORTION 2: CONTRACT

Section C1.2
Contract Data

Annexure A: Form of Guarantee

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C1.2: Contract Data Annexure A: Form of Guarantee



Northern Cape Department of Co-operative Governance, Human Settlement and Traditional Affairs

LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

(To be supplied on the official letterhead of "The *Bank/Company*")

PRO FORMA

FIXED PERFORMANCE GUARANTEE

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:					
Physical address:					
"Employer" means:					
"Contractor" means:					
"Employer's Agent" m	neans:				
"Works" means:					
"Site" means:					
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Contract No 2334/10/05/ID01

Part C1: Agreement and Contract Data

Section C1.2: Contract Data Annexure A: Form of Guarantee



"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 "Expiry Date" means: Date on which the Certificate of Completion of the Works has been issued. (Note: A fixed expiry date will not be accepted) 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. PERFORMANCE GUARANTEE The Guarantor's liability shall be limited to the amount of the Guaranteed Sum. 1. 2. The Guarantor's period of liability shall be from and including the date of issue of this Performance Guarantee and 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. The Employer's Agent and/or the Employer shall advice the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued. 3. The Guarantor hereby acknowledges that: 3.1. any reference in this Performance Guarantee to the Contract is made for the purpose of

3.2. its obligation under this Performance Guarantee is restricted to the payment of money.

accessory obligation or any intention whatsoever to create a suretyship;

convenience and shall not be construed as any intention whatsoever to create an

Contract No 2334/10/05/ID01

Part C1: Agreement and Contract Data

Section C1.2: Contract Data Annexure A: Form of Guarantee



- 4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 and 4.3:
 - 4.1. 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 4.2;
 - 4.2. 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 4.1 and the sum certified has still not been paid;
 - 4.3. A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.
- 5. Subject to the Guarantor's maximum liability referred to in 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:
 - 5.1. The Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 5; or
 - 5.2. 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 5; and
 - 5.3. 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.
- 6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
- 7. Where the Guarantor has made payment in terms of 5, 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

Contractor	Witness 1	Witness 2	ll .	Employer	Witness 1	j	Witness 2

Contract No 2334/10/05/ID01

Part C1: Agreement and Contract Data

Section C1.2: Contract Data Annexure A: Form of Guarantee



refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of the 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.

- 8. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
- 9. Payment by the Guarantor in terms of 5 will only be made against the return of the original Performance Guarantee by the Employer.
- 10. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem 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.
- 11. The Guarantor chooses the physical address as stated above for the service of all notice for all purposes in connection herewith.
- 12. This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 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.
- 13. This Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.
- 14. Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's 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 signa	atory (1)				
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Contract No 2334/10/05/ID01 Part C1: Agreement and Contract Data

Section C1.2: Contract Data Annexure A: Form of Guarantee



Capacity
Guarantor's signatory (2)
Capacity
Vitness signatory (1)
Vitness signatory (2)

END OF SECTION

Contractor	Mitnogg 1	Witness 2	Employer	Mitnoco 1	Mitnoss 2



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PORTION 2: CONTRACT

Section C1.2
Contract Data

Annexure B: Ministerial Determination-Special Public Works Programmes

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PORTION 2: CONTRACT

Part C2
Pricing Data

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PRICING DATA

CONTENTS LIST

Section	Description	Page No
PART C2.1	PRICING INSTRUCITONS	
1.	General	
2.	Pay Items	
3.	Quantities	
4.	Rates	
PART C2.2	BILL OF QUANTITIES	
PART C2.3	SUMMARY OF BILL OF QUANTITIES	

END OF SECTION



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PORTION 2: CONTRACT

Section C2.1
Pricing Instructions

	ſ					1	
Contractor	-	Witness 1	Witness 2	Employer	Witness 1		Witness 2



Northern Cape Department of Co-operative Governance, Human Settlement and Traditional Affairs

LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PRICING INSTRUCTIONS

1. **GENERAL**

These pricing instructions provide the Tenderer with guidelines and requirements with regard to the completion of the bill of quantities. These pricing instructions also describe the criteria and assumptions which will be assumed in the Contract to have been taken into account by the Tenderer when developing his prices.

The bill of quantities shall be read with all the documents which form part of this Contract.

The following words have the meaning hereby assigned to them:

: The unit of measurement for each item of work in terms of the Scope of Work. Unit

Quantity : The number of units for each item.

Rate : The payment per unit of work at which the tenderer tenders to do the work.

: The product of the quantity and the rate tendered for an item. Amount

Lump sum : An amount tendered for an item, the extend of which is described in the Pricing Instructions, Bill of Quantities or the Scope of Work but the quantity of (L.Sum)

work of which is not measured in any units.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



2. PAY ITEMS

The method of measurement published by the South African Bureau of Standards in Clause 8 of the Standardised Specifications for Civil Engineering Construction (SABS 1200) is applicable, subject to the variations and amendments contained in section C3.4.2.

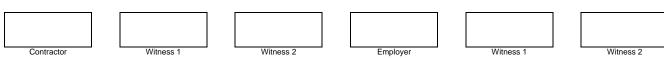
Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the Standard Specifications. The measurement and payment clause of each Standard Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standard Specification, or the Scope of Work, conflict with the terms of the Bill of Quantities, the requirements of the Standard Specification or Scope of Work, as applicable, shall prevail.

The units of measurement described in the Bill of Quantities are metric units. Abbreviations used in the Bill of Quantities are as follows:

mm	=	millimetre	h	=	hour
m	=	metre	kg	=	kilogram
km	=	kilometre	t	=	ton (1000kg)
m²	=	square metre	No.	=	number
m².pass	=	square metre pass	sum	=	lump sum
ha	=	hectare	MN	=	meganewton
m³	=	cubic metre	MN.m	=	meganewton-metre
m³.km	=	cubic metre-kilometre	PC sum	=	Prime Cost Sum
1	=	litre	Prov sum	=	Provisional sum
kl	=	kilolitre	%	=	per cent
MPa	=	megapascal	kW	=	kilowatt
kPa	=	kilopascal	wt	=	wall thickness
			dia	=	diameter

3. QUANTITIES

- 3.1 Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
- 3.2 The quantities set out in the Bill of Quantities are the estimated quantities of the Works, and do not necessarily represent the actual amount of work to be done. The quantities certified for





payment, and not the quantities given in the Bill of Quantities, shall be used for determining payments to the Contractor. The Contract Price for the completed contract shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.

4. RATES

- 4.1 The prices and rates to be inserted in the Bill of Quantities are to be full inclusive prices for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the tender is based, as well as overhead charges and profit. Reasonable prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.
- 4.2 A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price is entered or where a word or phrase such as "included" or "provided elsewhere" will be accepted as a rate of nil (R0,00) having been entered against such items and covered by the other prices or rates in the schedule.

Any work executed to which such a pay item applies, shall be measured under the appropriate items in the Bill of Quantities and valued at a rate of nil (R0,00). The rate of nil shall be valid irrespective of any change in the quantities during the execution of the Contract.

- 4.3 The Tenderer shall fill in a rate against all items where the words "rate only" appears in the amount column. The intention is that, although no work is foreseen under such item and no quantities are consequently given in the quantity column, the tendered rate shall apply should work under this item be actually required.
- 4.4 Except where rates only are required, the Tenderer shall insert all amounts to be included in his total tendered price in the "Amount" column and show the corresponding total tendered price.
- 4.5 The Tenderer shall not group together a number of items and tender one rate for such group of items.
- 4.6 All rates and sums of money quoted in the Bill of Quantities shall be in rands and whole cents. Fractions of a cent shall be discarded.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



- 4.7 This tender is VAT exempt (The Client will not pay VAT on this project)
- 4.8 Should excessively high unit prices be tendered, such prices may be of sufficient importance to warrant rejection of a tender by the Employer.
- 4.9 Where the Contractor is required to furnish detailed drawings and designs or other information in terms of the Contract Documents, all costs thereof shall be deemed to have been provided for and included in the unit rates and sum amounts tendered for the items scheduled in the Bill of Quantities, and separate additional payments will not be made.

END OF SECTION

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PORTION 2: CONTRACT

Section C2.2
Bill of Quantities

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Contract: 2334-10-05/ID01 Part C2: Pricing Data

Section C2.2: Schedule of Quantities



Teach Payment Reference	Preliminary and General						
1.20		Payment	Description	Unit	Qty		
1.20		0.4440					
FIXED-CHARGE ITEMS							
1.1		1200 A	PRELIMINARY AND GENERAL				
Establishment of Facilities on Site			FIXED-CHARGE ITEMS				
8.3.2	1.1	8.3.1	Contractual Requirements	sum			
Dwg 1396.10.ZA.01.A005 & A006			Establishment of Facilities on Site				
1.2		8.3.2	.1 Facilities for the Engineer				
the Engineer (b) Telephone (Telkom landlines) (c) Nameboards (d) Survey assistant (e) Survey equipment (for the Contractor) 1.8 PSAB6 (g) Laboratory equipment (g) Laboratory equipment (h) Workshops (h) Dealing with water (Sub-clause 5.5) (h) Dealing with water (Sub-clause 5.5) (h) Plant			Dwg 1396.10.ZA.01.A005 & A006				
the Engineer (b) Telephone (Telkom landlines) (c) Nameboards (d) Survey assistant (e) Survey equipment (for the Contractor) 1.8 PSAB6 (g) Laboratory equipment (g) Laboratory equipment (h) Workshops (h) Dealing with water (Sub-clause 5.5) (h) Dealing with water (Sub-clause 5.5) (h) Plant							
1.3 PSAB3 (b) Telephone (Telkom landlines) sum 1.4 PSAB1 (c) Nameboards no 1.5 PSAB5 (d) Survey assistant sum 1.6 PSAB6 (e) Survey equipment sum 1.7 PSAB4.2 (g) Laboratory equipment sum 1.7 PSAB4.2 (g) Laboratory equipment sum 1.8 (a) Offices and storage sheds sum 1.9 (b) Workshops sum 1.10 (c) Laboratories sum 1.11 (d) Living accommodation sum 1.12 (e) Ablution and latrine facilities sum 1.13 (f) Tools and equipment sum 1.14 (g) Water supplies, power and communication sum 1.15 (h) Dealing with water (Sub-clause 5.5) sum 1.16 (i) Access (Sub-clause 5.8) sum 1.17 (i) Plant sum 1.18 8.3.3 Other fixed-charge obligations sum 1.19 8.3.4 Removal of Contractor's and Engineers si	1.2	PSAB2	· · ·				
1.4 PSAB1 (c) Nameboards no 1.5 PSAB5 (d) Survey assistant sum 1.6 PSAB6 (e) Survey equipment sum 1.7 PSAB4.2 (g) Laboratory equipment sum 1.7 PSAB4.2 (a) Offices and storage sheds sum 1.9 (b) Workshops sum 1.10 (c) Laboratories sum 1.11 (d) Living accommodation sum 1.12 (e) Ablution and latrine facilities sum 1.13 (f) Tools and equipment sum (g) Water supplies, power and communication sum 1.14 (g) Water supplies, power and communication sum 1.15 (h) Dealing with water (Sub-clause 5.5) sum 1.16 (i) Access (Sub-clause 5.8) sum 1.17 (j) Plant sum 1.18 8.3.3 Other fixed-charge obligations sum 1.19 8.3.4 Removal of Contractor's and Engineers site establishment on completion sum 8.3.5 Occupational Health and S			_	sum			
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1.7 PSAB4.2 (g) Laboratory equipment sum 8.3.2 .2 Facilities for the Contractor (a) Offices and storage sheds (b) Workshops sum (c) Laboratories (d) Living accommodation sum (e) Ablution and latrine facilities (f) Tools and equipment sum (g) Water supplies, power and communication (h) Dealing with water (Sub-clause 5.5) sum (i) Access (Sub-clause 5.8) (j) Plant sum 1.18 8.3.3 Other fixed-charge obligations 1.19 8.3.4 Removal of Contractor's and Engineers site establishment on completion 8.3.5 Occupational Health and Safety 1.20 PSA5.1 Compliance with Occupational Health and Safety Act (Act 85 of 1993) and its regulations and with the Employers Health and Safety Specification 8.3.6 Environmental Managemant 1.21 PSA6.1 Compliance with Environmental Management plan sum		l .	1				
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1.12 1.13 1.14 1.14 1.15 1.16 1.17 1.18 1.18 1.19 1.19 1.19 1.20 1.20 1.20 1.30 1.40 1.51 1.61 1.71 1.71 1.71 1.81 1.82 1.83.34 1.83.4 1.84 1.85 1.85 1.85 1.85 1.85 1.85 1.85 1.85	1.10		(c) Laboratories	sum			
1.13 1.14 1.15 1.16 1.16 1.17 1.18 1.18 1.19 1.19 1.19 1.19 1.10 1.10 1.10 1.10	1.11		(d) Living accommodation	sum			
1.14 1.15 1.16 1.17 1.18 1.18 1.19 1.19 1.19 1.10 1.10 1.10 1.11 1.11	1.12		(e) Ablution and latrine facilities	sum			
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establishment on completion 8.3.5 Occupational Health and Safety 1.20 PSA5.1 Compliance with Occupational Health and Safety Act (Act 85 of 1993) and its regulations and with the Employers Health and Safety Specification 8.3.6 Environmental Managemant 1.21 PSA6.1 Compliance with Environmental Management plan sum	1.18	8.3.3	Other fixed-charge obligations	sum			
8.3.5 Occupational Health and Safety 1.20 PSA5.1 Compliance with Occupational Health and Safety Act (Act 85 of 1993) and its regulations and with the Employers Health and Safety Specification sum 8.3.6 Environmental Managemant 1.21 PSA6.1 Compliance with Environmental Management plan sum	1.19	8.3.4					
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(Act 85 of 1993) and its regulations and with the Employers Health and Safety Specification sum 8.3.6 Environmental Managemant 1.21 PSA6.1 Compliance with Environmental Management plan sum		8.3.5	Occupational Health and Safety				
Employers Health and Safety Specification sum 8.3.6 Environmental Managemant 1.21 PSA6.1 Compliance with Environmental Management plan sum	1.20	PSA5.1	Compliance with Occupational Health and Safety Act				
8.3.6 Environmental Managemant 1.21 PSA6.1 Compliance with Environmental Management plan sum			, ,				
1.21 PSA6.1 Compliance with Environmental Management plan sum			Employers Health and Safety Specification	sum			
		8.3.6	Environmental Managemant				
Carried Forward	1.21	PSA6.1	Compliance with Environmental Management plan	sum			
L I Carried Forward							
Carried Forward			<u> </u>		U	arried Forward	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Contract: 2334-10-05/ID01 Part C2: Pricing Data

Section C2.2: Schedule of Quantities



relimina	ary and Ge	neral			doing	business
Item	Payment Reference	I Describiion	Unit	Qty	Rate (R)	Amount (R)
				Br	ought Forward	
		TIME-RELATED ITEMS				
1.22	8.4.1	Contractual requirements	sum			
		Operation and maintanance of facilities on the Site for				
		Operation and maintenance of facilities on the Site for the duration of construction				
	8.4.2	.1 Facilities for the Engineer Dwg 1396.10.ZA.01.A005 & A006				
1.23	PSAB2	(a,f,h) Furnished offices, latrines and carports	sum			
1.24	PSA.7	(b) Telephone (Telkom landlines)	sum			
1.25	PSAB1	(c) Nameboards	sum			
1.26	PSAB5	(d) Survey assistant	sum			
1.27	PSAB6	(e) Survey equipment	sum			
1.28	PSAB4.2	(g) Laboratory equipment	sum			
	8.4.2	.2 Facilities for the Contractor				
1.29		(a) Offices and storage sheds	sum			
1.30		(b) Workshops	sum			
1.31		(c) Laboratories	sum			
1.32		(d) Living accommodation	sum			
1.33		(e) Ablution and latrine facilities	sum			
1.34		(f) Tools and equipment	sum			
1.35		(g) Water supplies, power and communication	sum			
1.36		(h) Dealing with water (Sub-clause 5.5)	sum			
1.37		(i) Access (Sub-clause 5.8)	sum			
1.38		(j) Plant	sum			
1.39	8.4.3	Supervision for duration of construction	sum			
1.40	8.4.4	Company and head office overhead costs for the duration				
		of the contract	sum			
1.41	8.4.5	Other time-related obligations	sum			
1.42	8.4.6	Occupational Health and Safety				
	PSA5.2	Compliance with Occupational Health and Safety Act				
		(Act 85 of 1993) and its regulations and with the				
		Employers Health and Safety Specification	sum			
1.43	8.4.7	Environmental Managemant				
	PSA6.2	Compliance with Environmental Management plan	sum			
		SCHEDULE: 1				
		PRELIMINARY AND GENERAL				
	•	Carried forward to Summary of Schedules			Total	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Contract: 2334-10-05/ID01 Part C2: Pricing Data

Section C2.2: Schedule of Quantities
Provisional Sums and Prime Cost Items



Provisio	nal Sums a	nd Prime Cost Items			004	ng business
Item	Payment Reference	Description	Unit	Qty	Rate (R)	Amount (R)
		SCHEDULE: 2 PROVISIONAL SUMS AND PRIME COST ITEMS				
		SUMS STATED PROVISIONALLY BY THE ENGINEER				
		For work to be executed by the Contractor and valued in terms of the "Valuation of Variations" clause in the Conditions of Contract				
		ALLOWANCES				
		Allowances				
	8.5	(a) .1 <u>Community requirements</u>				
2.1	PSA7.3	.1 CLO/LDO remuneration	Prov sum			
2.2		.2 Overheads, charges and profit on above	%	10%		
2.3	PSA7.4	.3 Accredited training courses for selected local and other labourers	Prov sum			
2.4		.4 Overheads, charges and profit on above	%	10%		
		ENGINEERS REQUIREMENTS				
2.5	8.5 PSA7.5	(a) .2 Engineers requirements .1 Cellular phone costs	Prov sum			
2.6		.2 Overheads, charges and profit on above	%	10%		
2.7	PSA7.6	.3 Acceptance control testing	Prov sum			
2.8		.4 Overheads, charges and profit on above	%	10%		
2.9	PSA7.7	.5 Site office consumables and personal protective equipment	Prov sum			
2.10		.6 Overheads, charges and profit on above	%	10%		
2.11	PSA7.8	.7 Electronic office equipment	Prov sum			
2.12		.8 Overheads, charges and profit on above	%	10%		
	8.5	WORK TO EXISTING SERVICES (a) .3 Existing services				
2.13		.1 Locating existing services	Prov sum			
2.14		.2 Overheads, charges and profit on above	%	10%		
				C	arried Forward	

			Carried Forward				
740 W	12				Serber Miles		
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2		

Section C2.2: Schedule of Quantities
Provisional Sums and Prime Cost Items



Provision	nal Sums a	nd Prime Cost Items			don	g business
Item	Payment Reference	Description	Unit	Qty	Rate (R)	Amount (R)
	_			Br	ought Forward	
2.15		.5 Connection to municipal water supply	Prov sum			
2.16		6 Overheads, charges and profit on above	%	10%		
		PRIME COST ITEMS				
	8.6	Materials for dayworks				
2.17	PSA8.1	(a) Materials used in the execution of dayworks	PC item			
2.18		(b) Overheads, charges and profit on above	%	10%		
		SCHEDULE: 2				
		PROVISIONAL SUMS AND PRIME COST ITEMS				
	1	Carried forward to Summary of Schedules			Total	

Section C2.2: Schedule of Quantities
Dayworks and Temporary Works



Daywork	s and Ten	nporary Works			904	ng business
Item	Payment Reference	L Description	Unit	Qty	Rate (R)	Amount (R)
	SANS 1200 A	SCHEDULE: 3 DAYWORKS AND TEMPORARY WORKS				
		DAYWORKS Note: Dayworks executed on instruction of the Engineer only Supervision of dayworks is not payable under this section and is deemed to be included under Preliminary and General items in 1200A				
	8.7.1	LABOUR				
3.1 3.2 3.3		(a) Skilled (b) Semi-skilled (c) Un-skilled	hr hr hr	50 100 200		
		PLANTHIRE (WORK RATES ON SITE) TRUCKS				
	8.7.2	.1 <u>Tipper trucks (specify capacity)</u>				
3.4 3.5 3.6		(a) Capacitym³ (small) (b) Capacitym³ (medium) (c) Capacitym³ (large)	hr hr hr	20 20 20		
	8.7.2	.3 Flatbed trucks (specify capacity)				
3.7 3.8 3.9		(a) Capacitym³ (small) (b) Capacitym³ (medium) (c) Capacitym³ (large)	hr hr hr	20 20 20		
		LDV'S				
	8.7.2	.4 LDV (specify size)				
3.10		(a) LDVton	km	500		
		WATER TANKERS				
	8.7.2	.5 Water tankers (specify capacity)				
3.11 3.12 3.13		(a) Capacityliter (small, towable) (b) Capacityliter (medium) (c) Capacityliter (large)	hr hr hr	20 20 20		
		<u>GRADERS</u>				
	8.7.2	.7 Motor graders (specify model/kw)				
3.14		(a) Modelkw	hr	20	arried Forward	
					annou i oi waiu	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities

Dayworks and Temporary Works



Item	Payment	I Description	Unit	Qty	Rate	Amount
	Reference	· ·		_	(R) ought Forward	(R)
	0.7.0	EXCAVATORS				
	8.7.2	.9 <u>Crawler excavators (specify model/mass/kw)</u>				
3.15		(a) Model//kgkw (small)	hr	20		
3.16		(b) Model//kgkw (medium)	hr	20		
3.17		(c) Model//kgkw (large)	hr	20		
		TLB'S				
	8.7.2	.10 Tractor loader backhoe (TLB)(specify model)				
0.40				400		
3.18		(a) Model	hr	100		
		RIDE-ON ROLLERS				
	8.7.2	.11 Self propelled vibrating rollers (smooth drum)				
		(specify mass)				
3.19		(a) Masskg (medium)	hr	20		
3.20		(b) Masskg (large)	hr	20		
	8.7.2	.12 <u>Self propelled vibrating rollers (padfoot)</u>				
		(specify mass)				
3.21		(a) Masskg (medium)	hr	20		
3.22		(b) Masskg (large)	hr	20		
		WALK BEHIND ROLLERS				
	8.7.2	.14 Walk behind vibrating rollers (specify model)				
	0.7.2	- 111 <u>- van somma visiating renera (opeony moder)</u>				
3.23		(a) Model(BW 61) (small)	hr	20		
3.24 3.25		(b) Model(BW 76) (medium) (c) Model(BW 90) (large)	hr hr	20 20		
0.20			1"	20		
		COMPACTORS				
	8.7.2	.15 Plate compactors (specify model)				
3.26		(a) Model	hr	20		
	0.7.0					
	8.7.2	.16 Wackers (specify model)				
3.27		(a) Model	hr	20		
		WATERPUMPS				
	8.7.2	.19 Waterpump (specify capacity)				

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities Dayworks and Temporary Works



Daywork		porary Works I	1		Data	A
Item	Payment Reference		Unit	Qty	Rate (R)	Amount (R)
	rtelelelice			Bro	ought Forward	(11)
				5.0	l l	
3.28		(a) Capacity liter/sec (small)	hr	20		
3.29		(b) Capacity liter/sec (medium)	hr	20		
3.30		(c) Capacity liter/sec (large)	hr	20		
		TRANSPORT (COST TO AND FROM SITE)				
		Note:				
		Distance shall be measured one way only (tender				
		rates shall include for transport in both directions to and from site)				
	8.7.3	.1 Low bed				
	00	··· 				
3.31		(a) Low-bed (suitable for the largest piece				
		of equipment above)	km	100		
	8.7.3	.2 <u>Tipper truck</u>				
0.00		() 0 "				
3.32		(a) Small	km	100		
3.33 3.34		(b) Medium	km	100		
3.34		(c) Large	km	100		
	8.7.3	.3 Flatbed truck				
	0.7.0	.o <u>raibouriuon</u>				
3.35		(a) Small	km	100		
3.36		(b) Medium	km	100		
3.37		(c) Large	km	100		
	8.7.3	.4 Water tanker				
3.38		(a) Small	km	100		
3.39		(b) Medium	km km	100		
3.40		(c) Large	km	100		
00		(0)	Kill	100		
		TEMPORARY WORKS				
3.41	8.8.2	Accommodation of traffic	sum			
	PSD5					
3.42	PSD6	Haul road to borrow area	sum			
		EVICTING OFFINATO				
		EXISTING SERVICES				
	8.8.4	Existing services				
	0.0. 1	<u></u>				
3.43	PSL7.2	(c) Excavation and backfill by hand in soft material				
-		to expose services, backfill compacted to				
		90% mod AASHTO density	m³	400		
		SCHEDULE: 3				
		DAYWORKS AND TEMPORARY WORKS				
		Carried forward to Summary of Schedules			Total	

Contractor	Witness 1	Witness 2	Employer	Witness 1	 Witness 2

Section C2.2: Schedule of Quantities



Site Clea	arance				don	ng business
Item	Payment Reference	I DESCRIPTION	Unit	Qty	Rate (R)	Amount (R)
	SANS 1200 C	SCHEDULE: 4 SITE CLEARANCE				
		CLEAR AND GRUB SITE				
	8.2.1	(a) Clear and grub area for				
4.1		.1 Roads	m²	83585		
4.2		.2 Sewer (minimum 3 m wide)	m	5760		
		REMOVE LARGE TREES AND STUMPS				
	8.2.2	Remove and grub large trees and tree stumps of girth				
4.3		(a) Exceeding 1m and up to and including 2m	no	1		
4.4		(b) Exceeding 2m and up to and including 3m	no	1		
		REMOVE TOPSOIL				
	8.2.10	(a) Remove topsoil to a depth of 150mm and				
4.5		.1 Stockpile on site and maintain	m³	4885		
4.6		.2 Spoil at spoil site established by the Contractor	m³	13012		
	SANS 1200 D	FINISHING, TOPSOILING AND GRASSING				
	8.3.10	Topsoiling with material from stockpiles on site				
4.7		(a) Spread over site	m³	4885		
		SCHEDULE: 4 SITE CLEARANCE				
		Carried forward to Summary of Schedules			Total	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities



arthwo	rks				908	ng business
Itom	Payment Reference		Unit	Qty	Rate (R)	Amount (R)
	SANS	SCHEDULE: 5				
	1200 D	<u>EARTHWORKS</u>				
	PSD6	DESIGNATED BORROW AREA (BORROW AREA ARRANGED BY THE EMPLOYER)				
5.1	8.3.4	(b) Opening up and closing down of borrow area	sum			
5.2	8.3.4	(c) Dealing with overburden	m³			
		MASS EARTHWORKS				
		MASS EXCAVATION				
		(a) .1 Excavate in all materials and spoil at site established by the Contractor				
5.3		.1 Excavation in open channels	m³	350		
		SCHEDULE: 5 EARTHWORKS				
		Carried forward to Summary of Schedules			Total	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities

Earthworks (Pipe Trenches)



I lay mant				'	A :
Payment Reference	I Describiion	Unit	Qty	Rate (R)	Amount (R)
CANC	SCHEDINE: C				
	TRENOUES FOR WATER RIDES				
	·				
	unsuitable materials for trenches				
8.3.2	(a) .1 <u>Up to 1m wide</u>				
		m³	5925		
	.1 Over fill and up to zill deep	III-	5625		
8.3.2	(b) Extra over reference 8.3.2 (a) for				
	.2 Hard rock excavation	m³	60		
8.3.2	(c) Excavate unsuitable material from trench bottom.				
	dispose of material, and re-fill with suitable imported				
	material compacted to 90% mod AASHTO density	m³	50		
	ADDITIONAL COMPACTION				
8.3.3	.3 Additional compaction in road reserves				
	.1 Additional compaction (90% compaction				
	included elsewhere) to obtain 93% mod				
	AASHTO density	m³	3405		
	TRENCHES FOR SEWER PIPES				
	EXCAVATION AND BACKFILLING				
	Excavate in all materials, backfill and compact to 90%				
	mod AASHTO density, and dispose of surplus and				
8.3.2					
0.0.2					
	.1 Over 1m and up to 2m deep	m³	4165		
	.2 Over 2m and up to 3m deep	m³	5105		
	.3 Over 3m and up to 4m deep	m³	615		
8.3.2	(b) Extra over reference 8.3.2 (a) for				
	.2 Hard rock excavation	m³	62		
	=::==:::=:::		ı ~-		
	8.3.2 8.3.2 8.3.2 8.3.2	SANS 1200 DB EARTHWORKS (PIPE TRENCHES) TRENCHES FOR WATER PIPES EXCAVATION AND BACKFILLING Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials for trenches 8.3.2 (a) .1 Up to 1m wide .1 Over 1m and up to 2m deep 8.3.2 (b) Extra over reference 8.3.2 (a) for .2 Hard rock excavation 8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density ADDITIONAL COMPACTION 8.3.3 .3 Additional compaction in road reserves .1 Additional compaction (90% compaction included elsewhere) to obtain 93% mod AASHTO density TRENCHES FOR SEWER PIPES EXCAVATION AND BACKFILLING Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials for trenches (a) .1 Up to 1m wide .1 Over 1m and up to 2m deep .2 Over 2m and up to 3m deep .3 Over 3m and up to 4m deep 8.3.2 (b) Extra over reference 8.3.2 (a) for	SANS 1200 DB EARTHWORKS (PIPE TRENCHES) TRENCHES FOR WATER PIPES EXCAVATION AND BACKFILLING Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials for trenches 8.3.2 (a) .1 Up to 1m wide .1 Over 1m and up to 2m deep m³ 8.3.2 (b) Extra over reference 8.3.2 (a) for .2 Hard rock excavation m³ 8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density m³ ADDITIONAL COMPACTION 8.3.3 .3 Additional compaction in road reserves .1 Additional compaction (90% compaction included elsewhere) to obtain 93% mod AASHTO density m³ TRENCHES FOR SEWER PIPES EXCAVATION AND BACKFILLING Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials for trenches (a) .1 Up to 1m wide .1 Over 1m and up to 2m deep m³ .2 Over 2m and up to 3m deep m³ .3 Over 3m and up to 4m deep m³ 8.3.2 (b) Extra over reference 8.3.2 (a) for	SCHEDULE: 6 EARTHWORKS (PIPE TRENCHES) TRENCHES FOR WATER PIPES EXCAVATION AND BACKFILLING Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials for trenches 8.3.2 (a) .1 Up to 1m wide .1 Over 1m and up to 2m deep m³ 5825 8.3.2 (b) Extra over reference 8.3.2 (a) for .2 Hard rock excavation m³ 60 8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density m³ 50 ADDITIONAL COMPACTION 8.3.3 Additional compaction in road reserves .1 Additional compaction (90% compaction included elsewhere) to obtain 93% mod AASHTO density m³ 3405 TRENCHES FOR SEWER PIPES EXCAVATION AND BACKFILLING Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials for trenches (a) .1 Up to 1m wide .1 Over 1m and up to 2m deep m³ 4165 .2 Over 2m and up to 3m deep m³ 5105 .3 Over 3m and up to 4m deep m³ 615	SANS 1200 DB EARTHWORKS (PIPE TRENCHES) TRENCHES FOR WATER PIPES EXCAVATION AND BACKFILLING Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials for trenches 8.3.2 (a) .1 Up to 1m wide .1 Over 1m and up to 2m deep m³ 5825 8.3.2 (b) Extra over reference 8.3.2 (a) for 2 Hard rock excavation m³ 60 8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density m³ 50 ADDITIONAL COMPACTION 8.3.3 .3 Additional compaction in road reserves .1 Additional compaction (90% compaction included elsewhere) to obtain 93% mod AASHTO density m³ 3405 TRENCHES FOR SEWER PIPES EXCAVATION AND BACKFILLING Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials for trenches (a) .1 Up to 1m wide .1 Over 1m and up to 2m deep m³ 4165 .2 Over 2m and up to 3m deep m³ 5105 .3 Over 3m and up to 4m deep m³ 615

				•	
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities

Earthworks (Pipe Trenches)



Reference Description Unit Oty Rate Amount (R)	Earthwo	rks (Pipe T					physiness
8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density ADDITIONAL COMPACTION 8.3.3 3 Additional compaction (90% compaction included elsewhere) to obtain 93% mod AASHTO density TRENCHES FOR STORMWATER PIPES EXCAYATION AND BACKFILLING Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials for trenches 8.3.2 (a) 2 Over 1m and up to 2m wide 6.11 1 Over 1m and up to 2m deep m³ 3030 6.12 2 Over 2m and up to 3m deep m³ 1190 8.3.2 (a) 2 Over 2m and up to 3m wide 6.13 1 Over 1m and up to 2m deep m³ 900 8.3.2 (b) Extra over reference 8.3.2 (a) for 2 Hard rock excavation m³ 510 8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density material off site and disposal of at a location identified by the contractor and	Item	Payment Reference	Desciono	Unit	Qty	Rate (R)	Amount (R)
dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density ADDITIONAL COMPACTION 8.3.3 .3 Additional compaction in road reserves .1 Additional compaction (90% compaction included elsewhere) to obtain 93% mod AASHTO density TRENCHES FOR STORMWATER PIPES EXCAVATION AND BACKFILLING Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials for trenches 8.3.2 (a) .2 Over 1m and up to 2m wide 6.11 .1 Over 1m and up to 2m deep m² 1190 8.3.2 (a) .2 Over 2m and up to 3m wide .1 Over 1m and up to 2m deep m² 900 8.3.2 (b) Extra over reference 8.3.2 (a) for 2 Hard rock excavation material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density (d) E.O. 8.2.2 (a), (b) & (c) for spolling unsuitable excess material off site and disposal of at a location identified by the contractor and					Bro	ought Forward	
6.10 1.1 Additional compaction (90% compaction included elsewhere) to obtain 93% mod AASHTO density TRENCHES FOR STORMWATER PIPES EXCAVATION AND BACKFILLING Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials for trenches 8.3.2 (a) .2 Over 1m and up to 2m wide 6.11 .1 Over 1m and up to 3m deep m³ 1190 8.3.2 (a) .2 Over 2m and up to 3m wide 6.13 .1 Over 1m and up to 2m deep m³ 900 8.3.2 (b) Extra over reference 8.3.2 (a) for 6.14 .2 Hard rock excavation m³ 510 8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density m³ 50 (d) E.O 8.2.2 (a), (b) & (c) for spoiling unsuitable excess material off site and disposal of at a location identified by the contractor and	6.9	8.3.2	dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density	m³	50		
6.10 1.1 Additional compaction (90% compaction included elsewhere) to obtain 93% mod AASHTO density TRENCHES FOR STORMWATER PIPES EXCAVATION AND BACKFILLING Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials for trenches 8.3.2 (a) .2 Over 1m and up to 2m wide 6.11 .1 Over 1m and up to 3m deep m³ 3030 6.12 .2 Over 2m and up to 3m deep m³ 1190 8.3.2 (a) .2 Over 2m and up to 3m wide 6.13 .1 Over 1m and up to 2m deep m³ 900 8.3.2 (b) Extra over reference 8.3.2 (a) for 6.14 .2 Hard rock excavation m³ 510 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density m³ 50 (d) E.O 8.2.2 (a), (b) & (c) for spoiling unsuitable excess material off site and disposal of at a location identified by the contractor and							
EXCAVATION AND BACKFILLING Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials for trenches 8.3.2 (a) .2 Over 1m and up to 2m wide 6.11 .1 Over 1m and up to 2m deep m³ 3030 6.12 .2 Over 2m and up to 3m deep m³ 1190 8.3.2 (a) .2 Over 2m and up to 3m wide 6.13 .1 Over 1m and up to 2m deep m³ 900 8.3.2 (b) Extra over reference 8.3.2 (a) for 6.14 .2 Hard rock excavation m³ 510 8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density m³ 50 (d) E.O 8.2.2 (a), (b) & (c) for spoiling unsuitable excess material off site and disposal of at a location identified by the contractor and	6.10	8.3.3	.1 Additional compaction (90% compaction included elsewhere) to obtain 93% mod AASHTO density	m³	1470		
Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials for trenches 8.3.2 (a) .2 Over 1m and up to 2m wide 6.11 .1 Over 1m and up to 2m deep m³ 3030 6.12 .2 Over 2m and up to 3m deep m³ 1190 8.3.2 (a) .2 Over 2m and up to 3m wide 6.13 .1 Over 1m and up to 2m deep m³ 900 8.3.2 (b) Extra over reference 8.3.2 (a) for 6.14 .2 Hard rock excavation m³ 510 8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density m³ 50 (d) E.O 8.2.2 (a), (b) & (c) for spoiling unsuitable excess material off site and disposal of at a location identified by the contractor and			TRENCHES FOR STORWWATER FIFES				
mod AASHTO density, and dispose of surplus and unsuitable materials for trenches 8.3.2 (a) .2 Over 1m and up to 2m wide 6.11 .1 Over 1m and up to 2m deep m³ 3030 6.12 .2 Over 2m and up to 3m deep m³ 1190 8.3.2 (a) .2 Over 2m and up to 3m wide 6.13 .1 Over 1m and up to 2m deep m³ 900 8.3.2 (b) Extra over reference 8.3.2 (a) for 6.14 .2 Hard rock excavation m³ 510 8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density m³ 50 (d) E.O 8.2.2 (a), (b) & (c) for spoiling unsuitable excess material off site and disposal of at a location identified by the contractor and			EXCAVATION AND BACKFILLING				
6.11 1. Over 1m and up to 2m deep 1. Over 2m and up to 3m deep 1. Over 2m and up to 3m wide 1. Over 1m and up to 2m deep 1. Over 1m and up to 3m wide 1. Over 1m and up to 3m deep 1. Over 1m and up to 2m deep			mod AASHTO density, and dispose of surplus and				
6.12 2. Over 2m and up to 3m deep 8.3.2 (a) .2 Over 2m and up to 3m wide 1. Over 1m and up to 2m deep 8.3.2 (b) Extra over reference 8.3.2 (a) for 2. Hard rock excavation 8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density (d) E.O 8.2.2 (a), (b) & (c) for spoiling unsuitable excess material off site and disposal of at a location identified by the contractor and		8.3.2	(a) .2 Over 1m and up to 2m wide				
8.3.2 (a) .2 Over 2m and up to 3m wide 1.1 Over 1m and up to 2m deep 8.3.2 (b) Extra over reference 8.3.2 (a) for 2. Hard rock excavation 8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density (d) E.O 8.2.2 (a), (b) & (c) for spoiling unsuitable excess material off site and disposal of at a location identified by the contractor and	6.11		.1 Over 1m and up to 2m deep	m³	3030		
6.13 .1 Over 1m and up to 2m deep 8.3.2 (b) Extra over reference 8.3.2 (a) for 2 Hard rock excavation 8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density (d) E.O 8.2.2 (a), (b) & (c) for spoiling unsuitable excess material off site and disposal of at a location identified by the contractor and	6.12		.2 Over 2m and up to 3m deep	m³	1190		
8.3.2 (b) Extra over reference 8.3.2 (a) for 2. Hard rock excavation m³ 510 8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density m³ 50 (d) E.O 8.2.2 (a), (b) & (c) for spoiling unsuitable excess material off site and disposal of at a location identified by the contractor and		8.3.2	(a) .2 Over 2m and up to 3m wide				
6.14 2. Hard rock excavation (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density (d) E.O 8.2.2 (a), (b) & (c) for spoiling unsuitable excess material off site and disposal of at a location identified by the contractor and	6.13		.1 Over 1m and up to 2m deep	m³	900		
8.3.2 (c) Excavate unsuitable material from trench bottom, dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density (d) E.O 8.2.2 (a), (b) & (c) for spoiling unsuitable excess material off site and disposal of at a location identified by the contractor and		8.3.2	(b) Extra over reference 8.3.2 (a) for				
dispose of material, and re-fill with suitable imported material compacted to 90% mod AASHTO density (d) E.O 8.2.2 (a), (b) & (c) for spoiling unsuitable excess material off site and disposal of at a location identified by the contractor and	6.14		.2 Hard rock excavation	m³	510		
excess material off site and disposal of at a location identified by the contractor and	6.15	8.3.2	dispose of material, and re-fill with suitable imported	m³	50		
	6.16		excess material off site and disposal of at a location identified by the contractor and	m³	805		
Carried Forward					Ca	arried Forward	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities

Earthworks (Pipe Trenches)



Earthwo	Earthworks (Pipe Trenches)									
Item	Payment Reference	Description	Unit	Qty	Rate (R)	Amount (R)				
			•	Bro	ought Forward					
6.17	8.3.3	ADDITIONAL COMPACTION .3 Additional compaction in road reserves .1 Additional compaction (90% compaction included elsewhere) to obtain 93% mod AASHTO density	m³	1715						
		EXISTING SERVICES								
		WORK TO EXISTING SERVICES Existing services that intersect or adjoin pipe trench excavations								
6.18	8.3.5	(a) Services that intersect a trench .1 Electric cable	no	5						
	8.3.5	(b) <u>Services that adjoin a trench</u>								
	0.5.5	(b) <u>Services that aujoin a trench</u>								
6.19		.1 Electric cable	m	210						
		SCHEDULE: 6 EARTHWORKS (PIPE TRENCHES)								
		Carried forward to Summary of Schedules			Total					

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities



Earthwo	rks (Roads	, Subgrade)			disk	ng business
Item	Payment Reference	Description	Unit	Qty	Rate (R)	Amount (R)
	SANS 1200 DM	SCHEDULE: 7 EARTHWORKS (ROADS , SUBGRADE)				
		TREATMENT OF ROADBED				
	8.3.3	(a) Roadbed preparation and compaction of material to				
7.1		.1 Minimum of 93% mod AASHTO density	m³	6780		
	8.3.3	(b) In-place treatment of roadbed or hard rock material by				
7.2		.1 Blasting	m³	70		
		DUMP ROCK FROM COMMERCIAL SOURCES				
		Dump rock from commercial sources supplied by the Contractor				
7.3		.1 Dump rock layer 300mm thick, selected, haul within freehaul distance, placing in position and compacting with 10 pass 10 ton roller compaction	m³	50		
		CUT TO FILL				
	8.3.4	(a) Cut to fill				
7.4		.1 Compacted to 90% mod AASHTO density	m³	684		
		SELECTED LAYERS FROM CUT				
		Excavate from road prism, select, load, transport to point of use and construct layerworks as follows				
		Selected layers				
	8.3.5	(a) .1 Compacted to 93% mod AASHTO density				
7.5		.1 150mm Thick	m³	6500		
		CONSTRUCT LAYERWORKS WITH COMMERCIAL MATERIAL SUPPLIED BY THE CONTRACTOR				
		G7 Selected layers				
		(a) .1 Compacted to 93% mod AASHTO density				
7.6		.1 150mm Thick	m³	6500		
				Ca	arried Forward	

1	1	1	1	1	
1					
	1000			10.00	11/2
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities Earthworks (Roads, Subgrade)



Earthworks (Roads, Subgrade)								
Item	Payment Reference	Description	Unit	Qty	Rate (R)	Amount (R)		
				Bro	ought Forward			
		CUT TO SPOIL						
	8.3.7	Cut to spoil (site established by the Contractor)						
7.7		(a) Soft excavation	m³	6105				
7.8		(b) Hard rock excavation	m³	285				
7.9		(d) Boulder excavation class A	m³	285				
7.10		(e) Boulder excavation class B	m³	285				
		SCHEDULE: 7 EARTHWORKS (ROADS , SUBGRADE)						
		Carried forward to Summary of Schedules			Total			

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



uPVC Medium Pressure Pipelines									
Item	Payment Reference	Description	Unit	Qty	Rate (R)	Amount (R)			
	SANS 1200 L	SCHEDULE: 8 uPVC MEDIUM PRESSURE PIPELINES							
		uPVC WATER PIPES Supply, lay, joint, bed (flexible pipe bedding) and test uPVC spigot and socket water pipes with moulded rubber rings to SABS 966							
	8.2.1	(a) <u>Class 9 pipes</u>							
8.1		.1 75mm Diameter	m	605					
8.2		.2 90mm Diameter	m	3810					
8.3		.3 110mm Diameter	m	1505					
8.4		.4 160mm Diameter	m	525					
8.5		.6 250mm Diameter	m	425					
		DISINFECT PIPES							
	8.2.1	(b) <u>Disinfect pipes</u>							
8.6		.1 75mm Diameter	m	605					
8.7		.2 90mm Diameter	m	3810					
8.8		.2 110mm Diameter	m	1505					
8.9		.3 160mm Diameter	m	525					
8.10		.5 250mm Diameter	m	425					
		PIPE FITTINGS							
		Extra over reference 8.2.1(a) for supply, install, bed and test the following fittings, including cutting of pipes, couplings, etc							
8.11	8.2.2	(a) .1 <u>uPVC Class 16 pressure bends</u> .1 90mm Diameter 11.25°	no	3					
8.12		.2 90mm Diameter 22.5°	no	3					
8.13		.3 90mm Diameter 45°	no	8					
8.14		.4 90mm Diameter 90°	no	15					
				Ca	arried Forward				

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2



uPVC Medium Pressure Pipelines							
Item	Payment Reference	Description	Unit	Qty	Rate (R)	Amount (R)	
				Bro	ought Forward		
8.15		.6 110mm Diameter 22.5°	no	1			
8.16		.7 110mm Diameter 45°	no	2			
8.17		.8 110mm Diameter 90°	no	3			
	8.2.2	(a) .2 CI socket-ended tee's, including all adaptors, reducers, etc to SABS 546					
8.18		.1 90x90x75mm	no	7			
8.19		.2 90x90x90mm	no	5			
8.20		.3 110x110x75mm	no	3			
8.21		.4 110x110x90mm	no	11			
8.22		.5 110x110x110mm	no	4			
8.23		.6 160x160x90mm	no	1			
8.24		.7 160x160x110mm	no	1			
8.25		.8 160x160x160mm	no	5			
8.26		.10 250x250x250mm	no	5			
	8.2.2	(a) .3 <u>CI socket-ended female reducers to SABS 546</u>					
8.27		.1 90x75mm	no	2			
8.28		.2 110x90mm	no	7			
8.29		.3 160x90mm	no	4			
8.30		.4 160x110mm	no	4			
8.31		.5 200x90mm	no	1			
8.32		.6 250x160mm	no	7			
				Ca	rried Forward		

Contractor	,	Witness 1	 Witness 2	Employer	Witness 1	Witness 2



Item	Payment Reference	Description	Unit	Qty	Rate (R)	Amount (R)
				Bro	ought Forward	
		.4 <u>CI socketed end caps</u>				
8.33		.1 90mm dia	no	1		
8.34		.5 250mm dia	no	0		
		FIRE HYDRANT ASSEMBLIES				
	8.2.2	(a) .6 Extra over reference 8.2.1(a) for supply, install, bed and testing fire hydrant assemblies complete including cutting of pipes, couplings, tee pieces, etc Dwg 1396.10.ZA.05.D003				
8.35		.1 On 90mm pipeline	no	18		
8.36		.2 On 110mm pipeline	no	7		
8.37		.3 On 160mm pipeline	no	2		
8.38		.5 On 250mm pipeline	no	2		
		<u>VALVES ASSEMBLIES</u>				
	8.2.3	(a) Extra over reference 8.2.1 for supply, install, bed and test "cap top" line valve assembly as SABS 664, including cutting of pipes, couplings, etc Dwg 1396.10.ZA.05.D003				
8.39		.1 80mm Dia (75mm pipeline)	no	6		
8.40		.2 100mm Dia (110mm pipeline)	no	14		
8.41		.3 150mm Dia (160mm pipeline)	no	1		
8.42		.5 250mm Dia (250mm pipeline)	no	4		
	8.2.11	CONCRETE ENCASEMENT AND THRUST BLOCKS Anchor/thrust blocks and pedestals in strength concrete 25Mpa/19mm, including all formwork, reinforcement, etc (b) Measured per m³				
8.43		.1 Thrust blocks	m³	5		
					rried Forward	

Contractor	,	Witness 1	 Witness 2	Employer	Witness 1	Witness 2



Description	uPVC M		ssure Pipelines			-	g business
8.2.12 Encasement of pipes in strength concrete 25Mpa/19mm including all formwork, reinforcement, etc	Item	Payment Reference		Unit	Qty		
Including all formwork, reinforcement, etc 1. Casing around pipes m³ 5					Bro	ought Forward	
Solicrete (5% OPC). (a) Backfilling around pipes VALVE CHAMBERS. 8.2.13 8.2.13 8.2.13 8.46 ANCIL LARIES Markings and marker posts . etc 8.2.16 8.2.16 (a) Inscribed and painted marking on kerbing. 1.1 Kerb marking 1.1 Kerb marking 1.1 Kerb marking 1.2 SCHEDULE: 8 UPVC MEDIUM PRESSURE PIPELINES	8.44	8.2.12	including all formwork, reinforcement, etc	m³	5		
8.2.13 VALVE CHAMBERS (a) Valve chambers for valves not exceeding 300mm dia Dwg 1396.10.ZA 05.D003 1 Valve chamber complete no 27 ANCILLARIES Markings and marker posts, etc (a) Inscribed and painted marking on kerbing. 1.1 Kerb marking no 142 SCHEDULE: 8 UPVG MEDIUM PRESSURE PIPELINES			Soilcrete (5% OPC)				
8.2.13 (a) <u>Valve chambers for valves not exceeding 300mm dia Dwg 1396.10.ZA.05.D003</u> 1.1 Valve chamber complete no 27 ANCILLARIES Markings and marker posts _ etc 8.2.16 (a) <u>Inscribed and painted marking on kerbing</u> 1.1 Kerb marking no 142 SCHEDULE: 8 UPVC MEDIUM PRESSURE PIPELINES	8.45		(a) Backfilling around pipes	m³	5		
ANCILLARIES Markings and marker posts . etc 8.2.16 (a) Inscribed and painted marking on kerbing. 1.1 Kerb marking no 142 SCHEDULE: 8 UPVC MEDIUM PRESSURE PIPELINES		8.2.13	(a) Valve chambers for valves not exceeding 300mm dia				
8.2.16 (a) Inscribed and painted marking on kerbing 1.1 Kerb marking 1.2 SCHEDULE: 8 UPVC MEDIUM PRESSURE PIPELINES	8.46		.1 Valve chamber complete	no	27		
8.2.16 (a) Inscribed and painted marking on kerbing. 1.1 Kerb marking no 142 SCHEDULE: 8 UPVC MEDIUM PRESSURE PIPELINES			<u>ANCILLARIES</u>				
SCHEDULE: 8 UPVC MEDIUM PRESSURE PIPELINES			Markings and marker posts , etc				
SCHEDULE: 8 UPVC MEDIUM PRESSURE PIPELINES		8.2.16	(a) Inscribed and painted marking on kerbing				
UPVC MEDIUM PRESSURE PIPELINES	8.47		.1 Kerb marking	no	142		
UPVC MEDIUM PRESSURE PIPELINES							
UPVC MEDIUM PRESSURE PIPELINES							
UPVC MEDIUM PRESSURE PIPELINES							
UPVC MEDIUM PRESSURE PIPELINES							
UPVC MEDIUM PRESSURE PIPELINES							
UPVC MEDIUM PRESSURE PIPELINES							
UPVC MEDIUM PRESSURE PIPELINES							
UPVC MEDIUM PRESSURE PIPELINES							
UPVC MEDIUM PRESSURE PIPELINES							
UPVC MEDIUM PRESSURE PIPELINES							
UPVC MEDIUM PRESSURE PIPELINES							
UPVC MEDIUM PRESSURE PIPELINES							
UPVC MEDIUM PRESSURE PIPELINES			SCHEDULE: 8				
						Total	

		1	1 1		
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities



Bedding	(Pipes)				dole	ng Susiness
Item	Payment Reference	Description	Unit	Qty	Rate (R)	Amount (R)
	SANS 1200 LB	SCHEDULE: 9 BEDDING (PIPES)				
		BEDDING FROM TRENCH EXCAVATIONS				
	8.2.1	Provision of bedding material from trench excavations				
9.1		(a) Selected granular material	m³	0		
9.2		(b) Selected fill material	m³	345		
		BEDDING FROM OTHER EXCAVATIONS ON SITE				
	8.2.2	.1 Provision of bedding material by importation from other necessary excavations within the freehaul distance				
9.3		(a) Selected granular material	m³	0		
9.4		(b) Selected fill material	m³	105		
	PSLB2	BEDDING FROM COMMERCIAL SOURCES				
	8.2.2	.1 Provision of bedding material by importation from commercial sources selected by the Contractor (compactability < 0.1)				
9.5		(a) Selected granular material	m³	4110		
9.6		(b) Selected fill material	m³	2970		
		CONCRETE BEDDING CRADLE				
	8.2.3	(a) Strength concrete 25Mpa/19mm				
9.7		.1 Cradle to pipes	m³	10		
		SCHEDULE: 9 BEDDING (PIPES)				
		Carried forward to Summary of Schedules			Total	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities



Item	Payment Reference	Description	Unit	Qty	Rate (R)	Amount (R)
		SCHEDULE: 10 CABLE DUCTS				
		EXCAVATION AND BACKFILLING				
		Excavate in all materials, backfill and compact to 90% mod AASHTO density, and dispose of surplus and unsuitable materials within the freehaul distance for trenches				
	8.2.2	(a) .1 <u>Up to 1m wide</u>				
10.1		.1 Up to 1m deep	m³	2312		
	8.2.2	(b) Extra over reference 8.2.2 (a) for				
10.2		.2 Hard rock excavation	m³	100		
	SANS 1200 DB	ADDITIONAL COMPACTION				
	8.3.3	.3 Additional compaction in road reserves				
10.3		.1 Additional compaction (90% compaction included elsewhere) to obtain 93% modAASHTO density	m³	2315		
	SANS	CABLE DUCTS SUPPLIED BY THE CONTRACTOR				
	1200 LC 8.2.5	(b) Supply, lay, bed, and prove Kabelflex ducts including providing draw wires complete				
10.4		.1 110mm Diameter	m	2610		
10.5		.2 160mm Diameter	m	655		
	8.2.5	(d) Paper plugs to ducts				
10.6		.1 110mm Duct	no	744		
10.7		.2 160mm Duct	no	186		
		BEDDING FROM TRENCH EXCAVATIONS				
	8.2.6	Provision of bedding material from trench excavations				
10.8		(a) Selected granular material	m³	0		
10.9		(b) Selected fill material	m³	50		
					rried Forward	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities



Description Unit Qty Rate (R)	Amount (R)
8.2.6 (a) Provision of bedding material from commercial sources (a) Selected granular material m³ 755 (b) Selected fill material m³ 425	
8.2.6 (a) Provision of bedding material from commercial sources (a) Selected granular material m³ 755 (b) Selected fill material m³ 425	
commercial sources (a) Selected granular material m³ 755 (b) Selected fill material m³ 425	
10.11 (b) Selected fill material m³ 425	
CABLE MARKERS	
(a) End markers	
10.12 .1 UV stabilised plastic markers no 930	
8.2.8 (b) <u>painted marking on kerbing</u>	
10.13 .1 Kerb marking no 930	
SOILCRETE	
Soilcrete (5% OPC)	
10.14 .1 Backfilling around pipes m³ 50	
SCHEDULE: 10	
CABLE DUCTS	
Carried forward to Summary of Schedules Total	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities



Subsoil I	Drainage					ģ business
Item	Payment Reference	Describion i	Unit	Qty	Rate (R)	Amount (R)
	SANS	SCHEDULE: 11				
	1200 LC	SUBSOIL DRAINAGE				
		EXCAVATION AND BACKFILLING				
		Excavate in all materials, backfill and compact to				
		90% mod AASHTO density, and dispose of surplus and unsuitable materials within the				
		<u>freehaul distance for trenches</u>				
	8.2.2	(a) .1 <u>Up to 1m wide</u>				
11.1		.1 Up to 1m deep	m³	589		
	8.2.2	(b) Extra over reference 8.2.2 (a) for				
11.2		.2 Hard rock excavation	m³	30		
	8.2.2	(c) Excavate unsuitable material from trench bottom, dispose within freehaul distance, and re-fill with				
		suitable imported material compacted to 90%				
11.3		mod AASHTO density	m³	10		
		SUBSOIL DRAINS				
		.1 Supply, lay, bed, and test Kaytech perforated subsoil pipes complete				
11.4		.1 110mm Diameter	m	775		
	SANS	GEOTEXTILES				
	1200 DK 8.2.4	Supply and lay geotextile fabric				
11.5		(a) Bidim U24 wrapped around stone encasement to pipes	m²	2365		
	SANS	STONE FROM COMMERCIAL SOURCES				
	1200 LB 8.2.2	.1 19mm Crushed stone from commercial sources supplied by the Contractor for				
11.6		(c) Encasement of pipes	m³	301		
		SCHEDULE: 11 SUBSOIL DRAINAGE				
		Carried forward to Summary of Schedules			Total	
		•				

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities



Sewers							
Item Payment Description	Unit	Qty	Rate (R)	Amount (R)			
SANS 1200 LD SCHEDULE: 12 uPVC SEWERS							
8.2.1 a Supply, lay, joint, bed (class B bedding) and test uPVC class 400 spigot and socket sewer pipes with moulded rubber rings to SABS 1601							
12.1 .1 160mm Diameter	m	6085					
12.2 .2 200mm Diameter	m	220					
MANHOLES							
Precast concrete manholes complete with precast concrete heavy duty cover and frame Type 4A Dwg 1396.10.ZA.06.D001							
8.2.3 (a) .1 Manholes 1000mm diameter (straight & angle)							
12.3 .1 1,0 - 1,5m Deep	no	15					
.2 1,5 - 2,0m Deep	no	35					
12.5 .3 2,0 - 2,5m Deep	no	23					
12.6 .4 2,5 - 3,0m Deep	no	9					
8.2.3 (a) .2 <u>Manholes 1250mm diameter (single junction)</u>							
.2 1,5 - 2,0m Deep	no	4					
.3 2,0 - 2,5m Deep	no	14					
12.9 .4 2,5 - 3,0m Deep	no	15					
8.2.3 (a) .3 Manholes 1500mm diameter (double junction)							
.2 1,5 - 2,0m Deep	no	1					
.4 2,5 - 3,0m Deep	no	2					
.5 3.0 - 3.5m Deep	no	8					
		Ca	arried Forward				

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2

Section C2.2: Schedule of Quantities



Item	Payment Reference	Describion	Unit	Qty	Rate (R)	Amount (R)
				Bro	ught Forward	()
		CLEANING EYS				
		Cleaning eye complete Dwg 1396.10.ZA.06.D003				
12.13		(a) Cleaning eye not exceeding 2m deep	no	2		
		ERF CONNECTIONS				
		Supply and install erf connections complete with all fittings as described including excavation, bedding, backfilling, testing, etc complete Dwg 1396.10.ZA.06.D002 & D003				
	8.2.6	On grade erf connections not exceeding 2m deep				
12.14		(a) 110mm Single connection	no	623		
	8.2.6	Sloping drop connections not exceeding 3m deep				
12.15		(b) 110mm Single connection	no	104		
	8.2.6	Vertical drop connections not exceeding 4m deep				
12.16		(c) 110mm Single connection	no	6		
		CONCRETE ENCASEMENT AND THRUST BLOCKS				
	8.2.7	Encasement of pipes in strength concrete 25Mpa/19mm including all formwork, reinforcement, etc				
12.17		(a) Casing around pipes	m³	5		
		SOILCRETE				
		Soilcrete (5% OPC)				
12.18		(a) Backfilling around pipes	m³	50		
		KERB MARKINGS				
		Markings and marker posts , etc				
	8.2.9	(a) Inscribed and painted marking on kerbing				
12.19		.1 Kerb marking	no	128		
		<u> </u>		Ca	rried Forward	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities



em	Payment Reference	I DESCRIPTION	Unit	Qty	Rate (R)	Amount (R)
			· ·	Bro	ought Forward	, ,
		WORK TO EXISTING SERVICES				
		WORK TO EXISTING SERVICES				
	8.2.11	Connection to existing sewer				
2.20		(a) MH 135 (New 160mm uPVC pipe connecting to existing Manhole)	sum			
2.21		(b) MH 143 (New 160mm uPVC pipe connecting to existing Manhole)	sum			
2.22		(a) MH 196 (New 160mm uPVC pipe connecting to existing Manhole)	sum			
2.23		(b) MH 207 (New 250mm uPVC pipe connecting to existing Manhole)	sum			
2.24		(a) MH 272 (new 160mm uPVC pipe connecting to existing Manhole)	sum			
2.25		(b) MH 141 (new 160mm uPVC pipe connecting to existing Manhole)	sum			
2.26		(a) MH 292 (New 160mm uPVC pipe connecting to existing Manhole)	sum			
2.27		(b) MH 294 (New 160mm uPVC pipe connecting to existing Manhole)	sum			
2.28		(a) MH 140 (New 160mm uPVC pipe connecting to existing Manhole)	sum			
2.29		(b) MH 137 (New 250mm uPVC pipe connecting to existing Manhole)	sum			
2.30		(a) MH 138 (new 160mm uPVC pipe connecting to existing Manhole)	sum			
			•	Ca	rried Forward	

Witness 2 Contractor Witness 1 Witness 2 Employer Witness 1

Section C2.2: Schedule of Quantities



VC Se	ewers				dsing	
tem	Payment		Unit	Qty	Rate	Amount
	Reference	'			(R)	(R)
				Bro	ught Forward	
		DIDE INCREASIONS	1			
		PIPE INSPECTIONS	4			
		COTY CAMERA INORECTION OF RIPES				
		CCTV CAMERA INSPECTION OF PIPES				
		CCT) / company impropriate of covern minor to include				
		CCTV camera inspection of sewer pipes to include				
		establishment, camera inspections and submission of inspection report for approval by the Engineer				
		Inspection report for approval by the Engineer				
2.31		.5 160mm Diameter	m	6085		
01		is recinitional planteter		0000		
2.32		.6 200mm Diameter	m	220		
				220		
		SCHEDINE. 40				
		SCHEDULE: 12				
		uPVC SEWERS				
		Corried forward to Commons of Calcadista			Total	
		Carried forward to Summary of Schedules			Total	

Contractor	Witness 1	Witness 2	Employer	Witness 1	 Witness 2

Section C2.2: Schedule of Quantities



Stormwater Drainage								
Item	Payment Reference	I Description	Unit	Qty	Rate (R)	Amount (R)		
	SANS 1200 LE	SCHEDULE: 13 STORMWATER DRAINAGE						
		OGEE PIPES						
		Supply, lay, bed (class B bedding) and test concrete pipe culverts including all cutting to ends						
	8.2.1	(a) Ogee class 50D						
13.1		.1 450mm Diameter	m	1165				
13.2		.2 600mm Diameter	m	305				
13.3		.3 675mm Diameter	m	230				
13.4		.4 750mm Diameter	m	100				
13.5		.5 825mm Diameter	m	80				
13.6		.6 900mm Diameter	m	255				
	SANS 1200 LE	SOILCRETE_						
	1200 LL	Soilcrete (5% OPC)						
13.7		(a) Backfilling around pipe culverts	m³	50				
		MANHOLES						
		Manhole complete with type 4 cover and frame not exceeding 2m deep						
	8.2.8	(a) .1 Type C (3 pipes connection) Dwg 1396.10.ZA.04D007 & D009						
13.8		.1 450-600mm Dia pipeline	no	5				
13.9		.2 675-1050mm Dia pipeline	no	2				
	8.2.8	(a) 2. Type D (2 pipes connection) (Dwg 1396.10.ZA.04D008 &D009)						
13.10		.1 450-600mm Dia pipeline	no	1				
13.11		.2 675-1050mm Dia pipeline	no	1				
					priod Convers			
				Ca	rried Forward			

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities



Stormwater Drainage							
Item	Payment Reference	I Deschouon	Unit	Qty	Rate (R)	Amount (R)	
				Bro	ought Forward		
	8.2.8	(c) Extra over or under reference 8.2.8 (a) for variation in depth (deeper than 2m deep)					
13.12		.1 Type C, Pipe OD ≤ than 600mm	m	0.5			
13.13		.2 Type C, Pipe OD > than 600mm	m	0.5			
13.14		.3 Type D, Pipe OD ≤ than 600mm	m	0.5			
13.15		.4 Type D, Pipe OD > than 600mm	m	0.5			
		JUNCTION BOX Junction box complete with cover slab not exceeding 2m deep					
	8.2.8	(a) 1. Type A (junction box connect to catchpit (KI) Dwg 1396.10.ZA.04D005					
13.16		.1 450-600mm Dia pipeline	no	1			
13.17		.2 750-1050mm Dia pipeline	no	0			
		(a) 2. Type B (junction box connect to catchpit (KI) Dwg 1396.10.ZA.04D006					
13.18		.1 450-600mm Dia pipeline	no	14			
13.19		.2 750-1050mm Dia pipeline	no	2			
		(a) 3. Type D (junction box connects 2 pipes) Dwg 1396.10.ZA.04D008					
13.20		.1 450-600mm Dia pipeline	no	16			
13.21		.2 750-1050mm Dia pipeline	no	6			
	8.2.8	(c) Extra over or under reference 8.2.8(a) for variation in depth for junction box (deeper than 2m deep)					
13.22		.1 Type A, Pipe OD ≤ than 600mm	m	0.5			
13.23		.2 Type A, Pipe OD > than 600mm	m	0.5			
13.24		.3 Type B, Pipe OD ≤ than 600mm	m	2			
13.25		.4 Type B, Pipe OD > than 600mm	m	0.5			
13.26		.5 Type D, Pipe OD ≤ than 600mm	m	2			
13.27		.6 Type D, Pipe OD > than 600mm	m	0.5	rried Forward		
				U a	inieu i orwaiu		

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities



<u>Stormw</u> a	ater Draina	ge			doing	business
Item	Payment Reference		Unit	Qty	Rate (R)	Amount (R)
	1 (010101100	1		Bro	ught Forward	(11)
	8.2.8	CATCHPITS (e) Catchpits complete with kerbs, kerb transitions gutters, etc with opening length of Dwg 1396.10.ZA.04D002 & D003 (All Structural Steelwork to be hot-dipped Galvanized)				
13.28		.1 3m Long	no	17		
		FIELD INLETS				
	8.2.8	Field inlets complete with cover slabs, etc. with the following pipe sizes Dwg 1396.10.ZA.04D010				
13.29		(f) .1 450mm Diameter pipe culvert	no	3		
		OUTLET STRUCTURES TO PIPES				
	8.2.8	(g) Pipe outlet structure complete with the following pipe sizes Dwg 1396.10.ZA.04D010				
13.30		.1 900mm Diameter pipe culvert	no	1		
		WORK TO EXISTING CULVERTS				
		Connecting into existing manholes				
13.31		.1 450mm Diameter pipe connected to MH at 1.46m deep (JB149)	no	1		
13.32		.2 450mm Diameter pipe connected to MH at 1.71m deep (JB171)	no	1		
				Ca	rried Forward	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities



Stormwater Drainage											
Item	Payment Reference	Description	Unit	Qty	Rate (R)	Amount (R)					
				Bro	ought Forward	. ,					
13.33		.3 675mm Diameter pipe connected to MH at 1.81m deep (MH174)	no	1							
13.34		.4 450mm Diameter pipe connected to MH at 1.43m deep (MH078A)	no	1							
13.35		.5 675mm Diameter pipe connected to MH at 1.60m deep (MH069)	no	1							
13.36		.6 450mm Diameter pipe connected to MH at 1.43m deep (KI076)	no	1							
13.37		.7 450mm Diameter pipe connected to MH at 1.43m deep (KI014)	no	1							
		STORMWATEF 13 STORMWATER DRAINAGE									
	1	Carried forward to Summary of Schedules	L		Total						

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities



tem Payment Reference Description Unit Qty Rate (R) SANS 1200 LF ERF CONNECTIONS (WATER) ERF CONNECTIONS MEASURED IN NUMBER Supply and install erf connections complete with all fittings as described including excavation, bedding, backfilling, testing, etc complete (saddles, markers water meters and water meter box assembly measured elsewhere) Dwg 1396.10.ZA.05.D001 8.2.1 .1 Single erf connection	Amount (R)
ERF CONNECTIONS (WATER) ERF CONNECTIONS MEASURED IN NUMBER Supply and install erf connections complete with all fittings as described including excavation, bedding, backfilling, testing, etc complete (saddles, markers water meters and water meter box assembly measured elsewhere) Dwg 1396.10.ZA.05.D001	
ERF CONNECTIONS (WATER) ERF CONNECTIONS MEASURED IN NUMBER Supply and install erf connections complete with all fittings as described including excavation, bedding, backfilling, testing, etc complete (saddles, markers water meters and water meter box assembly measured elsewhere) Dwg 1396.10.ZA.05.D001	
Supply and install erf connections complete with all fittings as described including excavation, bedding, backfilling, testing, etc complete (saddles, markers water meters and water meter box assembly measured elsewhere) Dwg 1396.10.ZA.05.D001	
Supply and install erf connections complete with all fittings as described including excavation, bedding, backfilling, testing, etc complete (saddles, markers water meters and water meter box assembly measured elsewhere) Dwg 1396.10.ZA.05.D001	
fittings as described including excavation, bedding, backfilling, testing, etc complete (saddles, markers water meters and water meter box assembly measured elsewhere) Dwg 1396.10.ZA.05.D001	
fittings as described including excavation, bedding, backfilling, testing, etc complete (saddles, markers water meters and water meter box assembly measured elsewhere) Dwg 1396.10.ZA.05.D001	
water meters and water meter box assembly measured elsewhere) Dwg 1396.10.ZA.05.D001	
measured elsewhere) Dwg 1396.10.ZA.05.D001	
Dwg 1396.10.ZA.05.D001	
8.2.1 .1 Single erf connection	
14.1 .1 Near side (type I) no 52	
14.2 .2 Far side (type III) no 27	
8.2.1 .1 <u>Double erf connection</u>	
.3 Near side (type II) no 158	
14.4 .4 Far side (type 6) no 169	
HDPE PIPES FOR STREET CROSSINGS	
8.2.1 .2 Supply, lay, bed and test additional HDPE class	
10 piping for cross street erf connections	
including all associated earthworks, complete	
with backfilling compacted to 93% mod AASHTO	
<u>density</u>	
14.5 .1 25mm Nominal diameter m 312	
14.6 .2 32mm Nominal diameter m 2014	
SADDLES	
8.2.1 .3 Supply and install Plasson uPVC saddles to	
uPVC water pipes for erf connections, including	
drilling and tapping, etc	
14.7 .1 75mm Diameter no 31	
14.8 .2 90mm Diameter no 260	
14.9 .3 110mm Diameter no 84	
4.10 .5 160mm Diameter no 22	
4.11 .5 250mm Diameter no 19	
Carried Forward	

Contractor Witness 1 Witness 2 **Employer** Witness 1 Witness 2

Section C2.2: Schedule of Quantities

Erf Connections (Water)



Erf Conr	nections (V	/ater)				g thursinees
Item	Payment		Unit	Qty	Rate	Amount
	Reference	Becompact			(R)	(R)
				Bro	ought Forward	
		KERB MARKINGS				
	000	4. Deinted resolving on kenhing				
	8.2.8	.1 Painted marking on kerbing				
14.12		.1 Kerb marking	no	142		
		COUEDINE. 44				
		SCHEDULE: 14				
		ERF CONNECTIONS (WATER) Carried forward to Summary of Schedules			Total	
		Carried forward to Summary of Schedules			Iotai	
01	roots	Witness 1	· · · ·	107:4	L	M/itmans 0
Cont	ractor	Witness 1 Witness 2 Employ	yeı	vvitn	iess 1	Witness 2

Section C2.2: Schedule of Quantities



Subbase	9				dole	ng business
Item	Payment Reference		Unit	Qty	Rate (R)	Amount (R)
		SCHEDULE: 15 SUBBASE				
		CONSTRUCT LAYERWORKS WITH COMMERCIAL				
		MATERIAL SUPPLIED BY THE CONTRACTOR				
		G5 Subbase				
	15.1	.1 .2 Compacted to 95% mod AASHTO density				
19.3		.1 100mm Thick	m³	3972		
19.4		.2 125mm Thick	m³	750		
		PROCESSING				
		Process layerwork material by the following process				
19.5	15.2	(d) Stabilization - all layer thicknesses	m³	4715		
		STABILIZATION				
	15.3	Stabilizing agent				
19.6		(b) Portland cement	ton	300		
		COUEDINE. 45				
		SCHEDULE: 15 SUBBASE				
		Carried forward to Summary of Schedules	<u> </u>		Total	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities



Segmented Paving											
Item	Payment Reference	Description	Unit	Qty	Rate (R)	Amount (R)					
	SANS 1200 MJ	SCHEDULE: 16 SEGMENTED PAVING									
	8.2.1	edge beam size 150mm wide x 225mm high, wood floated on top, angle rounded edges and 10mm thick jointex expansion joints at 3m centres Dwg 1396.10.ZA.03.D019									
16.1		.1 Straight sections	m	560							
		INTERLOCKING PRECAST CONCRETE PAVING									
	8.2.2	.1 Grey interlocking precast concrete paving blocks type SA, including all cutting of units to fit between edge restraints, laid on and including 20mm riversand ed, compacted and plastersand broomed into joints on completion Dwg 1396.10.ZA.03.D019									
16.2		.1 60mm To roads (25Mpa)	m²	33610							
16.3		.2 80mm To roads (35Mpa)	m²	5236							
		SCHEDULE: 16 SEGMENTED PAVING									
	1	Carried forward to Summary of Schedules		ı	Total						

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities Kerbing, Channelling, Edge beams, etc.



Kerbing,	Channellir	ng, Edge beams, etc	doing business				
Item	Payment Reference	I DESCRIPTION	Unit	Qty	Rate (R)	Amount (R)	
		SCHEDULE: 17 KERBING, CHANNELLING, EDGE BEAMS, ETC			, ,	,	
		PRECAST CONCRETE KERBING					
		Supply and install precast concrete kerbing					
	8.2.1	(a) .2 <u>Fig 8C kerbing</u>					
17.1		.1 Straight sections	m	1660			
17.2		.2 Curved sections, radius over 20m	m	93			
17.3		.3 Curved sections, radius over 4m, but up to and including 20m	m	56			
	8.2.1	(a) .3 Fig 8B kerbing					
17.4		.1 Straight sections	m	9450			
17.5		.2 Curved sections, radius over 20m	m	185			
17.6		.3 Curved sections, radius over 4m, but up to and including 20m	m	2717			
		TRANSITIONS TO KERBS					
	8.2.6	.1 .3 <u>Cast-in-situ strength concrete 30Mpa/19mm</u> <u>transitions</u>					
17.7		.1 All transitions 2m long	no	167			
		SCHEDULE: 17					
		KERBING, CHANNELLING, EDGE BEAMS, ETC			-		
		Carried forward to Summary of Schedules			Total		

Contractor	,	Witness 1	 Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities



Ancillary Roadworks											
Item	Payment Reference	Description	Unit	Qty	Rate (R)	Amount (R)					
	SANS 1200 MM	SCHEDULE: 18 ANCILLARY ROADWORKS									
		TRAFFIC SIGNS ERECTED COMPLETE									
	8.3.6	Statutory signs, street names, etc supplied and erected complete, including posts, excavation, etc									
	8.3.6	(a) Provision and erection of regulatory traffic signs for 60km/h design standard, complete									
18.1		.1 Stop sign (R1)	no	29							
18.2		.4 Yield sign (R2)	no	27							
	8.3.6	(b) Provision and erection of warning traffic signs for 60km/h design standard, complete									
18.3		.1 T-junction (W104)	no	10							
18.4		.6 Dead end/road closed chevron (W410)	no	7							
	8.3.6	(d) Provision and erection of street names complete									
18.5		.2 Double type	no	29							
		RETRO-REFLECTIVE ROAD MARKINGS									
		Retro-reflective paint applied at a nominal rate of 0,42l/m²									
	8.4.1	(a) White lines (broken or unbroken)									
18.6		.1 100mm Lines	m	3300							
18.7		.2 150mm Lines	m	550							
18.8		.4 300mm Lines	m	172							
18.9	8.4.1	(c) White characters and symbols	m²	142							
					arried Forward						

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.2: Schedule of Quantities

Ancillary Roadworks



em	Payment	Description	Unit	Qty	Rate	Amount
	Reference	· · · · · · · · · · · ·	1		(R)	(R)
			1	Bro	ought Forward	
		SETTING OUT AND PREMARKING				
		Setting out and premarking				
	8.4.4	(a) Lines (excluding traffic island, symbols, etc.)				
	0.4.4	(a) <u>Lines (excluding traine island, symbols, etc.)</u>				
.10		.1 Lines	km	3.9		
		SCHEDULE: 18				
		ANCILLARY ROADWORKS				
		Carried forward to Summary of Schedules			Total	

Witness 1

Contractor



Northern Cape Department of Co-operative Governance, Human Settlement and Traditional Affairs

LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PORTION 2: CONTRACT

Section C2.3
Summary of Bill of Quantities

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					i l
					1
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C2.3: Summary of Schedules

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ABSA BANK LIMITED LERATO PARK INTEGRATED HOUSING DEVELOPMENT CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES PHASE 5

Summary of Schedules

Schedule No.	Description	Amount (R)		
1	PRELIMINARY AND GENERAL			
2	PROVISIONAL SUMS AND PRIME COST ITEMS			
3	DAYWORKS AND TEMPORARY WORKS			
4	SITE CLEARANCE			
5	EARTHWORKS			
6	EARTHWORKS (PIPE TRENCHES)			
7	EARTHWORKS (ROADS , SUBGRADE)			
8	uPVC PIPELINES			
9	BEDDING (PIPES)			
10	CABLE DUCTS			
11	SUBSOIL DRAINAGE			
12	uPVC SEWERS			
13	STORMWATER DRAINAGE			
14	ERF CONNECTIONS (WATER)			
15	SUBBASE			
16	SEGMENTED PAVING			
17	KERBING, CHANNELLING, EDGE BEAMS, ETC			
18	ANCILLARY ROADWORKS			
	Sub-Total			
	Provisional sum: Allowance for Contract Price Adjustment (7% of Sub-Total)			
	Sub-Total			
	Provisional sum: Allowance for Contingencies (10% of Sub-Total)			
	Total Construction Cost			
Value Adde	Value Added Tax (This tender is VAT Exempt (The Cleint will not Pay VAT on this Project))			
	This tender is VAT Exempt (The Cleint will not Pay VAT on this Project)			
	Total Amount of Tender Carried Forward to Form of Offer and Acceptance			

s:								
e:								
	nt:							
Contractor	Witness 1	Witness	C2 2 38	Employer] [Witness 1		Witness 2
	e: n bank statemer	e: n bank statement: or s	e: n bank statement: or Savings Account	c: n bank statement: or Savings Account Contractor Witness 1 Witness 2	bank statement: or Savings Account Contractor Witness 1 Witness 2 Employer	bank statement: or Savings Account Contractor Witness 1 Witness 2 Employer	bank statement: or Savings Account Contractor Witness 1 Witness 2 Employer Witness 1	bank statement: or Savings Account Contractor Witness 1 Witness 2 Employer Witness 1



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PORTION 2: CONTRACT

Part C3
Scope of Work

	ſ					1	
Contractor	-	Witness 1	Witness 2	Employer	Witness 1		Witness 2



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

SCOPE OF WORKS

CONTENTS LIST

Section	Description Page No	
Section C3.1	Description of the Works	
Section C3.1.1	Employer's Objectives	
Section C3.1.2	Overview of the Works	
Section C3.1.3	Scope of the Works	
Section C3.1.4	Location of the Works	
Section C3.2	EngineeringC3.6	
Section C3.2.1	Employer's DesignC3.6	
Section C3.2.2	Drawings	
Section C3.3	ProcurementC3.7	
Section C3.3.1	Procurement Principles	
Section C3.4	ConstructionC3.11	
Section C3.4.1	Standard Specifications	
Section C3.4.2	Variations and Additions to Standard and Particular Specifications	
Section C3.4.3	Particular Specifications	
Section C3.5	Management	
	END OF SECTION	
		_
Contractor	Witness 1 Witness 2 Employer Witness 1 Witness 2	



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PORTION 2: CONTRACT

Section C3.1
Description of the Works

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Contract 2334-10-05/ID01
Part C3: Scope of Work
Section C3.1: Description of the Works



Northern Cape Department of Co-operative Governance, Human Settlement and Traditional Affairs

LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

C3.1 DESCRIPTION OF THE WORKS

C3.1.1 Employers Objectives

The Lerato Park Integrated Housing Development Project is intended to capture the principles of an integrated housing development project. In essence the Project aims to achieve a development approach that provides for the integration of:

- Higher level of services than typical of subsidised RDP townships;
- Mixed income residential environment;
- Rich choice of housing modalities;
- Various tenure options;
- Quality built environment;
- Economic opportunities;
- Provision of full range of transport and social facilities; and
- Delivered in one seamless development process.

The Project is located within the jurisdiction area of the Sol Plaatje Municipality ("SPM") planned to deliver approximately 4 654 subsidised, institutional and bonded units over an envisage period of 5 years, subject to the availability of funding by the various funding sources for the Project. COGHSTA is the developer and the SPM is the land owner. The land was made available by the SPM to COGHSTA for the development of the project by means of a Land Availability Agreement.

Phase 5 of the housing project aims to deliver some 734 housing opportunities in the subsidized, institutional/rental and bonded housing segments.

Contractor	J.	Witness 1	J	Witness 2	J	Employer		Witness 1		Witness 2
C3.1-1										

Contract 2334-10-05/ID01
Part C3: Scope of Work
Section C3.1: Description of the Works



This contract consists of the construction of internal civil engineering services for the second phase of the Lerato Park Integrated Housing Project. Electrical reticulation and subsidy houses will be constructed concurrently under separate contracts.

This contract is divided into four (4) sub-phases. The Employer plans to fast track the construction of the electrical reticulation and subsidy houses. A Practical Completion Certificate will be issued after completion of the civil engineering services for each phase. Please note that all civil engineering services will have to be tested and erf boundary pegs be verified and replaced where required before a Certificate of Practical Completion will be issued.

Thereafter the site will be handed over to the contractor for the electrical services. After completion of the electrical services for each phase, the water reticulation shall be retested.

After completion of the services for each phase the services will be handed to the local authority. A Certificate of Completion will only be issued after completion of all phases.

After completion of the services for each phase, the site will be handed over to the building contractor for the construction of houses.

Refer to clause C3.5.1.3 for the specified construction programme.

C3.1.3 Scope of the Works

The following work is included in this contract:

- a) uPVC water mains, reticulated in street reserves
- b) uPVC midblock and road frontage sewers
- c) kerbed, interlocking concrete block paved roads
- d) Kerb inlet storm water structures and junction boxes
- e) concrete storm water pipes
- f) Storm water channels lined with concrete interlocking blocks
- g) Cable ducts for future electrical reticulation road crossings
- h) Telkom Sleeves

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2

Contract 2334-10-05/ID01
Part C3: Scope of Work
Section C3.1: Description of the Works



C3.1.4 Location of the Works

The proposed development site is located to the North of Kimberly, in the Northern Cape Province, within the Francis Baard District Municipal area and within the borders of the Sol Plaatjie Local Municipality. It is situated between the townships of Galeshewe and Roodepan (see locality plan).

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2 C3.1-3



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PORTION 2: CONTRACT

Section C3.2 Engineering

	ſ					1	
Contractor	-	Witness 1	Witness 2	Employer	Witness 1		Witness 2



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

C3.2 ENGINEERING

C3.2.1 Employer's Design

The permanent works included in this contract has been designed by the Employer. The detail of the works is indicated on the drawings and in the specifications. The Tenderer may submit alternative offers for designs prepared by himself subject to the conditions specified in the Contract Data.

C3.2.2 Drawings

Drawings are bound in Volume 2 – Book of Drawing. A drawing list is included in Volume 2.

Contractor		Witness 1		Witness 2	-	Employer		Witness 1	=	Witness 2
C3.2-1										



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PORTION 2: CONTRACT

Section C3.3 Procurement

	ſ					1	
Contractor	-	Witness 1	Witness 2	Employer	Witness 1		Witness 2



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

C3.3 PROCUREMENT

C3.3.1 Procurement Principles

The Employer decided to adopt the Standard of Uniformity in Construction Procurement published by the Construction Industry Development Board (CIDB) for his procurement process.

The Standard for Uniformity in Construction Procurement establishes minimum requirements that:

- promote cost efficiencies through the adoption of a uniform structure for procurement documents, standard component documents and generic solicitation procedures;
- provide transparent, fair and equitable procurement methods and procedures in critical areas in the solicitation process;
- ensure that the forms of contract that are used are fair and equitable for all the parties to a contract; and
- enable risk, responsibilities and obligations to be clearly identified.

C3.3.2 Contractors Personnel

The Contractor shall limit the utilisation of his permanently employed personnel to that of key personnel only on the Works, as defined below, and shall execute and complete the Works utilising a temporary workforce employed directly by the Contractor and/or by his subcontractors, using the assistance of the Labour Desk(s), from the various communities that are established in proximity to the Works or which will be consumers from the Scheme.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2					
	C3.3-1									



Without derogating from the Contractor's obligations to complete the Works within the specified time for completion in terms of the General Conditions of Contract, the numbers in each category of the Contractor's key personnel, as stated by the Contractor in the Returnable Schedules, will be strictly controlled during the contract period and any increase in numbers will be subject to the prior approval of the Employer.

Key personnel means all contracts managers, site agents, site clerks, materials and survey technicians, quantity surveyors, trainers, supervisors, foremen, skilled plant operators, brick layers, welders, shutter hands and the like, and all other personnel in the permanent employ of the Contractor or his sub-contractors who possess special skills, and/or who play key roles within the Contractor's or his subcontractor's operations.

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

- a) The unavailability from local sources of sufficient numbers of temporary workers and/or sub-contractors to execute the Works, provided always that the Contractor has satisfied the Engineer that he has exercised his best endeavours and taken all reasonable actions to recruit sufficient temporary workers and sub-contractors from local sources.
- b) The unavailability within the temporary worker pool and/or from subcontractor sources available to the Contractor in terms of the Contract, of sufficient skills necessary to execute the Works or specific portions thereof, in situations where the completion period allowed in the Contract is insufficient to facilitate the creation of the necessary skills through the provision of suitable training as contemplated in the Contract;
- c) Any other circumstances which the Engineer may deem as constituting a warrant.

C3.3.3 Temporary Workforce

The Contractor shall employ labour from the local communities through the Labour Desk(s). Accordingly, the workforce that is employed on Site shall consist of local residents, except for

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2					
C3.3-2										



approved key staff in the permanent employ of the Contractor, to the maximum extent that is compatible with the requirements of Clause C3.3.2.

The Labour Desk(s) shall assist in identifying available local labour and, where available, semi-skilled labour as well as local sub-contractors. The Labour Desks shall also assist and advise regarding conditions of employment, minimum wages, disputes and disciplinary procedures. The function of the Labour Desk(s) shall however in no way diminish the responsibilities of the Contractor in terms of the Conditions of Contract.

Although the Contractor shall adhere to the statutory minimum wage rates, he is however at liberty to negotiate additional incentive payments based on performance.

A contract of employment or subcontract should be signed between the Contractor and each of his employees or sub-contractors, as the case may be. Likewise contracts of employment must be entered into between each such sub-contractor, and each of the specific subcontractor's employees. Employment and subcontract agreements shall make clear reference to at least the following conditions:

- The minimum agreed wage rate per hour in respect of labourers;
- The agreed pay rate per unit of production where applicable;
- UIF and WCA payments;
- Minimum working hours per day;
- Start and end times of a daily shift;
- Lunch break times:
- Company Policy regarding :
 - Rain time
 - Sickness and absenteeism
 - Disciplinary matters
 - Grievances
- Method and frequency of payment;
- Work clothes and safety equipment to be issued.

C3.3.4 Labour Intensive Construction

Labour Intensive Construction shall mean the economically efficient employment of as great a portion of labour as is technically feasible to produce a standard of construction as demanded by the Specifications with completion by the Due Completion Date, thus the effective substitution of labour for equipment.



Appropriate portions of the Works included in the Contract shall be executed using labour intensive construction methods. These portions of the Works shall be constructed utilising only locally employed labour and/or the labour of local sub-contractors, supplemented to the extent necessary and unavoidable by the Contractors key personnel as provided for in clause C3.3.2, unless otherwise instructed by the Engineer. The portions of the Works to be executed using labour intensive construction methods are:

- clearing and grubbing of the Site;
- bedding, selected fill, backfilling and compaction of all pipe trenches irrespective of depth, but assisted by mechanical compaction equipment in order to achieve the specified densities;
- reinstatement of all fill, shoulder and pavement layers at road crossings, but using mechanical compaction equipment in order to achieve the specified densities;
- transportation and spoiling of all trench materials, where the disposal site is located within 20 metres of source;
- removal of oversized materials to the edge of the roadway during the construction of roads and streets;
- laying, testing and disinfection of all pipelines, including all fittings, valves and house/erf connections; but excluding all stormwater pipe- and rectangular culverts;
- construction of all manholes, cleaning eyes, kerb inlets, junction boxes, culvert floors, end structures and balustrades, valve chambers, thrust blocks, pipeline markers and the like (earth-, concrete-, brick- and metalworks), but excluding the mixing of concrete and transporting of same to the point of pouring;
- construction of concrete interlocking block pavement;
- kerbing;
- road marking and signage;
- dismantling and re-erection of fences; and
- cleaning and tidying up of the Site.

In respect of those portions of works which are not listed above, the construction methods adopted and plant utilised shall be at the discretion of the Contractor, provided always that the construction methods adopted and plant utilised by the Contractor are appropriate in respect of the nature of the Works to be executed and the standards to be achieved in terms of the Contract.



C3.3.5 Subcontracting

The Contractor shall appoint such authorities and/or specialist subcontractors and suppliers as may be designated or nominated by the Employer or the Engineer for those portions of the Works specified in the Scope of Works.

The Contractor shall sub-let to local emerging sub-contractors appropriate portions of the works that are designated in C3.3.4 as being reserved for labour intensive construction methods.

As required by the Conditions of Contract, the Contractor shall be responsible for all work carried out by sub-contractors (whether nominated by the Employer or selected by the Contractor) on his behalf. The Engineer will not liaise directly with any such sub-contractor, nor will he become involved in any problems and/or disputes related to payments, programming, workmanship, etc, unless provided for in the Conditions of Contract. Such problems and/or disputes shall remain the sole concern of the Contractor and his sub-contractors.

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2

C3.3-5



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PORTION 2: CONTRACT

Section C3.4 Construction

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Contractor	-	Witness 1	Witness 2	Employer	Witness 1		Witness 2



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PORTION 2: CONTRACT

Section C3.4.1
Standard Specifications

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Contract 2334-10-05/ID01 Part C3: Scope of Work Section C3.4: Construction

Section C3.4.1: Standard Specifications



Northern Cape Department of Co-operative Governance, Human Settlement and Traditional Affairs

LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

C3.4 CONSTRUCTION

C3.4.1 Standard Specifications

The Standard Specifications on which this contract is based are the South African Bureau of Standard's Standardized Specifications for Civil Engineering Construction (SABS 1200). (Note: "SABS has been changed to "SANS"; the SABS 1200 specifications are due to be replaced in the foreseeable future by SANS 2001 amongst other specifications).

Although not bound in nor issued with this Document, the relevant sections of the standard specifications shall form part of this Contract. These documents are available at the Contractor's expense from the SA Bureau of Standards, Private Bag X191, PRETORIA, 0001.

The applicable SABS 1200 Standardised Specification for this Contract shall be the following:

A - General

AB - Engineers office

C - Site clearance

D - Earthworks

Contractor	Witness 1	Witness 2	Employer	•	Witness 1	•	Witness 2

April 2021



DB - Earthworks (Pipe Trenches)

DK - Gabions and pitching

DM - Earthworks (roads, subgrade)

G - Concrete (structural)

GA - Concrete (small works)

GE - Precast concrete

H - Structural steelwork

HC - Corrosion protection of structural steelwork

L - Medium pressure pipelines

LB - Bedding (pipes)

LC - Cable ducts

LD - Sewers

LE - Stormwater drainage

LF - Erf connections (water)

M - Roads (general)

ME - Subbase

MF - Base

MJ - Segmented paving

MK - Kerbing and channelling

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2 C3.4.3-2

Contract 2334-10-05/ID01 Part C3: Scope of Work Section C3.4: Construction

Section C3.4.1: Standard Specifications



MM - Ancillary roadworks

The various documents listed in section C3.4.1 shall be treated as mutually explanatory. However, should any requirement of section C3.4.2 conflict with any requirement of the Standardised Specifications or with any requirement of the Particular Specifications, then the requirement of section C3.4.2 shall prevail.

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2 C3.4.3-3



LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PORTION 2: CONTRACT

Section C3.4.2
Variations and Additions to Standard and Particular Specifications

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2





LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

C3.4.2 VARIATIONS AND ADDITIONAL CLAUSES TO THE STANDARD AND PARTICULAR SPECIFICATIONS

The following variations and additions to the Standard and Particular Specifications will be applicable to this Contract:

The various documents listed in section C3.4.1 shall be treated as mutually explanatory. However, should any requirement of section C3.4.2 conflict with any requirement of the Standardised Specifications or with any requirement of the Particular Specifications, then the requirement of section C3.4.2 shall prevail.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2					
C3.4.3-0										

Section C3.4: Construction

Section C3.4.2: Variations and Additions to Standard and Particular Specifications

PSA General



Northern Cape Department of Co-operative Governance, Human Settlement and Traditional Affairs

LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

GENERAL	2
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ADJUSTMENT OF PRELIMINARY AND GENERAL TIME-RELATED ITEMS (Clause 8.2.2)	5
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Time-related Items	7
Contract Price Adjustment Salary for Labour Desk Officer and Community Liaison Officer Artisans and Skills Training Telephone Calls and Rental Acceptance Control Testing Office Consumables for Engineer's Site Facility	8 8 9 9
PRIME COST ITEMS (Clause 8.6)	10
Materials for Dayworks	10
	PLANT (Clause 4.3) SITE FACILITIES

Section C3.4: Construction

Section C3.4.2: Variations and Additions to Standard and Particular Specifications

PSA General



Northern Cape Department of Co-operative Governance, Human Settlement and Traditional Affairs

LERATO PARK INTEGRATED HOUSING DEVELOPMENT

CONTRACT 2334-10-05/ID01

INTERNAL CIVIL ENGINEERING SERVICES: PHASE 5

PSA GENERAL

PSA1 QUALITY (Clause 3.1)

All material used in the Works shall, where such mark has been awarded for a specific type of material, bear the SABS mark. Alternatively, the Contractor shall furnish the Engineer with certificates of compliance of materials, which bear the official mark of the appropriate standard.

PSA2 PLANT (Clause 4.3)

Except where the use of plant is essential in order to meet the specified requirements by the Due Completion Date, the Contractor shall use only hand tools and equipment in the construction of those portion(s) of the Works that are required in terms of the Scope of Works to be constructed using labour intensive construction methods.

PSA3 SITE FACILITIES

PSA3.1 SITE FACILITIES AVAILABLE

PSA3.1.1 Contractor's Camp

A Site will be made available by the Employer for the Contractor's camp and depot adjacent to the existing camp site for the Engineer.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C3.4: Construction

Section C3.4.2: Variations and Additions to Standard and Particular Specifications

PSA General



PSA3.1.2 Source of Water Supply

The Contractor shall be responsible under the Contract for the supply and distribution at his cost of all water that he may require for purposes of constructing the Works. Accordingly, the Contractor shall pay all connection fees and consumption charges, and at his cost provide all connections, consumption meters, pipework, storage tanks, transport and other items associated with the supply of water for the Works.

Water can be provided by Sol Plaatje Local Municipality.. The Contractor shall, subject to the approval of the Engineer, make any necessary arrangements with the relevant authority for the connection(s), and shall provide in his tender for the payment of all charges and costs that are associated with making water available for purposes of constructing the Works.

Water for filling, testing and disinfecting the pipelines and structures will be made available by the Employer at no cost to the Contractor. However, should the pipelines and/or structures have to be drained and refilled due to defective materials or workmanship by the Contractor or by his subcontractors, then the water required for refilling shall be made available at the cost of the Contractor.

PSA3.1.3 Source of Power Supply

The Contractor shall be responsible under the Contract for the supply and distribution at his cost of all electricity that he may require for purposes of constructing the Works. Accordingly, the Contractor shall pay all connection and consumption charges, and at his cost provide all connections, transformers, consumption meters, cables, distribution boards and other items that are associated with the supply of electricity for construction of the Works.

Sol Plaatje Local Municipality is the power supply authority in the area. The Contractor shall, subject to the approval of the Engineer, make any necessary arrangements with the relevant authority for the connection(s), and shall provide in his tender for the payment of all charges and costs that are associated with making electricity available for purposes of constructing the Works. The distribution of electricity shall be in accordance with the applicable bylaws and regulations of the supply authority.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

C3.4.2-3

Section C3.4: Construction

Section C3.4.2: Variations and Additions to Standard and Particular Specifications

PSA General



PSA3.1.4 Housing

The Contractor shall be permitted to house Key Personnel only within his camp site(s). At the commencement of the Contract, the Contractor shall inform the Engineer of his intentions regarding the housing of Key Personnel on Site, and he shall thereafter ensure that all such accommodation is kept neat and tidy, hygienic and properly controlled at all times. Should at any stage of the Contract the Employer and/or the Engineer be of the opinion that the housing of Key Personnel within the camp site(s) of the Contractor is causing disturbance or inconvenience to the landowner or to nearby residents, then the authority granted by this clause for the Contractor to house Key Personnel on Site may be withdrawn, either partially or entirely.

The Contractor shall at all times conform with all requirements contained in law or bylaws, as well any other requirements set by the controlling local authority.

PSA3.2 SITE FACILITIES REQUIRED

PSA3.2.1 For the Contractor

Whatever may be required for the satisfactory execution of the Contract.

PSA3.2.2 For the Engineer

As specified under Section PSAB.

PSA3.2.3 Sanitary facilities

Water borne sewerage is available at the Engineer's camp site. Flush toilets or Chemical toilets shall be provided and maintained for the use of the Contractor's personnel at all camp sites that the Contractor may establish for construction of the Works. In addition, the Contractor shall at all times during construction of the Works provide adequate sanitary facilities on site so that all employees are at all times within easy reach of sanitary facilities.

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2

C3.4.2-4

Section C3.4: Construction

Section C3.4.2: Variations and Additions to Standard and Particular Specifications

PSA General



PSA4 ADJUSTMENT OF PRELIMINARY AND GENERAL TIME-RELATED ITEMS (Clause 8.2.2)

PSA4.1 Replace the note on the end of the clause with the following:

Note: An approved extension of time will qualify the Contractor to receive additional payment for each relevant time related item at the original tendered unit rate for such item. The additional payment will be calculated pro rata to the extension of time in relation to the time for achieving Practical Completion for the Works at the date when the agreement came into effect.

PSA4.2 Should the Time for Completion be automatically extended due to abnormal weather conditions occurring during execution of the Contract as provided for in the Conditions of Contract, adjustment to the total for time-related preliminary and general items will be applicable as specified in Clause PSA4.1.

PSA5 HEALTH AND SAFETY

The maintenance of safe work practice at all times and in all sections of the execution of the works is embedded in the day to day site activities of all the Contractor's management, staff and workforce on the contract.

The introduction of the Construction Regulations in 2003 requires from the Employer to ensure that the Contractor has made adequate provision for the execution of the works within the specifications of said regulations. The contractor shall comply to the Health and Safety Specification bound into section C3.4.3 of this document.

It must be noted that the lists below are not exhaustive and that many items have been traditionally priced by the Contractor as an integral part of his Preliminary and General items or as part of the overhead costs of other items. The tender document, although not detailed with regards the Construction Regulations, requires that the Contractor ensures adherence to the Occupational Health and Safety Act (Act 85 of 1993) the Construction Regulations, 2003.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Section C3.4: Construction

Section C3.4.2: Variations and Additions to Standard and Particular Specifications

PSA General



PSA5.1 Fixed-charge Items

Add the following new Clause (Clause 8.3.5):	
	<u>Unit</u>
Compliance with the Occupational Health and Safety Act	
(Act 85 of 1993) and its regulations and with the Employer's	
Health and Safety Specification.	Sun

The fixed charge item shall include but shall not be limited to the following:

- Preparation of Health and Safety Plan,
- Establishment of Health and Safety File,
- Health and Safety Training
- Personal Protective Clothing and Equipment
- Establishment of Safety Administration
- Signage to demarcate site as a restricted construction area
- Other Health and Safety Fixed-charge Obligations

PSA5.2 Time-related Items

Add the following new Clause (Clause 8.4.6):
Compliance with the Occupational Health and Safety Act.
(Act 85 of 1993) and its regulations and with the Employer's
Health and Safety Specification.

The time related item shall include but shall not be limited to the following:

- The employment cost of all health and safety personnel including consultants, health and safety officers, inspectors, supervisors and issuers required in terms of the Contractor's Health and Safety Plan,
- Updating the Health and Safety Plan as needed,
- Carrying out of periodic own audits and follow-up audits,
- Compiling ongoing risk assessments and risk assessment reports as required by the Works,

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Unit

Sum

Section C3.4: Construction

Section C3.4.2: Variations and Additions to Standard and Particular Specifications

PSA General



- Convening of regular safety meetings with the Safety Representatives,
- Accompanying and supporting the Employer or his Safety Agent during ad hoc audits,
- Compilation of monthly safety reports and statistics for the Employer or his Safety Agent,
- Implementation and maintenance of Training
- Maintenance of personal protective clothing and equipment
- Maintenance of fences, signs and barricades
- Access control to construction site
- Implementation and maintenance of safety administration
- Other Health and Safety Time-related Obligations

PSA6 ENVIRONMENTAL MANAGEMENT PLAN

The Contractor shall comply with all the conditions of the Record of Decision and the Environmental Management Plan bound into Section C4).

PSA6.1 Fixed-Charge Items

Add the following Clause (Clause 8.3.7):

<u>Unit</u>

Compliance with Environmental Management Plan and Record of Decision

Sum

The sum tendered shall cover all costs, overheads, profits and charges incurred in complying with all the conditions of the Environmental Management Plan and Record of Decision bound into Section C4

PSA6.2 Time-related Items

Add the following Clause (Clause 8.4.8):

<u>Unit</u>

Compliance with Environmental Management Plan and Record of Decision

Sum

The sum tendered shall cover all costs, overheads, profits and charges incurred in complying with all the conditions of the Environmental Management Plan and Record of Decision bound into Section C4.

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•	Contractor	Witness 1	ļl.	Witness 2	ı	Employer	1	Witness 1	Witness 2