

**ZNB4293/18A: APPOINTMENT OF A SERVICE PROVIDER / CONTRACTOR FOR  
REHABILITATION OF MAKHATHINI IRRIGATION CANAL ONE (1) KILOMETRE AT  
UMKHANYAKUDE DISTRICT**

**ADENDUM**



# agriculture & rural development

Department:  
Agriculture and Rural Development  
**PROVINCE OF KWAZULU-NATAL**

ITEM	PAYMENT	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		<b>SECTION 1</b>				
<b>1</b>	<b>SANS 1200 A</b>	<b>PRELIMINARY &amp; GENERAL</b>				
1.1	8.3	<b>FIXED CHARGE ITEMS &amp; VALUE RELATED ITEMS</b>				
1.1.1	8.3.1	Contractual requirements (including Contract Works Insurance, sureties, UIF, etc.)	Sum	1		
1.1.2		All survey and site control requirements, including setting out and establishing supplementary benchmarks	Sum	1		
<b>1.2</b>	<b>8.3.2</b>	<b>Establishment of facilities on site</b>				
1.2.1	8.3.2.2	Facilities for the Contractor				
1.2.1.1		a) Furnished air conditioned offices and storage sheds (suitable for 10 people)	Sum	1		
1.2.1.2		b) Workshops	Sum	1		
1.2.1.3		c) Ablution and latrine facilities	Sum	1		
1.2.1.4		d) Tools and equipment	Sum	1		
1.2.1.5		e) Water supplies, electric power and communications	Sum	1		
1.2.1.6		f) Dealing with water supplies	Sum	1		
1.2.1.7		g) Access	Sum	1		
1.2.1.8		h) Living Accomodation	Sum	1		
1.2.1.9		i) Plant (designated plant for designated operations or plant for use during stated periods)	Sum	1		
1.2.1.10	8.3.3	Other fixed charge obligations	Sum	1		
1.2.1.11	8.3.4	Removal of site establishment	Sum	1		
1.2.1.12		Geotechnical analysis and report- the rate shall include the testing of the soil against the load imposed by the irrigation canal. The report should detail the bearing capacity of the in situ material and make recommendation on the sub-surface drainage if needed. The recommendation should also reflect on the stability of the in situ material as well as the recommended shapes and side slopes of the canals (temporary earth canal and concrete lined canal).	Prov Sum	1	R 200 000,00	R 200 000,00
1.2.1.13		Percentage mark up on 1.2.1.12	%			
<b>1.3</b>		<b>Health and Safety Compliance</b>				
1.3.1	8.3.5	<b>Complying with Health and Safety Act</b>				
1.3.1.1		a) Preparation of Health and Safety Plan	Sum	1		
1.3.1.2		b) Compilation of a Risk Assessment Plan prior to construction	Sum	1		
1.3.1.3		c) Health and Safety Induction Training of employees	Sum	1		
1.3.1.4		d) Implementation of the Health and Safety Plan over	Sum	1		
1.3.1.5		e) Provision of safety gear as per OHS Act	Sum	1		
1.3.1.6	8.3.6	Provision for Environmental management plan requirements	Sum	1		
<b>CARRIED FORWARD</b>						



# agriculture & rural development

Department:  
Agriculture and Rural Development  
PROVINCE OF KWAZULU-NATAL

ITEM	PAYMENT	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>2</b>	<b>SABS 1200 A</b>	<b>SECTION 2 DAYWORK</b>				
2.1		<b>LABOUR</b>				
2.1.1	8.2.7	a) Foreman	hr.			Rate Only
2.1.2		c) Semi-skilled	hr.			Rate Only
2.1.3		d) Unskilled	hr.			Rate Only
2.1.4		e) Surveyor	hr.			Rate Only
2.1.5		f) Watchman	hr.			Rate Only
2.2		<b>PLANT</b>				
2.2.1		a) Backactors				
2.1.1.1		i) TLB Case 480D or similar 4.6t, 39kW	hr.			Rate Only
2.2.2		b) Compactors				
2.2.2.1		i) Pedestrian vibrating roller (Bomag 60 or similar)	hr.			Rate Only
2.2.2.2		ii) Pedestrian vibrating roller (Bomag 90 or similar)	hr.			Rate Only
2.2.3		c) Trucks	hr.			Rate Only
2.2.3.1		i) 6m <sup>3</sup> tip truck	hr.			Rate Only
2.2.3.2		ii) 10m <sup>3</sup> tip truck	hr.			Rate Only
2.2.3.3		iii) LDV	hr.			Rate Only
2.2.3.4		iv) 6 000 litre watercart	hr.			Rate Only
2.2.3.5		v) 10 000 litre watercart	hr.			Rate Only
2.2.3.6		vi) 7t flatbed crane truck	hr.			Rate Only
2.2.3.7		vi) 7t flatbed crane truck	hr.			Rate Only
2.2.4		d) Other Plant	hr.			Rate Only
2.2.4.1		i) Hitachi UH 121 excavator or similar 26t, 1212kW	hr.			Rate Only
2.2.4.2		ii) Bulldozer Cat D6D or similar, 14200kg, 104kW	hr.			Rate Only
2.2.4.3		iii) Bulldozer Komatsu D31 or similar, 6590kg, 49kW	hr.			Rate Only
2.2.4.4		iv) Grader CAT 140G or similar, 16500kg, 112kW	hr.			Rate Only
2.2.4.5		v) Roller : Bomag 518 or similar	hr.			Rate Only
2.2.4.6		vi) Front end Loader CAT 930 or similar 9620kg, 75kW	hr.			Rate Only
2.2.4.7		vii) Hitachi WH051D wheel excavator or similar 10t, 566kW	hr.			Rate Only
<b>TOTAL SECTION, CARRIED TO SUMMARY</b>						



# agriculture & rural development

Department:  
Agriculture and Rural Development  
**PROVINCE OF KWAZULU-NATAL**

ITEM	PAYMENT	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>BROUGHT FORWARD</b>						
<b>1.4</b>	<b>8.4</b>	<b>TIME-RELATED ITEMS</b>				
1.4.1	8.4.1	Contractual Requirements	Month	6		
1.4.2	8.4.2	Operate and Maintain Facilities on Site for the duration of construction	Month	6		
1.4.3	8.4.2.2	Facilities for the Contractor		6		
1.4.4		a) Furnished air conditioned offices and storage sheds	Month	6		
1.4.5		b) Workshops	Month	6		
1.4.6		c) Ablution and latrine facilities	Month	6		
1.4.7		d) Tools and equipment	Month	6		
1.4.8		e) Water supplies, electric power and communications	Month	6		
1.4.9		f) Living Accomodation	Month	6		
1.4.10		g) Dealing with water supplies	Month	6		
1.4.11	8.4.3	Supervision for the Duration of Construction	Month	6		
1.4.12	8.4.4	Company and Head Office Overhead Costs for the duration of the Contract	Month	6		
1.4.13		Provision of security for the duration of the contract	Month	6		
1.4.14	8.4.4	Provision of the community liaison officer (CLO) for the duration of contract.	Month	6		
1.4.15	8.4.5	Other Time-related Obligations	Month	6		
<b>TOTAL SECTION, CARRIED TO SUMMARY</b>						



# agriculture & rural development

Department:  
Agriculture and Rural Development  
**PROVINCE OF KWAZULU-NATAL**

ITEM	PAYMENT	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>SECTION 3</b>						
<b>EARTH CANAL CONSTRUCTION AND CONCRETE</b>						
<b>CANAL REPAIRS</b>						
<b>3.1</b>	<b>SANS 1200</b>	<b>SITE CLEARANCE</b>				
	<b>C</b>					
3.1.1	8.2.1	Clear and grub (10m width stream for the earth canal)	m	1500		
3.1.2	8.2.3	Remove and grub all trees and tree stumps regardless of girth	No.	10		
3.1.3	8.2.5	Take down existing fences and reinstate	Prov Sum	1	R 100 000,00	R 100 000,00
3.1.4	8.2.7	Remove and reinstate existing pipelines	Prov Sum	1	R 20 000,00	R 20 000,00
3.1.5	8.2.8	Demolish and remove concrete rubble (5800m <sup>3</sup> ) from the existing irrigation canal.	Sum	1		
3.1.6	8.2.9	Transport materials (concrete rubble) and debris to unspecified sites and dump (provisional)	m <sup>3</sup> .km	5800		
3.1.7	8.2.10	Remove topsoil to nominal depth of 150mm and stockpile (as directed by the Engineer on site)	m <sup>3</sup>	1125		
<b>3.2</b>	<b>SANS 1200</b>	<b>EARTHWORKS - EARTH CANAL CONSTRUCTION</b>				
	<b>D</b>					
	8.3.2	Excavation				
3.2.1		a) Excavate in all materials and use for backfill or dispose of as ordered by the Engineer	m <sup>3</sup>	4908		
3.2.2	8.3.3	b) Extra-over item (a) above for				
3.2.3		i) Intermediate excavation	m <sup>3</sup>	578		
3.2.4		ii) hard rock excavation	m <sup>3</sup>	291		
3.2.5	8.3.6	Overhaul				
3.2.6		a) Limited overhaul (Provisional)	m <sup>3</sup>	100		
3.2.7		b) Long overhaul (Provisional)	m <sup>3</sup> .km	200		
3.2.8	8.3.10	Topsoiling	m <sup>2</sup>	7500		
3.2.9		Place and compact selected material for canal embankment	m <sup>3</sup>	1000		
3.2.10		Final trimming of canal profile to line and level	m <sup>2</sup>	10500		
<b>3.3</b>	<b>SANS 1200</b>	<b>EARTHWORKS - SUBSURFACE DRAINAGE</b>				
	<b>DB</b>					
3.3.1	8.3.2	a)Excavate in all material for trenches for drainage pipe in soil	m <sup>3</sup>			Rate Only
3.3.2		b) Extra-over item (a) above for				
3.3.3		i) Intermediate excavation	m <sup>3</sup>			Rate Only
3.3.4		ii) hard rock excavation	m <sup>3</sup>			Rate Only
<b>CARRIED FORWARD</b>						



# agriculture & rural development

Department:  
Agriculture and Rural Development  
**PROVINCE OF KWAZULU-NATAL**

BROUGHT FORWARD						
3,4	<b>SANS 1200LB</b> 8.2.1	<b>BEDDING - SUBSURFACE DRAINAGE SYSTEM</b> Provision of bedding material for trench excavated				
3.4.1		a) Selected granular material - 19mm crushed stones	m <sup>3</sup>			Rate Only
3.4.2		b) Selected fill material - sand	m <sup>3</sup>			Rate Only
3.4.3	PPS 1	110mm slotted/ perforated UPVC pipes and fittings complete with couplings	m			Rate Only
3.4.4	PPS 1	Grade U14 or similar approved polyester non-woven filter fabric	m <sup>2</sup>			Rate Only
3,5		<b>SUBSURFACE DRAINAGE INSTALLATION</b>				
3.5.1		Sub-surface drainage installation on site as recommended by the geotechnical specialist and designed by the engineer, in collaboration with the geotechnical soil analysis report	Prov Sum	1	R 500 000,00	R 500 000,00
3,6	<b>SANS 1200 G</b>	<b>CONCRETE (STRUCTURAL)</b>				
		<b>Formwork</b>				
3.6.1	8.2.2	Steel formwork to suit different shapes of floor and wall of canal	m <sup>2</sup>	50		
		<b>Steel Reinforcing</b>				
3.6.2	8.3.2	High tensile welded mesh - Ref 193 Mesh	m <sup>2</sup>	6000		
		<b>Concrete Works</b>				
3.6.3	8.4.3	30 Mpa /19mm concrete for walls complete with rubber sealant for expansion joints	m <sup>3</sup>	700		
		<b>Unformed surface finish</b>				
3.6.4	8.4.4	a) 15 mm thick, wooden-float finish externally b) 15 mm thick, steel-float finish internally Construction joint in canal lining	m <sup>2</sup> m <sup>2</sup> m	6600 6600 2000		
		<b>Construction joints and weepholes</b>				
3.6.5	8.5	Rubber sealant for expansion joints or similar approved product	m	1000		
3.6.6	PPS 2	Weepholes (including supply of materials and construction of weepholes as per contract drawings)	Prov Sum	1	R 100 000,00	R 100 000,00
3.6.7	PPS 3	Supply and install concrete impregnated fabric on the inlet and outlet of the temporary earth canal after completion of the concrete works.	m <sup>2</sup>	10		
3.6.8		Testing concrete strength of the existing irrigation canal, samples to be taken at designated points by the project engineer.	Prov Sum	1	R 10 000,00	R 10 000,00
3.6.9		Percentage mark-up on 3.6.8	%			
<b>TOTAL SECTION, CARRIED TO SUMMARY</b>						



## agriculture & rural development

Department:  
Agriculture and Rural Development  
**PROVINCE OF KWAZULU-NATAL**

ITEM	DESCRIPTION	ACTUAL AMOUNT
	<b>SUMMARY</b>	
1	SECTION 1 PRELIMINARY & GENERAL	
2	SECTION 2 DAYWORK	Rate Only
3	SECTION 3 EARTH CANAL CONSTRUCTION AND CONCRETE CANAL REPAIRS	
	Sub-Total 1	
	10% ANCILLARY WORKS	
	Sub-Total 2	
	15% VAT	
	<b>TOTAL TO: CI.1 FORM OF OFFER AND ACCEPTANCE</b>	