DSPACE

https://dspace.org/

Obstacles to quality management in South African infrastructure projects - The case of Route 21 (R21) from National Route 1 (N1) to O.R Tambo International Airport.

Rugodho, George

2013-02-08
http://hdl.handle.net/10539/12408

Downloaded from a DSpace repository. https://dspace.org/

VKE Irene (R21) Site Office
Route 21 Corporate Park
63 Regency Street
Techno Link Block E
Tel: +27 (0)12 345 2238
Fax: +27 (0)12 345 5934

CONTRACT NO NRA R.021-002-2008/1
UPGRADING OF NATIONAL ROUTE R21 SECTION 2: OLIFANTSFONTEIN INTERCHANGE TO HANS STRIJDOM INTERCHANGE (17, 60 km's)

CLIENT: **SOUTH AFRICAN NATIONAL ROADS AGENCY LIMITED**
CONSULTANT: **VELA VKE CONSULTING ENGINEERS**
CONTRACTOR: **RAUBEX CONSTRUCTION**

MINUTES OF SITE MEETING NO 24 HELD ON 9 NOVEMBER 2010 AT 10h00

SUMMARY OF CONTRACT DETAILS

EMPLOYER	**CONSULTING ENGINEER**	**CONTRACTOR**
The South African National Roads Agency Limited	VelaVKE Engineers	Raubex Construction
SANRAL, Northern Region Private Bag X17 **LYNNWOOD RIDGE** 0040 Tel : (012) 426-6200 Fax :(012) 348-1680	VelaVKE Engineers P O Box 72927 **LYNNWOOD RIDGE** 0040 Tel : (012) 481-3800 Fax : (012) 803-7943	Raubex Construction P O Box 884 **BLOEMFONTEIN** 9300 Tel : (051) 406-2000 Fax : (051) 406-2063
FILE REF:N13/5/4:R021-002-2008/1	FILE REF: PN106	FILE REF:
CONTACT PERSONS		
Mr.	Mr.	Mr.
	TENDER AMOUNT (VAT Inclusive)	**FINAL ESTIMATE AMOUNT (CPA and VAT Inclusive)**
	R 719 340 000,00	R 882 956 963,91

CONTRACT COMMENCEMENT DATE:	3 September 2008
CONTRACT PERIOD:	20 months
CONTRACT COMPLETION DATE:	3 May 2010
EXTENSION OF TIME GRANTED:	0 Days
TARGET CONTRACT COMPLETION DATE:	27 September 2010

THE NEXT SITE MEETING WILL BE ON 7 DECEMBER 2010 AT THE SITE OFFICES

		File No. PN106
ITEM	**MINUTES OF MEETING**	**ACTION**

WELCOME

24.1 The Chairman Mr. welcomed all present to the meeting. INFO

ATTENDANCE

Present

24.2

Name	Company	Cell No.	Fax No.
	SANRAL		012 348 0883
	VelaVKE		012 345 5934
	VelaVKE		012 803 7943
	VelaVKE		086 601 7157
	VelaVKE		012 345 5934
	Raubex		012 345 1792
	Raubex		012 345 1792
	Raubex		012 345 1792
	Raubex		012 345 2859
	VelaVKE		012 345 5934

Apologies

24.3

Name	Company	Cell No.	Fax No.
	Raubex		012 345 1792
	Nyeleti		012 361 3525
	VelaVKE		012 345 5934
	VelaVKE		012 803 7943
	Nyeleti		012 361 3525
	Raubex		012 811 1595
	SANRAL		012 348 0883

MINUTES OF PREVIOUS MEETING

Corrections/Clarification to Minutes of Previous Meeting

24.4 No corrections were made to the previous minutes. INFO

Approval of Minutes

24.5 The minutes of site meeting no. 23 were approved as a true reflection of the meeting and signed at the end of the meeting. INFO

CONTRACTUAL MATTERS

Representation

24.6

Company	Name	Designation
SANRAL		Client's Representative
SANRAL		Client's Representative
CoT		Cities Representative
2010 LOC		Representative 2010 LOC
VelaVKE		Engineer
		Project Manager
		Quality Manager
		Engineer's Representative
		Assistant Engineer's Representative: Structures
		Assistant Engineer's Representative:
		Assistant Engineer's Representative: Electrical
		Senior Technician: Materials
		Technician Traffic Accommodation and Safety
Nyeleti		Design Engineer (K69)
		Assistant Design Engineer (K69)
Soillab		Site Laboratory Manageress
Raubex		Project Coordinator
		Project Manager
		Project Manager (Admin) & DEO
		Contractor's Representative (Site Agent)
		Site Safety Officer (OHS)

OTHER CONTRACTS AND CONTRACTORS

Representation

24.7

Company	Name	Designation
Tolplan		Project Manager (Toll Plaza's)
		Senior Engineer's Representative (Toll Plaza's)
		Engineer's Representative (Toll Plaza's)
ASTII		Project Manager (VMS)
Trencon		Contracts Director (Toll Plaza's)
		Contracts Manager (Toll Plaza's)
SATT		Contracts Manager (VMS)

SITE SAFETY AND ACCOMMODATION OF TRAFFIC

OCCUPATIONAL HEALTH AND SAFETY

	Administrative Issues	
24.8	The last safety audit undertaken was audit no. 21. The audit was undertaken by .. … of VelaVKE on 25 October 2010. Performance measure = 98.9%	INFO
24.9	Safety Audit highlights the following non-conformances: Rotating light on construction vehicle not working.	INFO
	Construction related accidents	
24.10	Two construction related accident have occurred since previous meeting. 1. A subcontractor labourer crossed the road and was hi by a speeding motor bike. Both motorcyclist and labourer were killed. 2. A motorcyclist crashed into construction truck inside the closure no injury.	INFO
	Induction	
24.11	All personnel have received re-induction following the fatal accident.	INFO
	Incidents	
24.12	Contractors working directly for SANRAL were not applying appropriates safety measures.	INFO
	ACCOMMODATION OF TRAFFIC AND HAUL ROADS	
	Accident Statistics	
24.13	Refer to Appendix II.	INFO
24.14	The ER reported that subsequent to Site Meeting No. 23 a further sixteen (16) accidents (two construction related) had occurred on site. One fatal accidents were recorded. Since the start of the works a total of two hundred and sixty five (265) accidents (six (6) construction related) had been recorded, of which nine (9)were fatal (none construction related). NMC to continue being informed as per procedure.	INFO
	General Matters	
24.15	A total of twenty eight (28) third party claims had been registered with the Contractor for the period ending Oct, 2010. Letters and summary required to attached to complete report.	INFO
24.16	The ER confirmed that a duty list for the traffic safety officers is ongoing.	RAUBEX
24.17	The Client have requested to only close lanes when work is being carried out and to optimise the closure by implementing rolling closures. The engineer requested that lanes be blocked off with delineators to prevent public travelling inside closures. The use of VMS signs at night was also requested.	RAUBEX
	BORROW PITS, SPOIL AREAS AND HAUL ROADS	
	Borrow pits and commercial sources	
24.18	A cut-off beam and drain is being constructed around the perimeter of the borrow pit at Olifantsfontein interchange – Contour plan of the area was requested.	RAUBEX
	SURVEY AND LAND REQUIREMENTS	
24.19	All missing beacons have been reinstated. Asbuilt information has been given to Eugene Fereria of mance. No response received.	VELAVKE /RAUBEX

24.20		
24.21	It was reported that the km markers would be placed on both carriageways, based on the North Bound Stake Values.	VELAVKE
	ENVIRONMENTAL MANAGEMENT PLAN (EMP)	
24.22		INFO
24.23	External audits are carried out by the Environmental Impact Management Services Environmental Compliance Officer (ECO) a further audit has been planned for the first week of November. Contractor to confirm coordinate work at Sesmyl Spruit.	RAUBEX
	SERVICES	
24.24	Nyeleti reported that overhead sign gantries are to be installed at either end of Hans Strjdom Bridge. Spare sign gantries have been manufactured on another G-FIP project. Will make sure of these, busy with design	VELAVKE
	CONTRACTOR'S PLANT, LABOUR AND MATERIAL ON SITE	
24.25	Refer to Appendices III A, III B, IV A & IV B	
24.26	Refer to Table in Appendix VI B LABOUR, the total accumulated wages for labour up to the end of October 2010 is R70054187.00 representing 9.04% of the estimated contract amount.	INFO
	SUBCONTRACTORS, SMME'S AND BE'S	
24.27	Refer to Appendix IV A and IV B.	INFO
24.28	Refer to Table in Appendix VI B BEs, the total value of work undertaken by BE Subcontractors up to the end of October 2010 is R61 444429.65 representing 7.93% of the estimated contract amount.	INFO
	RDP – TRAINING – LABOUR ENHANCEMENT	
24.29	Refer to appendices V A.	INFO
24.30	Accredited training complete – reports received and will to be submitted to the Client.	VELAVKE
	COMMUNITY ISSUES	
24.31	Nothing reported or discussed.	INFO
	FRUSTRATIONS AND DELAYS	
24.32	The Contractor reported a few minor frustrations with the interphase with the neighbouring project – situation resolved.	INFO
	SITE INSTRUCTIONS, MEMOS AND DRAWINGS ISSUED	
24.33	Refer to Appendices VIA, VIB, VII and XIB.	INFO
24.34	See Appendix XIB.	
	An additional eleven (11) Site Instructions and two Non Conformance Reports were issued. To date four hundred and forty four (444) Site Instructions and thirty (30) Non Conformances Reports have been issued subsequent to the handing over of the site to the Contractor.	INFO

	MIX DESIGNS, MATERIALS AND TESTING	
	General	
24.35	Nothing was reported.	INFO
	Approval of mix designs	
	Testing of materials	
24.36	Nothing reported.	INFO
	Materials Laboratory	
24.37	The Contractor confirmed their satisfaction with the services provided by the Soillab laboratory on site. The laboratory has the capacity to handle the remaining works.	INFO
	VARIATION AND EXTRA WORK ORDER AND DAYWORKS	
24.38	Refer to Appendices VIII and IX.	
24.39	A total of 23 Variation Orders have been prepared, VOs 1 to 5 have been approved, VOs 6 have been submitted.	VelaVKE/ RAUBEX
	PROGRAMME OF WORKS	
24.40	Progress evaluated based programme dated 29 July 2010. An updated program showing progress handed out at the meeting. This project shows current practical completion by 14 December 2010 accept/agreed until request for extention time.	INFO
	PROGRESS	
	PAYMENT AND CASH FLOW	
24.41	Refer to Appendices I, X A, X B and XI B.	
24.42	The total contract expenditure, inclusive of the scheduled items of work completed, materials on site, contract price adjustment, penalties joint laboratory contribution, and retention amounted to 89.58% of the estimated final contract amount (see Appendix I). A total of 94.5% of time used up to 31/10/10.	INFO

STANDARD OF WORKS

CONTRACTUAL DATES AND DELAYS

24.43 Refer to Appendix XII — INFO

The Contract Dates and delays were revised to include work on Saturdays (previously not considered) and recorded as follows:

Site Handover	3 September 2008
Commencement Date	3 September 2008
Contract Period	20 months
Contract Completion Date	3 May 2010
Agreed Rain-Related Delays	116.0 days
Agreed Consequential-Related Delays	Nil days
Agreed Total Weather Related Delays	116.0 days
"n" Value of working days to be subtracted	63.5 days
Apparent weather related Delays	52.5 days
Other delays (strike)	6.5 days
Other delays (ret pipes H/Strijdom)	16.0 days
Total days delay	75.0 days(Note n values factored in)
Practical completion	14 December, 2010

(See note below and taking the temporary suspension period 29 May – 13 July 2010 into account)

Toll TG037 Completion Date	1 September 2009
Toll TG038 Completion Date	6 November 2009
Toll TG039 Completion Date	13 March 2010
Toll TG040 Completion Date	27 November 2009
VMS (km 40,550) Completion Date	15 March 2010

Note: a Request for extension of time being required by contractor

CLAIMS AND DISPUTES

24.44 None — INFO

Notification Of An Intention To Claim

24.45 None — INFO

Claims and their Resolution

24.46 None — INFO

Disputes and disruptions

24.47 The Contractor reported that there might be possible delays due to Bitumen supply shortage. Engineer will be kept informed. — INFO

	DAB Meetings	
24.48	The next DAB meeting will be held at 09:00 on 14 January 2010, at SANRAL offices. A joint statement is required a week before i.e. by the 1st October, 2010.	VelaVKE/ RAUBEX
24.49	An Engineer/SANRAL meeting will be held.	RAUBEX
	SITE ADMINISTRATIVE MATTERS	
	House Keeping	
24.50	House keeping acceptable.	INFO
	Working hours	
24.51	The Contractor confirmed that they were back to normal working hours 07h00 to 17h00 however; Cleaning, Guard Rail, Electrical and Asphalt operations will precede over weekends some operations e.g. ULM and Guard Rails will work extended hours.	INFO
	INFORMATION REQUIRED AND PLANNING	
	Information required by the Client	
24.52	Resubmission of VO's.	VelaVKE/ RAUBEX VelaVKE/ RAUBEX
	Information required by the Consultant	
24.53	Resubmission of VO's with supporting documents Cross section gantries	RAUBEX
	Information required by Nyeleti (K69)	
24.54	Nothing reported.	INFO

	Information required by the Contractor	
	Details of Overhead sign gantries R21 and Hans Strijdom	VELAVKE
	COMMUNICATION AND PUBLIC AUTHORITIES	
24.55	Nothing was recorded.	
	GENERAL	
24.56	Contactor informed to close up and all white toll signs on then project, the Yellow Toll signs can remain exposed.	INFO
	NEXT MEETING	
24.57	The next site meeting will be held on **Tuesday, 7 December 2010 at 10h00**, on site at the ER's offices (Block E, Techno link, 63 Regency Street, Route 21 Corporate Park off the Rietvlei Interchange). Meet at the office at 14H00 for site inspection, meeting to follow site inspection.	INFO
	APPROVAL OF MINUTES	
	_____ _____	
	CLIENT: SANRAL **DATE**	
	_____ _____	
	ENGINEER: VELA VKE. ENGINEERS (PTY) LTD **DATE**	
	_____ _____	
	CONTRACTOR: RAUBEX (PTY) LTD **DATE**	

Appendices		
Appendix I	Contract Expenditure	
Appendix II	Accidents & Incidents	
Appendix III A	Contractor's Plant	
Appendix III B	Consultant's and Contractor's Site Staff	
Appendix IV A	Sub-Contractors	
Appendix IV B	RDP Contract Participation	
Appendix V A	RDP-Training	
Appendix V B	RDP-Labour Enhancement	
Appendix VI A	Site Instructions	
Appendix VI B	Memo's Issued	
Appendix VII	Drawings Issued	
Appendix VIII	Extra Work And Variations	
Appendix IX	Dayworks	
Appendix X A	Progress- Cash flow	
Appendix X B	Progress- Diagrams	
Appendix XI A	Substandard Work	
Appendix XI B	Penalties	
Appendix XII	Contractual Dates	
Appendix XIII A	Claims-Contractor	
Appendix XIII B	Claims-Third Party	
Appendix XIV	Summary Of Call-Outs	
Appendix XV	Recorded Damages And Cost Recovery	
Appendix XVI	Material On Site List	
Appendix XVII	Mix designs	
Appendix XVIII	Distribution List	

APPENDIX I:
CONTRACT EXPENDITURE

ORIGINAL TENDER DETAILS		ESTIMATED FINAL DETAILS	
Tender amount (latest revision) approved by SANRAL on	04-Jul-08	Estimated final contract amount as at	31/10/2010
Schedule H: Roadworks	R 502,996,521.00	Schedule H: Roadworks	R 503,465,130.73
Schedule B: Structures	R 36,000,000.00	Schedule B: Structures	R 35,483,000.00
Schedule D: Requirements for BBBE	R 550,000.00	Schedule D: Requirements for BBBE	R 550,000.00
Schedule E: Electrical	R 56,197,479.00	Schedule E: Electrical	R 52,639,170.00
Friction Course	R 35,256,000.00	Friction Course	R 35,934,000.00
Contingencies	R 0.00	Variations	R 123,415,600.82
CPA	R 0.00	CPA	R 27,287,376.00
Special Materials	R 0.00	Joint Lab Contribution/ Penalties	-R 4,250,625.00
Sub Total	R 631,000,000.00	Sub Total	R 774,523,652.55
VAT @ 14%	R 88,340,000.00	VAT @ 14%	R 108,433,311.36
TOTAL	R 719,340,000.00	TOTAL	R 882,956,963.91

CONTRACTUAL DATES		OVER/UNDER EXPENDITURE	
Commencement date	03-Sep-08	Amount	R 0.00
Contract period (Original)	20 Months	Percentage	0.00%
Completion date (Original)	03-May-10	Percentage time lapsed	94.55%
Maintenance Period	12 Months	Percentage money spent	93.18%

NEW APPROVED COMPLETION DATE		ESTIMATED COMPLETION DATE	
Approved extension of time	0 Days	Estimated Additional Time Required	137
New approved completion date	N/a	Estimated contract period	27.5 Months
		Estimated completion date	14-Dec-10

EXPENDITURE TO DATE			ESTIMATED EXPENDITURE (including VAT)	
Payment certificate	25		Previous financial years	
Date	25 Oct 2010		2008/2009	R 167,313,130.23
Schedule items:		R 615,799,376.54		
Material on site		R 2,840,552.00		
Extra work/Dayworks		R 89,826,483.00	Present financial year	
Contract price adjustment/ Special material		R 27,480,275.29	2009/2010	R 387,808,253.98
Sub Total		R 735,946,686.83		
Less retention		R 10,000,000.00		
Less Penalties / Lab		R 4,220,625.00		
Sub Total		R 721,726,061.83		
VAT @ 14%		R 101,041,648.66		
TOTAL		R 822,767,710.49		

Estimated value of next 3 payment certificates (including VAT)

Cert. No.	Date	Amount
25	31 Oct 2010	R 31,836,934.30
26	30 Nov 2010	R 33,584,338.44
27	31 Dec 2010	R 15,327,453.25

Future financial years :

2010/2011	R 327,835,579.70
TOTAL	R 882,956,963.91

APPENDIX II:
ACCIDENTS & INCIDENTS FOR THE MONTH OF Sep '10

No	DATE	TIME	CLASS	WEATHER	PLACE	VEHICLE INVOLVED	DESC.	INSIDE WORK AREA	ACCIDENT REPORT No.
227	10/05/10	17:15	NS	D	KM29.50 SB	1L; 1H	H-R	NO	227
228	13/05/10	06:32	NS	D	KM38.80 SB	1L; 1H	H-R	NO	228
229	13/05/10	06:36	NS	D	KM38.90 NB	1L; 1H	H-R	NO	229
230	04/06/10	09:35	NS	D	KM41+80SB	3L	H-R	NO	230
231	07/06/10	18:02	NS	D	KM42+30NB	3L	H-R	NO	231
232	25/06/10	07;20	NS	D	KM31+40NB	1L	OC	NO	232
233	03/07/10	11:20	NS	D	KM31+00SB	1L	OC	NO	233
234	10/07/10	09:15	NS	D	KM44+90K69	3L	H-R	NO	234
235	23/07/10	16:20	NS	D	KM42+08NB	2L; 1H	H-R	NO	235
236	29/07/10	05:50	NS	D	KM42+20NB	1L	OC	NO	236
237	29/07/10	07:15	NS	D	KM41+20NB	2L	H-R	NO	237
238	29/07/10	10:11	NS	D	KM45+20NB	1L; 1H	S	NO	238
239	04/08/10	07:49	NS	D	KM39+080SB	2L	OC	NO	239
240	04/08/10	13:19	NS	D	KM42+650NB	2L	H-R	NO	240
241	17/08/10	14:53	NS	D	KM37+200NB	2L	OC	NO	241
242	18/08/10	06:30	NS	D	KM44+700NB	1H	OC	NO	242
243	24/08/10	15:30	NS	D	44+900 K69	1L; 1H	S	NO	243
244	21/08/10	07:30	NS	D	KM28+600SB	2L	OC	NO	244
245A	25/08/10	07:53	NS	D	KM36+700NB	1L	OC	NO	245A
245B	01/09/10	14:17	NS	D	KM44+600NB	2L	H-R	NO	245B
246	08/09/10	11:50	NS	D	KM38+300NB	3L	OC	NO	246
247	09/09/10	07:55	NS	D	KM40+100NB	2L	H-R	NO	247
248	09/09/10	12:48	NS	D	KM42+339NB	1L; 1H	H-R	NO	248
249	09/09/10	13:13	NS	D	KM44+400SB	2L	H-R	NO	249
250	18/09/10	11:37	NS	D	KM44+200SB	2L	H-R	NO	250
251	18/09/10	16:03	NS	D	KM32+060SB	2L	S	YES	251
252	21/09/10	10:00	NS	D	KM31+760NB	4L	H-R	NO	252
253	07/10/10	08:45	NS	D	KM41+700NB	3L	H-R	NO	253
254	12/10/10	07:44	NS	D	KM35+900NB	1L; 1H	H-R	NO	254
255	15/10/10	08:45	NS	D	KM45+180SB	2L	H-R	NO	255
256	15/10/10	15:55	F	D	KM35+700NB	1L	OC	NO	256
257A	15/10/10	08:34	NS	D	KM43+620NB	3L	H-R	NO	257A
257B	20/10/10	07:03	NS	D	KM40+80NB	3L	H-R	NO	257B
258	20/10/10	09:12	NS	D	KM30+000NB	3L	H-R	NO	258
259A	21/10/10	06:45	NS	D	KM4,4NB	1L; 1H	S	NO	259A
259B	21/10/10	13:21	NS	D	KM42+380NB	1L; 1H	OC	NO	259B
260	23/10/10	11:30	NS	D	KM3,6NB	1H	OC	NO	260

261	23/10/10	08:40	NS	D	KM45+100SB	1L	OC	NO	261
262	25/10/10	17:14	NS	D	KM4,6SB	2L	H-R	NO	262
263	26/10/10	11:09	NS	D	KM42+900NB	1L; 1H	H-R	NO	263
264	26/10/10	08:41	NS	D	KM38+900	1L	OC	NO	264
265	29/10/10	14:30	NS	D	KM4,6SB	3L	H-R	NO	265

COLUMN

4. F ( ) = Fatal (How many dead) NS = Not so Serious
5. D = Dry, W = Wet
7. Registration number: P = Pedestrian M = Motorcycle L= Light, H = Heavy
8. H-R = Head - Rear Collusion, S = Side Impact Collision
   OC = Out of control
9. Yes or No

APPENDIX III A
CONTRACTOR'S PLANT

DESCRIPTION	2008			2009													2010									
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
CONTRACTOR:																										
Excavator		1	3	3	7	7	7	8	8	8	8	7	7	7	7	7	7	7	7	7	7	6	4	4	3	2
Grader			2	2	5	6	8	8	8	8	8	8	8	8	8	9	8	10	10	10	7	5	5	4	4	3
Dozer			1	1	2	2	3	4	4	4	3	2	1	1	1	2	2	2	2	2	2	1	1	1	1	1
Water cart			2	4	5	5	6	9	9	9	10	10	12	13	14	14	15	16	16	16	6	6	6	5	6	3
TLB			1	2	2	4	4	8	8	8	9	8	10	10	10	10	10	10	10	10	10	3	2	4	4	3
Roller		1	3	4	5	5	5	11	11	11	11	9	12	12	11	11	11	11	10	9	5	4	3	3	3	1
Dumper			1	2	4	4	4	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	5	6	1
ACO Tractor & Grid			1	1	3	3	3	4	4	4	4	3	3	3	3	2	2	3	3	3	2	2	2	1	1	0
Tipper		1	4	1	3	24	25	28	28	28	33	18	12	12	12	12	14	14	25	16	16	10	5	8	9	6
Milling Machine			1	1	1	1	2	2	3	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Safety Truck			1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
Service Truck				1	2	2	2	1	1	1	1	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Bomag			1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
Attenuator Truck		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Gang Truck			2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1
Slurry Truck				1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flat Deck						1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Ditch Witch							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0
LDV's (bakkies)	9	15	16	16	18	19	20	21	22	22	24	28	28	28	28	28	29	29	29	30	30	30	30	15	15	11
Road Reclaimers	0	0	0	0	0	0	0	0	0	0	0	4	3	3	2	2	2	2	2	2	1	1	1	0	0	0
Motors	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2
	9	**19**	**40**	**44**	**64**	**90**	**98**	**120**	**122**	**122**	**130**	**120**	**119**	**120**	**119**	**120**	**123**	**127**	**137**	**128**	**108**	100	**80**	**65**	**72**	**42**

APPENDIX III B CONSULTANT'S AND CONTRACTOR'S STAFF

DESCRIPTION	2008			2009														2010									
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
CONSULTANT :																											
Project manager Quality	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
manager Resident	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Engineer (RE)	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1
Assistant RE	1		1	1	1		1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1
Senior Materials Tech.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Senior Civil Technician			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Materials Tech.	1	1	1	1	1	1	1	1	1	1	1	3	3	3	3	3	3	3	3	2	1	1	1	1	1	1	1
Electrical Engineer									1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Civil Technician			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Surveyor			1	1	1	1	1	1	1	1	1	1	1	3	3	3	4	4	4	4	4	4	4	4	4	4	4
Surveyor's Assistant					1	1	1	1	1	1	1	1	1	4	4	4	5	5	5	5	5	5	5	5	5	5	5
Technical Assistant		1	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Student Technician			1	1	1	1	1	1	1	2	3	0	0	0	3	4	2	2	4	4	4	4	4	4	4	4	4
Secretary	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total Personnel:	**7**	**7**	**12**	**12**	**13**	**12**	**13**	**13**	**15**	**16**	**17**	**16**	**16**	**21**	**24**	**25**	**25**	**24**	**26**	**25**	**24**	**24**	**24**	**24**	**24**	**24**	

APPENDIX III B
CONSULTANT'S AND CONTRACTOR'S STAFF [CONTINUE]

DESCRIPTION	2008			2009													2010									
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
CONTRACTOR :																										
Contracts Director	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Projects Co-Coordinator	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Con. Man. (DEO)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Construction Manager	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Operation Manager	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Site Agent (Earthworks)		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Site Agent (Concrete)		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Traffic Safety Officer	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Site Safety Officer (OHS)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Head Surveyor	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
Surveyor			2	2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	3	3	1
Foreman	3	3	6	6	8	8	8	8	8	9	9	9	10	10	10	10	10	10	10	12	12	12	12	10	7	8
Survey assistants	2	2	6	6	6	6	6	6	6	6	6	8	8	8	8	8	8	8	8	8	8	8	8	4	4	4
Operators/Drivers	2	9	23	29	41	41	44	58	60	62	67	56	59	59	59	62	66	66	69	69	69	50	50	52	41	51
Team Leaders		1	2	2	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	2
Safety workers		2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Security/cleaning	1			12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	10	6
Clerks		1	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1
Skilled Labour	2	4	6	6	6	6	6	19	16	19	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	7
General Labour	8	32	40	44	46	46	52	159	183	217	242	260	241	261	272	272	272	272	272	270	270	100	100	90	70	56
Total Personnel:	**26**	**66**	**104**	**127**	**144**	**144**	**153**	**287**	**310**	**350**	**375**	**382**	**372**	**392**	**403**	**406**	**410**	**410**	**413**	**413**	**413**	**224**	**224**	**209**	**173**	**152**

APPENDIX IV A
SUBCONTRACTORS

Notes
1. Approval of subcontractors given in terms of Sub clause 4.4(b) of FIDIC GCC
2. Values of work to be prefixed by E (for estimate) or A (for actual)
3. Percentage of work completed by subcontractors is calculated pro rata the total tendered value of work which excludes all contingent sums.
4. Registration:
4.1 All emerging subcontractors (BE's) are to be registered
4.2 SMME's/BE's who have previously been registered shall be denoted by *
4.3 SMME's/BE's who are registering for the first time shall be denoted by [IR]
5. Any emerging subcontractor (BE) not registered shall be deemed to be an established contractor

TABLE A FOR ESTABLISHED SUBCONTRACTORS

NAME	DATE	TYPE OF WORK	MONTHLY VALUE OF WORK	Cumulative value of work (Actual)	TOTAL VALUE OF WORK (ESTIMATE)	%
Roadmac Surfacing	Jan 09	Surfacing	R 0.00	R 69 425 099.35	R 139 934 735.00	49.61%
Engen	Nov 08	Supplier	R 512 003.40	R 17 851 193.27	R 16 000 000.00	111.56%
Muscle Construction	Mrt 09	Ancillary works	R 3 313 204.68	R 43 199 670.30	R 42 436 890.13	101.79%
Telkom	Oct 08	Services	R 13 062.93	R 270 340.88	R 275 000.00	98.30%
3 sixty precast	Jun 09	Concrete	R 0.00	R 87 928.00	R 87 928.00	100.00%
Scribante	Mrt 09	Plant Hire	R 0.00	R 670 114.41	R 600 000.00	111.68%
West Reef Plant Hire	Mrt 09	Plant Hire	R 0.00	R 2 034 625.17	R 2 200 000.00	92.48%
Tar Spray	Apr 09	Tar spray	R 87 812.00	R 4 439 834.50	R 2 500 000.00	177.59%
Mbekela Inv	May 09	Sub-contractor	R 0.00	R 5 125 638.53	R 11 240 000.00	45.60%
Zero Tree Felling	Sep 08	Tree felling	R 0.00	R 324 250.00	R 270 000.00	120.09%
Sinoville Fencing	Oct 08	Fencing	R 0.00	R 78 361.75	R 280 000.00	27.99%
PPC	Mrt 09	Concrete	R 0.00	R 6 141 131.20	R 13 896 757.00	44.19%
Erbacon Constr.	Nov 08	Sub-contractor	R 0.00	R 20 545 030.23	R 17 115 838.43	120.03%
Global	Dec 08	Towing	R 0.00	R 8 000.00	R 8 000.00	100.00%

APPENDIX IV A
SUBCONTRACTORS (CONTINUE)

NAME	DATE	BE/ SMME	TYPE OF WORK	CUMULATIVE VALUE OF WORK (ACTUAL)	TOTAL VALUE OF WORK (ESTIMATE)	%
Malesela T&D	Jan 09	BE	Electrical	R 46 781 536.40	R 50 000 000.00	94.42%
Afrisam	Oct 08	BE	Concrete	R 1 123 413.46	R 4 350 000.00	24.97%
W J de Beer	Apr 09	BE	Tippers	R 4 615 209.93	R 1 100 000.00	404.90%
Road Furnishing Services	Mrt 09	BE	Road furnish	R 1 419 951.14	R 9 430 000.00	15.05%
Vhugala Transport	Nov 08	BE	Transport	R 273 770.00	R 370 000.00	74.00%
Stirling Maintenance	Nov 08	BE	Traffic Safety	R 693 248.00	R 625 000.00	106.39%
K S Mpele	Mrt 09	BE	V-drains	R 477 839.79	R 480 000.00	83.84%
SPD Construction	Mrt 09	BE	Balustrades	R 3 726 031.05	R 1 500 000.00	237.60%
Touch Tone Trading	Jan 09	BE	Tippers	R 347 115.23	R 330 000.00	105.19%
Le-Nash Signs	Oct 08	BE	Signs	R 606 037.82	R 300 000.00	202.01%
Skyline Crane hire	Oct 08	SMME	Barriers	R 17 105 566.94	R 14 000 000.00	121.08%
Calming Traffic Solutions	Nov 08	SMME	Guardrails	R 485 578.06	R 500 000.00	97.12%
Car Towing Services	Nov 08	SMME	Towing	R 1 100 000.00	R 900 000.00	116.66%
Viv's Tippers	Feb 09	SMME	Tippers	R 5 339 131.79	R 4 230 000.00	126.22%
Desert Star	Mrt 09	SMME	Roadmarking	R 324 677.58	R 404 375.00	80.29%
Tragos Security	Jan 09	SMME	Security	R 2 736 857.97	R 1 500 000.00	182.45%
TOTAL (BE's + SMME)				**R 88 796 210.09**	**R 90 019 375.00**	**96.64%**
TOTAL BE's					R 61 499 357.75	
TOTAL SMME's					R 27 296 852.34	
TOTAL SMME + BE					**R 88 796 210.09**	

TABLE B **FOR SMME's AND EMERGING SUBCONTRACTORS (BE's)**

Contract Value (Total) = R 774 523 652.55
Target Value (9, 1 %) = R 70 481 652.38 (SMME's and BE's)
Current Contract Value = R 690 070 556.40
Construction Participation Goal SMME's & BE's = R 59 992 756.62

APPENDIX IV B:
RDP CONTRACT PARTICIPATION GOAL

TABLE A : LABOUR			Specified target value % =6 Specified target value R =46 768 132.75			
Month	**Monthly Wages**	**Accum. Wages**	**Certificate Value**	**Monthly target Achieved**	**Target Tendered**	**Target to tender sum**
09-Sep	R 0.00	R 0.00	R 63 100 000.00	0.00%	6%	0.00%
09-Oct	R 344 520.07	R 344 520.07	R 18 833 774.77	1.83%	6%	0.05%
09-Nov	R 416 449.00	R 760 969.07	R 8 584 318.64	4.85%	6%	0.10%
09-Dec	R 620 661.00	R 1 381 630.07	R 7 703 044.82	8.06%	6%	0.19%
09-Jan	R 488 336.00	R 1 869 966.07	R 10 682 224.37	4.57%	6%	0.26%
09-Feb	R 508 121.80	R 2 378 087.87	R 12 233 344.26	4.15%	6%	0.33%
09-Mar	R 1 849 542.13	R 4 227 630.00	R 25 629 196.85	7.22%	6%	0.58%
09-Apr	R 1 692 399.00	R 5 920 029.00	R 21 894 814.37	7.73%	6%	0.82%
09-May	R 1 867 962.00	R 7 787 991.00	R 34 149 645.92	5.47%	6%	1.07%
09-Jun	R 1 248 391.00	R 9 036 382.00	R 30 000 107.17	4.16%	6%	1.25%
09-Jul	R 2 691 390.00	R 11 727 772.00	R 15 922 527.75	16.90%	6%	1.62%
09-Aug	R 2 693 166.00	R 14 420 938.00	R 18 170 069.18	14.82%	6%	1.99%
09-Sep	R 2 718 303.90	R 17 139 241.90	R 28 639 799.34	9.49%	6%	2.36%
Oct-09	R 2 874 503.69	R 20 013 745.59	R 22 141 653.53	12.98%	6%	2.76%
Nov-09	R 2 600 695.16	R 22 614 440.75	R 35 773 025.01	7.26%	6%	3.12%
Dec-09	R 4 082 212.50	R 26 696 653.25	R 34 004 615.24	12.00%	6%	3.68%
Jan-10	R 3 578 454.83	R 30 275 108.08	R 33 264 083.26	10.75%	6%	4.17%
Feb-10	R 4 746 501.18	R 35 021 609.26	R 29 821 141.69	15.91%	6%	4.83%
Mar-10	R 5 153 963.65	R 40 175 572.91	R 36 401 196.46	14.15%	6%	5.54%
Apr-10	R 4 802 833.41	R 44 978 406.32	R 58 420 051.38	8.22%	6%	6.20%
June-10	R 10 404 800.64	R 55 383 206.96	R 53 398 952.35	19.48%	6%	7.10%
July-10	R 3 726 389.24	R 59 109 596.20	R 28 343 947.26	13.14%	6%	7.58%
Aug-10	R 3 878 851.31	R 62 988 447.51	R 21 092 198.54	18.38%	6%	8.13%
Sept-10	R 3 215 578.45	R 66 204 025.96	R 48 911 960.64	6.57%	6%	8.54%
Oct- 10	R 3 850 161.04	R 70 054 187.00	R 27 927 135.35	13.78%	6%	9.04%
TABLE B : BE'S			Specified target value % =8,19 Specified target value R = 63 838 501.20			
Month	**Monthly Paid**	**Accum. Paid**	**Certificate Value**	**Monthly target Achieved**	**Target Tendered**	**Target to tender sum**
Sep-08	R 0.00	R 0.00	R 63 100 000.00	0.00%	8.19%	0.00%
Oct-08	R 54 988.38	R 54 988.38	R 18 833 774.77	0.29%	8.19%	0.00%
Nov-08	R 130 645.84	R 185 634.22	R 8 584 318.64	1.52%	8.19%	0.02%
Dec-08	R 83 158.00	R 268 792.22	R 7 703 044.82	1.08%	8.19%	0.03%
Jan-09	R 4 323 797.55	R 4 592 589.77	R 10 682 224.37	40.48%	8.19%	0.63%
Feb-09	R 3 471 402.88	R 8 063 992.65	R 12 233 344.26	28.38%	8.19%	1.11%
Mar-09	R 2 780 707.60	R 10 844 700.25	R 25 629 196.85	10.85%	8.19%	1.49%
Apr-09	R 2 302 370.25	R 13 147 070.50	R 21 894 814.37	10.52%	8.19%	1.81%
May-09	R 6 495 365.90	R 19 642 436.43	R 34 149 645.92	19.02%	8.19%	2.70%
Jun-09	R 1 873 319.45	R 21 515 755.88	R 30 000 107.17	6.24%	8.19%	2.96%
Jul-09	R 969 568.42	R 22 485 324.30	R 15 922 527.75	6.09%	8.19%	3.09%
Aug-09	R 2 622 469.42	R 25 107 793.72	R 18 170 069.18	14.43%	8.19%	3.46%
Sep-09	R 3 555 015.12	R 28 662 808.84	R 28 639 799.34	12.41%	8.19%	3.95%
Oct-09	R 4 863 594.00	R 33 526 402.84	R 22 141 653.53	21.97%	8.19%	4.62%
Nov-09	R 4 688 318.95	R 38 214 721.79	R 35 773 025.01	13.11%	8.19%	5.26%
Dec-09	R 4 091 025.35	R 42 305 747.14	R 34 004 615.24	12.03%	8.19%	5.83%
Jan-10	R 1 641 330.55	R 43 418 549.69	R 33 264 083.26	4.93%	8.19%	5.98%
Feb-10	R 1 979 886.55	R 45 398 436.24	R 29 821 141.69	6.64%	8.19%	6.25%
Mar-10	R 3 488 014.19	R 48 886 450.43	R 36 401 196.46	9.58%	8.19%	6.74%
Apr-10	R 4 426 784.91	R 53 841 763.34	R 58 420 051.38	7.57%	8.19%	7.35%
June-10	R 5 399 363.99	R 59 241 127.33	R 53 398 952.35	10.11%	8.19%	7.60%

July-10	R 787 276.99	R 60 028 404.32	R 28 343 947.26	2.77%	8.19%	7.70%
Aug -10	R- 35 647.70	R 59 992 756.62	R 21 092 198.54	-7.51%	8.19%	7.74%
Sept-10	R 281 755.76	R 60 724 512.38	R 48 911 960.64	0.57%	8.19%	7.78%
Oct- 10	R 1 169 917.27	R 61 444 429.65	R 27 927 135.35	4.18%	8.19%	7.93%

APPENDIX V A
RDP-TRAINING

ENGINEERING SKILLS

Scope of training	**Acc Y/N**	Organisation	Persons Perm/Temp	Total Hrs Perm/Temp	Cost (R) NRA	Cost (R) Cont
Install sub soil Drains	Y	Tjeka training matters	12 Temp	432 Temp		17 500
Manhole Construction	Y	Tjeka training matters	12 Temp	756 Temp		24 500
Concrete lined drains	Y	Tjeka training matters	11 Temp	891 Temp		35 000
Install culverts	Y	Tjeka training matters	12 Temp	1080 Temp		35 000
Concrete Lined Drains	Y	Tjeka training matters	12 Temp	1080 Temp		35 000
Basic First Aid	Y	Tjeka Training Matters	10 Temp	270 Temp		11 500
Aids Awareness	Y	Tjeka Training Matters	10 Temp	558 Temp		4 500
HIV/AIDS Training	Y	Tjeka Training	20 Temp	540 Temp		13 500
			91	**5643**		**179300**

ENTREPRENEURIAL SKILLS

Scope of training	**Acc Y/N**	Organisation	Persons Perm/Temp	Total Hrs Perm/Temp	Cost (R) NRA	Cost (R) Cont
Manage Constr Resources	Y	Tjeka Training matters	11 Temp 1Perm	972		78 408
Implement Site Management Procedure	Y	Tjeka Training	10 Temp	720		69 696
Understand and apply business Finances	Y	Tjeka Training	6 Temp 2Perm	216		26 136
			30	**1908**		**174240**

GENERIC SKILLS						
Scope of training	Acc Y/N	Organisation	Persons Perm/Temp	Total Hrs Perm/Temp	Cost (R) NRA	Cost (R) Cont
None to date.						

APPENDIX V B
RDP- LABOUR ENHANCEMENT

Labour Target = 6, 0%
Labour Target = R 46 471 419.15

Achieved to date = 150.74%
Achieved to date = R 70 054 157.00

Tender sum = R 774 523 652.55
Target to tender sum = 6%
Target to tender sum achieved = 9.04%

SCHEDULE ITEM No	TOTAL SCHEDULED COST (A)	PERMANENT LABOUR (MAN HOURS)						TEMPORARY LABOUR (MAN HOURS)						% OF TOTAL COST (B+C) x 100 / A
		PREVIOUS TOTAL		THIS MONTH		TOTAL TO DATE		PREVIOUS TOTAL		THIS MONTH		TOTAL TO DATE		
		HRS	COST	HRS	COST	HRS	COST (B)	HRS	COST	HRS	COST	HRS	COST (C)	
	46 471 419.15	469 531.52	22 067 981.48	27 306.10	1 283 387.01	496 837.62	23 351 416.01	1 298 117.55	36 406 396	75 492.47	2 566 744.03	1 373 610.02	46 702 740.99	150.74
TOTAL														

APPENDIX VI A
SITE INSTRUCTIONS FOR THE MONTH OF OCTOBER '10

S. I. No	Date	Description	Issued By
410	01 Sep 10	R21 : Asphalt clarifications from the engineer	VELAVKE
411	01 Sep 10	HS: Confirmation for Ramp A	VELAVKE
412	02 Sep 10	HS: Road Marking Reinstatement Hans Strijdom Bridge.	VELAVKE
413	05 Sep 10	R21: Vehicle Access detail and median guardrail positioning	VELAVKE
414	06 Sep 10	HS: Percussion drilling for sink hole investigation	VELAVKE
415	06 Sep 10	R21: Field Inlet confirmation of instruction	VELAVKE
416	12 Sep 10	R21: Asphalt adjudication of Asphalt partial payments and rejected sections on R21 up to end June 2010	VELAVKE
417	13 Sep 10	ULM Operation Commencement - Texture depths	VELAVKE
418	13 Sep 10	R21: Way leaves for service crossings	VELAVKE
419	17 Sep 10	Guardrails Pierre van Ryneveld Bridge to Hans Strijdom Bridge(R21 NB)	VELAVKE
420	17 Sep 10	R21: Appointment of Land Surveyor to install Reserve Beacons	VELAVKE
421	17 Sep 10	R21: Acceptance of Subcontractor Road Furnishing services	VELAVKE
422	17 Sep 10	R21: Acceptance of Subcontractor Progress Precision Roadmarking	VELAVKE
423	17 Sep 10	R21: Street Names overpasses and Underpasses	VELAVKE
424	17 Sep 10	R21: Guardrail Post in Concrete	VELAVKE
425	21 Sep 10	R21: Sign - River name Sesmyl Spruit	VELAVKE
426	21 Sep 10	R21- N1 Bridge Joints	VELAVKE
427	21 Sep 10	R21 - Drainage between 30+600 to 31+220 R21 North Bound	VELAVKE
428	21 Sep 10	R21 - Drainage between 35+000 to 35+280 R21 South Bound	VELAVKE
429	21 Sep 10	R21 - Prevention of Illegal Vehicle access	VELAVKE
430	28 Sep 10	R21 - Premarking, temp road studs and temporary road marking on SB+NB + Permanent marking K69	VELAVKE
431	28 Sep 10	R21 - Guard rails on NB Nelmapius off ramp	VELAVKE
432	28 Sep 10	R21 - Protection of Works - Asphalt operations	VELAVKE
433	30 Sep 10	R21- Guard Rails on median Km 44+020 to Pierre Van Ryneveld Bridge	VELAVKE
434	2010/10/1	R21- Fencing Nelmapius Bridge to Hans Strijdom bridge	VELAVKE
435	2010/10/1	R21- Guardrails on median Hans Strijdom bridge n/b to southern side of	VELAVKE
436	2010/10/1	R21- Road Reserve Co-Ordinates	VELAVKE
437	2010/10/2	R21- Confirmation of steel post guardrails- South bound wall and light	VELAVKE
438	2010/10/2	R21- Confirmation of Wooden Guardrails on K69 near Dastek and R21	VELAVKE
439	2010/10/2	R21- Confirmation of VMS Order	VELAVKE
440	2010/10/2	R21- Light poles near Sesmyl Spruit	VELAVKE
441	2010/11/0	R21-Asphalt adjudication acceptance.	VELAVKE
442	2010/10/28		VELAVKE

443	2010/10/28	R21 – Additional electrical security Requirements	VELAVKE
444	8 Nov 10	R21- Cantilever + Portal sign gantries. Drawing A, B and C	VELAVKE

APPENDIX VI B
MEMOS ISSUED FOR THE MONTH OF OCT '10

MEMO. No	DATE	DESCRIPTION	ISSUED BY
		NONE FOR THE MONTH OF October 2010	

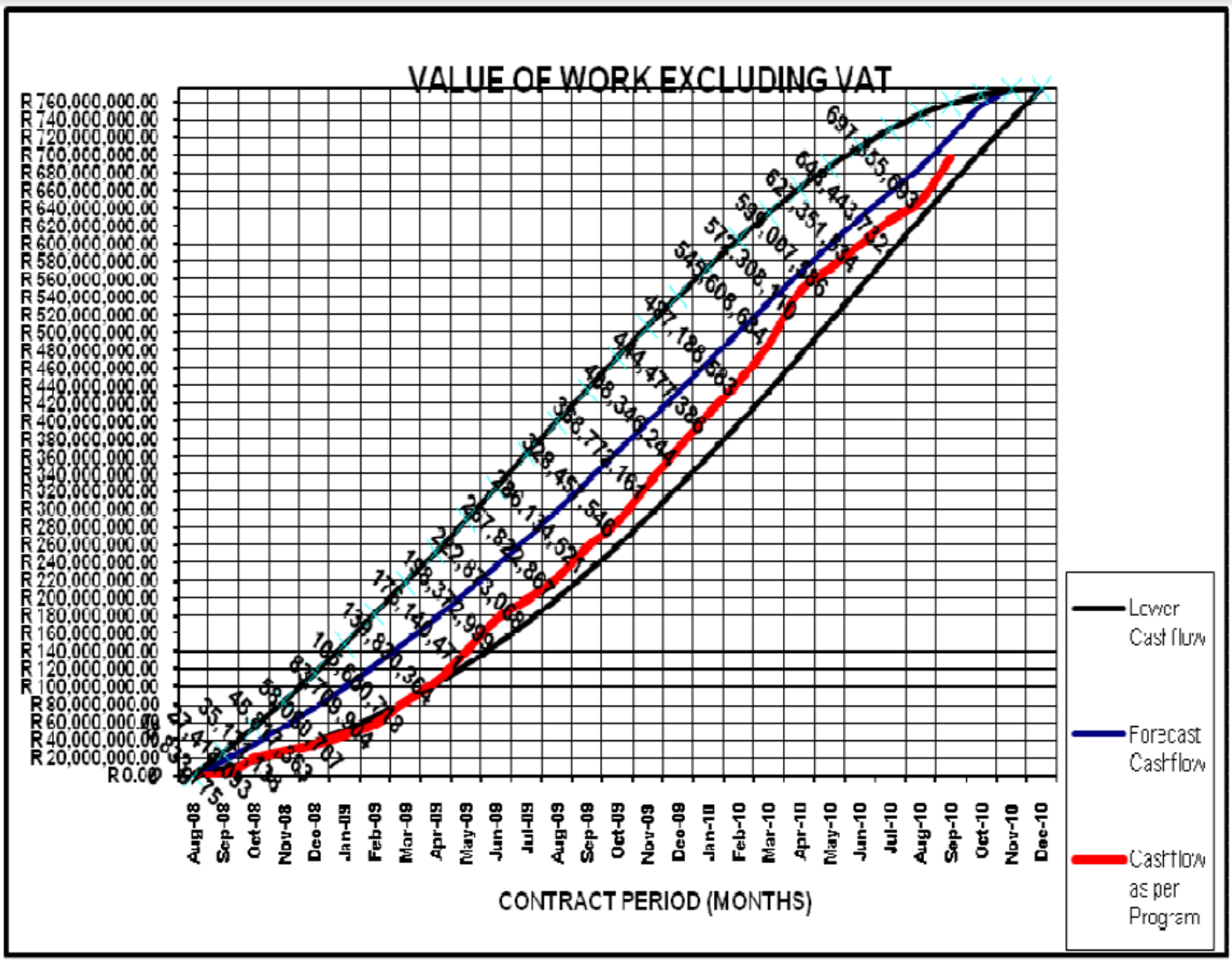
APPENDIX VII
DRAWINGS ISSUED FOR THE MONTH OF OCT '10

DATE ISSUED	DRAWING NUMBER	DESCRIPTION	No./ SIZE/TYPE
02/06/2010	13984/CON/01 VIA	NYELETI: RAMP B RETAINING/BARRIER WALL: LAYOUTS	AO
02/06/2010	13984/CON/05 VI	NYELETI : RAMP B RETAINING/BARRIER: TYPICAL SECTIONS	AO
06/02/2010	13984/CON/06 VI	NYELETI : RAMP B RETAINING/BARRIER: FOUNDATION LAYOUT	AO
06/02/2010	13984/CON/07 VI	NYELETI : RAMP B RETAINING/BARRIER:REINFORCEMNET DETAILS	AO

APPENDIX VIII
EXTRA WORK AND VARIATIONS

EXTRA WORKS ORDERS AND VARIATION ORDERS					
VO No	**DATE SUBMITTED**	**DATE APPROVED**	**DESCRIPTION**	**ESTIMATED VALUE (Excl. CPA and VAT)**	**ACCUMULATED VALUE OF VO'S**
1	08/06/09	11/03/2010	In situ recycling and time related obligations	R 15,193,750.00	R 15,193,750.00
2	08/06/09	11/03/2010	Supplementary agreement no 1 for the Upgrading of the Hans Strijdom Interchange	R 37,192,554.20	R 52,386,304.20
3	25/09/09	11/03/2010	Minisubs, luminares, transformers	R 1,089,284.80	R 53,475,589.00
4	19/10/09	11/03/2010	Sinkhole – cable reinforce concrete mat	R 1,848,262.40	R 55,323,851.40
5	19/10/09	11/03/2010	PVC Cable & T3 Unit	R 2,328,610.00	R 57,652,461.40
6	22/07/10		Instalation of toll facility gantries and platform	R 7,639,081.86	R 65,291,543.26
7	22/07/10		30m High light mast(Nellmaphuis)	R 761 957.70	R 66 053 500.96
8	22/07/10		Additional manhole(alternative design)	R 1,072,915.20	R 67,126,416
9	22/07/10		Bulk metering unit to Ekurhuleni	R 235,785.75	R 67,362,201.91
10	22/07/10		Security measures for minisubs and transformers	R 634,875.00	R 67,997,076.91
11	22/07/10		Increase council connection fees	R 972,879.67	R 68,969,956.58
12	22/07/10		Supply and place over size precast concrete plinths	R 685,283.85	R 69,655,240.43
13	22/07/10		K69-Extension	R 721,525.00	R 70,376,765.43
14	22/07/10		Acceleration cost of Hans Strijdom Interchange(K69)	R 7,810,947.88	R 78,187,713.31
15	22/07/10		Glass armor roadstuds and guardrail reflectors	R 1,362,025.00	R 79,549,738.31
16	22/07/10		Repair Ramp E(Hans Strijdom interchange) as result of sinkhole	R 1,439,861.20	R 80,989,599.51
17	22/07/10		400w Luminaires and 5A MCB'S	R 1,461,929.14	R 82,451,528.65
18	22/07/10		Erection of V.M.S overhead gantry sign	R 307,160.42	R 82,758,689.07
19	22/07/10		Secure locks for security fence of minisub	R 522,450.03	R 83,281,139.10
20	22/07/10		Retaining wall: NBCW: Km44200-Km44800	R 74,623.50	R 83,355,762.60
21	22/07/10		Additional manhole(alternative design)	R 3,168,900.00	R 86,524,662.60
22			Supply of Variable Speed Sign	R 277,725.00	R 86,802,387.60
23			Repairs to Sesmyl Spruit Bridge Joints	R 395,480.00	R 87,197,867.60
TOTAL VALUE OF WORKS ORDERS TO DATE :				R 87 191 867.60	

APPENDIX X A: PROGRESS CASH FLOW DIAGRAM



CONTRACT NO. NRA R.021-002-2008/1				CERTIFICATE NO. 25						PAGE 2	
SUMMARY PAGE OF WORK DONE TO DATE											
DETAILS	FROM PAGE	GENERAL		ROADWORKS		SPECIAL CONCRETE WORKS		PMPL S/BASE AND CONCRETE PAVEMENT		TOTALS	
1. VALUE OF SCHEDULED WORK TO DATE	3.1 to 3.3			580 099 000	.24	35 700 376	.30	0	.00	615 799 376	.54
2. VALUE OF MATERIALS ON SITE	4.1 to 4.3			2 840 552	.00	0	.00	0	.00	2 840 552	.00
3. VALUE OF EXTRA WORK (CPA APPLICABLE)	5.1 to 5.3			89 826 483	.07	0	.00	0	.00	89 826 483	.07
4. VALUE OF DAYWORKS (CPA APPLICABLE)	6.1 to 6.3			0	.00	0	.00	0	.00	0	.00
5. VALUE OF NON ESCALATABLE ITEMS NOT IN SCHEDULE	8.1 to 8.3			0	.00	0	.00	0	.00	0	.00
6. SUB-TOTAL				672 766 035	.31	35 700 376	.30	0	.00	708 466 411	.61
7.LESS TOTAL AMOUNT OF REDUCED PAYMENT	9.1 to 9.3			0	.00	0	.00	0	.00	0	.00
8. SUB-TOTAL				672 766 035	.31	35 700 376	.30	0	.00	708 466 411	.61
9. ADD TOTAL CONTRACT PRICE ADJUSTMENT	11.1 to 11.3			26 520 454	.44	0	.00			26 520 454	.44
10. ADD/DEDUCT TOTAL VALUE OF SPECIAL MATERIALS	12.4			959 820	.85	0	.00	0	.00	959 820	.85
11. TOTAL				700 246 310	.60	35 700 376	.30			735 946 686	.90
12. DEDUCT 10% RETENTION R 10 000 000-00 MAXIMUM				10 000 000	.00	0	.00	0	.00	10 000 000	.00
13.(A) DEDUCT PENALTIES				294 000	.00					294 000	.00
13.(B) DEDUCT LAB CONTRIBUTION				3 950 625	.00					3 950 625	.00
14. TOTAL				686 001 685	.60	35 700 376	.30			721 702 061	.90
15. DEDUCT PREVIOUS TOTAL (ITEM 14 PREVIOUS CERTIFICATE)				693 774 926	.55	0	.00	0	.00	693 774 926	.55
15.a ADVANCE PAYMENT	13.1			0	.00	0	.00	0	.00	0	.00
16. TOTAL THIS CERTIFICATE				- 7 773 240	.95	35 700 376	.30			27 927 135	.35
17. ADD VAT (14 %)				- 1 088 253	.73	4 998 052	.68			3 909 798	.95
18. NET AMOUNT NOW DUE FOR PAYMENT										31 836 934	.30

CONTRACTOR	DATE	RESIDENT ENGINEER	DATE	ENGINEER	DATE
[signature]	28/10/10	[signature]	05/11/2010		

APPENDIX X B
PROGRESS VALUE OF WORK COMPLETED:

CONTRACT NRA R.021-002-2008/1

SITE MEETING NO 25
09-November-10

APPENDIX XI B
PENALTIES

NO	DATE OF INCIDENT	POSITION	CLAUSE / ITEM NO.	REASON FOR PENALTY	AMOUNT
R21 / 2	10-Dec-08	KM 29.0 NB	B1502	Failure to cover temporary traffic signage timeously	**R 14,000.00**
R21 / 3	20-Jan-09	KM 8.1 SB	B1502 (f)	Erecting temp. guardrails without the submission of a complete traffic layout for approval.	**R 10,000.00**
R21 / 3	20-Jan-09	KM 8.1 SB	B1503	Failure to comply with special provisions while erecting temp. signs not according to specifications.	**R 10,000.00**
R21 / 6	5-Mar-09	KM 42.1 NB	B1502	Contractor constructing a traffic 2 lane shift without providing temporary signage, warning traffic ahead.	**R 46,000.00**
R21 / 8	7-Apr-09	KM 37.0 SB	B1502	Contractor shall provide the necessary traffic control devices and workman. Failure to comply was noted.	**R 10,000.00**
R21 / 9	8-Apr-09	KM 45.2 SB	B1503	Failure to comply, while placing concrete barriers without the correct signage to warn traffic of obstruction ahead.	**R 10,000.00**
R21 / 10	5-May-09	KM 35.5 SB	B1503	Contractor shall ensure the safety of the travelling public and personal. Failure to comply, while erecting unsafe guardrails.	**R 10,000.00**
R21 / 11	5-May-09	KM 42.7 SB	B1503 (j)	Construction vehicles entered and exit the median not at the designated entrance and exit areas provided for them.	**R 10,000.00**
R21 / 14	22-Jun-09	_____	B1503 (e)(i)	Construction vehicles on site without the necessary traffic-control devices e.g. CONSTRUCTION VEHICLE signage.	**R 10,000.00**
R21 / 14	22-Jun-09	KM 45.2 NB	B1503 (j)	Construction vehicles entered and exit the median not at the designated entrance and exit areas provided for them.	**R 10,000.00**
R21 / 14	22-Jun-09	KM 39.5 SB	B1503	Contractor shall provide and maintain the necessary traffic control devices at all times. Failure to comply was noted.	**R 10,000.00**
R21 / 15	21-Jul-09	KM 31.25 NB	B1502/ C1008	Failure to comply, while creating excessive dust and failing to ensure the safety and convenience of the travelling public.	**R 10,000.00**
R21 / 16	21-Jul-09	KM 39.2 SB	B1503 (j)	Construction vehicles entered and exit the median not at the designated entrance and exit areas provided for them.	**R 10,000.00**
R21 / 18	25-Jul-09	_____	B 4206 (c)	Trucks used to haul asphalt were found to be overloaded and the legal axle loads exceeded.	**R 13,855.27**
R21 / 19	10-Sep-09	_____	1502 (a) / B1503	Excessive dust created by the contractor, caused traffic to brake suddenly and creating very dangerous conditions.	**R 10,000.00**
R21 / 20	30-Sep-09	KM 38.5 NB	B1502 (f) / B1503	Contractor shall ensure the safety of the travelling public and personal. Failure to comply, while pouring concrete unsafely.	**R 20,000.00**

R21 / 21	2-Oct-09	KM 36.85 NB	1502 (i) / B1502 (i)	Traffic Safety Officer shall attend to accident scenes with sufficient labour and with the Attenuator. Failure to comply was noted.	**R 10,000.00**
R21 / 22	6-Nov-06	_____	B1502	Unnecessary lengthy periods of closure of traffic lanes	**R 10,000.00**
R21/23	28-May-10	KM 32.900 NB	15.01/ B1502 (l)	Construction vehicle TR 09 travelling in opposing direction to NB Traffic with excessive speed.	**R 10,000.00**
R21/26	3-Aug-10	____		Failure to comply with provisions	**R 10,000.00**
R21/27	15-Sep-10		15.01/ B1502 (l)	Failure to open the road on time –during Asphalt operation causing traffic jam	**R24,000.00**
TOTAL:					**R 277 855.27**

APPENDIX XII
CONTRACTUAL DATES

START	DURATION	DUE DATE	APPROVED DELAYS	APPROV ED END	ESTIMATED END	TIME ELAPSED
03 Sep.2008	20 Months	03 May 2010	None	None	27 Sep. 2010	92.23%

Note: Time elapsed is based on approved due date relative to contract start date.

DATE	DAY	REASON FOR EXTENSION FOR October '10	DAYS APPLIED FOR		DAYS AGREED
			RAIN	CONSEQUENTIAL	
09/2010	N/A	NONE	NIL	-	NIL
TOTAL		**NONE**	**NIL**	**-**	**NIL**

APPENDIX XII
CONTRACTUAL DATES [CONTINUE]

AVERAGE RAINFALL *Irene*			ACTUAL RAINFALL		DELAYS				
	(mm)	(mm)	(mm)	(mm)	MONTHLY			DAYS CREDIT	
MONTH	Month	Accum.	Month	Accum.	Actual	Cons.	'n' value	Actual	Accum.
08-Sep	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
08-Oct	68.0	82.0	57.0	57.0	0.0	0.0	4.0	-4.0	-4.0
08-Nov	94.0	176.0	135.0	192.0	9.5	0.0	6.0	3.5	-0.5
08-Dec	120.0	296.0	62.0	254.0	3.0	0.0	4.0	-1.0	-1.5
09-Jan	120.0	416.0	202.0	456.0	13.5	0.0	4.0	9.5	8.0
09-Feb	119.0	535.0	188.0	644.0	10.0	0.0	8.0	2.0	10.0
09-Mar	100.0	635.0	151.0	795.0	7.5	0.0	3.0	4.5	14.5
09-Apr	39.0	674.0	4.0	799.0	0.0	0.0	1.0	-1.0	13.5
09-May	20.0	694.0	25.0	824.0	2.5	0.0	1.0	1.5	15.0
09-Jun	6.0	700.0	56.0	880.0	4.0	0.0	0.0	4.0	19.0
09-Jul	1.0	701.0	14.0	894.0	2.0	0.0	0.0	2.0	21.0
09-Aug	6.0	707.0	14.0	908.0	1.5	0.0	0.0	1.5	22.5
09-Sep	14.0	721.0	27.0	935.0	1.5	0.0	0.0	1.5	24.0
09-Oct	68.0	789.0	115.0	1050.0	7.0	0.0	4.0	3.0	27.0
09-Nov	94.0	883.0	179.0	1229.0	10.5	0.0	6.0	4.5	31.5
09-Dec	120.0	1003.0	228.0	1457.0	6.5	0.0	5.5	1.0	32.5
10-Jan	120.0	1123.0	207.0	1664.0	11.0	0.0	4.0	7.0	39.5
10-Feb	119.0	1242.0	144.0	1808.0	5.0	0.0	8.0	-3.0	36.5
10-Mar	100.0	1342.0	117.0	1925.0	6.5	0.0	3.0	3.5	40.0
10-Apr	39.0	1381.0	199.0	2124.0	10.5	0.0	1.0	9.5	49.5
10-May	20.0	1262.0	25.0	2149.0	4.0	0.0	1.0	3.0	52.5
10-Jun	6.0	1407.0	0.0	2149.0	0.0	0.0	0.0	0.0	52.5
10-Jul	1.0	1408.0	0.0	2149.0	0.0	0.0	0.0	0.0	52.5
10-Aug	0.0	1408.0	0.0	2149.0	0.0	0.0	0.0	0.0	52.5
10-Sep	0.0	1408.0	0.0	2149.0	0.0	0.0	0.0	0.0	52.5

Note: *The above does not consider extension of time due to inclement weather occurring on a normal Saturday working day.*

APPENDIX XIII A

CLAIMS- CONTRACTOR

Note: Value of claim to be prefixed by A, actual by E, estimate

DESCRIPTION	CLIENT'S DECISION	NOTICE BY CONTRACTOR	ENGINEER'S DECISION	VALUE
None this month				
			TOTALS	
TOTALS				

APPENDIX XIII B

CLAIMS-THIRD PARTY

NO	SI NO	NAME	DATE	CAUSE	VALUE (R)	REFERRED	ACTION	STATUS
1	106	S McNamee	07 May 09	Collision with Yellow Barrier	R 16 000.00	31 July 09	Paid	Settled
2	114	P F de Villiers	04 Aug 09	Stone cracked windscreen	R 3 900.00	04 Aug 09	No liability	Closed
3	135	D Griesel	18 Aug 09	Hit a pothole	R 6 900.00	07 Sep 09	Paid	Settled
4	136	D A Emett	27 Aug 09	Stone cracked windscreen	R 3 800.00	07 Sep 09	Paid	Settled
5	137	G J Kriel	04 Sep 09	Stone hit car grill	R 1 200.00	08 Sep 09	More info req. – no response	Closed
6	168	D M Mazibuko	13 Oct 09	Stone cracked windscreen	R 1 653.00	27 Oct 09	Letter- own insurance	Closed
7	171	L Jacobs	14 Oct 09	Stone hit the car	R 14 996.45	27 Oct 09	Ref to J. Reid	Settled
8	177	J M du Plessis	03 Nov 09	Hit a pothole	R 570.04	03 Nov 09	Paid	Settled
9	192	L Sing	13 Nov 09	Stone cracked windscreen, head light and damaged paint	R 4 027.00	13 Nov 09	More info req. – no response	Closed
10	202	W H Thackwray	19 Nov 09	Piece of steel on carriageway	R 1 400.00	19 Nov 09	Await 3rd party approach	Closed
11	218	R Finn	11 Dec. 09	Stone hit windscreen	R 1 600.00	11 Dec. 09	No liability	Settled
12	231	A Duminy	18 Jan. 10	Pothole	R 1 866.00	18 Jan. 10	To be paid	Settled
13	232	B A Falconer	18 Jan. 10	Pothole	R 1 120.00	18 Jan. 10	To be paid	Settled
14	233	R Mkhonza	18 Jan. 10	Pothole	R 76 000.00	18 Jan. 10	Declined: Claimant already	Closed
15	234	E T Manisi	18 Jan. 10	Pothole	R 2 216.36	18 Jan. 10	Requested Quotations	Settled
16	235	K Pillay	18 Jan. 10	Pothole	N/A	18 Jan. 10	Ref to vehicle insurance	Closed
17	236	R-Y Chang	18 Jan. 10	Pothole	R 3 390.00	18 Jan. 10	To be paid	Settled
18	237	C Marais	18 Jan. 10	Sign damaged mirror of vehicle	R 2 335.00	18 Jan. 10	To be paid	Settled
19	266/ 323	E Jones	17 Feb. 10	Pothole	R 13 200.00	17 Feb. 10	Ref to CEU, waiting response	Pending
20	268	S van Rooyen	25 Feb. 10	Stone cracked windscreen and wheels got damaged	R 12 984.64	25 Feb. 10	CEU Advised: No liability	Closed
21	278	N Bhamjee	04 Jan. 10	Pothole	R 8 600.00	04 Jan. 10	Referred to own insurance	Closed
22	292	J Bosman	26 Mar. 10	Pothole	R 914.35	31 Mar. 10	Within excess: Paid	Closed

23	310	Wessels	23 Feb. 10	Stones off truck damaged windscreen	R 1 850.00	23 Feb. 10	Declined: Not one of Raubex's vehicles	Closed
24	311	S K W van ser Walt	10 Mar. 10	Stone fell on top of windscreen	R 3 000.00	10 Mar. 10	Declined: Claimant can't provide enough detail to prove liability	Closed
25	313	R Pretorius	04 Apr. 10	Aqua planed	R ?	07 May 10	Referred to own insurance	Closed
26	314	A Sethaelo	25 Feb. 10	Strones off truck damaged w/screen	R ?	07 May 10	Declined, no tipper truck of RCON, only subcontractors	Closed
27	322	B J Nkabinde	16 Apr. 10	Pothole	R 2 300.00	13 May 10	Declined, driver travelling over speed limit	Closed

CONTRACT NO. NRA R.021-002-2008/1	CERTIFICATE NO. 25	PAGE 4.1

MATERIALS ON SITE : ROADWORKS

ITEM NO. ON SCHEDULE	DESCRIPTION	QUANTITY	UNIT	RATE ALLOWED	VALUE OF MATERIALS ON SITE	
					R	C
E.2.24	Interac 3phase 3.3kV 25mm²	5 365.00	m	158.00	847 670	.00
E.2.26	10mm² Copper	4 778.00	m	65.00	310 570	.00
E.2.28	25mm² Copper	6 387.00	m	130.00	830 310	.00
E.2.36	70mm² bare copper	8 349.00	m	60.00	500 940	.00
E.5.1	20m scissor masts	16.00	No.	40 600.00	649 600	.00
E.9.1	16mm² copper	5145.00	m	80.00	411 600	.00
TOTAL VALUE OF MATERIALS ON SITE: ROADWORKS TO PAGE NO 10.1					3 550 690	.00
DEDUCT 20% OF TOTAL VALUE OF MATERIALS ON SITE					710 138	.00
AMOUNT PAYABLE FOR M.O.S ROADWORKS CARRIED FORWARD TO PAGE 2					2 840 552	.00

APPENDIX XVI:
MATERIAL ON SITE

CONTRACT NRA R.021-002-2008/1 SITE MEETING NO 25
09-November-10

APPENDIX XVII:
MIX DESIGNS

MATERIALS & DESIGN SUBMISSION SCHEDULE — As at 26/05/2010

USAGE IN THE WORKS	DESCRIPTION				NO OF SAMPLES	SOURCE/ SUPPLIER	SUBMITTED TO	ENGINEER'S DECISION	DATE OF ENGINEER'S DECISION	FINAL APPROVAL
	PRODUCT	MATERIAL REQUIRED	DESIGN / SPEC TO BE SUPPLIED	Date of Submission						
Mass concrete	15/19	No	Yes	05/12/08	NONE	Afrisam Olifantsfontein	VelaVKE/ Soillab	Accepted.		Accepted.
Non-structural	30/19	Yes	Yes	05/12/08	Received as per COLTO	Afrisam Olifantsfontein	VelaVKE/ Soillab	Accepted.		Accepted.
	30/19	Yes	Yes	19/08/08	Received as per COLTO	Quick Mix	VelaVKE/ Soillab	Prov App.		Await result of trial section
Abutment,Pier....	W30/19	Yes	Yes	05/12/08	Received as per COLTO	Afrisam Olifantsfontein	VelaVKE/ Soillab	Accepted.		Accepted.
Deck,Precast.....	W40/19	Yes	Yes	05/12/08	Received as per COLTO	Afrisam Olifantsfontein	VelaVKE/ Soillab	Accepted.		Accepted.
Asphalt Base 40/50 pen	Cont. Graded Aspalt Base- Conventional binder	Yes	Yes	14/07/09	Received as per COLTO	Akasia Road Surfacing	Velavke			Accepted.
Asphalt Base 40/50 pen	Cont. Graded Aspalt Base- Conventional binder	Yes	Yes	10/05/2014	Received as per COLTO	Akasia Road Surfacing	Velavke			Await result of trial section
AC Meduim (60/70 Pen)	Cont. Graded Asphalt- Conventional binder	No	Yes		None			Prov App.		For temperory works
AC Meduim (A-E2)	Cont. Graded Asphalt- A-E2 mod binder	Yes	Yes	02/2009	Received as per COLTO	Akasia Road Surfacing	Velavke	Prov App.	07/07/2009	Await result of trial section
AC Meduim (A-E2)	Cont. Graded Asphalt- A-E2 mod binder	Yes	Yes	19/09/09	Received as per COLTO	National Asphalt	VelaVKE/Soillab			Accepted.
AC Meduim (A-E2)	Cont. Graded Asphalt- A-E2 mod binder	Yes	Yes	12/03/2010	Received as per COLTO	National Asphalt: Buffalo Mix	VelaVKE/Soillab		19/03/2010	Accepted.
Ultra thin friction course	13.2 mm max - with 60/70 pen	Yes	Yes	05/07/2010	Received as per COLTO	National Asphalt	VelaVKE/Soillab	Prov App.	04/08/2010	Texture Depth -
Fill	Gravel	Yes	Yes	Yes	Received as per COLTO	Olifantsfontein Borrowpit		Accepted	14/11/2008	
SSG	Gravel	Yes	Yes	Yes	Received as per COLTO	Olifantsfontein Borrowpit	Velavke	Accepted	14/11/2008	
SUBBASE	Gravel	Yes	Yes	Yes	Received as per COLTO	Olifantsfontein Borrowpit	Velavke	Accepted	14/11/2008	Accepted.
SUBBASE	Commercial gravel	Yes	Yes	01/09	Received as per COLTO	Afri-Sam Olifantsfontein		Accepted	11/12/2008	Accepted.
SHOULDERS	Shoulder material	Yes	Yes		Received as per COLTO	Site mix		Accepted	09/09/09	Accepted
G1 BASE	Crushed Stone	Yes	Yes	02/12/08	1 to 10 Plastic Bags	Rossway - Raubex	VelaVKE/Soillab	Prov App.	01/07/2009	Accepted
STAB AGENT	50 Kg per Stab Agent	Yes	Yes	02/12/08	1 Bag	PPC/CEM II 32.5 R (B-V)	VelaVKE/Soillab	Accepted.		Accepted.
STAB AGENT	55%Klinker/45%Slag	Yes	Yes	04/06/2009	3 Bag	Cemlock Middelburg	VelaVKE/Soillab	Accepted.		Accepted.
PRIME A:	E-Prime	Yes	Yes	20/04/09	Trial section	Tarspray		Accepted.		Accepted.
BRIDGE BEARINGS	Elastomeric	Yes						Accepted.		Accepted.
ROAD STUDS	See Plans	Yes								

APPENDIX XVIII:
DISTRIBUTION LIST

COMPANY	FAX NR.	E-MAIL	FOR ATTENTION
SANRAL	012 348 0883		
SANRAL	012 348 0883		
2010 Org Com			
CTMM	086 620 6461		
CTMM	012 358 4923		
VelaVKE	012 803 7943		
VelaVKE	012 803 7943		
VelaVKE	012 803 7943		
VelaVKE	012 345 5934		
VelaVKE	012 345 5934		
VelaVKE	012 345 5934		
VelaVKE	012 345 5934		
VelaVKE	012 345 5934		
VelaVKE	012 345 5934		
Nyeleti	012 361 3525		
Nyeleti	012 361 3525		
Tolplan	012 369 7700		
Tolplan	012 369 7700		
Tolplan	012 369 770		
ITS	012 349 1665		
Trencon	086 210 5228		
Trencon			
SATT			
Soillab	012 481 3812		
Raubex			
Raubex	086 659 9252		
Raubex	012 811 1595		
Raubex	012 345 2859		
Raubex	012 345 2859		
Raubex	012 345 2859		
Raubex	012 345 2859		

EMERGENCY NUMBERS			
NETCARE	082 911		
LYTTELTON POLICE STATION	012 644 8600		
LYTTLETON METRO POLICE	012 664 4445	012 358 7095	012 358 7096
FIRE BRIGADE	012 358 6300	012 325 5219	10177
TRAFFIC DEPARTMENT	012 358 7095/6	012 664 4445	