Goba (Pty) Ltd

Belvedere Place, 5 Eglin Road,
Sunninghill, Sandton
South Africa

Consulting engineers & project managers
REG NO: 2001/019534/07

P O Box 180
Sunninghill, Sandton
South Africa, 2157

Tel : +27 (0)11 236-3300
Fax : +27 (0)11 236-3440

Tax Invoice

To: Pheko Letlonkane
Ekurhuleni Metropolitan Council
Private Bag X65
Benoni
Gauteng
1500

Work Requested By: Pheko Letlonkane

Our Contact Person: Rochelle Rajasakran

Invoice No.	Vat Reg. No.	Your VAT Reg. No.	Date	Your Order No. / Your Ref No.
0033514	4200195040	4280193493	29/09/2011	

Project No. : 020092.R **Project Name:** EMM IRPTN OPS PLAN

Professional Fees

Project Management and Attendance at Meetings	50,807.00	
Network Development	14,950.00	
Demand Modelling & Processing of Data	165,609.00	
Financial Modelling (Existing Operators)	33,120.00	
Operational Analysis	690.00	
Strategic Environmental Assessment	21,800.00	
Financial Modelling (New System)	4,600.00	
Professional Fees as per Annexures		**291,576.00**
Amount excluding VAT		**291,576.00**
Total VAT		**40,820.64**
Total this Invoice	**ZAR**	**R332,396.64**

Kindly arrange for payment to be made directly into our:
ABSA Bank Account
Rivonia Branch : (Code: 331155)
Account No. 405-401-4312

Invoices are payable within 30days. Interest will be charged at prime rate on late payments.

Summary of Operations Plan Costs

ANNEXURE A

Invoice 9 30/09/2011

September 2011

1 PROFESSIONAL FEES

1.1 Project Management incl. Attendance at Meetings

• Adrian Brislin	10.0 hrs @	R 920.00 /hr	R 9,200.00
• Rochelle Rajasakran	53.5 hrs @	R 690.00 /hr	R 36,915.00
• Stephen Luke	4.0 hrs @	R 1,173.00 /hr	R 4,692.00
		Sub-Total	**R 50,807.00**
		% Complete	**111%**
		Invoiced to date plus this month	*R 524,332.10*

1.2 Network Route and Corridor Development

• Adrian Brislin	2.0 hrs @	R 920.00 /hr	R 1,840.00
• Rochelle Rajasakran	19.0 hrs @	R 690.00 /hr	R 13,110.00
		Sub-Total	**R 14,950.00**
		% Complete	**64%**
		Invoiced to date plus this month	*R 158,330.46*

1.3 Demand Modelling incl. Identifiaction and Planning of Taxi Rank Surveys

• Adrian Brislin	14.2 hrs @	R 920.00 /hr	R 13,064.00
• Madumetja Moselakgomo (Engineer)	3.0 hrs @	R 350.00 /hr	R 1,050.00
• Roger Maniay	67.5 hrs @	R 372.00 /hr	R 25,110.00
• Robin Barker	82.0 hrs @	R 460.00 /hr	R 37,720.00
• Chris White	13.5 hrs @	R 920.00 /hr	R 12,420.00
• Sansaka Sirivadiduraj	110.5 hrs @	R 690.00 /hr	R 76,245.00
		Sub-Total	**R 165,609.00**
		% Complete	**98%**
		Invoiced to date plus this month	*R 749,252.77*

1.4 Financial Modelling (Existing Operators)

• Danie Ackerman	36.0 hrs @	R 920.00 /hr	R 33,120.00
		Sub-Total	**R 33,120.00**
		% Complete	**63%**
		Invoiced to date plus this month	*R 271,451.22*

1.5 Operational Analysis

• Shelly Webster	1.0 hrs @	R 690.00 /hr	R 690.00
		Sub-Total	**R 690.00**
		% Complete	**56%**
		Invoiced to date plus this month	*R 251,771.70*

1.6 Strategic Environmental Assessment

• Kevin Weerts	2.0 hrs @	R 920.00 /hr	R 1,840.00
• Guy Butler	10.5 hrs @	R 1,200.00 /hr	R 12,600.00
• Debbie Donkin	8.0 hrs @	R 920.00 /hr	R 7,360.00
		Sub-Total	**R 21,800.00**
		% Complete	**64%**
		Invoiced to date plus this month	*R 131,215.28*

1.7 Financial Modelling New System

• Danie Ackerman	5.0 hrs @	R 920.00 /hr	R 4,600.00
		Sub-Total	**R 4,600.00**
		% Complete	**26%**
		Invoiced to date plus this month	*R 75,311.03*

FEES	**This Invoice**	**Fee TOTAL**		**R 291,576.00**
	BUDGET		R	4,576,919.13
	Total Amount Claimed to Date		*R*	*2,185,353.07*
% COMPLETE		**% Complete**		**47.7%**

2 REIMBURSABLE EXPENSES (SURVEY BUDGET)

None

REIMBURSABLE EXPENSES	**This Invoice**	**Fee TOTAL**		**R 0.00**
	BUDGET		R	500,000.00
	Total Amount Claimed to Date			*R 1,531,543.15*
% COMPLETE		**% Complete**		**306.3%**

GRAND TOTAL excl. VAT	R 291,576.00
Total VAT	R 40,820.64
TOTAL THIS INVOICE	**R 332,396.64**

TOTAL BUDGET	R 5,076,919.13
TOTAL AMOUNT CLAIMED TO DATE	R 3,716,896.22
% Claimed	73%



GOBA

Belvedere Place
5 Eglin Road
Sunninghill
Johannesburg 2157
South Africa

Telephone + 27 11 236 3300
Facsimile + 27 11 807 8535

Mott MacDonald

Mott Mac Donald South Africa (Pty) Ltd
Mott Mac Donald House
359 Rivonia Boulevard
Rivonia
Johannesburg 2128
South Africa

Telephone + 27 (0) 87 310 5000
Facsimile + 27 (0) 87 310 5199

Mott Mac Donald Ltd
Prince House
43 - 51 Prince House
Bristol
BS1 4PS
United Kingdom

Telephone + 0117 906 9579
Facsimile + 0117 906 9501

Ref No. 020092.R

Ref to: A Brislin

30 September 2011

Public Transport Infrastructure Services Department
Kempton Park Civic Centre
Cnr CR Swart Drive and Pretoria Road
Kempton Park

Attn: Pheko Letlonkane

RE: PROGRESS REPORT AS AT 30 SEPTEMBER 2011

Dear Sir

The following Progress Report is issued to the client from the Goba / Mott MacDonald JV for the Project "Development of an Operations Plan for an IRPTN North/South Corridor" for EMM (Contract No. PS-IS (PT) 31/2010). It details the progress of the project for the period 1 September to 30 September 2011.

1. Project Management

The project management duties for September constituted the following:

- Management of tasks and resources.
- Attendance at meetings with the Client, PMU, NDoT, and Technical Committee.
- Review of the project programme.
- Collection of project data from EMM, namely OLS data, Bus Passenger Data, Road Network Data and Land Use Data.
- Teleconferences with MMUK to discuss client requests, monitor project progress and discuss outstanding data requirements for the Demand Modelling.
- Budgeting, preparation of progress reports, timesheets and invoicing.

The client requested that the IRPTN project programme be revised in order to fast track the implementation of the Phase 1 Route. The Business Plan, Operations Plan and the PMU met twice to review their respective programmes and identify milestones that could be achieved earlier. The following milestones were identified for the Operations Plan:

- **Finalisation of the Phase 1 Route** (middle September 2011) – this would enable the Strategic Environmental Assessment to continue, with early identification of areas requiring environmental authorisations. This would provide an indication of the time required for the EIA process along the Phase 1 Route. Ideally, the EIA should be conducted before the Preliminary Design Phase in order to inform the design proposals. However, given the constrained project timeline, the EIA could be conducted during the Preliminary Design Phase.
- **Demand Modelling** (end November 2011) – Due to delays in the procurement of survey data, the demand modelling was delayed by one month, and is now scheduled to end in November 2011.Once the results from the Demand Modelling is finalised and approved by the EMM and NDOT, the Operations Plan would begin in earnest.
- **Draft Operations Plan**, containing the Full IRPTN Network (middle March 2012) – this could be available by the middle of March for approval by the EMM and NDoT. Once this is approved, the Preliminary Design could be put out to tender.

The timeline for these milestones is highly dependent on the availability of data that has been requested from the following departments:

- EMM Planning Department – Existing land use data and proposed land use scenarios for 2031 (request for quantified proposals on 19 September 2011).
- EMM Roads and Stormwater – Road network data, new road schemes (2011-2031) and year of implementation (requested since beginning of project).
- Gautrans – Bus Passenger Information for Putco, Brakpan and JR Cheou Services (bus information requested since beginning of project)
- PRASA – Updated 2007 rail passenger information (requested in May and August, received from EMM in September)

2. Demand Modelling and Demand Surveys

The following additional traffic surveys were conducted:

Vehicle Occupancy Counts were carried out on 31 August and 1 September 2011 at 6 locations along the Phase 1 Route. These were as follows:

1. Zuurfontein Road
2. Pretoria Road (M57)
3. Rondebult Road (Bardene East Rand)
4. Main Reef Road

5. Rondebult Road (Farrar Park, East Rand)
6. Barry Marais Road

The counts were located after major nodes or directional changes in the route to determine a profile of passenger load shedding.

Public transport surveys were conducted at the OR Tambo International Airport to quantify the public transport movements and the modal split between rail, bus and taxi patronage. The surveys were carried out on 26 August 2011 and have been summarised.

The Demand Modelling progress can be summarised as follows:

- The Journey Time data has been prepared for validation. This consisted of; processing the data and aggregating it into sections, calculating the mean and standard deviation for individual sections, statistical tests and sense checks undertaken to identify outliers (these have been removed), cumulative journey times have been plotted against cumulative distance, +/- 15% journey time bands have also been plotted on the same graph.
- The ATC and MCC data has been prepared for Matrix Estimation and validation. This consisted of; extracting AM/PM/Interpeak hourly flows from the ATC data, setting up flow validation tables, hourly flows by vehicle category for each peak period have been extracted from the MCC data.
- The MCC and ATC data has been checked for consistency, and any locations where there are significant differences are being investigated.

3. Network Route and Corridor Development

A Technical Note was presented to the Client on 16 September 2011. The report provides an analysis of two Phase 1 Corridors, the original route through Benoni and a proposed option through Boksburg only.

Using the forecast 2010 scenario in the Demand Model (as provided by Aurecon), the potential passengers alighting and boarding along both routes were analysed. A higher demand for Benoni confirmed that this CBD should be included in the route. Eventually it was decided to serve the Anderbolt industrial area and the CBD of Boksburg to a certain extent by taking the route along Main Reef, Cason and Rondebult Road. While this route takes in several major nodes, the Demand Modelling revealed a higher trip production along Van Dyke Road (parallel to Rondebult and in the original Phase 1 Route proposed in the Scoping Study). It was subsequently decided to provide a complementary IRPTN route along Van Dyke Road to accommodate this demand. Linking the complementary route at Dunswart Intermodal Station would also provide opportunities to commuters to use rail, taxi or IRPTN services.

It was hoped that the client would approve the Phase 1 Route by the end of September to enable other work items to begin. However at the Technical Committee Meeting held on 16 September 2011, EMM Planning Department indicated that the route should take in the Chris Hani Crossing as opposed to the Vosloorus Hospital. They would also like to confirm the use of Rondebult Road as opposed to Van Dyke Road. A meeting with the Planning

Department was scheduled for 10th October 2011. The consultants have assumed that the Phase 1 Route would be tied down and finalised at this meeting.

4. Financial Modelling of the Existing System

Work on the development of the model continued. Work continued on the analysing of taxi information provided

The basic structure of the model for the system is populated with data and formulae.

The progress on this workstream is to date.

5. Strategic Environmental Assessment

A presentation on the SEA and the limited progress to date was made to the Project Steering Committee on 16 September. In order to carry out the SEA, the Phase 1 route needed to be finalised and the infrastructural upgrades determined and agreed upon. The SEA would be a high level assessment which identified environmentally sensitive areas (social and ecological) as well as those areas where a basic or full environmental impact assessment would be required for the upgrades proposed. It was recognised that some of the upgrades might require lane re-marking or extension within the existing road reserves. However, it would be upgrades outside of these areas that need to be clarified so that the SEA can proceed.

Yours faithfully

Adrian Brislin

Technical Director *(for Goba/Mott MacDonald JV)*

2. PROGRESS REPORT PER PROJECT

2.1 Project Number

020092.R

2.2 Project Name

The Development of an Operations Plan for an Integrated Rapid Public Transport Network (IRPTN) North / South Corridor (Contract No. PS-IS (PT) 31/2010)

2.3 Project Description

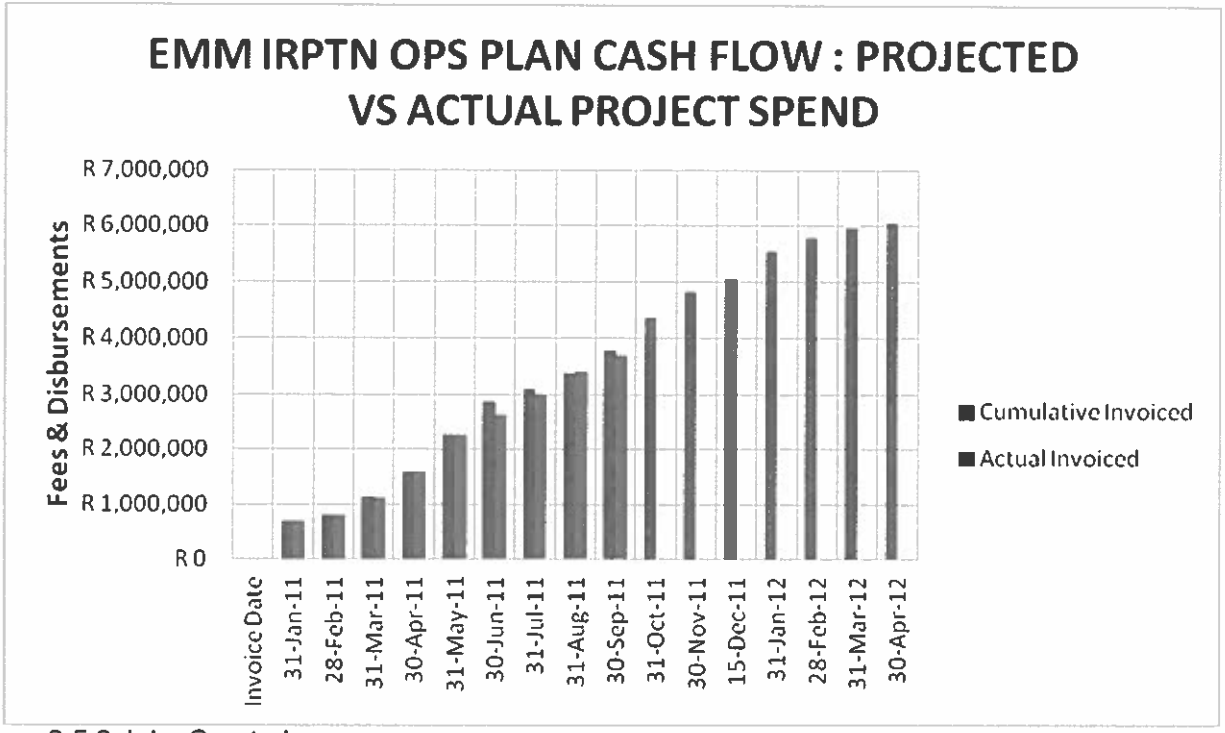
The Project involves the development of an Integrated Rapid Public Transport Network in EMM using passenger demand analysis to determine the size of the system and financial and economic modelling to evaluate the financial feasibility of the network. The main deliverable of the study will be an Operations Plan detailing the phased implementation of the network; public transport mode and fleet size; duration of and scheduling of services and the optimal location and size of network facilities. The study includes integration of ITS, Fare Collection, Non-motorised Transport and Economic Analysis with the Operations Plan. A Social Impact Assessment and Strategic Environmental Framework will also be developed.

2.4 Updated Microsoft Project Plan (Please attach Ms Project Gantt Chart)

2.5 Budget, Expenditure & Job Opportunities

IRPTN Budget	Municipal Budget	Other Budget	Total Budget	Expenditure To Date	Variance	% Expenditure	Last Month Expenditure	Current Month Expenditure
R 5 076919.14	R5076919.14	R1000000	R6076919.14	R3716896.22	0	61%	R426,421.56	R332,396.64

2.5.1 Monthly Expenditure Graph



2.5.2 Jobs Created

The number of job opportunities for this project is 45 jobs.

2.6 Project Progress

Planned Start Date	Planned End Date	Actual Start Date	Actual End Date	% Completed	% Expected	% Variance
24 November 2010	30 April 2012	14 December 2010	30 April 2012	50%	50%	0

2.7 Challenges (Complete each per challenge)

Challenge No	Challenge Description	Recommendations	Impact (High or Low or Medium)	Date Raised	Raised By	Assigned To	Due Date
1.	Confirmation of Phase 1 Route	Key role-players EMM Planning Dept and PT Dept discuss route alternatives and finalise .	High	16 September 2011	Goba – R Rajasakran	Pheko Letlonkane and Pieter Swanepoel	15 October 2011
2.	Collection of Bus Passenger Data from Province for Putco, JR Cheou and Brakpan Bus Company	EMM to chase this up with Province	High	9 June 2011	Goba – Danie Ackerman, AG Brislin	Petrus Oupa	Required Immediately
3.	Collection of Updated Rail Passenger data and Regional Rail Plan from PRASA	EMM to assist	High	Beginning of Project	Goba – AG Brislin	Pheko Letlonkane	Received on 21 September 2011 (sent beg of month – problems with email)
4	Land use data for future year forecasting – The MSDF is a new document with high level planning proposals. These have not yet been translated into specific land use scenarios which can be quantified	Goba to follow up EMM Planning	High	12 September 2011	Goba – Rochelle Rajasakran	Pieter Swanepoel	End October 2011

	and its impact on future trip making patterns in EMM determined.						
5.	EMM have yet to confirm whether budget extensions for additional survey work and extended Phase 1 Route have been approved.	EMM to follow up	High	14 September 2011	Goba – Adrian Brislin	Pheko Letlonkane	Required Immediately

2.8 Risks (Complete each per risk)

Risk No	Risk Description	Recommendations / Mitigation	Impact (High or Low or Medium)	Likelihood (High or Low or Medium)	Date Raised	Raised By	Assigned To	Due Date
1.	Delays in Demand Modelling due to lack of quantified Land Use Proposals	EMM Planning and PT to discuss a way forward	High	High	16 September 2011	Goba – Rochelle Rajasakran	Pheko Letlonkane & Pieter Swanepoel	End September
2.	Lack of Continuity in Project due to EMM capacity shortage	EMM's Technical Advisors play a leading role in tracking project outcomes and decision-making	High	High	21 September 2011	Goba – Rochelle Rajasakran	Tshepo Motsitsi	Middle October
3.	Delays due to political buy-in for Phase 1 Route not factored into Ops Plan Programme	Re-work the programme, project deliverables delayed	High	High	22 September 2011	Goba – Rochelle Rajasakran	-	-

2.9 Meetings Held

Meeting Date	Meeting Objective / Subject	Location
1 September	Meeting with MEC of Transport	Ekurhuleni
6 September	Meeting with NDoT to discuss surveys and median vs shoulder IRPTN Lane	Pretoria
13 September @ 10:00	Fortnightly Progress Meeting with MMUK	Goba, Sunninghill – Teleconference
16 September @ 10:00	Technical Committee Meeting	Councilors Chambers, Kempton Park Civic Centre

21 September @ 10:00	One on one meeting with PMU	Ekurhuleni Public Transport Boardroom, Kempton Park

2.10 Site Visit Findings

Site Visit No	Date(s) Visited	Findings
1.		

2.11 Recommendations

Recommendation No	Recommendations
<prj1recommend>	<prj1recommendation>

2.12 Comments

Comment No	Comments
<prj1comm>	<prj1comment>

2.13 Project Photographs (Last Photograph & Current Photograph, these should be captioned and dated)

Photo No	Photo Date	Photo Description	Photo
<photono>	<photodate>	<photodescription>	<photo>

3 ANNEXURES (Include all annexures per project)

Annexure 1: Meeting Attendance Register & Minutes (signed)
Annexure 2: Site Visit Register (signed)
Annexure 3: Cash Flow Projections
Annexure 4: Precedent Charts
Annexure 5: Gantt Chart
Annexure 6: Project Plan – Microsoft Version

Date	Workstream	Deliverable	JV Partner	Personnel	Activity No.	Project Activity	Sub-Activity	Description	Hours	Rate	Total
01-Sep	Project Management	Co-ordination of activities	Goba (Pty) Ltd	Adrian Brislin	1.2	Project Management	Co-ordination of activities	Prepare Year End Progress Report for Ops Plan	2	R 920.00	R 1,840.00
01-Sep	Project Management	Co-ordination of activities	Goba (Pty) Ltd	Rochelle Rajasakran	1.2	Project Management	Co-ordination of activities	Correcting Invoice, pritning and delivery to EMM	1	R 690.00	R 690.00
13-Sep	Project Management	Co-ordination of activities	Goba (Pty) Ltd	Rochelle Rajasakran	1.2	Project Management	Co-ordination of activities	Co-ordination of activities	1	R 690.00	R 690.00
15-Sep	Project Management	Co-ordination of activities	Goba (Pty) Ltd	Rochelle Rajasakran	1.2	Project Management	Co-ordination of activities	Co-ordination of inputs, formatting and printing Tech Note, correspondence	3	R 690.00	R 2,070.00
16-Sep	Project Management	Co-ordination of activities	Goba (Pty) Ltd	Rochelle Rajasakran	1.2	Project Management	Co-ordination of activities	Prep for meeting, correspondence with JV regarding meeting outcomes, handling queries	3.5	R 690.00	R 2,415.00
19-Sep	Project Management	Co-ordination of activities	Goba (Pty) Ltd	Rochelle Rajasakran	1.2	Project Management	Co-ordination of activities	Correspondence with EMM and JV Partners, sourcing data, arranging meetings, phone calls	7	R 690.00	R 4,830.00
20-Sep	Project Management	Co-ordination of activities	Goba (Pty) Ltd	Rochelle Rajasakran	1.2	Project Management	Co-ordination of activities	Progress Reports & co-ordination of inputs, correspondence, uploading data	6	R 690.00	R 4,140.00
21-Sep	Project Management	Co-ordination of activities	Goba (Pty) Ltd	Rochelle Rajasakran	1.2	Project Management	Co-ordination of activities	Prep for PMU meeting, co-ordination of activities, handling queries	3.5	R 690.00	R 2,415.00
22-Sep	Project Management	Co-ordination of activities	Goba (Pty) Ltd	Rochelle Rajasakran	1.2	Project Management	Co-ordination of activities	Updating programme, correspondence	2.5	R 690.00	R 1,725.00
27-Sep	Project Management	Co-ordination of activities	Goba (Pty) Ltd	Rochelle Rajasakran	1.2	Project Management	Co-ordination of activities	Capturing time, co-ordinating inputs from JV partners, phone calls	3	R 690.00	R 2,070.00
29-Sep	Project Management	Co-ordination of activities	Goba (Pty) Ltd	Rochelle Rajasakran	1.2	Project Management	Co-ordination of activities	Invoicing, update programme, cash flow and review budget	5.5	R 690.00	R 3,795.00
30-Sep	Project Management	Co-ordination of activities	Goba (Pty) Ltd	Rochelle Rajasakran	1.2	Project Management	Co-ordination of activities	Finalise Invoice with admin, correspondence with JV, print and deliver	6	R 690.00	R 4,140.00
13-Sep	Network Route Development	Confirmation of Phase 1 Route	Goba (Pty) Ltd	Adrian Brislin	1.3.2	Network Route Development	Confirmation of Phase 1 Route	Final Review of Technical Note	2	R 920.00	R 1,840.00
09-Sep	Network Route Development	Confirmation of Phase 1 Route	Goba (Pty) Ltd	Rochelle Rajasakran	1.3.2	Network Route Development	Confirmation of Phase 1 Route	Review of Phase 1 Route, Townships along Van Dyke Road	7	R 690.00	R 4,830.00
12-Sep	Network Route Development	Confirmation of Phase 1 Route	Goba (Pty) Ltd	Rochelle Rajasakran	1.3.2	Network Route Development	Confirmation of Phase 1 Route	Review of Land Use Information, uploading data for MMUK	4	R 690.00	R 2,760.00
14-Sep	Network Route Development	Confirmation of Phase 1 Route	Goba (Pty) Ltd	Rochelle Rajasakran	1.3.2	Network Route Development	Confirmation of Phase 1 Route	Modification to Technical Note for Complementary Route, Re-examine Land Use	8	R 690.00	R 5,520.00
06-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Adrian Brislin	1.5.1	Demand Modelling	Process Data	Taxi Surveys, OD coding management	0.5	R 920.00	R 460.00
07-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Adrian Brislin	1.5.1	Demand Modelling	Process Data	Taxi Surveys, OD coding management	0.5	R 920.00	R 460.00
08-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Adrian Brislin	1.5.1	Demand Modelling	Process Data	Taxi Surveys, OD coding management	0.5	R 920.00	R 460.00
12-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Adrian Brislin	1.5.1	Demand Modelling	Process Data	Taxi Survey Report	1.7	R 920.00	R 1,564.00
13-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Adrian Brislin	1.5.1	Demand Modelling	Process Data	Taxi Survey Report	1	R 920.00	R 920.00
26-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Adrian Brislin	1.5.1	Demand Modelling	Process Data	Final Edit of Phase 1 Route Tech Note	2	R 920.00	R 1,840.00
28-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Adrian Brislin	1.5.1	Demand Modelling	Technical Note	Evaluation of ATC and MCC Data Anomolies	3	R 920.00	R 2,760.00
29-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Adrian Brislin	1.5.1	Demand Modelling	Technical Note	Prepare Traffic Survey Report	3	R 920.00	R 2,760.00
30-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Adrian Brislin	1.5.1	Demand Modelling	Process Data	Prepare Traffic Survey Report	2	R 920.00	R 1,840.00
01-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, Vetting	4	R 460.00	R 1,840.00
02-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, Vetting	4	R 460.00	R 1,840.00
05-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, Vetting	3	R 460.00	R 1,380.00
06-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, Vetting	4	R 460.00	R 1,840.00
07-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, Vetting	4	R 460.00	R 1,840.00
08-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, Vetting	4	R 460.00	R 1,840.00
09-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, Vetting	4	R 460.00	R 1,840.00
12-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, Vetting	4	R 460.00	R 1,840.00
13-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, Vetting	4	R 460.00	R 1,840.00
14-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, Vetting	4	R 460.00	R 1,840.00
15-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, Vetting	4	R 460.00	R 1,840.00
16-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, Vetting	4	R 460.00	R 1,840.00
20-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Analysing ATC/MCC Counts	1	R 460.00	R 460.00
21-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Analysing ATC/MCC Counts	2	R 460.00	R 920.00
22-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Analysing ATC/MCC Counts	4	R 460.00	R 1,840.00
23-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Analysing ATC/MCC Counts	4	R 460.00	R 1,840.00
24-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Analysing ATC/MCC Counts	4	R 460.00	R 1,840.00
26-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Analysing ATC/MCC Counts	4	R 460.00	R 1,840.00
27-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Analysing ATC/MCC Counts	4	R 460.00	R 1,840.00
28-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Analysing ATC/MCC Counts	4	R 460.00	R 1,840.00
29-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Analysing ATC/MCC Counts	4	R 460.00	R 1,840.00
30-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Robin Barker	1.5.1	Demand Modelling	Process Data	Analysing ATC/MCC Counts	4	R 460.00	R 1,840.00
01-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Roger Maniay	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, OD translation	1.5	R 372.00	R 558.00
05-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Roger Maniay	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, OD translation	6	R 372.00	R 2,232.00
06-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Roger Maniay	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, OD translation	4	R 372.00	R 1,488.00
07-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Roger Maniay	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, OD translation	3	R 372.00	R 1,116.00
08-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Roger Maniay	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, OD translation	3	R 372.00	R 1,116.00
09-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Roger Maniay	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, OD translation	4	R 372.00	R 1,488.00
12-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Roger Maniay	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, OD translation	9	R 372.00	R 3,348.00
13-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Roger Maniay	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, OD translation	9.5	R 372.00	R 3,534.00
14-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Roger Maniay	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, OD translation	6	R 372.00	R 2,232.00
15-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Roger Maniay	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, OD translation	6.5	R 372.00	R 2,418.00
16-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Roger Maniay	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, OD translation	7	R 372.00	R 2,604.00
29-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Roger Maniay	1.5.1	Demand Modelling	Process Data	Processing of Survey Data, OD translation	8	R 372.00	R 2,976.00
08-Sep	Demand Modelling	Survey Data	Goba (Pty) Ltd	Madumetja Moselakgomo	1.5.1	Demand Modelling	Process Data	Management of Travel time surveys	3	R 350.00	R 1,050.00
01-Sep	Meetings and Presentations	Attendance at Meetings	Goba (Pty) Ltd	Adrian Brislin	1.2.6	Meetings and Presentations	Internal Meetings	Meeting with MEC Transport	3	R 920.00	R 2,760.00
05-Sep	Meetings and Presentations	Attendance at Meetings	Goba (Pty) Ltd	Adrian Brislin	1.2.6	Meetings and Presentations	Technical Committee Meeting	Preparation of Presentation to NDOT	2	R 920.00	R 1,840.00
06-Sep	Meetings and Presentations	Attendance at Meetings	Goba (Pty) Ltd	Adrian Brislin	1.2.7	Meetings and Presentations	Client Meetings	Meeting and Presentation to NDOT Taxi surveys and Median vs shoulder treatment	3	R 920.00	R 2,760.00
13-Sep	Meetings and Presentations	Attendance at Meetings	Goba (Pty) Ltd	Rochelle Rajasakran	1.2.6	Meetings and Presentations	Client Meetings	Arranging meeting, Teleconference with Motts UK, Teleconference with Motts SA	2	R 690.00	R 1,380.00
15-Sep	Meetings and Presentations	Attendance at Meetings	Goba (Pty) Ltd	Rochelle Rajasakran	1.2.6	Meetings and Presentations	Client Meetings	Preparation of Presentation, co-ordinating inputs	3	R 690.00	R 2,070.00
16-Sep	Meetings and Presentations	Attendance at Meetings	Goba (Pty) Ltd	Rochelle Rajasakran	1.2.7	Meetings and Presentations	Technical Committee Meeting	Technical Committee Meeting,	4.5	R 690.00	R 3,105.00
21-Sep	Meetings and Presentations	Attendance at Meetings	Goba (Pty) Ltd	Rochelle Rajasakran	1.2.6	Meetings and Presentations	Client Meetings	Meeting with PMU and travel	2	R 690.00	R 1,380.00
14-Sep	Operational Analysis	System Definition	Goba (Pty) Ltd	Shelly Webster	1.8.1	Operational Analysis	Define Key Operational Characteristics	GIS Land use	1	R 690.00	R 690.00
											R 138,699.00

Date	Workstream	Deliverable	JV Partner	Personnel	Activity No.	Project Activity	Sub-Activity	Description	Hours	Rate	Total
26-Sep	Project Management	Co-ordination of activities	Mott MacDonald	Stephen Luke	1.2	Project Management		Project Management	4	R 1,173.00	R 4,692.00
05-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	7.5	R 690.00	R 5,175.00
06-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	7.5	R 690.00	R 5,175.00
12-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	7.5	R 690.00	R 5,175.00
13-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	7.5	R 690.00	R 5,175.00
14-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	7.5	R 690.00	R 5,175.00
15-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	7.5	R 690.00	R 5,175.00
16-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	5.5	R 690.00	R 3,795.00
19-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	7.5	R 690.00	R 5,175.00
20-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	7.5	R 690.00	R 5,175.00
21-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	7.5	R 690.00	R 5,175.00
22-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	7.5	R 690.00	R 5,175.00
26-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	7.5	R 690.00	R 5,175.00
28-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	7.5	R 690.00	R 5,175.00
29-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	7.5	R 690.00	R 5,175.00
30-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Sansaka Sirivadidurage	1.5	Demand Modelling		Demand Modelling Report	7.5	R 690.00	R 5,175.00
16-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Chris White	1.5	Demand Modelling		Demand Modelling Report	5.5	R 920.00	R 5,060.00
21-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Chris White	1.5	Demand Modelling		Demand Modelling Report	3.5	R 920.00	R 3,220.00
28-Sep	Demand Modelling	1.5.7 Update VISSUM model and report on development and results	Mott MacDonald	Chris White	1.5	Demand Modelling		Demand Modelling Report	4.5	R 920.00	R 4,140.00
05-Sep	SEA	1.16.2 Development of an EIA Framework	Mott MacDonald	Guy Butler	1.16	SEA		1.16.2 Development of an EIA Framework	1	R 1,200.00	R 1,200.00
09-Sep	SEA	1.16.2 Development of an EIA Framework	Mott MacDonald	Guy Butler	1.16	SEA		1.16.2 Development of an EIA Framework	2	R 1,200.00	R 2,400.00
16-Sep	SEA	1.16.3 Stakeholder Engagement	Mott MacDonald	Guy Butler	1.16	SEA		1.16.3 Stakeholder Engagement	6	R 1,200.00	R 7,200.00
20-Sep	SEA	1.16.2 Development of an EIA Framework	Mott MacDonald	Guy Butler	1.16	SEA		1.16.2 Development of an EIA Framework	1	R 1,200.00	R 1,200.00
21-Sep	SEA	1.16.2 Development of an EIA Framework	Mott MacDonald	Guy Butler	1.16	SEA		1.16.2 Development of an EIA Framework	0.5	R 1,200.00	R 600.00
09-Sep	SEA	1.16.2 Development of an EIA Framework	Mott MacDonald	Debbie Donkin	1.16	SEA		1.16.2 Development of an EIA Framework	0.5	R 920.00	R 460.00
15-Sep	SEA	1.16.2 Development of an EIA Framework	Mott MacDonald	Debbie Donkin	1.16	SEA		1.16.2 Development of an EIA Framework	1	R 920.00	R 920.00
16-Sep	SEA	1.16.3 Stakeholder Engagement	Mott MacDonald	Debbie Donkin	1.16	SEA		1.16.3 Stakeholder Engagement	6	R 920.00	R 5,520.00
19-Sep	SEA	1.16.2 Development of an EIA Framework	Mott MacDonald	Debbie Donkin	1.16	SEA		1.16.2 Development of an EIA Framework	0.5	R 920.00	R 460.00
16-Sep	SEA	1.16.2 Development of an EIA Framework	Mott MacDonald	Kevin Weerts	2.16	SEA		1.16.2 Development of an EIA Framework	2	R 920.00	R 1,840.00
											R 115,157.00

Deliverable	JV Partner	Personnel	Activity No.	Project Activity	Sub-Activity	Description	Hours	Rate	Total
Financial Model	Tess	Danie Ackerman	1.7.2	Financial Modelling - Existing Operators	Data collection and review	Analysis of taxis registered on RAS (South)	2	R 920.00	R 1,840.00
Financial Model	Tess	Danie Ackerman	1.7.2	Financial Modelling - Existing Operators	Data collection and review	Analysis of taxis registered on RAS (South)	2	R 920.00	R 1,840.00
Financial Model	Tess	Danie Ackerman	1.7.2	Financial Modelling - Existing Operators	Data collection and review	Analysis of taxis registered on RAS (North)	2	R 920.00	R 1,840.00
Financial Model	Tess	Danie Ackerman	1.7.2	Financial Modelling - Existing Operators	Data collection and review	Analysis of taxis registered on RAS (North)	2	R 920.00	R 1,840.00
Financial Model	Tess	Danie Ackerman	1.7.2	Financial Modelling - Existing Operators	Data collection and review	Analysis of taxis registered on RAS (East)	2	R 920.00	R 1,840.00
Financial Model	Tess	Danie Ackerman	1.7.2	Financial Modelling - Existing Operators	Data collection and review	Analysis of taxis registered on RAS (East)	2	R 920.00	R 1,840.00
Financial Model	Tess	Danie Ackerman	1.6.2	Financial Modelling - New system	Data collection and review	Comments on slides re Revenue Flow	2	R 920.00	R 1,840.00
Financial Model	Tess	Danie Ackerman	1.7.2	Financial Modelling - Existing Operators	Data collection and review	Analysis of taxis registered on RAS (East)	2	R 920.00	R 1,840.00
Financial Model	Tess	Danie Ackerman	1.6.1	Financial Modelling - New system	Set up model structure	Populating model with formulae	3	R 920.00	R 2,760.00
Financial Model	Tess	Danie Ackerman	1.7.2	Financial Modelling - Existing Operators	Data collection and review	All routes operated on Map Source	1	R 920.00	R 920.00
Financial Model	Tess	Danie Ackerman	1.7.2	Financial Modelling - Existing Operators	Data collection and review	All routes operated on Map Source	2	R 920.00	R 1,840.00
Financial Model	Tess	Danie Ackerman	1.7.2	Financial Modelling - Existing Operators	Data collection and review	All routes operated on Map Source	2	R 920.00	R 1,840.00
Financial Model	Tess	Danie Ackerman	1.7.2	Financial Modelling - Existing Operators	Data collection and review	All routes operated on Map Source	5	R 920.00	R 4,600.00
Financial Model	Tess	Danie Ackerman	1.7.2	Financial Modelling - Existing Operators	Data collection and review	All routes operated on Map Source	4	R 920.00	R 3,680.00
Financial Model	Tess	Danie Ackerman	1.7.2	Financial Modelling - Existing Operators	Data collection and review	All routes operated on Map Source	4	R 920.00	R 3,680.00
Financial Model	Tess	Danie Ackerman	1.7.2	Financial Modelling - Existing Operators	Data collection and review	All routes operated on Map Source	4	R 920.00	R 3,680.00

R 37,720.00