

ITERELENG BAKGATLA MINERAL RESOURCES (PTY) LTD, PILANESBERG PLATINUM MINES (PTY) LTD AND RICHTRAU NO 123 (PTY) LTD

BACKGROUND INFORMATION DOCUMENT FOR A COMBINED PLATINUM MINING OPERATION NEAR THE PILANESBERG NATIONAL PARK

February 2012

INTRODUCTION

As part of a joint venture agreement, the Itereleng Bakgatla Mineral Resources (Pty) Ltd (IBMR), Pilanesberg Platinum Mines (Pty) Ltd and Richtrau No 123 (Pty) Ltd (Richtrau) proposed to develop three separate projects that could function as a combined mining operation situated to the north of the Pilanesberg National Park in the Moses Kotane Local Municipality, of the Bojanala Platinum District Municipality in the North West Province. The mining operation will include three mining areas, namely the operational Pilanesberg Platinum Mine (PPM), the approved and currently developing Sedibelo Platinum Mine (Sedibelo), and the proposed Magazynskraal Mine (Magazynskraal). Further detail is provided below.

PPM is an existing opencast platinum mining operation on the farms Tuschenkomst 135 JP and Witkleifontein 136 JP. It is proposed that the existing opencast pit on the farm Tuschenkomst be extended onto the farms Wilgespruit 2 JQ and Rooderand 46 JQ. The mining right is held by Boynton Investments (Pty) Ltd. Further detail is provided in **Appendix A**.

Sedibelo is an approved opencast and underground platinum mining operation that is currently being developed on the farms Wilgespruit 2 JQ, Rooderand 46 JQ, Legkraal 45 JQ, Koedoesfontein 42 JQ. It is proposed that the layout of surface infrastructure be changed to better suit the combined mining operation. The mining right for the Sedibelo operation is held by the IBMR. Further detail is provided in **Appendix B**.

Magazynskraal is a proposed underground platinum mining operation on the farm Magazynskraal 3 JQ. Due to the nature of the ore body it is planned to access and process the ore using mine infrastructure at the neighbouring Sedibelo mine. The prospecting right is held by Richtrau. Further detail is provided in **Appendix C**.

ENVIRONMENTAL AUTHORISATION PROCESS

Prior to the commencement of the proposed projects, an environmental impact assessment is required, including an application phase, scoping phase, and Environmental Impact Assessment / Environmental Management Programme (EIA/EMP) phase. The assessment will be conducted in terms of the Mineral and Petroleum Resources Development Act, 28 of 2002 (MPRDA), the National Environmental Management Act, 107 of 1998 (NEMA), and the National Environmental Management: Waste Act, 59 of 2008 (NEMWA). These laws apply as the projects include mining activities and incorporate listed activities in terms of NEMA and NEMWA. In addition, each project will require authorisation in terms of the National Water Act, 36 of 1998. An outline of the process is provided on Page 2 of this document.

SLR Consulting (Africa) (Pty) Ltd (SLR), an independent firm of environmental consultants (formally known as Metago Environmental Engineers (Pty) Ltd), has been appointed to manage the environmental process.

SLR Consulting (Africa) (Pty) Ltd

LOCATION OF THE MINING OPERATION

Province: North West Province

Location: Off the P50-1 and D5111 roads, approximately 3km north of the Pilanesberg National Park

Farms: Tuschenkomst 135 JP, Wilgespruit 2 JQ, Rooderand 46 JQ, Legkraal 45 JQ, Koedoesfontein 42 JQ and Magazynskraal 3 JQ

Local authority: Moses Kotane Local Municipality

WHAT IS YOUR ROLE?

You have been identified as an interested and/or affected party (IAP) who may want to be informed about the project and have input into the environmental authorisation process. You will be given the opportunity to provide input at information-sharing meeting(s), and also through review and comment on environmental reports.

HOW TO RESPOND

Responses to this document can be submitted by means of the attached comments sheet, through communication with the people listed below and/or at the public meeting(s).

WHO TO CONTACT

SLR Consulting

Tel: (011) 467-0945 * Fax: (011) 467-0978

PPM Tuschenkomst Pit Extension:

Hylton Allison: hallison@slrconsulting.com

Sedibelo Infrastructure Changes:

Linda Munro: lmunro@slrconsulting.com

Magazynskraal Project:

Fiona Bolton: fbolton@slrconsulting.com

PURPOSE OF THIS DOCUMENT

This document has been prepared by SLR to inform you about:

- * the proposed project;
- * the environmental assessment process to be followed;
- * possible environmental impacts; and
- * how you, as an IAP can have input into the above process.

ENVIRONMENTAL AUTHORISATION PROCESS

As the three projects are proposed to operate as a combined mining operation, one environmental process will be conducted to cover the three projects. However, a separate set of documents will be produced to support each mining / prospecting right. In this regard, a scoping report will be produced for each project: PPM will require an EIA/EMP amendment to cater for the extended pit; Sedibelo will require an EIA/EMP amendment to cater for the changes and additions to surface infrastructure; and Magazynskraal will require an EIA/EMP to cater for the proposed activities.

The environmental process provides information on the project and environment in which it is being undertaken; identifies, in consultation with IAPs, the potential negative as well as positive impacts of the project; and reports on management measures required to mitigate impacts to an acceptable level. The likely process steps and time frames are provided below.

STEPS IN THE ASSESSMENT PROCESS

PHASE I – Application phase (October 2011)
Submission of three separate sets of applications (in terms of NEMA and NEMWA respectively) to DEA and DEDECT. DMR notification and submission of an application
PHASE II – Scoping process (October 2011 – March 2012)
Notify other regulatory authorities and IAPs of projects and environmental assessment process (via social scan, newspaper advertisements, site notices and this document). Scoping information-sharing meeting(s) with regulatory authorities (if required) and IAPs. Compile a scoping report for each mining / prospecting right and submit to IAPs, government authorities, DEA, DEDECT, DMR for review.
PHASE III – EIA/EMP (April 2012 – April 2013)
Complete specialist studies. Compile two EIA/EMP amendment reports (PPM and Sedibelo) and one EIA/EMP report (Magazynskraal). Submit documents to IAPs, government authorities, DEA, DEDECT, DMR for review and decision making. Circulate authority decisions to IAPs registered on the project database.
PHASE IV – WULA (November 2012 onwards)
Compile amendments to PPM and Sedibelo's existing Water Use License Applications (WULAs), compile a WULA for Magazynskraal, and submit the documentation to the Department of Water Affairs.

PARTIES INVOLVED IN THE ENVIRONMENTAL ASSESSMENT PROCESS

IAPs

- * Surrounding landowners, land users and communities
- * Surrounding mines and industries
- * Non-governmental organisations and associations

REGULATORY AUTHORITIES

- * Department of Environmental Affairs (DEA)
- * Department of Mineral Resources (DMR)
- * North West Department of Economic Development, Environment, Conservation and Tourism (DEDECT)
- * Department of Water Affairs (DWA)
- * South Africa Heritage Resource Agency (SAHRA)
- * Department of Rural Development and Land Reform (DRDLR)
- * Department of Agriculture (DA)
- * Department of Public Works, Roads and Transport (DPWRT)
- * North West Parks and Tourism Board (NWPTB)

LOCAL AUTHORITIES

- * Moses Kotane Local Municipality
- * Bojanala Platinum District Municipality
- * Ward councillors

Please let us know if there are any additional parties that should be involved.

MOTIVATION FOR THE PROPOSED PROJECT

Due to the nature of the ore body and the proximity of the mines to one another, it makes economic and mining sense to combine the three separate mining operations into one functioning operation.

Due to the costs associated with transporting domestic, industrial and hazardous wastes from site for disposal at an off-site facility, it is proposed that on-site waste disposal facilities be established on the farms Wilgespruit 2 JQ and Magazynskraal 3 JQ.

POTENTIAL ENVIRONMENTAL ISSUES

The following table provides a preliminary list of **potential** environmental issues that may be caused as a result of the proposed projects. The list is based on issues associated with typical mining projects. Any additional issues raised by IAPs during the scoping phase, will be added to the list. Where required, a suitably qualified specialist will be commissioned to investigate potential impacts.

	POTENTIAL ISSUES	PROPOSED STUDY TEAM
GEOLOGY	* Loss of a mineral resource, pollution potential and potential for Acid Mine Drainage	IBMR, PPM and Richtrau
TOPOGRAPHY	* Change in topography caused by surface infrastructure	SLR
SOILS	* Soil compaction * Soil contamination * Soil erosion	Earth Science Solutions
LAND USE & LAND CAPABILITY	* Potential change in post mining land use	
VEGETATION & ANIMAL LIFE	* Loss of natural vegetation and animal life (aquatic and terrestrial)	Natural Scientific Services
SURFACE WATER	* Impact on surface water quality and quantity	SLR
GROUNDWATER	* Impact on groundwater quality and quantity	AGES
ARCHAEOLOGY	* Impact on archaeological and culturally significant sites (including graves) and palaeontology	Dr Julius Pistorius and BPI for Palaeontological Research
BLASTING & VIBRATIONS	* Damage to surrounding infrastructure	SLR
AIR QUALITY	* Air pollution from roads and the concentrator plant for an extended period of time due to the combined mining operation	Airshed Planning Professionals
NOISE	* Increase in ambient noise levels resulting from transport and concentrator operations for an extended period of time due to combined mining operation	Acusolv
VISUAL	* Visual light disturbance at night for an extended period of time due to the combined mining operation * Visual intrusion of infrastructure	Newtown Landscape Architects
TRAFFIC	* Capacity for increased traffic on public roads for an extended period of time due to the combined mining operation * Road safety	Siyazi
SOCIO-ECONOMIC	* Investment in local and regional economy * Employment opportunities and the influx of migrant workers to the area * Impact on the lifestyle and services of surrounding communities	Managing Transformation Solution

**ITERELENG BAKGATLA MINERAL RESOURCES; PILANESBERG PLATINUM MINES (PTY) LTD; AND
 RICHTRAU NO 123 (PTY) LTD
 PROPOSED DEVELOPMENT OF A COMBINED PLATINUM MINING OPERATION
 REGISTRATION AND RESPONSE FORM FOR INTERESTED AND AFFECTED PARTIES**

DATE		TIME	
PARTICULARS OF THE INTERESTED AND AFFECTED PARTY			
NAME			
POSTAL ADDRESS			
			POSTAL CODE
STREET ADDRESS			
			POSTAL CODE
WORK/ DAY TELEPHONE NUMBER		WORK/ DAY FAX NUMBER	
CELL PHONE NUMBER		E-MAIL ADDRESS	

PLEASE IDENTIFY YOUR INTEREST IN THE PROPOSED PROJECT
PLEASE WRITE YOUR COMMENTS AND QUESTIONS HERE

Please return completed forms to:

**SLR Consulting (Africa) (Pty) Ltd
 (Previously known as Metago Environmental Engineers)**
 Hylton Allison: [hallison@slrconsulting.com](mailto:harrison@slrconsulting.com); Linda Munro: lmunro@slrconsulting.com;
 Fiona Bolton: fbolton@slrconsulting.com
 Fax: (011) 467-0978

APPENDIX A: PILANESBERG PLATINUM MINES – TUSCHENKOMST PIT EXTENSION PROJECT

OVERVIEW

It is proposed that PPM's existing Tuschenkomst pit is extended onto the farms Wilgespruit 2 JQ and Portion 1 of Rooderand 46 JQ, as shown shaded purple in Figure 1. It is expected that the pit extension would increase the life of the pit by up to six years.

Reference numbers

DMR	NW 30/5/1/1/3/2/1/320 EM
DEDECT	NWP/EIA/88/2011
DEA	12/9/11/L750/7

The mining rights for platinum group metals (PGMs) and associated minerals including Chrome on Tuschenkomst 135 JP is held by the PPM. The mining rights for platinum group metals (PGMs) and associated minerals including Chrome on the farms Wilgespruit 2 JQ and Portion 1 of Rooderand 46 JQ are held by the IBMR as discussed in Appendix B of this document. For ease of reference, the approved mine infrastructure at PPM and Sedibelo are shown in Figure 1 and are shaded grey.

In an agreement between PPM and the IBMR, PPM has purchased a portion of the mineral rights for PGMs on the above-mentioned farms to enable the extension of the Tuschenkomst pit. This area is called the Mineral Rights Abandonment Area and is shaded green in Figure 1. Certain components of the approved infrastructure at Sedibelo fall within the Mineral Rights Abandonment Area, namely the tailings storage facility (TSF) and waste rock dump. These facilities will be used as part of PPM's mining operations.

PROPOSED NEW INFRASTRUCTURE AT PPM

The proposed project will require the establishment of stormwater management facilities and the construction of a bridge over the Wilgespruit River to access operations within the Mineral Rights Abandonment Area. In addition, a new telecommunications tower will be established in the Mineral Rights Abandonment Area (See Figure 1).

PROPOSED CHANGES TO EXISTING OPERATIONS AT PPM

The footprint of the existing waste rock dump on Tuschenkomst 135 JP will be increased.

PROPOSED ROAD DIVERSION



The P50-1, an existing provincial road that connects Saulspoort in the east to the R565 in the west, crosses a portion of the proposed open pit extension on farm Rooderand 46 JQ (Figure 1). As a result, it is proposed that the P50-1 road be diverted away from the proposed pit extension. Alternative route options identified to date are illustrated in Figure 1.

ADDITIONAL PROJECT INFORMATION

SERVICES

No additional Power or Water will be required for the proposed project.

Sewage will be treated at the existing sewage treatment facility at PPM. An application will be made to use treated sewage sludge as a fertilizer for rehabilitation at the mine.

Transport of materials to and from the mine will be by road as per the existing operations. Within the site boundary, existing haul roads and pipelines will be used. The transport of run-of-mine (ROM) from the pit to the ROM pad next to the pit will remain as a continuous (24/7) operation.

SUPPORT FACILITIES

All support facilities required for the proposed project will be sourced from PPM's existing operations.

SOCIO-ECONOMIC AND EMPLOYMENT OPPORTUNITIES

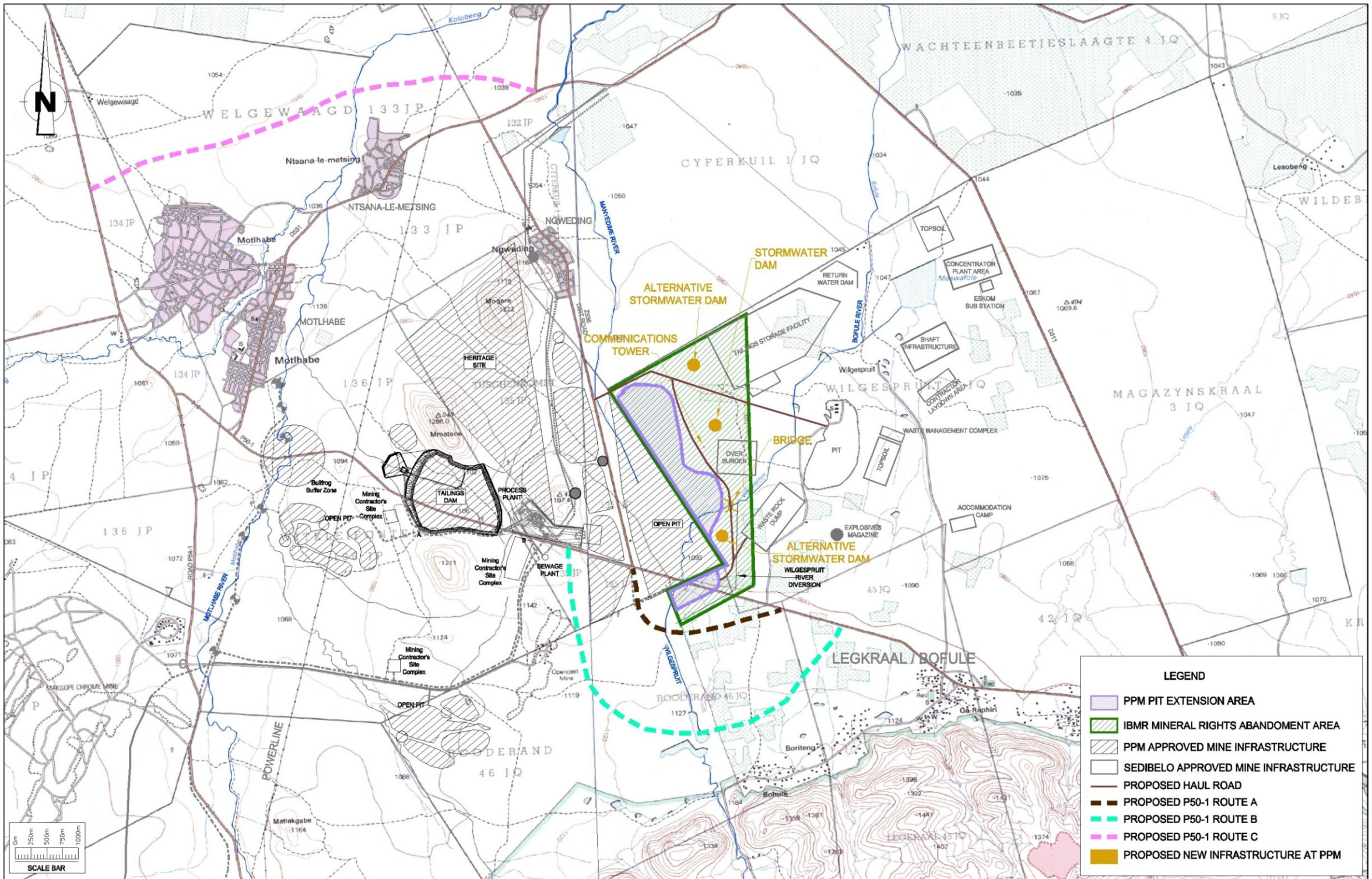
No additional job opportunities will be created as part of this project, however existing employment contracts would be extended. As part of the proposed project, PPM's Social and Labour Plan (SLP) would be amended.

TIMING OF THE PROPOSED PROJECT (IF APPROVED)

The proposed pit extension, new infrastructure, changes to PPM's approved mine operations and diversion of the P50-1 road will only take place if authorisation is obtained from the relevant departments.

ALTERNATIVES BEING CONSIDERED

The process of considering alternatives is on-going and will form part of the scoping, EIA and EMP phases of the environmental assessment process. The number of alternatives for this project is however limited as the location of the pit is fixed due to geological constraints, the ore will be processed at PPM's existing facilities and the mineralised waste will either be disposed of at PPM's existing facilities or the approved facilities at Sedibelo that fall within the Mineral Rights Abandonment Area. A number of alternative routes for the proposed diversion of P50-1 road will be considered during the environmental assessment process.



APPENDIX B: CHANGES TO SURFACE INFRASTRUCTURE AT SEDIBELO PLATINUM MINE

OVERVIEW

Sedibelo is an authorised platinum mining operation owned by IBMR that is in the process of being developed. The anticipated life of mine for the Sedibelo operation is in excess of 25 years. The Sedibelo mining right covers the farms Wilgespruit 2 JQ, Portion 1 of Rooderand 46 JQ, Legkraal 45 JQ and Koedoesfontein 42 JQ. The mining rights for platinum group metals (PGMs) and associated minerals including Chrome on the above farms are held by the IBMR. A portion of the farms Wilgespruit 2 JQ and Portion 1 of Rooderand 46 JQ currently held by the IBMR are to be transferred to PPM as discussed in Appendix A.

Reference numbers	
DMR	NW 3/5/1/2/2/333 MR
DEDECT	NWP/EIA/89/2011
DEA	To be provided

APPROVED INFRASTRUCTURE

In broad terms, the approved Sedibelo operation comprises opencast and underground mining, decline and ventilation shafts, a tailings storage facility (TSF), waste rock dump, topsoil stockpiles, run-of mine pads, explosives magazine, concentrator plant, contractors laydown area, solid and hazardous waste skips and transfer areas, workshops, fuel bays, salvage yard, raw water reservoir, administration buildings, change houses and an accommodation camp.

REPOSITIONING / REDESIGNING OF APPROVED SURFACE INFRASTRUCTURE

The concentrator plant and shaft area will be repositioned to better suit the combined mining operation. In addition, the open pit will be made bigger to access the ore body. As a result of the combined mining operations, the TSF and waste rock dump will be redesigned to cater for additional mineralised waste.

PROPOSED ADDITIONAL SURFACE INFRASTRUCTURE

The proposed additional infrastructure at Sedibelo includes a shaft complex, waste rock dumps, ventilation shafts, stormwater management infrastructure including stormwater dams, channels and berms, two additional sewage treatment plants and a helipad.

WASTE DISPOSAL FACILITY

As part of the proposed project it is planned that a waste disposal facility will be established on Wilgespruit 2 JQ for domestic, industrial and hazardous wastes.

CLOSURE OF THE OPENCAST PIT

The EMP amendment process will also potentially revise the closure objectives for the open cast pit.

ADDITIONAL PROJECT INFORMATION

SERVICES

Water will be sourced from the Magalies Water Board as per the approved EIA/EMP report. Approximately 8 ML of make-up water will be required per day.

Power supply will be sourced from Eskom as per the approved EIA/EMP. Approximately 34 MVA will be required.

Sewage will be treated at the approved sewage treatment facility at Sedibelo, as well as the additional sewage treatment facilities that are proposed as part of this project.

Transport of materials to and from site will be by road. Within the site boundaries, haul roads and pipelines will be used.

SOCIO-ECONOMIC AND EMPLOYMENT OPPORTUNITIES

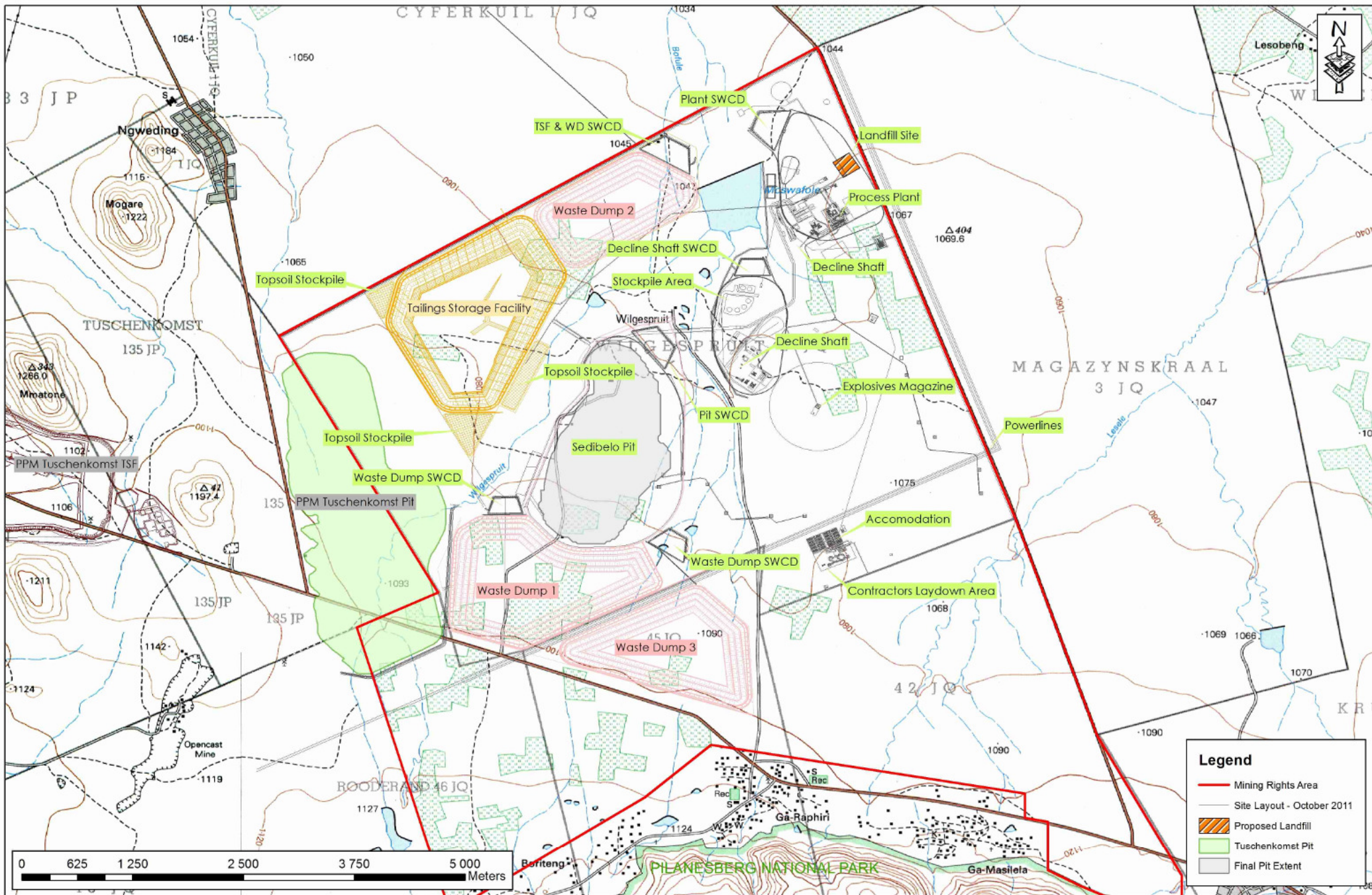
It is estimated that the Sedibelo mining operation (including opencast and underground mining) would employ up to 6 000 people at the peak of the construction phase and approximately 4 000 people during the operational phase of the mine.

TIMING

It is expected that mining and the establishment of surface infrastructure at Sedibelo (as per the approved EIA/EMP report) would commence in the second half of 2012. Additional infrastructure would only be established should authorisation from the various regulatory authorities be granted.

ALTERNATIVES BEING CONSIDERED

The process of considering alternatives is on-going and will form part of the scoping and EIA/EMP phases of the environmental assessment process. It should be noted that limited alternatives exist as surface infrastructure will be positioned to better suit the combined mining operation.



APPENDIX C: THE MAGAZYNSKRAAL PROJECT

OVERVIEW

The Magazynskraal Mine will involve underground mining on the farm Magazynskraal 3 JQ. The prospecting rights for platinum group metals (PGMs) and associated minerals including Chrome on the above farms are held by Richtrau.

INFRASTRUCTURE ON MAGAZYNSKRAAL 3 JQ

Proposed infrastructure that will be established on Magazynskraal 3 JQ includes a TSF, two shaft complexes which will be used to access the underground workings, roads and support infrastructure (Figure 3).

UNDERGROUND MINING

As initial access to the underground workings will be via the mine shafts at Sedibelo, mining on Magazynskraal could be considered an extension of the underground mining operations on Sedibelo. Future mining extensions will take place through vertical shafts. An overview of the proposed production process is outlined in the adjacent box.

ORE PROCESSING

It is proposed that mined ore from Magazynskraal 3 JQ will be transported to the concentrator plant at Sedibelo for processing.

MINERALISED WASTE

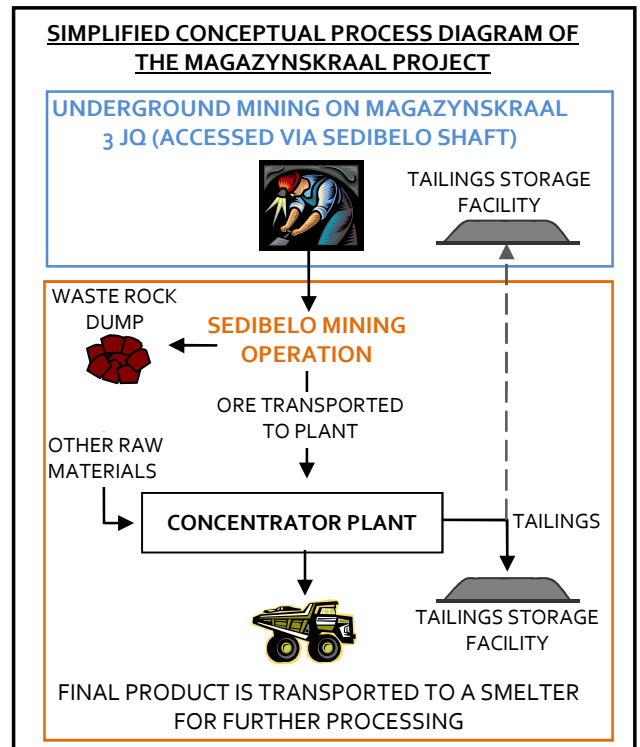
Mineralised waste will either be disposed on the approved tailings storage facility (TSF) at Sedibelo or on the proposed TSF on Magazynskraal 3 JQ. Waste rock dumps will be established at each shaft complex on Magazynskraal 3 JQ.

WASTE DISPOSAL FACILITY

As part of the proposed project it is planned that a waste disposal facility will be established on Magazynskraal 3 JQ for domestic, industrial and hazardous wastes.

Reference numbers

DMR	To be provided
DEDECT	NWP/EIA/go/2011
DEA	To be provided



ADDITIONAL PROJECT INFORMATION

SERVICES

Water will be sourced from the Magalies Water Board via the infrastructure at Sedibelo. Approximately 7 ML of make-up water will be required per day.

Power supply will be sourced from Eskom via the infrastructure at Sedibelo. Approximately 31 MVA will be required.

Sewage will be treated at the approved and proposed sewage treatment facilities at Sedibelo.

Transport of materials to and from site will be by road. Within the site boundaries, haul roads and pipelines will be used.

SOCIO-ECONOMIC AND EMPLOYMENT OPPORTUNITIES

As the mining operation on Magazynskraal will extend the life of the operations at Sedibelo, the employment contracts of the Sedibelo employees will be extended. No additional employment opportunities will be created as part of the Magazynskraal operation.

SUPPORT FACILITIES

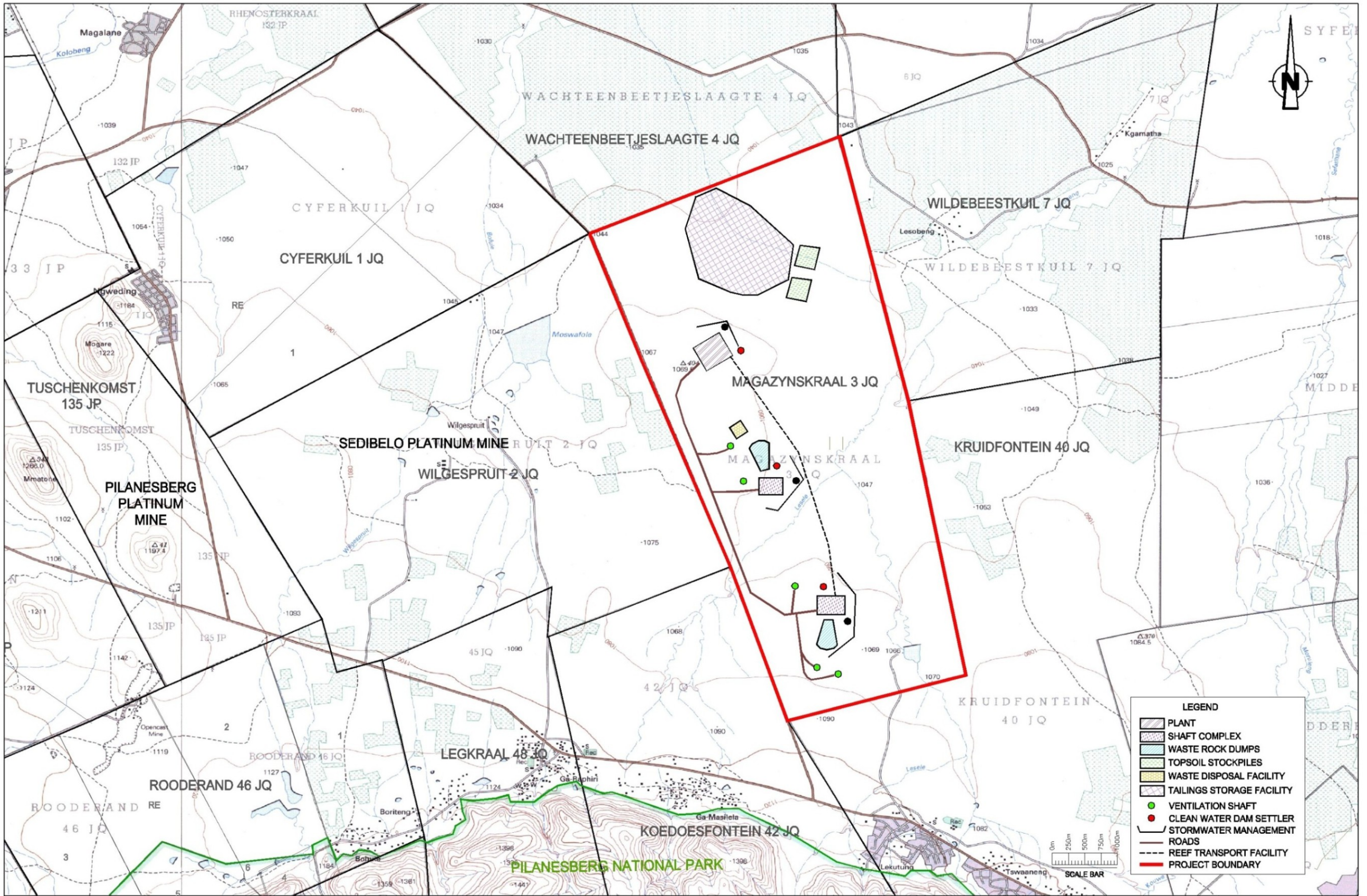
All support facilities required for the Magazynskraal Project will be sourced from the approved facilities at Sedibelo.

TIMING OF THE PROJECT (IF APPROVED)

If approved, mining on Magazynskraal 3 JQ will commence when underground mining at Sedibelo reaches the Wilgespruit / Magazynskraal farm boundary. It is expected that this will occur after approximately 5 years of underground mining at Sedibelo. The planned life of mining for the Magazynskraal Project is approximately 25 years.

ALTERNATIVES BEING CONSIDERED

The process of considering alternatives is on-going and will form part of the scoping and EIA/EMP phases of the environmental assessment process.



ITERELENG BAKGATLA MINERAL RESOURCES (PTY) LTD,
PILANESBERG PLATINUM MINES (PTY) LTD LE
RICHTRAU NO 123 (PTY) LTD

MAITSHETLEGO A LEKWALO LA TSHEDIMOSITSO LA TIRO E E KOPANETSWENG YA GO
EPA POLATINAMO GAUFI LE PHAKA YA BOSETSHABA YA PILANESBERG

Tlhakole 2012

MATSENO

Jaaka karolo ya tumalelano e e kopanetsweng ya go dira, Itereleg Bakgatla Mineral Resources (Pty) Ltd (IBMR), Pilanesberg Platinum Mines (Pty) Ltd le Richtrau No 123 (Pty) Ltd (Richtrau) di tshikinya/tshitshinya go tlabolola diporojeke tse tharo tse di farologaneng, tse di ka dirang jaaka tiro e e kopanetsweng ya moepo mo bokone ba Phaka ya bosetshaba ya Pilanesburg, mo Masepaleng wa Legae wa Moses Kotane wa Masepala wa Kgaolo ya Polatinamo ya Bojala, mo Porofenseng ya Bokonebophirima. Tiro ya moepo e tla akaretsa dikgaolo di le tharo tsa moepo, e leng ya Pilanesburg Platinum Mine (PPM) o o dirang mo sebakeng se, Moepo wa Polatinamo wa Sedibelo o o tlabololwang mo sebakeng se, le Moepo o o tshikinngwang wa Magazynskraal. Dintlha tsa go ya pele di tlhagisiwa fa tlase.

PPM ke moepo o o leng teng wa mosima o o atlhameng wa polatinamo mo dipolaseng tsa Tuschenkomst 135 JP le Witkleifontein 136 JP. Go tshikinngwa go re mosima o o leng teng o o atlhameng o o mo polaseng ya Tuschenkomst o katoletse mo dipolaseng tsa Wilgespruit 2 JQ le Rooderand 46 JQ. Ditshwanelo tsa moepo ke tsa Boynton Investments (Pty) Ltd. Dintlha tsa go ya pele di tlhagisiwa mo **Mametlelelong ya A**.

Sedibelo ke tiro ya moepo wa polatinamo o o atlhameng le wa go epa ka fa tlase ga lefatshe, o o mo polaseng ya Wilgespruit 2 JQ, Rooderand 46 JQ, Legkraal 45 JQ, Koedoesfontein 42 JQ, o o tlabololwang mo sebakeng se. Go tshikinngwa go re sebopego sa popetheo se se fa godimo se fetolwe, go siamela sentle ditiro tse di kopaneng tsa moepo. Ditshwanelo tsa moepo wa Sedibelo ke tsa IBMR. Dintlha tsa go ya pele di tlhagisiwa mo **Mametlelelong ya B**.

Magazynskraal ke tiro ya moepo wa ka fa tlase ga lefatshe e e tshikinngwang mo polaseng ya Magazynskraal 3 JQ. Ka ntlha ya sebopego sa boalo ba manya, go rulagannwa go re a fitlhelwe le go siamisiwa ka go dirisa popegotheo ya moepo o o mabapi wa Sedibelo. Ditshwanelo tsa go tlhotlhomisa di tshotswe ke Richtrau. Dintlha tsa go ya pele di rebolwa mo **Mametlelelong ya C**.

TIRO YA TETLA YA TIKOLOGO

Pele go simololwa ka porojeke e e tshikinngwang, go batlega tshekatsheko ya go amega ga tikologo, go akaretswa kgato ya go dira kopo, kgato ya patliso le kgato ya tshekatsheko ya kamego ya tikologo le ya lenaneo la tsamaiso ya tikologo. Tshekatsheko e tla diriwa go ya ka Molao wa tlabololo ya motswedi wa minerala le peteroliamo wa bo, 28 wa 2002, Molao wa bosetshaba wa taolo ya tikologo wa bo, 107 wa 1998 (NEMA), le Taolo ya bosetshaba ya tikologo: Molao wa masalela wa bo, 59 wa 2008. Melao e, e a dira ka ntlha ya fa porojeke e akaretsa ditiro tsa moepo, mme e akaretsa ditiro tse di kwadilweng go ya ka Molao wa bosetshaba wa taolo ya tikologo (NEMA) le Taolo ya bosetshaba ya tikologo: Molao wa masalela (NEMWA). Mo godimo ga moo, porojeke nngwe le nngwe e tla tlhoka tetla go ya ka Molao wa bosetshaba wa metsi wa bo 36 wa 1998. Tlhaloso ya tiro e tlhagisiwa mo letlhareng la bo 2 la lekwalo le.

SLR Consulting (Africa) (Pty) Ltd (SLR), e leng setlamo se se ikemetseng sa bagakolodi ba tikologo (se pele se neng se itsege ka Metago Environmental Engineers (Pty) Ltd), se thapilwe go laola tiro ya tikologo.

LEFELO LE TIRO YA GO EPA E LENG MO GO LONA

Porofense: Porofense ya Bokonebophirima/North West Province

Lefelo: Go tswa mo ditseleng tsa P50-1 le D5111, bokana ka 3km mo bokone ba Phaka ya Bosetshaba ya Pilanesberg/Pilanesburg National Park.

Dipolasa: Tuschenkomst 135 JP, Wilgespruit 2 JQ, Rooderand 46 JQ, Legkraal 45 JQ, Koedoesfontein 42 JQ le Magazynskraal 3 JQ

Bothati ba legae: Masepala wa legae wa Moses Kotane

SEABE SA GAGO KE SE FE?

O supilwe jaaka Moamegi le Mokgatlhegi, yo a ka batlang go sedimosetswa ka porojeke, le go nna le ditshwaelo mo tirong ya tetla ya tikologo. O tla nwa tshono ya go ntsha maikutlo mo dikopanong tsa go arogana tshedimosetso, le ka go thadisa le go tshwaela mo dipegelong tsa tikologo.

KA MO O TSIPOGANG KA GONA

Ditsibogelo tsa lekwalo le, di ka diriwa ka letlhare le le gokeletsweng la ditshwaelo, ka kgolagano le batho ba ba kwadilweng fa tlase le/kgotsa mo dikopanong tsa setshaba.

BA O KA GOLAGANANG LE BONA

SLR

Tel: (011) 467-0945 * Fax: (011) 467-0978

PPM Tuschenkomst Pit Extension:

Hylton Allison: hallison@slrconsulting.com

Sedibelo Infrastructure Changes:

Linda Munro: lmunro@slrconsulting.com

Magazynskraal Project:

Fiona Bolton: fbolton@slrconsulting.com

MAITLHOMO A LEKWALO LE

Lekwalo le, le rulagantswe ke SLR go go sedimosetsa ka:

- * Porojeke e e tshikinngwang/tshitshinngwang;
- * Tiro e e tla latelwang ya go sekasekiwa ga tikologo;
- * Go amega go go ka nngang teng ga tikologo; le
- * Ka mo wena, jaaka Mokgatlhegi le Moamegi o ka nngang le ditshwaelo ka gona mo tirong e e fa godimo.

Ka ntlha ya fa go tshikinngwa go re diporojeke tse tharo di dire dira jaaka tiro e e kopaneng ya moepo, go tla diriwa tiro e le nngwe ya tikologo, go akaretse diporojeke tseno ka boraro. Le fa go le jalo, go tla diriwa sete ya dikwalo tse di farologaneng go emanokeng/tshegetsatshe ditshwanelo dingwe le dingwe tsa tlhotlhomiso/moepo. Mo ntlheng e, go tla tlhagisiwa pegelo ya patlisiso ya porojeke nngwe le nngwe; PPM e tla tlhoka tlhabololo ya Tshekatsheko ya kamego ya tikologo le Lenaneo la taolo ya tikologo, go tlamela mosima o o atolositsweng; Sedibelo e tla tlhoka le Lenaneo la taolo ya tikologo, go tlamela diphetogo le dikatoloso tsa popegotheo e e fa godimo; mme Magazynskraal e tla tlhoka go tlamela diphetogo le dikatoloso tsa popegotheo e e fa godimo; fa Magazynskraal e tla tlhoka Tshekatsheko ya kamego ya tikologo le Lenaneo la tsamaiso ya tikologo, go tlamela ditiro tse di tshikinngwang / tshitshinngwang.

Tiro ya tikologo e tlhagisa tshedimosetso ya porojeke le tikologo e e diriwang mo go yona; e supa ka kgoaganano le Baamegi le Bakgatlhegi, ditlamorago tse di ka nnang teng, tse di amogelesegang le tse di sa amogelesegang tsa porojeke; le go bega ka dikgato tsa taolo tse di tlhokegang, go fokotsa dikamego go nna mo maemong a a amogelesegang. Dikgato tse di ka nneng tsa tsewa le dinako tse di beilweng di rebolwa fa tlase.

DIKGATO MO TIRONG YA TSHEKATSHEKO

KGATO YA I – Kgato ya go dira kopo (Diphalane 2011)

Go diriwa ga disete di le tharo tse di farologaneng tsa dikopo (go ya ka NEMA le NEMWA) mo Lefapheng la merero ya tikologo le Lefapha la tlhabololo ya ekonomi, tikologo, tshomarelo le bojanala.
Go itsisiwe ga Lefapha la metswedi ya minerala le go neelwa ga kopo.

KGATO YA BO II – Tiro ya patlisiso (Diphalane 2011 – Mopitlwe 2012)

Go itsisiwe ga bathati ba bangwe ba taolo le Baamegi le Bakgatlhegi ka diporojeke le tiro ya go sekaseka tikologo (ka diphasalatso tsa dikurata, dikitsiso tsa mo lefelong, lekwalo le, le dikgolaganano le setshaba)
Dikopano tsa go arogana tshedimosetso ya patlisiso le bathati ba taolo (fa go tlhokega) le Baamegi le Bakgatlhegi.
Go diriwa ga pegelo ya patlisiso ya moepo mongwe le mongwe/ ditshwanelo tsa tlhotlhomiso le go e naya Bakgatlhegi le Baamegi, bathati ba mmuso, Lefapha la merero ya tikologo, Lefapha la tlhabololo ya ikonomi, tikologo, tshomarelo le bojanala le Lefapha la metswedi ya dimineral, go e lebisisa.

KGATO YA BO III – EIA/EMP (Moranang 2012 – Moranang 2013)

Go digelwa ga dipatlisiso tsa boitseanape.
Go diriwa ga dipegelo di le pedi tse di tlhabolotsweng tsa Tshekatsheko ya kamego ya tikologo le Lenaneo la tsamaiso ya tikologo (PPM le Sedibelo) le pegelo e le nngwe ya Tshekatsheko ya kamego ya tikologo le Lenaneo la tsamaiso ya tikologo ya (Magazynskraal).
Go naya dikwalo Baamegi le Bakgatlhegi, bothati ba mmuso, Lefapha la merero ya tikologo, Lefapha la tlhabololo ya ekonomi, tikologo le bojanala, Lefapha la metswedi ya dimineral, go lebisisiwa le go tsaya tshwetso.
Go naya Baamegi le Bakgatlheng ba ba kwadisitsweng mo lenaneong la dintlha tsa porojeke, tshwetso ya bathati.

KGATO IV – Kopo ya tiriso ya metsi (Ngwanaitsele 2012 go ya pele)

Go dira ditlhabololo mo dikopong tse di leng teng tsa tiriso ya metsi tsa PPM le Sedibelo, go dira kopo ya Laesense ya Tiriso ya metsi ya Magazynskraal, le go neela Lefapha la merero ya metsi dikwalo.

MAKALA A A AMEGANG MO TIRONG YA GO SEKASEKA TIKOLOGO

BAKGATLHEGI LE BAAMEGI

- * Beng ba lefatshe ba ba mo tikologong, badirisi ba lefatshe le ditshaba
- * Meepo e e mo tikologong le madirelo
- * Mekgatlho e e seng ya mmuso le ditlamo

BATHATI BA TAOLO

- * Lefapha la merero ya tikologo (DEA)
- * Lefapha la metswedi ya dimineral (DMR)
- * Lefapha la Bokonebophirima la tlhabololo ya ikonomi, tikologo, tshomarelo le bojanala (DEDECT)
- * Lefapha la merero ya metsi (DWA)
- * Boemedi ba Aforika Borwa ba metswedi ya boswa (SAHRA)
- * Lefapha la tlhabololo ya magae le phetolo ya lefatshe (DRDLR)
- * Lefapha la temothuo (DA)
- * Lefapha la ditiro tsa setshaba, ditsela le dipalangwa (DPWRT)
- * Boto ya Bojanala le Diphaka ya Bokonebophirima (NWPTB)

BOTHATI BA LEGAE

- * Masepala wa legae wa Moses Kotane
- * Masepala wa kgaolo ya Bojanala ya Polatinamo
- * Bakhanselara ba kgaolotlhopho

Tsweetswee re itsise fa go na le makala mangwe a tlaeletso a a tshwanetseng a amega.

TLHABEGO YA POROJEKE E E TSHIKINNGWANG/TSHITSHINNGWANG

Ka ntlha ya sebopego sa karolo ya manya le go bapana ga meepo, go a utlwala go ya ka ekonomi go kopanya meepo e meraro e e farologaneng, go nna tiro e le nngwe.

Ka ntlha ya ditshenyegelo tse di golaganngwang le go rwalwa ga masalela a legae, a bodirelo le a a kotsi, go tshikinngwa go re go tlhomiwe tshiamelo e e mo lefelong ya go latlhela masalela, mo dipolaseng tsa Wilgespruit 2 JQ le Magazynskraal 3 JQ.

DINTLHA TSE DI KA NNANG TENG TSA TIKOLOGO

Lenaneo le le latelang le tlhagisa lenaneo la tshimololo la dintlha **tse di ka nnang** teng tse di ka bakegang ka ntlha ya diporojeke tse di tshikinngwang/tshitshinngwang. Lenaneo le ikaegile ka dintlha tse di golaganeng le diporojeke tsa moepo. Dintlha dingwe le dingwe tsa tlaletso tse di tlhagisiwang ke Bakgatlhegi le Baamegi mo kगतong ya patlisiso di tla tlaletswa mo lenaneong. Fa go tlhokegang teng moitsenape yo a rutegileng ka tshwanelo o tla thapiwa go batlisisa kamego e e ka nnang teng.

	DINTLHA TSE KA NNANG TENG	SETLHOPHA SA PATLISISO SE SE TSHIKINTSWENG/TSHITSHINTSWENG
JIOLOJI/SEBOPEGO SA LEFATSHE	* Go fela ga metswedi ya minerala, kgonego ya kgotlhelego le kgonego ya go tsena mo mmung ga esiti ya moepo.	IBMR, PPM le Richtrau
TOPOKERAFI/TLHALOSO YA KGAOLO	* Phetogo ya sebopego sa kgaolo e e bakiwang ke popegotheo e e fa godimo	SLR
MEBU	* Go tampega/papatlelega ga mmu * Kgotlhelego ya mmu * Kgogolego ya mmu	Earth Science Solutions
TIRISO YA LEFATSHE & BOKGONI JWA LEFATSHE	* Kgonego ya phetogo morago ga go re lefatshe le dirisetswe moepo	
DIMELA & BOTSHELO JWA DIPHOLOGOLO	* Tatlhego ya dimela tsa tlhago le botshelo jwa diphologolo (tsa metsi le tsa lefatshe)	Natural Scientific Services
METSI A A FA GODIMO	* Go amega ga boleng le bogolo ba metsi a a fa godimo	SLR
METSI A A MO MMUNG	* Go amega ga boleng le bogolo ba metsi a a mo mmung	AGES
AKHIOLOJI/MAROPE	* Go amega ga marope le mefelo a a botlhokwa a ngwao (go akaretswa mabitla) le tsa botshelo jwa bogologolo tala/palaeontoloji	Dr Julius Pistorius and BPI for Palaeontological Research
THUNYO & DITHOROMO	* Go senyega ga popegotheo e e mo tikologong	SLR
BOLENG JWA MOWA	* Kgotlhelego ya mowa e e bakiwang ke ditsela le bodirelo jwa go siamisa diminerala/khonsentereita mo pakeng e telele, ka ntlha ya ditiro tse di kopaneng tsa moepo	Airshed Planning Professionals
LERATLA/MODUMO	* Koketsego ya maemo a leratla le le bakiwang ke dipalangwa le ditiro tsa bodirelo ba tshiamiso ya diminerala/khonsentereita mo pakeng e telele, ka ntlha ya ditiro tse di kopaneng tsa moepo.	Acusolv
PONO	* Kgoreletsego ya pono e e bakiwang ke dipone mo bosigong mo pakeng e telele ka ntlha ya ditiro tse di kopaneng tsa moepo * Kgoreletso ya pono e e bakiwang ke popegotheo	Newtown Landscape Architects
PHARAKANO	* Go oketsega ga pharakano mo ditseleng tsa setshaba mo pakeng e telele ka ntlha ya ditiro tse di kopaneng tsa moepo * Pabalasego ya mebila	Siyazi
LEAGO-EKONOMI	* Peeletso mo ekonoming ya legae le ya kgaolo * Ditshono tsa ditiro le go thologela mo kgaolong ga badiri ba ba tswang kwa ntle * Go amega ga mokgwa wa botshelo le ditirelo tsa ditshaba tse di mo tikologong	Managing Transformation Solution

ITERELENG BAKGATLA MINERAL RESOURCES; PILANESBERG PLATINUM MINES (PTY) LTD;

LE RICHTRAU NO 123 (PTY) LTD

TSHIKINYO/TSHITSHINYO YA TLHABOLOLO YA TIRO E E KOPANETSWENG YA GO EPA POLATINAMO

FOROMO YA KWADISO YA MAKALA A A NANG LE KGATLHEGO LE A A AMEGANG

LETLHA		NAKO	
DINTLHA TSA BAAMEGI LE BAKGATLHEGI			
LEINA			
ATERESE YA POSO			
		KHOUTU YA POSO	
ATERESE YA MMILA			
		KHOUTU YA POSO	
TIRO/ LEGAE NOMORE YA TELEFOUNU		NOMORE YA FEKESE YA TIRO/ LEGAE	
NOMORE YA SELEFOUNU		ATERESE YA E-MAIL	

TSWEETSWEE SUPA SE O SE KGATLHEGELANG MO POROJEKENG E E
TSHIKINNGWANG/TSHITSHINNGWANG

TSWEETSWEE KWALA DITSHWAELO TSA GAGO LE DIPOTSO FA

Tsweetswee busetsa diforomo tse di tladitsweng go:

SLR Consulting (Africa) (Pty) Ltd

(e pele e neng e le Metago Environmental Engineers)

Hylton Allison: hallison@slrconsulting.com; Linda Munro: lmunro@slrconsulting.com;

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Fax: (011) 467-0978

MAMETLELELO A: PILANESBERG PLATINUM MINES –POROJEKE YA TUSCHENKOMST KATOLOSO YA MOSIMA

TSHOBOLOKO

Go tshikinngwa/tshitshinngwa go re mosima o o leng teng wa PPM wa Tuschenkomst, o katolosetswe mo dipolaseng tsa Wilgespruit 2 JQ le Karolo ya 1 ya Rooderand 46 JQ, e e supiwang ka go tshasiwa mmala o o phepole mo Setshwantshong sa 1. Go solofetswe fa katoloso ya mosima e tla oketsa botshelo jwa mosima ka dingwaga tse di fitlhang go di le thataro.

Dinomore tsa kaelo	
DMR	NW 30/5/1/1/3/2/1/320 EM
DEDECT	NWP/EIA/88/2011
DEA	12/9/11/L750/7

Ditshwanelo tsa go epa tsa setlhopho sa dimetale tsa polatinamo le diminerala tse di tsamaisanang go akaretswa koroumu mo Tuschenkomst 135 JP ke tsa PPM. Ditshwanelo tsa go epa diminerala tsa setlhopho sa dimetale tsa polatinamo le diminerala tse di tsamaisanang go akaretswa koroumu mo dipolaseng tsa Wilgespruit 2 JQ le Karolo ya 1 ya Rooderand 46 JQ ke tsa IBMR, jaaka go tlhalositswe mo Mametlelelong ya B ya lekwalo le. Go bonwa bonolo, popegotheo e e amogetsweng ya moepo wa PPM le Sedibelo, e supiwa mo Setshwantshong sa 1, mme e tshasitswe ka bontsho le ka bo-kerei ka go farologana.

Mo tumallanong magareng ga PPM le IBMR, PPM e reketse PGM karolo ya ditshwanelo tsa minerala mo dipolaseng tse di umakilweng fa godimo go kgonagatsa katoloso ya mosima wa Tuschenkomst. Kgaolo e, e bidiwa Kgaolo e ditshwanelo tsa yona tsa minerala di tlogetsweng, mme e tshasitswe ka mmala o motala mo Setshwantshong sa 1. Dikarolo dingwe tsa popegotheo e e amogetsweng kwa Sedibelo, di wela mo teng ga Kgaolo e go tlogetsweng ditshwanelo tsa yona tsa diminerala, mme tsona ke lefelo la poloko ya masalela, le thotobolo ya go latlhela matlapa a a sa batlegeng. Ditshiamelo tse di tla dirisiwa jaaka karolo ya ditiro tsa go epa tsa PPM.

POPEGOtheo E Ntshwa E E TSHIKINNGWANG/TSHITSHINNGWANG KWA PPM

Porojeke e e tshikinngwang e tla tlhoka go tlhomiwa ga tshiamelo ya taolo ya metsi a pula le go tlhomiwa ga letsibogo mo nokeng ya Wilgespruit, go fithelela ditiro mo teng ga Kgaolo e go tlogetsweng ditshwanelo tsa yona tsa minerala. Mo godimo ga moo, go tla tlhomiwa torio e ntshwa ya tlhaeletsano mo Kgaolong e ditshwanelo tsa yona tsa menirala di tlogetsweng (leba Setshwantsho sa 1).

DIPHETOGO TSE DI TSHIKINTSWENG/TSHITSHINTSWENG MO DITIRONG TSE DI LENG TENG KWA PPM

Lefelo la jaanong la thotobolo ya go latlhela masalela a matlapa mo Tuschenkomst 135 JP le tla okediwa.

TSHIKINYO/TSHITSHINYO YA PHAPOSO YA TSELA



Tsela e e leng teng ya P50-1 ya porofense, e e tshwaraganyang Saulspoort kwa botlhaba le R565 kwa bophirima, e kgabaganya karolo e e tshikinngwang ya katoloso ya mosima o o bulegileng, mo polaseng ya Rooderand 46 JQ (Setshwantsho sa 1). Ka ntlha ya moo, go tshikinngwa go re tsela ya P50-1 e faposiwe mo katolosong e e tshikinngwang ya mosima. Ditsela tse dingwe tse di supilweng go fitlha fa di bontshiwa mo Setshwantshong sa 1.

TSHEDIMOSETSO YA TLALELETSO YA POROJEKE

DITIRELO

Ga go ne go tlhokega Maatla/Motlakase kgotsa Metsi a tlaleletso mo porojekeng e e tshikinngwang.

Digweregwere di tla siamisiwa mo lefelong le le ntseng le le teng la digweregwere mo PPM. Go tla diriwa kopo ya go siamisa seretse sa digweregwere go nna monontsha mo tsosolosong ya moepo.

Thwalo ya diminerala go ya le go tswa mo moepong e tla diriwa ka tsela go ya ka ditiro tse di ntseng di le teng. Ditsela tse di dirisetswang thwalo le mela ya dipeipi e e leng teng mo teng ga molelwane wa lefelo di tla dirisiwa. Go tsamaisiwa ga materiale o o iseng o thugiwe (ROM) go tswa mo mosimeng, go ya mo lefelong la materiale o o iseng o thugiwe (ROM) le le gaufi le mosima, e tla nna tiro e e tswelletseng ya (24/7).

DITSHIAMELO TSA KEMONOKENG

Ditshiamelo tsotlhe tsa tshegetso tse di tlhokegang mo porojekeng e e tshikinngwang di tla bonwa mo ditirong tse di leng teng tsa PPM.

DITSHONO TSA LEAGO – EKONOMI LE TSA GO THAPIWA

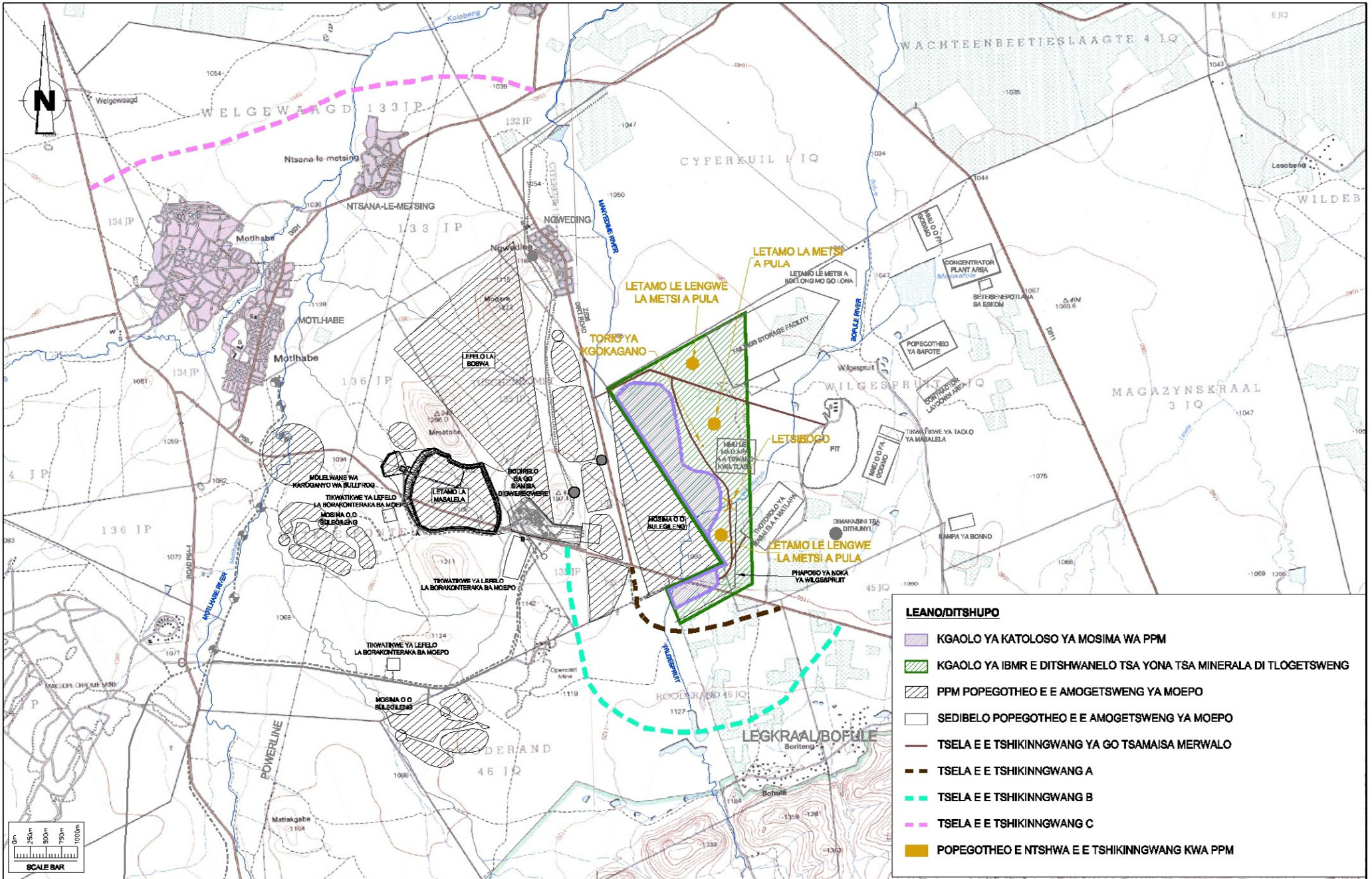
Ga go ditshono tsa tlaleletso tsa ditiro tse di tla tlholwang jaaka karolo ya porojeke e mme le fa go le jalo, dikonteraka tse di leng teng tsa thapo di tla katolosiwa. Leano la leago le la ditiro la PPM le tla tlhabololwa jaaka karolo ya porojeke e e tshikinngwang.

NAKO YA POROJEKE E E TSHIKINNGWANG/TSHITSHINNGWANG (FA E AMOGETSWE)

Katoloso ya mosima e e tshikinngwang, popegotheo e ntshwa, diphetolo tsa ditiro tse di amogetsweng tsa PPM le phetolo ya tsela ya P50-1 di tla diragala fela fa go bonwe tetla go tswa mo mafapheng a a maleba.

TSE DINGWE TSE DI AKANNGWANG

Tiro ya go akanya tse dingwe tse di ka diriwang e tswelletswe mme e tla nna karolo ya patlisiso, dikgato tsa Tshakatsheko ya go amega ga tikologo (EIA) le tsa Lenaneo la tsamaiso ya tikologo (EMP). Palo ya tse dingwe tse di ka diriwang mo porojekeng e nnye, ka ntlha ya fa lefelo le mosima o leng mo go lona le golagana le mabaka a jiloloji mme manya a tla rulaganngwa mo ditshiamelong tse di leng teng tsa PPM, fa masalela a a ntshitsweng diminerala a ka nne a latlhelwa mo ditshiamelong tse di leng teng tsa PPM, kgotsa mo ditshiamelong tse di amogetsweng tsa masalela kwa Sedibelo, tse di welang mo teng ga Kgaolo ya ditshwanelo tsa diminerala tse di tlogetsweng. Ditsela tse dingwe tse di ka dirisiwang tsa phaposo e e tshikinngwang ya tsela ya P50-1, di tla elwatlhoko mo tirong ya tshakatsheko ya tikologo.



MAMETLELELO B: DIPHETOLO TSA POPEGO THEO E E FA GODIMO KWA MOEPONG WA POLATINAMO WA SEDIBELO

TSHOBOLOKO

Sedibelo ke moepo o o letlilweng wa polatinamo wa IBMR o o tshwaraganeng le go tlhabololwa. Sebaka sa go dira se se solofetsweng sa moepo wa Sedibelo ke sa go feta dingwaga di le 25. Ditshwanelo tsa moepo tsa Sedibelo di akaretsa dipolasa tsa Wilgespruit 2 JQ, Karolo ya 1 ya Rooderand 46 JQ, Legkraal 45 JQ le Koedoesfontein 42 JQ. Ditshwanelo tsa go epa tsa setlhophsa sa dimetale tsa polatinamo le diminerala tse di tsamaisanang go akaretswa koroumu mo dipolaseng tse di fa godimo ke tsa IBMR. Karolo ya dipolasa tsa Welgespruit 2JQ le karolo ya 1 ya Rooderand 46 JQ tse mo sebakeng seno e leng tsa IBMR, di sitlhamololelwa mo go PPM, jaaka go tlhalositswe mo Tshobolokong ya A.

Dinomore tsa kaelo	
DMR	NW 3/5/1/2/2/333 MR
DEDECT	NWP/EIA/89/2011
DEA	To be provided

POPEGO THEO E E AMOGETSWENG

Ka kakaretso, tiro e e amogetsweng ya Sedibelo e dirwa ke moepo wa mosima o o bulegileng le wa ka fa tlase ga lefatshe, dišafote tsa go ya tlase le tsa mowa, ditshiamelo tsa go boloka masalela (TSF), thotobolo ya masalela a matlapa, dithotobolo tsa mmu o o fa godimo, dimakasini tsa dithunyi, bodirelo ba tshiamiso ya diminerala/khonsentereita, karolo ya borakonteraka, dikarolo tsa masalela a dithata (soliti) le a a kotsi le tsa go teransefera/fetisa, dikarolo tsa go direla, mafelo a dituki, lefelo la go boloka, bodutelo jwa metsi a a leswe, dikago tsa tsamaiso, matlo a boithusetso le dikampa tsa bonno.

GO BEWA SEŠWA/ GO RULAGANNWA SEŠWA GA POPEGO THEO E E AMOGETSWENG YA FA GODIMO

Bodirelo jwa tshiamiso ya diminerala/khonsentereita le kgaolo ya šafote di tla tlhomiwa sešwa, go tshwanela botoka ditiro tsa moepo tse di kopaneng. Mo godimo ga moo, mosima o o bulegileng o tla godisiwa go fitlhelela fa manya a leng teng. Ka ntlha ya ditiro tse di kopaneng, ditshiamelo tsa go boloka masalela le thotobolo ya masalela a matlapa di tla rulaganngwa sešwa, go tlamela masalela a tlaleletso a diminerala.

POPEGO THEO YA TLALELETSO YA FA GODIMO E E TSHIKINNGWANG/TSHITSHINNGWANG

Popegotheo ya tlaleletso e e tshikinngwang/tshitshinngwang kwa Sedibelo e akaretsa tikwatikwe ya šafote, dithotobolo tsa masalela a matlapa, dišafote tsa mowa, popegotheo ya taolo ya metsi a pula go akaretswa matama a metsi a pula, dikanala le dithibedi, madirelo a le mabedi a tlaleletso a paakanyo ya digweregwere le botsuramelolelo ba helikoptara.

TSHIAMELO E LESWE LE LATLHELWANG MO GO YONA

Jaaka karolo ya porojeke e e tshikinngwang go rulagantswe go re go tlhomiwe tshiamelo kwa Wilgespruit 2 JQ ya go latlhela leswe la mo gae, la madirelo le leswe le le kotsi.

GO TSWALELWA GA MOSIMA WA MOEPO O O BULEGILENG

Go na le kgonagalo gape ya go re tiro ya tlhabololo ya Lenaneo la tsamaiso la tikologo e boeletse maikemisetso a go tswalela mosima wa moepo o o bulegileng.

TSHEDIMOSSETSO YA TLALELETSO YA POROJEKE

DITIRELO

Metsi a tla bonwa go tswa go Boto ya metsi ya Magalies go ya ka pegelo e e amogetsweng ya Tshakatsheko ya go amega ga tikologo/EIA le Pegelo ya tsamaiso ya tikologo/EMP. Metsi a ka nnang 8 ML a tla batlega ka letsatsi.

Maatla/Motlakase o tla bonwa mo go Eskom go ya ka Tshakatsheko e e amogetsweng ya go amega ga tikologo/EIA le Lenaneo la tsamaiso ya tikologo/EMP. Go tla tlhokega bokanaka 34 MVA.

Digweregwere di tla siamisiwa mo lefelong la go siamisa digweregwere le le amogetsweng kwa Sedibelo, mmogo le ditshiamelo tsa tlaleletso tsa tshiamiso ya digweregwere tse di tshikinngwang, jaaka karolo ya porojeke e.

Thwalo ya materiale go ya le go tswa mo lefelong e tla dirwa ka tselo. Go tla dirisiwa ditsela tsa thwalo le mela ya dipeipi mo teng ga molelwane wa lefelo.

LEAGO – EKONOMI LE DITŠHONO TSA DITIRO

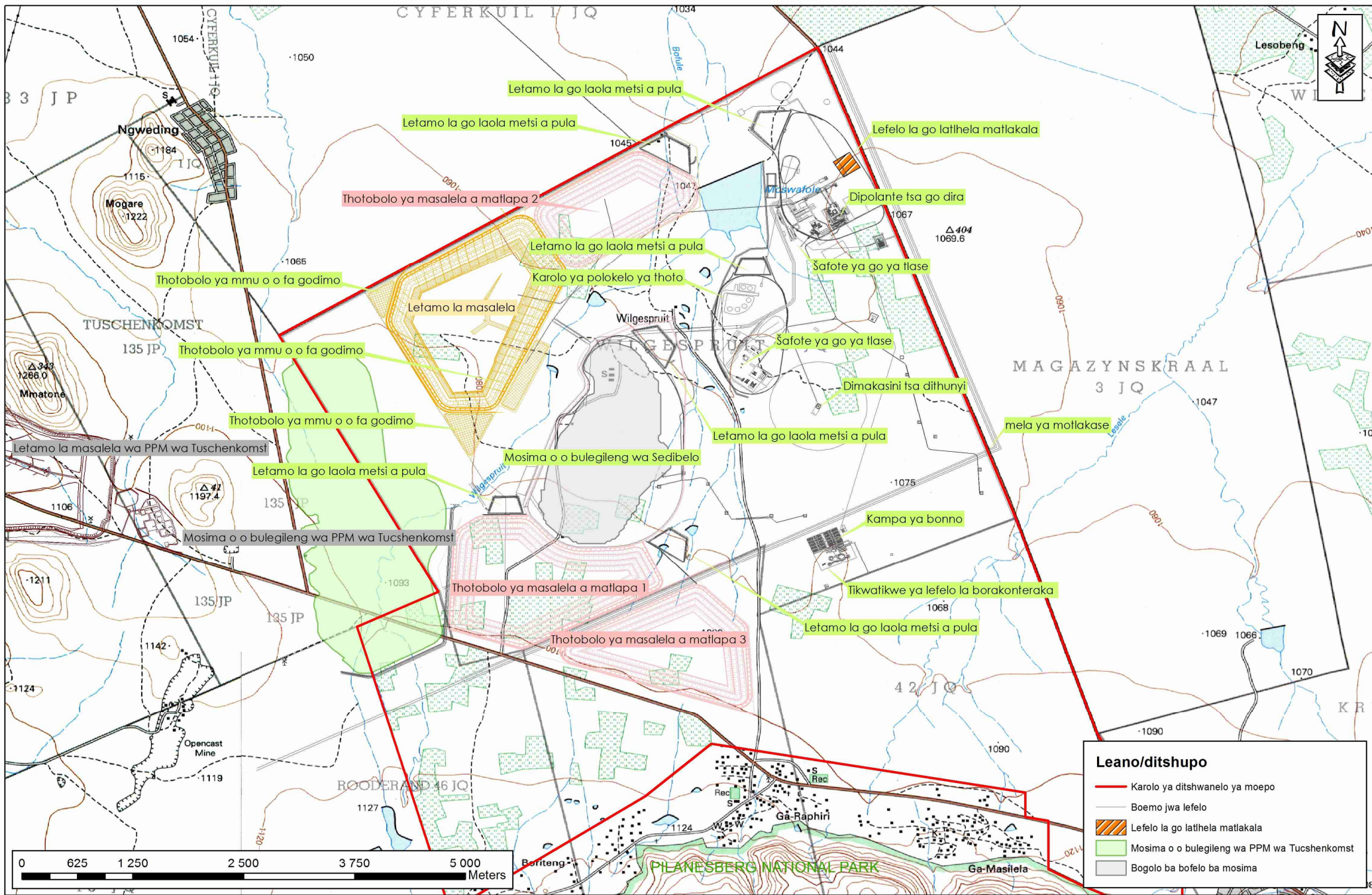
Go fopholetswa fa moepo wa Sedibelo (go akaretswa mosima o o bulegileng le go epa mo teng ga lefatshe) o tla thapa batho ba ba fitlhang go 6 000 mo kगतong e kgolo ya kago le batho ba ba ka nnang 4 000 mo kगतong ya go dira ga moepo.

NAKO

Go solofetswe fa go epa le go tlhomiwa ga popegotheo e e fa godimo kwa Sedibelo (go ya ka pegelo e e amogetsweng ya Tshakatsheko ya go amega ga tikologo le Pegelo ya tsamaiso ya tikologo) go tla simolola mo halofong ya bobedi ya 2012. Dipopegotheo tsa tlaleletso di tla tlhomiwa fela fa e le go re bathati ba ba farologaneng ba taolo ba ka naya tetla.

TSE DINGWE TSE DI AKANNGWANG

Tiro ya go akanya ka tse dingwe tse di ka dirwang e tsweletsepele mme e tla nna karolo ya patlisiso le dikgato tsa Tshakatsheko ya go amega ga tikologo [EIA], le Lenaneo la tsamaiso ya tikologo [EMP]. Go tshwanetse ga elwatlhoko go re tse dingwe tse di ka dirwang ke tse di nnye go nne popegotheo ya fa godimo e tla tlhomiwa go siamela botoka ditiro tse di kopaneng tsa go epa.



Leano/ditshupo

- Karolo ya ditshwanelo ya moepo
- Boemo jwa lefelo
- Lefelo la go lathela matlakala
- Mosima o o bulegileng wa PPM wa Tucshenkomst
- Bogolo ba bofelo ba mosima

**POROYEKE YA SEDIBELO
POPEGOTHEO YA FA GODIMO E E TSHIKINNGWANG**

MAMETLELELO YA C: POROJEKE YA MAGAZYNSKRAAL

TSHOBOLOKO

Moepo wa Magazynskraal e tla nna wa go epa ka fa tlase ga lefatshe mo polaseng ya Magazynskraal 3 JQ. Ditshwanelo tsa go tlotlhomisa (go popona) setlhopha sa dimetale tsa polatinamo le dimateriale tse di tsamaisanang go akaretswa le koroumu mo polaseng e e fa godimo, ke tsa Richtau.

POPEGOtheo MO MAGAZYNSKRAAL 3 JQ

Popegotheo e e tshikinngwang e e tla tlhomiwang mo Magazynskraal 3 JQ e akaretsa Lefelo la go boloka masalela/TSF, ditikwatikwe tsa dišafote di le pedi, tse di tla dirisetswang go fitlhelela ditiro tsa ka fa tlase, ditsela le popegotheo ya kemonokeng. (Setshwantsho sa bo 3).

GO EPA KA FA TLASE GA LEFATSHE

Phitlhelelo ya tshimologo ya ditiro tsa ka fa tlase e tla diriwa ka dišafote tsa moepo kwa Sedibelo, mme go epa mo Magazynskraal go ka tsewa e le katoloso ya ditiro tsa go epa tsa ka fa tlase ga lefatshe tsa Sedibelo. Dikatoso tsa moepo tsa isago di tla diriwa ka dišafote e e tsepameng. Sebopego sa tiro e e tshikinngwang ya tlhagiso se tlhalosiwa mo lebokosong le le fa thoko.

GO DIRA KA MANYA

Go tshikinngwa go re manya a a epilweng go tswa Magazynskraal 3 JQ a tla isiwa kwa bodirelong jwa tshiamiso ya diminerala/khonsentereiti kwa Sedibelo go baakanngwa.

MASALELA A A SENANG DIMINERALA

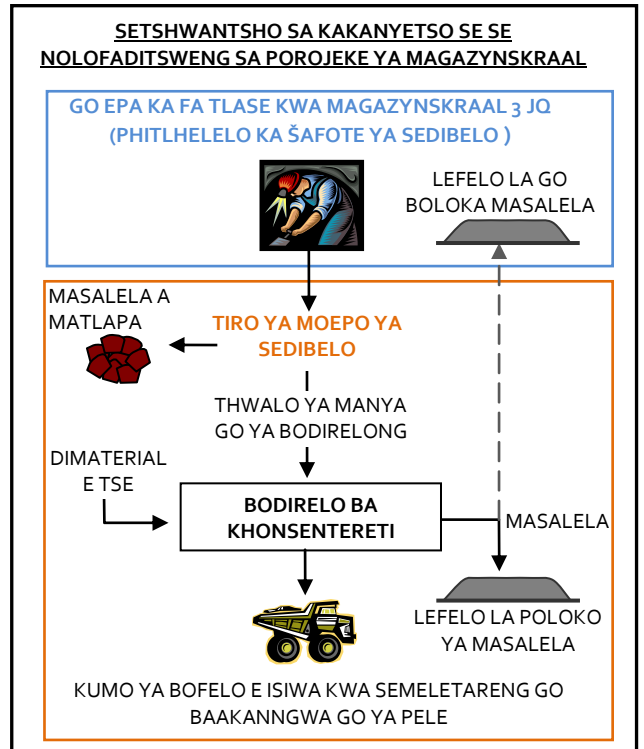
Masalela a a ntshitsweng diminerala a ka nne a latlhelwa mo lefelong le le amogetsweng la go boloka masalela (TSF) kwa Sedibelo kgotsa mo lefelong la go boloka masalela kwa Magazynskraal 3 JQ. Dithotobolo tsa masalela a matlapa di tla tlhomiwa mo tikwatikweng nngwe le nngwe ya šafote kwa Magazynskraal 3 JQ.

LEFELO LA GO LATLHELA MATLAKALA

Jaaka karolo ya porojeke e e tshikintsweng go rulaganngwa go re go tlongwe lefelo la go latlhela matlakala a mo gae, a bodirelo le a a kotsi kwa Magazynskraal 3 JQ.

Dinomore tsa kaelo

DMR	To be provided
DEDECT	NWP/EIA/90/2011
DEA	To be provided



TSHEDIMOSETSO YA TLALELETSO YA POROJEKE

DITIRELO

Metsi a tla bonwa go tswa go Boto ya metsi ya Magalies ka popegotheo ya kwa Sedibelo. Metsi a a kana ka 7 ML a tla tlhokega ka letsatsi.

Motlakase o tla bonwa kwa Eskom ka popegotheo ya kwa Sedibelo. Go tla tlhokega bo kana ka 31 MVA.

Digweregwere di tla siamisiwa mo lefelong le le amogetsweng le le tshikintsweng la tshiamiso ya digweregwere kwa Sedibelo.

Thwalo ya dimateriale go ya le go tswa ka lefelong e tla diriwa ka tsela. Ditsela tsa thwalo le mela ya dipeipi e e mo molelwaneng wa lefelo di tla dirisiwa.

LEAGO-EKONOMI LE DITŠHONO TSA DITIRO

Ka ntlha ya fa ditiro tsa moepo kwa Magazynskraal di tla atolosa botshelo ba ditiro kwa Sedibelo, dikonteraka tsa go thapiwa tsa badiri ba Sedibelo di tla atolosiwa. Ga go ne go bakega ditšhono tsa tlaletso tsa go thapiwa mo karolong ya ditiro tsa Magazynskraal.

DITSHAMELO TSA KEMONOKENG

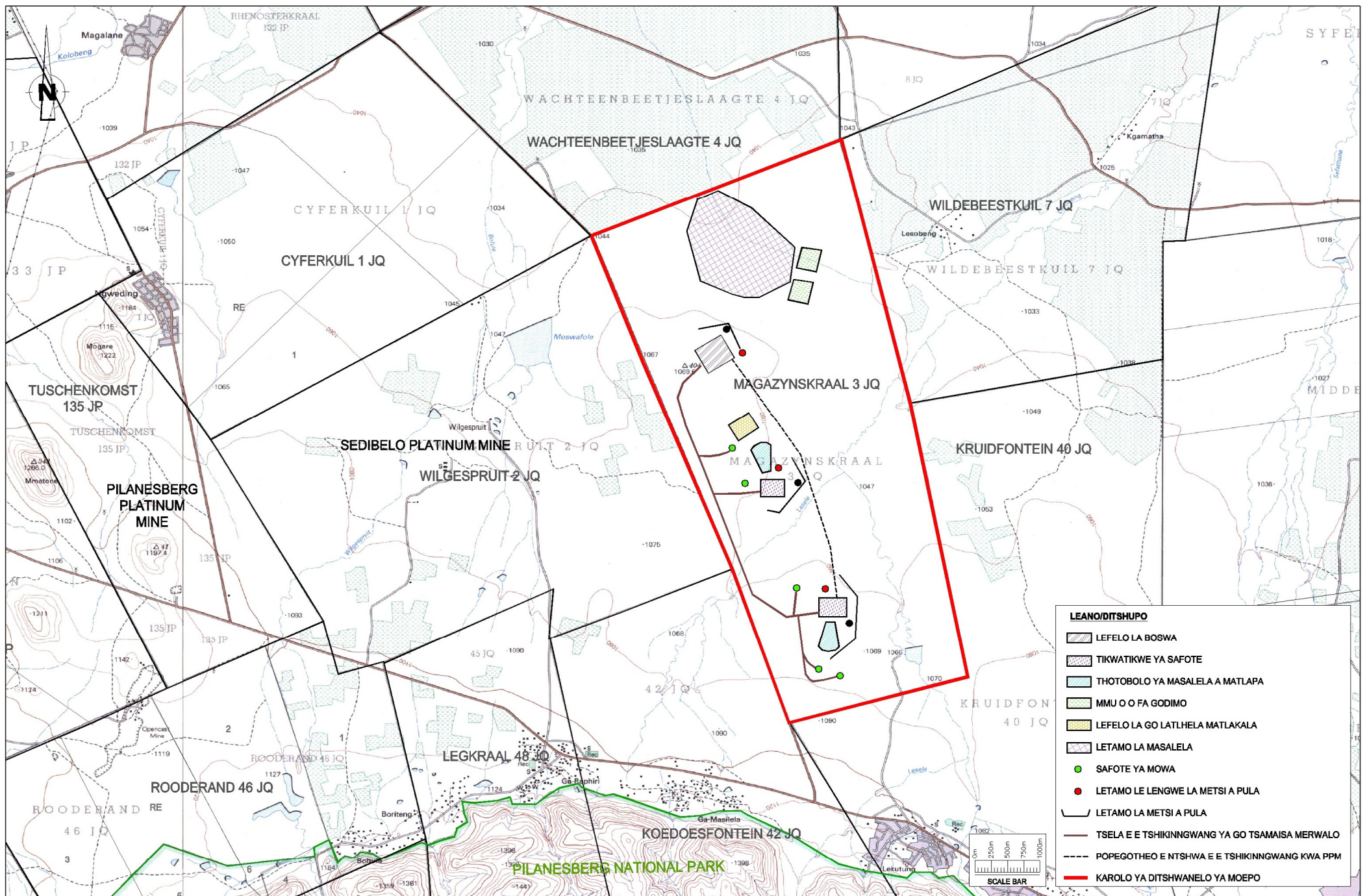
Ditshiamelo tsothe tsa tshegetso tse di batlelwang porojeke ya Magazynskraal di tla bonwa mo ditshiamelong tse di amogetsweng kwa Sedibelo.

NAKO YA POROJEKE (FA E AMOGETSWE)

Fa go amogetswe, go epa mo Magazynskraal 3 JQ go tla simolola, mme go epa ka fa tlase ga lefatshe kwa Sedibelo go tla fitlha mo molelwaneng wa polasa ya Wilgespruit/ Magazynskraal. Go solofetswe fa seno se tla diragala morago ga dingwaga tse di ka nnang 5 tsa go epa ka fa tlase kwa Sedibelo. Sebaka se se rulagantsweng sa go epa sa Porojeke ya Magazynskraal ke dingwaga tse di ka nnang 25.

TSE DINGWE TSE DI AKANNGWANG

Tiro ya go akanya ka tse dingwe tse di ka diriwang e tswelutse, mme e tla nna karolo ya patlisiso le dikgato tsa Tshekatsheko ya kamego ya tikologo, le Lenaneo la tsamaiso ya tikologo la tiro ya go sekaseka tikologo.



LEANO/DITSHUPO

- LEFEO LA BOSWA
- TIKWATIKWE YA SAFOTE
- THOTOBOLU YA MASALELA A MATLAPA
- MMU O O FA GODIMO
- LEFEO LA GO LATLHELA MATLAKALA
- LETAMO LA MASALELA
- SAFOTE YA MOWA
- LETAMO LE LENGWE LA METSI A PULA
- LETAMO LA METSI A PULA
- TSELA E E TSHIKINNGWANG YA GO TSAMAISA MERWALO
- POPEGOTHEO E NTSHTWA E E TSHIKINNGWANG KWA PPM
- KAROLO YA DITSHWANELO YA MOEPO

SCALE BAR
0m 250m 500m 750m 1000m