

DRAFT ENVIRONMENTAL IMPACT REPORT / ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT FOR THE WATERVAL RETROFIT E FEED PROJECT (LEDET REF NO. NWP/EIA/73/2012) (DMR REF NO. R20130514)

Public

Rustenburg Platinum Mines Limited
Volume II
2013/10/21

Confidentiality:

## 17 Appendices





Project number: 39354 Dated: 2013/10/22 Revised:



Department:

Economic Development, Environment, Conservation and Tourism

North West Provincial Government

Republic of South Africa

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Reference: NWP/EIA/73/2012

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WSP Environment and Energy (Pty) Ltd

P.O. Box 5384 **RIVONIA** 2128

Tel No.:

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Dear Madam

ACCEPTENCE OF THE SCOPING REPORT FOR THE PROPOSED RE-MINING OF THE ANGLO AMERICAN PLATINUM WATERVAL TAILINGS STORAGE FACILITIES ON THE FARMS WATERVAL 303 JQ, TURFONTEIN 302 JQ, KLIPFONTEIN 300 JQ, BRAKSPRUIT 299 JQ AND HOEDSPRUIT 298 JQ, WITHIN THE JURISDICTION OF RUSTENBURG LOCAL MUNICIPALITY, NORTH WEST PROVINCE

- 1. The Scoping Report (SR) and plan of study for Environmental Impact Assessment (EIA) which was submitted in terms of regulation 29 of the EIA Regulations, 2010, for the above-mentioned application and received by the Department on 08 April 2013 refers.
- 2. This Scoping Report and plan of study for EIA has been reviewed by this Department and has been found to be acceptable. However the following information should be addressed in detail in the EIA Phase of this project.
  - a) A detailed layout plan for the proposed development must be included in the Environmental Impact Assessment report. Such layout plan should include the name of the drawer, a date, and a plan reference number. An A3 or A2 size would be preferable.
  - b) All specialist studies related to the proposed development which were identified during the Scoping Phase must be undertaken and included in the Environmental Impact Assessment Report.
  - c) A draft Environmental Impact Assessment Report which includes all specialist studies undertaken must be made available to all registered interested and affected parties for comments. Rustenburg Local Municipality and the Department of Water Affairs (DWA) must be provided with a copy of the draft Environmental Impact Assessment Report.

- 3. You may accordingly proceed with undertaking the environmental impact assessment in accordance with the requirements of regulation 31 of Government Notice No. R. 543 of 18 June 2010 and the tasks that are outlined above, and in the plan of study for Environmental Impact Assessment.
- 4. It must be emphasised to the applicant that construction activities on site must not commence until a favourable Environmental Authorisation has been issued.
- 5. Please contact this office if you have any queries regarding this correspondence.

Yours faithfully

Mr. Steven Mukhola

Environmental Officer Control Grade B: Development Impact Management North West Province: Department of Economic Development, Environment, Conservation and Tourism

Date: 15/04/2013

Cc. Danie Vermaak Anglo American Platinum Fax No.: 086 760 3082

#### TRANSMISSION REPORT

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## Appendix B: Specialist Studies





#### Archaetnos Culture & Cultural Resource Consultants BK 98 09854/23

# A REPORT ON A CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED WATERVAL RETROFIT E-FEED PROJECT AT THE RUSTENBURG PLATINUM MINES LIMITED (RPM) LOCATED IN THE NORTHWEST PROVINCE

For:

#### WSP ENVIRONMENTAL (PTY) LTD

**REPORT NO.: AE01350V** 

By:

Dr. A.C. van Vollenhoven (L.AKAD.SA.) Accredited member of ASAPA Professional member of SASCH

#### September 2013

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Member: AC van Vollenhoven BA, BA (Hons), DTO, NDM, MA (Archaeology) [UP], MA (Culture History) [US], DPhil (Archaeology) [UP], Man Dip [TUT], D Phil (History) [US]

#### SUBMISSION OF REPORT

Please note that the South African Heritage Resources Agency (SAHRA) or one of its subsidiary bodies needs to comment on this report.

It is the client's responsibility to do the submission via the SAHRIS System on the SAHRA website.

Clients are advised not to proceed with any action before receiving the necessary comments from SAHRA.

#### DISCLAIMER

Although all possible care is taken to identify all sites of cultural importance during the survey of study areas, the nature of archaeological and historical sites are as such that it always is possible that hidden or subterranean sites could be overlooked during the study. Archaetnos and its personnel will not be held liable for such oversights or for costs incurred as a result thereof.

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#### **SUMMARY**

Archaetnos cc was requested by WSP Environmental (Pty) Ltd (WSP) to conduct a cultural heritage impact assessment (HIA) for the proposed Waterval Retrofit E-feed Project (Propose Project). The mine forms part of the Rustenburg Platinum Mines Limited (RPM) who are wholly owned by Anglo American Platinum Limited.

The Proposed Project site is situated close to and to the east of the town of Rustenburg and to the north of the town of Kroondal in the Northwest Province. For the development two alternatives were considered and both of these were investigated.

A survey of the available literature was undertaken in order to obtain background information regarding the Proposed Project area and the area surrounding the mine. This was followed by the field survey which was conducted according to generally accepted HIA practices, aimed at locating all possible objects, sites and features of cultural significance in the Proposed Project area.

All sites, objects features and structures identified were to be documented according to the general minimum standards accepted by the archaeological profession. Coordinates of individual localities were determined by means of a Global Positioning System. The information was added to photographs and the description in order to facilitate the identification of each locality.

During the HIA survey one site of cultural heritage significance was identified at alternative1, but none at the preferred alternative. The site is a grave yard, along the proposed route for the pipeline. Therefore, from a cultural historical perspective, the preferred alternative would be a better option. It should however be stated that alternative 1 may also be decided upon since the impact on the grave site will only be secondary and could be mitigated easily.

In the opinion of the HIA consultant the Proposed Project may commence. It should be noted however, that whichever alternative is chosen, the subterranean presence of archaeological and/or historical sites, features or artifacts is always a possibility. As such, care should be taken when the construction phase of the Proposed Project commences. If any historical sites, features or artifacts are discovered, a qualified archaeologist should be commissioned to investigate.

It is also important to take cognisance of the applicant's responsibility to submit this report via the SAHRIS System on the South African Heritage Resource Agency (SAHRA) website. No work on site may commence before receiving the necessary comments from the SAHRA.

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#### 1. INTRODUCTION

Archaetnos cc was requested by WSP Environmental (Pty) Ltd (WSP) to conduct a cultural heritage impact assessment (HIA) for the proposed Waterval Retrofit E-feed Project (Propose Project). The mine forms part of the Rustenburg Platinum Mines Limited (RPM) who are wholly owned by Anglo American Platinum Limited.

The Proposed Project site is situated close to and to the east of the town of Rustenburg and to the north of the town of Kroondal in the Northwest Province. For the development two alternatives were considered and both of these were investigated (Figure 1-5).

AAP indicated the area to be surveyed for the purposes of this assessment. The field survey/assessment was confined to the identified area.

The Proposed Project will entail the re-mining of the Waterval West and Waterval East Tailings Storage Facility. Additional infrastructure needed, are a pipeline, booster stations, pump stations and additional pipelines for the transfer of slurry to the concentrator. The preferred alternative consists of an approximately 500m pipeline to the existing UG2 concentrator. Alternative 1 includes an approximately 12km pipeline to the existing Waterval concentrator. In this case the existing Hoedspruit Tailings Storage Facility is to be expanded.

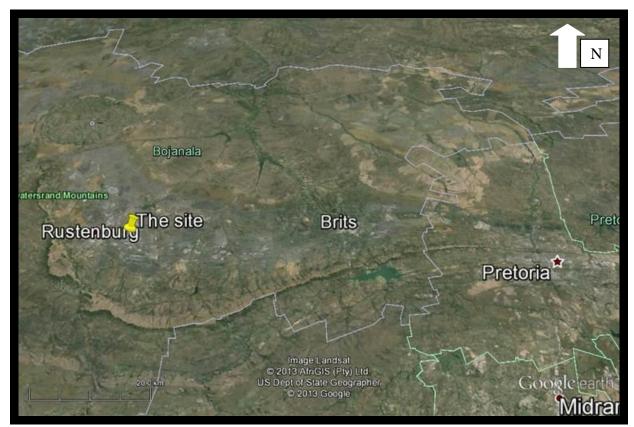


Figure 1: Location of the surveyed site (Regional Layout)

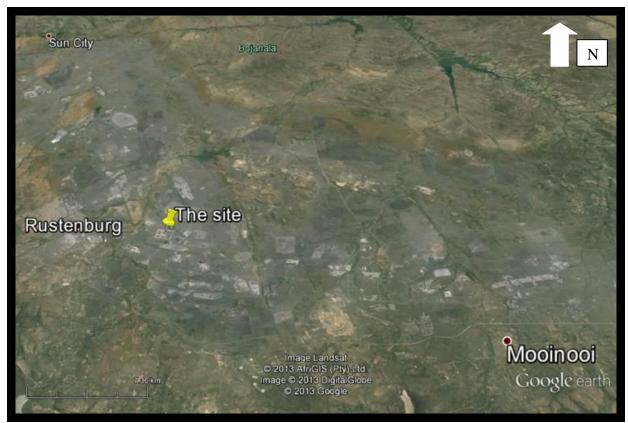


Figure 2: Location of the Proposed Project site in relation to the town of Rustenburg.

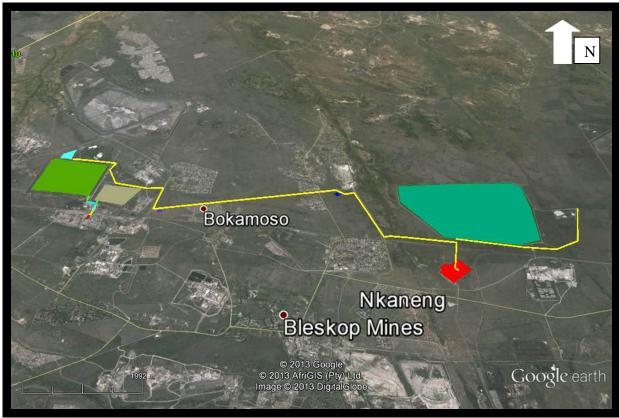


Figure 3: Layout of the Proposed Development including both alternatives.



Figure 4: The preferred alternative for the proposed development.

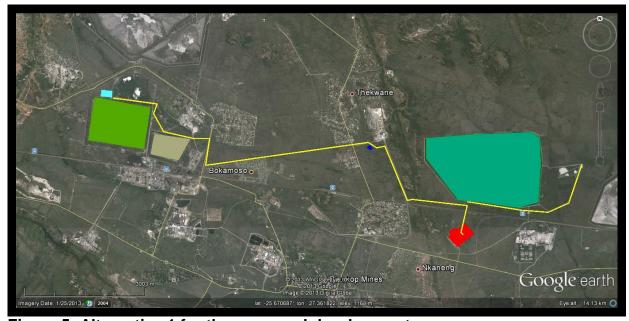


Figure 5: Alternative 1 for the proposed development.

#### 2. TERMS OF REFERENCE

The Terms of Reference for the survey were to:

- Identify objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the property (see Appendix A);
- 2. Study background information on the site to be developed;

- 3. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value (see Appendix B);
- 4. Describe the potential impact of the Proposed Project on cultural remains, according to a standard set of conventions;
- 5. Recommend suitable mitigation measures to minimise potential negative impacts on the cultural resources; and
- 6. Review applicable legislative requirements.

#### 3. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with primarily through two Acts, namely the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

#### 3.1 The National Heritage Resources Act

According to the National Heritage Resources Act (NHRA) the following are considered protected as heritage resources:

- a. Archaeological artifacts, structures and sites older than 100 years;
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography;
- c. Objects of decorative and visual arts;
- d. Military objects, structures and sites older than 75 years;
- e. Historical objects, structures and sites older than 60 years:
- f. Proclaimed heritage sites;
- g. Grave yards and graves older than 60 years;
- h. Meteorites and fossils: and
- i. Objects, structures and sites or scientific or technological value.

The national estate (see Appendix D) includes the following:

- a. Places, buildings, structures and equipment of cultural significance;
- b. Places to which oral traditions are attached or which are associated with living heritage;
- c. Historical settlements and townscapes;
- d. Landscapes and features of cultural significance:
- e. Geological sites of scientific or cultural importance;
- f. Archaeological and paleontological importance;
- g. Graves and burial grounds;
- h. Sites of significance relating to the history of slavery; and
- i. Movable objects (e.g. archaeological, paleontological, meteorites, geological specimens, military, ethnographic, books etc.).

An HIA is the process to be followed in order to determine whether any heritage resources are located within the area proposed for development as well as the potential impact of the proposed development thereon. An Archaeological Impact Assessment only looks at archaeological resources. The different phases of the HIA process are described further in Appendix E. An HIA should be undertaken under the following circumstances:

- a. The construction of a linear development (road, wall, power line canal etc.) exceeding 300m in length;
- b. The construction of a bridge or similar structure exceeding 50m in length;
- Any development or other activity that will change the character of a site and exceed 5 000m<sup>2</sup> or involve three or more existing erven or subdivisions thereof;
- d. Re-zoning of a site exceeding 10 000 m<sup>2</sup>; and
- e. Any other category provided for in the regulations of South African Heritage Resource Agency (SAHRA) or a provincial heritage authority.

#### **Structures**

Section 34 (1) of the mentioned act states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

The act defines a structure as any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

According to the act alter means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

#### Archaeology, palaeontology and meteorites

Section 35(4) of this act deals with archaeology, palaeontology and meteorites. The NHRA states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial):

- a. Destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite;
- Destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological material or object or any meteorite;
- Trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or paleontological material or object, or any meteorite;
- d. Bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment that assists in the detection or

- recovery of metals or archaeological and paleontological material or objects, or use such equipment for the recovery of meteorites; and/or
- e. Alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by a registered archaeologist, after receiving a permit from the SAHRA. In order to demolish such a site or structure, a destruction permit from SAHRA is required.

#### Human remains

Graves and burial grounds are divided into the following:

- a. Ancestral graves;
- b. Royal graves and graves of traditional leaders,;
- c. Graves of victims of conflict;
- d. Graves designated by the Minister;
- e. Historical graves and cemeteries; and
- f. Human remains.

In terms of Section 36(3) of the NHRA, no person may, without a permit issued by the SAHRA:

- a. Destroy, damage, alter, exhume or remove from its original position of otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- Destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; and/or
- c. Bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Unidentified/unknown graves are also handled as older than 60 until proven otherwise.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) (HTA) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations** (**Ordinance no. 12 of 1980**) (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated) before exhumation can take place. Human remains can only be handled by a registered undertaker or an institution declared under the **HTA**.

#### 3.2The National Environmental Management Act

The National Environmental Management Act (Act 107 of 1998) states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimised and remedied.

#### 4. METHODOLOGY

#### **4.1** Survey of literature

A review of literature was undertaken in order to obtain background information regarding the area. Sources consulted in this regard are indicated in the list of references (Section 14).

#### 4.2 Field survey

The survey was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites and features of cultural significance in the area in which the Project is proposed. HIA practices refer to the general guidelines of SAHRA based on the studies of Van Vollenhoven (1998 and 2000). Depending on circumstances, one regularly looks at an area which is wider than the demarcated Proposed Project site, as the surrounding context needs to be taken into consideration.

If required, the location/position of any objects, sites and features of cultural significance was determined by means of a Global Positioning System (GPS)<sup>1</sup>, while photographs were also taken where needed. The site survey was undertaken by means of an off-road vehicle and on foot (Figure 6). The size of the area surveyed is approximately 2 070m<sup>2</sup> and the length of the linear developments approximately 6 615m and took five hours to complete.

-

<sup>&</sup>lt;sup>1</sup> A Garmin Oregon 550 with an accuracy factor of between 3 and 5 meters.



Figure 6: GPS track of the surveyed area<sup>2</sup>.

#### 4.3 Oral histories

People from local communities are interviewed in order to obtain information relating to the surveyed area. However, it should be understood that this is activity is not required under all circumstances as it only comes to the fore once a specific community is directly involved. When applicable, this information obtained is included in the report write-up and linked to the information sources.

#### **4.4** Documentation

All sites, objects features and structures identified were documented according to the general minimum standards accepted by the archaeological profession. This list is comprehensive, but the following aspects are the most important:

- Background information on the project;
- An indication of the type of development (e.g. opencast mining/ building of warehouses etc.);
- Indication of associated infrastructure;
- The size of the project area (in Hectares) should be included;
- A map indicating the project area;
- An indication of the current and previous land use of the area to be surveyed;

<sup>&</sup>lt;sup>2</sup> Large parts of the surveyed areas include existing infrastructure at the mine, which therefore needed no intensive survey.

- Information on the topography of the area, including landscape qualities;
- If possible, information on the historical development of the project area;
- Archaeological background information, properly referenced;
- Photographs;
- A bibliography;
- · Methodology;
- Limitations experienced;
- A GPS track:
- Detailed description of heritage resources;
- Motivations for possible Phase II surveys;
- Co-ordinates of individual localities determined by means of a GPS; and
- A description of each site identified.

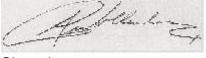
#### 4.5 Evaluation of Heritage sites

The evaluation of heritage sites is undertaken by applying a field rating to each (see Appendix C) using the following criteria:

- The unique nature of a site;
- The integrity of the archaeological deposit;
- The wider historic, archaeological and geographic context of the site;
- The location of the site in relation to other similar sites or features;
- The depth of the archaeological deposit (when it can be determined or is known);
- The preservation condition of the site;
- Uniqueness of the site; and
- Potential to answer present research questions.

#### 5. DECLARATION OF INDEPENDENCE

I, Anton Carl van Vollenhoven from Archaetnos, hereby declare that I am an independent specialist within the field of heritage management.



Signed Date: 14 September 2013

#### 6. CV OF HERITAGE CONSULTANT

Dr. Anton Carl van Vollenhoven:

Tertiary education

- BA 1986, University of Pretoria;
- BA (HONS) Archaeology 1988 (cum laude), University of Pretoria;
- MA Archaeology 1992, University of Pretoria:

- Post-Graduate Diploma in Museology 1993 (cum laude), University of Pretoria;
- Diploma Tertiary Education 1993, University of Pretoria;
- DPhil Archaeology 2001, University of Pretoria;
- MA Cultural History 1998 (cum laude), University of Stellenbosch;
- Management Diploma 2007 (cum laude), Tshwane University of Technology; and
- DPhil History 2010, University of Stellenbosch.

#### Relevant positions held

- 1988-1991: Fort Klapperkop Military Museum Researcher;
- 1991-1999: National Cultural History Museum. Work as Archaeologist, as well as Curator/Manager of Pioneer Museum (1994-1997);
- 1999-2002: City Council of Pretoria. Work as Curator: Fort Klapperkop Heritage Site and Acting Deputy Manager Museums and Heritage;
- 2002-2007: City of Tshwane Metropolitan Municipality. Work as Deputy Manager Museums and Heritage;
- August 2007 present Managing Director for Archaetnos Archaeologists;
- 1988-2003: Part-time lecturer in Archaeology at the University of Pretoria and a part-time lecturer on Cultural Resources Management in the Department of History at the University of Pretoria.

#### Experience and professional affiliations

- Has published 72 articles in scientific and popular journals on archaeology and history;
- Has been the author and co-author of over 400 unpublished reports on cultural resources surveys and archaeological work;
- Has published a book on the Military Fortifications of Pretoria;
- Has delivered more than 40 papers and lectures at national and international conferences;
- Member of SAHRA Council for 2003 2006;
- Member of the South African Academy for Science and Art:
- Member of Association for South African Professional Archaeologists;
- Member of the South African Society of Cultural History (Chairperson 2006-2008 and 2012-2014);
- Has been editor for the SA Journal of Cultural History 2002-2004; and
- Member of the Gauteng PHRA's Council and Chairperson of the HIA adjudication committee.

#### 7. CONDITIONS AND ASSUMPTIONS

The following conditions and assumptions have a direct bearing on the survey and this report:

1. Cultural Resources are all non-physical and physical man-made occurrences, as well as natural occurrences associated with human activity (Appendix A). These include all sites, structure and artifacts of importance, either individually

- or in groups, in the history, architecture and archaeology of human (cultural) development (including graves and cemeteries).
- 2. The significance of the sites, structures and artifacts is determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. The various aspects are not mutually exclusive, and the evaluation of any site is undertaken with reference to any number of these aspects.
- 3. Cultural significance is site-specific and relates to the content and context of the site. Sites regarded as having low cultural significance have already been recorded in full and require no further mitigation. Sites with medium cultural significance may or may not require mitigation depending on other factors such as the significance of impact on the site. Sites with a high cultural significance require further mitigation (see Appendix C).
- 4. The latitude and longitude of any archaeological or historical site or feature, is to be treated as sensitive information by the developer and should not be disclosed to members of the public.
- 5. All recommendations are made with full cognisance of the relevant legislation.
- 6. It should be noted that it is almost impossible to locate all the cultural resources in a given area during a single project specific survey. Developers should however, be aware of the fact that this report outlines how to handle any finds which may take place after the commissioning of the site.

#### 8. DESCRIPTION OF THE ENVIRONMENT

#### General:

A large portion of the areas on which the survey was carried out, have already been disturbed. This is to a large extent the result of recent human activities, mainly mining infrastructure as well as former agricultural activities.

The preferred alternative entails a much shorter route for the proposed pipeline than that of alternative 1. It will consist of only approximately 500m pipeline, while alternative 1 will consist of approximately 12km. In both cases the pipelines will start at the Waterval East and Waterval West Tailings Storage Facilities which will be remined. These two facilities are not only man-made, but have even been used for the dumping of refuse recently (Figure 7).

#### Preferred alternative:

The environment of the preferred alternative has been disturbed totally by mining infrastructure. This consists of existing roads and pipelines already installed for other purposes (Figure 8-9). No natural vegetation is left. The topography of the area is of no consequence as the natural slope does not exist any more.



Figure 7: Existing Waterval Tailings Storage Facility West which will be remined.



Figure 8: Area where the pump station is being proposed.



Figure 9: Infrastructure area where different piping will be placed.

#### Alternative 1:

The environment of alternative 1 is also almost entirely disturbed by recent human activities. The area where the pre-treatment plant is proposed has been used for agriculture in the past. The grass cover here is very short, making archaeological visibility good. Other plants are clearly pioneer species<sup>3</sup>, such as weeds and grass with the occasional small thorn tree such as sickle bush (Figure 10).

The proposed pipeline route runs parallel to an existing compressed air pipeline (Figure 11). Accordingly the route has also been recreated into a man-made landscape. The pipeline ends to the east of the existing Hoedspruit Tailings Storage Facility (Figure 12). Here again former agricultural activities, followed by mining activities has recreated a disturbed landscape now dominated by pioneer plant species.

Should this alternative be chosen, the Hoedspruit Tailings Storage Facility will be expanded. The environment of the proposed extension is similar to what has been described above with pioneer species dominating (Figure 13). The topography of the entire area is reasonably flat. Some hills do occur to the north, but these do not form part of the proposed development.

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<sup>&</sup>lt;sup>3</sup> Pioneer species refer to those usually first to start growing in a disturbed area.



Figure 10: Area where the pre-treatment plant is being proposed.



Figure 11: Route along the existing compressed air pipeline, where the additional pipeline is being proposed.



Figure 12: The area where the pipeline will end at the Hoedspruit Tailings Storage Facility.



Figure 13: General view of the vegetation cover in the area where the Hoedspruit Tailings Storage facility will be expanded to.

#### 9. HISTORICAL CONTEXT

In order to understand possible finds that could be unearthed during construction activities, it is necessary to give a background regarding the different phases of human history. It should be stated that during a previous survey in the surrounding area (Küsel 2013), no heritage sites were located.

#### 9.1 Stone Age

The Stone Age is the period in human history when lithic material was mainly used to produce tools (Coertze & Coertze 1996: 293). In South Africa the Stone Age can be divided in three periods. It is, however, important to note that dates are relative and only provide a broad framework for interpretation. The division for the Stone Age according to Korsman & Meyer (1999: 93-94) is as follows:

- Early Stone Age (ESA) 2 million 150 000 years ago;
- Middle Stone Age (MSA) 150 000 30 000 years ago; and
- Late Stone Age (LSA) 40 000 years ago 1850 A.D.

The closest known Stone Age site in the vicinity of the surveyed area is a rock art site to the northeast. A number of Late Stone Age sites are also known from the Magaliesberg Mountains. Rock engravings are found to the south and east of Rustenburg. These date back to the Late Stone Age (Bergh 1999: 4-5).

No natural shelter exists, although the Magaliesberg Mountain Range is only a few kilometers to the south of the site. The area probably provided good grazing and therefore it is possible that Stone Age people may have utilized the site for hunting purposes. One may therefore find Stone Age material out of context lying around, although none was identified during the survey.

#### 9.2 Iron Age

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts (Coertze & Coertze 1996: 346). In South Africa it can be divided in two separate phases according to Van der Ryst & Meyer (1999: 96-98), namely:

- Early Iron Age (EIA) 200 1000 A.D; and
- Late Iron Age (LIA) 1000 1850 A.D.

Huffman (2007: xiii) however, indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

- Early Iron Age (EIA) 250 900 A.D.;
- Middle Iron Age (MIA) 900 1300 A.D.; and
- Late Iron Age (LIA) 1300 1840 A.D.

Many Late Iron Age sites have been identified in the area around the towns of Rustenburg, Koster and Groot Marico as well as in the Waterberg Mountains which excludes the surveyed area (Bergh 1999: 7-8). During earlier times this part of the Northwest Province was inhabited by Tswana groups, namely the Fokeng and Kwena. These people fled from Mzilikazi during the Difaquane, but later on returned (Bergh 1999: 9-11).

Since the environment has been totally disturbed, one would not expect to find large Iron Age sites. The close proximity to the Magaliesberg Mountain may however mean that people used the plains and therefore isolated pottery may well be present.

#### 9.3 Historical Age

The historical age began with the first recorded oral histories in the area. It includes the moving into the area of people that were literate. This era is often referred to as the Colonial era or the recent past.

Due to factors such as population growth and a decrease in mortality rates, more people inhabited the country during the recent historical past. Therefore, much more cultural heritage resources from this era have been left on the landscape. It is important to note that all cultural resources older than 60 years are potentially regarded as part of the heritage and that detailed studies are required in order to determine whether these indeed have cultural significance. Factors to be considered include aesthetic, scientific, cultural and religious value of such resources.

Early travelers have moved through this part of the Northwest Province. This included Coenraad de Buys in 1821 and 1825, David Hume in 1825, Robert Scoon and William McLuckie in 1827 and 1829 and Dr. Robert Moffat and Reverend James Archbell in 1829 (Bergh 1999: 12, 117-119).

Hume again moved through this area in 1830 followed by the expedition of Dr. Andrew Smith in 1835 (Bergh 1999: 13, 120-121). Hume again moved through the area with Scoon in 1835. In 1836 William Cornwallis Harris visited the area. The well-known explorer Dr. David Livingston passed through this area in 1847 (Bergh 1999: 13, 119-122).

In 1837 the Voortrekkers also moved through the Swartruggens area (Bergh 1999: 11). During this year a Voortrekker commando moved out against Mzilikazi and was engaged in a battle with his impi to the north of Swartruggens. The area surveyed was inhabited by white settlers as early as 1839 (Bergh 1999: 14-15).

The greater Magaliesberg and Rustenburg area saw much action during the Anglo-Boer War (1899-1902). British troops reached Rustenburg on 14 June 1900. Three battles were fought here during the War, being the one at Buffelspoort on 3 December 1900, the one at Nooitgedacht on 13 December 1900 and the one at Vlakfontein on 29 May 1901 (Bergh 1999: 51-52).

Historical structures, such as farm houses and infrastructure relating to these times, may be found in the area. It is possible to find graves around the Proposed Project area from this era.

#### 10. FINDINGS

#### 10.1 Preferred Alternative

As described above the natural environment has been entirely disturbed. No cultural heritage resources were identified and the chances of finding such sites are reasonably small. The possible impacts therefore are:

#### • Pipeline:

- Construction phase None
- Operational phase None
- De-commissioning phase None
- Cumulative impacts
   None

#### Pump station:

- Construction phase None
- Operational phase None
- De-commissioning phase None
- Cumulative impacts None

#### 10.2 Alternative 1

The environment of alternative 1 has also been disturbed to a great extent. One cultural heritage resource was identified, but since this is located more than 20m from the proposed pipeline route, no direct impact is expected. An indirect or secondary impact may however be expected.

Site 1 – Grave yard

This is a grave yard consisting of a large number of fairly recent graves meaning they are all younger than 60 years (Figure 14-15). The grave yard is still in use and is fenced in with a concrete fence.

Graves are always given a rating of **high** cultural significance due to it being a sensitive matter. Graves with an unknown date are always handled as if older than 60 years. Graves older than 60 years are regarded as heritage graves. The graves receive a field rating of Local grade III B.

GPS: 25°40'49.3"S 27°23'09.7"E



Figure 14: Graves at site no. 1.

Usually there are two options when dealing with graves. The first option is to leave the graves *in situ*. This would be possible should there be no direct impact on the graves. However, there always is a secondary impact as descendants may find it difficult to visit the site once mining has commenced. In principle it means that sites should be fenced in and a management plan should be written for the preservation and maintenance thereof.

The Management Plan would detail aspects such as the fence and site management and maintenance. In addition, the plan would provide details on how to grant access to descendants. The fence and site will need to be managed and maintained. The management plan includes inter alia arrangements for security and safety measures. Other measures would include the preservation and maintenance of the site where aspects such as cleaning and upkeep will be dealt with. Such a plan should be written and then monitored annually by an independent heritage specialist.

The plan will have to be approved by the Burial Grounds and Graves Unit (BGG) of the SAHRA. SAHRA has specific guidelines for management plans and these will have to be followed.

The second option is to exhume the graves and have the bodies reburied. This usually is only allowed if there is a direct impact on the site. Such a process has to be motivated to SAHRA and permits needs to be applied for. It is a lengthy process and includes social consultation in accordance with legislation in order to obtain permission from descendants or at least proof that a concerted effort has been made to do such consultation.

Graves younger than 60 years are handled by a registered undertaker. Graves older than 60 years and those of an unknown date is regarded as heritage graves. In such a case an archaeologist is also involved in the process.

In this case there will be no direct impact as the site is more than 20 m from the development. Therefore Option 1 is recommended. However, since the site is already fenced in it would only be necessary to draft a management plan.



Figure 15: Location of the site identified along the pipeline route.

The possible impacts therefore are:

- Pipeline:
  - Construction phase

Possible indirect impact on grave site due to the dumping of construction material or the dust created by activities.

#### Operational phase

Possible indirect impact on grave site due to the dumping of construction material or the dust created by activities.

#### o De-commissioning phase

Possible indirect impact on grave site due to the dumping of construction material or the dust created by activities.

#### o Cumulative impacts

Possible indirect impact on grave site due to the dumping of construction material or the dust created by activities.

#### Pre-treatment plant/ Pump station:

- Construction phase None
- Operational phase None
- De-commissioning phase None
- Cumulative impacts
   None

#### Pollution control dam:

- Construction phase None
- Operational phase None
- De-commissioning phase None
- Cumulative impacts
   None

#### Booster station:

- Construction phase None
- Operational phase

#### None

- De-commissioning phase None
- Cumulative impacts
   None

#### 11. ASSESSMENT OF IMPACTS

The environmental impact rating was undertaken according to the AAP's 5x5 Impact Rating Matrix utilised to determine the significance of the potential impact as a result of the Proposed Project. This entails:

- The identification of different environmental aspects, impacts, receptors and resources for construction and operational phases and, where relevant, for decommissioning;
- The identification of receptors and resources will provide an indication of the areas sensitivity to impact; and
- The identification of the significance of impacts, including the probability of occurrence; the intensity or severity of the change to the environment; the timing of the impact; duration over which an impact will be experienced; and the spatial extent of the impact.

In terms of EIA Regulations it is a requirement that the EIR Phase take cognisance of cumulative impacts. In fulfilment of this requirement, the impact assessment will take cognisance of any existing impact sustained by the operations, any mitigation measures already in place, any additional impact to environment through continued and proposed activities, and the residual impact after mitigation measures.

It is important to note that cumulative impacts at national or provincial level will not be considered in this assessment, as the total quantification of external companies on resources is not possible at the project level due to the lack of information and research documenting the effects of existing activities. Such cumulative impacts that may occur across industry boundaries can also only be effectively addressed at a provincial and national government level.

**Table: Environmental Significance Determination** 

| Aspect                           | Consequence  |  |  |   |   |
|----------------------------------|--|--|--|---|---|
| Schedule                         | Less than 1%<br>impact on<br>overall<br>project<br>timeline      | May result in overall project timeline overrun equal to or more than 1% and less than 5% | May result in<br>overall project<br>timeline overrun of<br>equal to or more<br>than 5% and less<br>than 20%              | May result in overall project timeline overrun of equal to or more than 20% and less than 50% | May result in<br>overall<br>project<br>timeline<br>overrun of<br>50% or more                      |
| Cost                             | Less than 1% impact on the budget of the project                 | May result in overall project budget overrun equal to or more than 1% and less than 5%   | May result in<br>overall project<br>budget overrun of<br>equal to or more<br>than 5% and less<br>than 20%                | May result in overall project budget overrun of equal to or more than 20% and less than 50%   | May result in<br>overall<br>project budget<br>overrun of<br>50% or more                           |
| Quality of<br>Deliverables       | No significant<br>impact on<br>quality of<br>deliverables        | Quality issues<br>that can be<br>addressed<br>prior to<br>handover                       | Quality issues that<br>can be addressed<br>during ramp-up  | Quality issues<br>that require<br>significant<br>intervention<br>to maintain<br>performance   | Quality issues<br>that require<br>significant<br>intervention<br>to achieve<br>performance        |
| Safety/ Health                   | First aid case<br>/ Exposure to<br>minor health<br>risk          | Medical<br>treatment case<br>/ Exposure to<br>major health<br>risk                       | Lost time injury /<br>Reversible impact<br>on health   | Single fatality<br>or loss of<br>quality of life<br>/ Irreversible<br>impact on<br>health     | Multiple<br>fatalities /<br>Impact on<br>health<br>ultimately<br>fatal                            |
| Legal & Regulatory               | Low level<br>legal issue   | Minor legal<br>issue; non-<br>compliance<br>and breaches<br>of the law                   | Serious breach of<br>law;<br>investigation/report<br>to authority,<br>prosecution and or<br>moderate penalty<br>possible | Major breach<br>of the law;<br>considerable<br>prosecution<br>and penalties                   | Very<br>considerable<br>penalties and<br>prosecutions.<br>Multiple law<br>suits and jail<br>terms |
| Reputation/ Social/<br>Community | Slight impact - public awareness may exist but no public concern | Limited<br>impact - local<br>public<br>concern   | Considerable<br>impact - regional<br>public concern  | National<br>impact -<br>national<br>public<br>concern   | International<br>impact -<br>international<br>public<br>attention                                 |
| Environment                      | Minimal<br>environmental<br>harm – L1<br>incident                | Material<br>environmental<br>harm – L2<br>incident<br>remediable<br>short term           | Serious<br>environmental<br>harm – L2 incident<br>remediable within<br>LOM   | Major<br>environmental<br>harm – L2<br>incident<br>remediable<br>post LOM                     | Extreme<br>environmental<br>harm – L3<br>incident<br>irreversible                                 |

| Likelihood            |  | Risk Level |        |        |        |        |
|-----------------------|--|------------|--------|--------|--------|--------|
| 5 – Almost<br>Certain | 90% and<br>higher<br>probability<br>of occurring       | 11 (M)     | 16 (H) | 20 (H) | 23 (H) | 25 (H) |
| 4 – Likely            | Between<br>60% and<br>less than<br>90% of<br>occurring | 7 (M)      | 12 (M) | 17 (H) | 21 (H) | 24 (H) |
| 3 – Possible          | Between 30% and less than 60% of occurring             | 4 (L)      | 8 (M)  | 13 (H) | 18 (H) | 22 (H) |
| 2 – Unlikely          | Between 1%<br>and less than<br>30% of<br>occurring     | 2 (L)      | 5 (L)  | 9 (M)  | 14 (H) | 19 (H) |
| 1 – Rare              | Less than<br>1% of<br>occurring                        | 1 (L)      | 3 (L)  | 6 (M)  | 10 (M) | 15 (H) |

#### Table: Interpretation of the Risk Level

| Risk Rating           | Guideline for Matrix   |
|-----------------------|--|
| 21 to 25 Extreme (EX) | Eliminate, avoid, implement specific action plans/procedures to manage and Monitor |
| 13 to 20 High (H)     | Proactive Management   |
| 6 to 12 Medium (M)    | Actively manage  |
| 1 to 5 Low (L)        | Monitor and manage as appropriate  |

#### 11.1 Construction phase

The construction phase entails the establishment of project infrastructure.

In both the case of the preferred alternative as well as alternative 1, construction phase activities may impact on unknown archaeological material contained under the surface of the soil or vegetation.

In the case of alternative 1 there is an additional possible impact, being that on the grave site. This may be as a result of discard material being dumped close by.

Tables 1 and 2 contains a rating of the potential impact should it occur.

Table 1: Construction phase Impacts Rating: Preferred alternative

| Impact  | Consequence | Likelihood | Significance<br>before<br>mitigation | Significance after mitigation | Positive/Negative |
|---|-------------|------------|--------------------------------------|-------------------------------|-------------------|
| Uncovering of archaeological material during construction | 3           | 3          | 13H                                  | 1L                            | Negative          |

Table 2: Construction phase Impacts Rating: Alternative 1

| Impact  | Consequence | Likelihood | Significance before mitigation | Significance after mitigation | Positive/Negative |
|---|-------------|------------|--------------------------------|-------------------------------|-------------------|
| Uncovering of archaeological material during construction | 3           | 3          | 13H                            | 1L                            | Negative          |
| Secondary impact on the grave site                        | 2           | 4          | 8M                             | 1L                            | Negative          |

Should the first impact be realised on-site during site establishment, AAP should contact a heritage specialist to assess such a discovery. The assessment will then determine if the discovery is significant or insignificant according to the value of the object, site and/or feature, following which mitigation will be proposed.

Mitigation of the grave site, which includes a site management plan, should enable the avoidance of this impact. However, contractors should be made aware thereof in order for them to avoid damage to the site.

#### 11.2 Operational Phase

This phase entails the utilisation of the infrastructure that is established during the construction phase. Although extremely unlikely, any activity during this phase may impact on unknown archaeological material contained underground. This goes for both alternatives.

Construction activities may also have a secondary impact on the grave site identified at alternative 1 if it is not avoided.

Table 3-4 contains a rating of the potential impact should it occur.

Table 3: Operational phase Impacts Rating: Preferred alternative

| Impact   | Consequence | Likelihood | Significance<br>before<br>mitigation | Significance after mitigation | Positive/<br>Negative |
|--|-------------|------------|--------------------------------------|-------------------------------|-----------------------|
| Uncovering of archaeological material during operation | 3           | 2          | 9M                                   | 1L                            | Negative              |

Table 4: Operational phase Impacts Rating: Alternative 1

| Impact   | Consequence | Likelihood | Significance<br>before<br>mitigation | Significance after mitigation | Positive/<br>Negative |
|--|-------------|------------|--------------------------------------|-------------------------------|-----------------------|
| Uncovering of archaeological material during operation | 3           | 2          | 9M                                   | 1L                            | Negative              |
| Secondary impact on the grave site                     | 2           | 4          | 8M                                   | 1L                            | Negative              |

Should this impact be realised on-site during the operational phase, AAP should contact a heritage specialist to assess such a discovery. The assessment will then determine if the discovery is significant or insignificant according to the value of the object, site and/or feature, following which mitigation will be proposed.

Mitigation of the grave site, which includes a site management plan, should enable the avoidance of this impact. However, contractors should be made aware thereof in order for them to avoid damage to the site.

#### 11.3 Decommissioning and Closure Phase

This phase commences when active mining ceases. During this phase, for both alternatives, it is unlikely that an archaeological discovery will occur, but any activity during this phase may impact on unknown archaeological material contained underground.

Again the grave site identified at alternative 1 may be impacted on secondary if it is not deliberately avoided.

The impacts rating for these are included in Table 5-6.

Table 5: Decommissioning and Closure Phase Impacts Rating: Preferred alternative

| Impact   | Consequence | Likelihood | Significance<br>before<br>mitigation | Significance after mitigation | Positive/<br>Negative |
|--|-------------|------------|--------------------------------------|-------------------------------|-----------------------|
| Uncovering of archaeological material during decommissioning and closure | 1           | 1          | 1L                                   | 1L                            | Negative              |

Table 6: Decommissioning and Closure Phase Impacts Rating: Alternative 1

| Impact   | Consequence | Likelihood | Significance<br>before<br>mitigation | Significance after mitigation | Positive/<br>Negative |
|--|-------------|------------|--------------------------------------|-------------------------------|-----------------------|
| Uncovering of archaeological material during decommissioning and closure | 1           | 1          | 1L                                   | 1L                            | Negative              |
| Secondary impact on the grave site                                       | 2           | 4          | 8M                                   | 1L                            | Negative              |

Should this impact be realised on-site during site decommissioning, AAP should contact a heritage specialist to assess such a discovery. The assessment will then determine if the discovery is significant or insignificant according to the value of the object, site and/or feature, following which mitigation will be proposed.

Mitigation of the grave site, which includes a site management plan, should enable the avoidance of this impact. However, contractors should be made aware thereof in order for them to avoid damage to the site.

# 12. CONCLUSION, MITIGATION, MANAGEMENT MEASURES AND RECOMMENDATIONS

Although only one site of cultural importance was identified during the survey, there will be no specific impact resultant of the Proposed Project. The site will however be impacted on indirectly and this needs to be mitigated. The survey of the indicated area was completed successfully.

The following is recommended:

- The Proposed Project may continue;
- From a cultural historical perspective, the preferred alternative would be the best option, since no sites of cultural heritage importance were identified here;

- However, although one site of cultural heritage significance (a grave yard along the pipeline route) was identified at alternative1, it would be possible to use this alternative as the impact on the grave site will only be secondary and could be mitigated easily;
- Should alternative 1 be chosen, the fence around the grave yard should be secured and a management plan for the preservation of the site be written be a heritage expert;
- Contractors should be inducted to understand how to deal with this site; and
- It should be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts is always a possibility. Care should be taken when development commences that if any of the mentioned are discovered, a qualified archaeologist be called in to investigate the occurrence.

#### 13. REFERENCES

- Bergh, J.S. (red.). 1999. **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.
- Coertze, P.J. & Coertze, R.D. 1996. **Verklarende vakwoordeboek vir Antropologie en Argeologie.** Pretoria: R.D. Coertze.
- Huffman, T.N. 2007. Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa. Scotsville: University of KwaZulu-Natal Press.
- International Finance Corporation. 2012. **Overview of performance standards on Environmental and Social Sustainability. Performance Standard 8, Cultural Heritage.** World Bank Group.
- Knudson, S.J. 1978. **Culture in retrospect.** Chicago: Rand McNally College Publishing Company.
- Küsel, U.S. 2013. Phase 1 Cultural Heritage Resources Impact Assessment for the Bleskop Mine of Anglo American Platinum Distrubution Centre on a portion of portion 6 of the farm Waterval 303 JQ Rustenburg North West Province. (Unpublished report, African Heritage Consultants, Magalieskruin).
- Korsman, S.A. & Meyer, A. 1999. Die Steentydperk en rotskuns. Bergh, J.S. (red.). **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.
- Republic of South Africa. 1980. Ordinance on Excavations (Ordinance no. 12 of 1980). The Government Printer: Pretoria.
- Republic of South Africa. 1983. **Human Tissue Act** (Act 65 of 1983). The Government Printer: Pretoria.
- Republic of South Africa. 1999. **National Heritage Resources Act** (No 25 of 1999). Pretoria: the Government Printer.

- Republic of South Africa. 1998. **National Environmental Management Act** (no 107 of 1998). Pretoria: The Government Printer.
- Van der Ryst, M.M. & Meyer, A. 1999. Die Ystertydperk. Bergh, J.S. (red.).

  Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.

  Pretoria: J.L. van Schaik.
- Van Vollenhoven, A.C. 1998. **Kultuurhulpbronbestuur (KHB) binne die funksionele konteks van museums in Suid-Afrika**. (Unpublished M.A.-dissertation, Stellenbosch: University of Stellenbosch).
- Van Vollenhoven, A.C. 2000. 'n Voorgestelde paradigma vir navorsing op histories-argeologiese erfenishulpbronne in Suid-Afrika aan die hand van gevallestudies in noordelike Gauteng. (Unpublished D.Phil. thesis, Pretoria: University of Pretoria).

#### **APPENDIX A**

#### **EXPLAINING DIFFERENT ARCHAEOLOGICAL LOCALITIES:**

**Site**: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

**Structure**: A permanent building found in isolation or which forms a site in conjunction with other structures.

**Feature**: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

#### **APPENDIX B**

#### **HERITAGE ASSESSMENT CRITERIA:**

Historic value: Important in the community or pattern of history or has an

association with the life or work of a person, group or organization

of importance in history.

Aesthetic value: Important in exhibiting particular aesthetic characteristics valued

by a community or cultural group.

Scientific value: Potential to yield information that will contribute to an

understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement

of a particular period

Social value: Have a strong or special association with a particular community

or cultural group for social, cultural or spiritual reasons.

Rarity: Does it possess uncommon, rare or endangered aspects of

natural or cultural heritage.

Representivity: Important in demonstrating the principal characteristics of a

particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, landuse, function, design or technique) in the environment of the

nation, province region or locality.

#### **APPENDIX C**

#### **SIGNIFICANCE AND FIELD RATING:**

#### **Cultural significance:**

- Low A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.

- Medium Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.

- High Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

#### Heritage significance:

 Grade I Heritage resources with exceptional qualities to the extent that they are of national significance

- Grade II Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate

- Grade III Other heritage resources of local importance and therefore worthy of conservation

#### Field ratings:

| I.   | National Grade I significance           | should be managed as part of the national estate    |
|------|---|---|
| ii.  | Provincial Grade II significance        | should be managed as part of the provincial         |
|      |   | estate  |
| iii. | Local Grade IIIA                        | should be included in the heritage register and not |
|      |   | be mitigated (high significance)                    |
| iv.  | Local Grade IIIB                        | should be included in the heritage register and     |
|      |   | may be mitigated (high/medium significance)         |
| ٧.   | General protection A (IV A)             | site should be mitigated before destruction         |
|      | , ,                                     | (high/medium significance)                          |
| vi.  | General protection B (IV B)             | site should be recorded before destruction          |
|      | ,                                       | (medium significance)                               |
| vii. | General protection C (IV C)             | phase 1 is seen as sufficient recording and it may  |
|      | , | be demolished (low significance)                    |
|      |   | ` '   |

#### **APPENDIX D**

#### PROTECTION OF HERITAGE RESOURCES:

#### Formal protection:

National heritage sites and Provincial heritage sites – grade I and II
Protected areas - an area surrounding a heritage site
Provisional protection – for a maximum period of two years
Heritage registers – listing grades II and III
Heritage areas – areas with more than one heritage site included
Heritage objects – e.g. archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

#### **General protection:**

Objects protected by the laws of foreign states Structures – older than 60 years Archaeology, palaeontology and meteorites Burial grounds and graves Public monuments and memorials

#### APPENDIX E

#### HERITAGE IMPACT ASSESSMENT PHASES

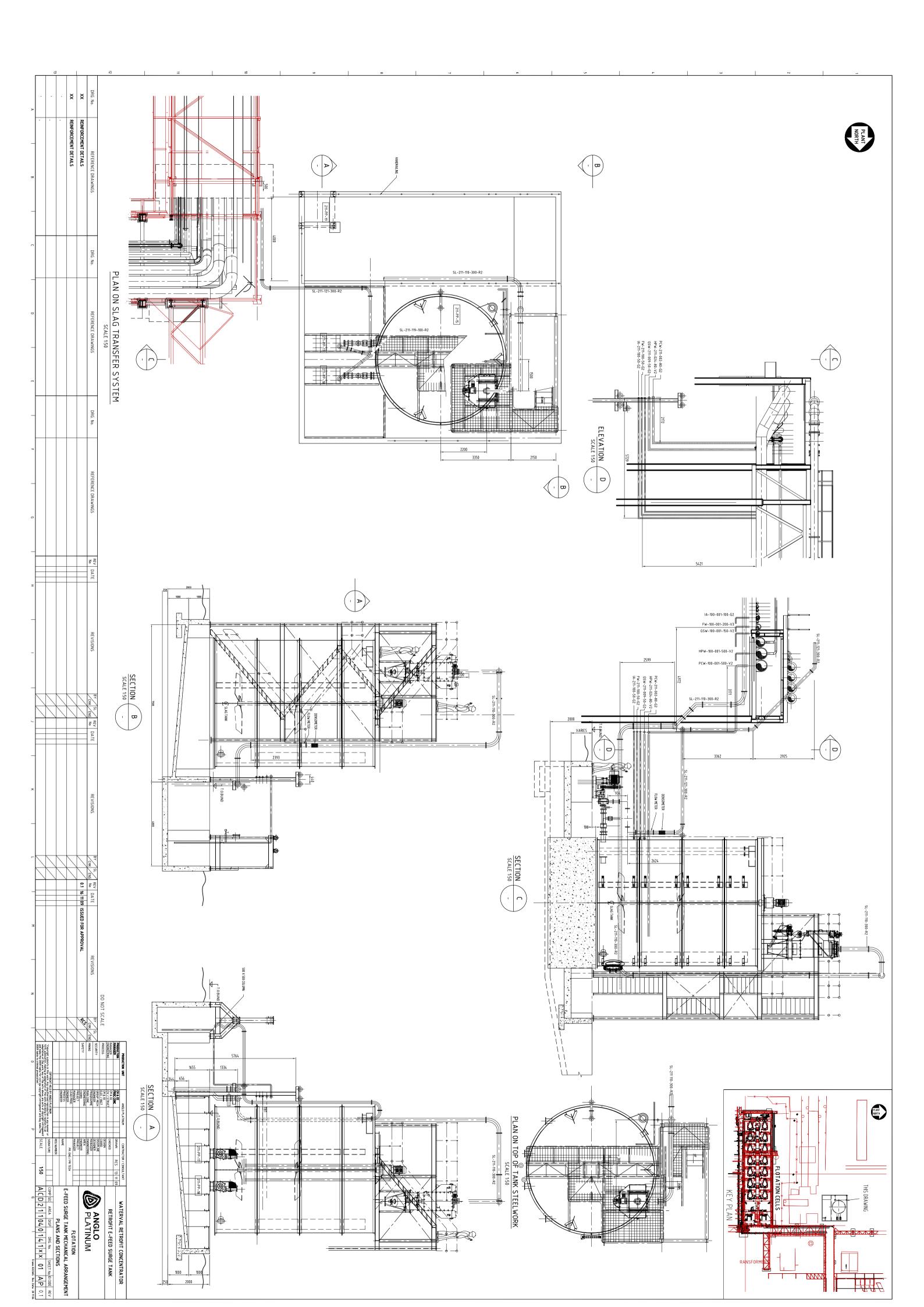
- 1. Pre-assessment or scoping phase establishment of the scope of the project and terms of reference.
- 2. Baseline assessment establishment of a broad framework of the potential heritage of an area.
- 3. Phase I impact assessment identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.
- 4. Letter of recommendation for exemption if there is no likelihood that any sites will be impacted.
- 5. Phase II mitigation or rescue planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.
- 6. Phase III management plan for rare cases where sites are so important that development cannot be allowed.

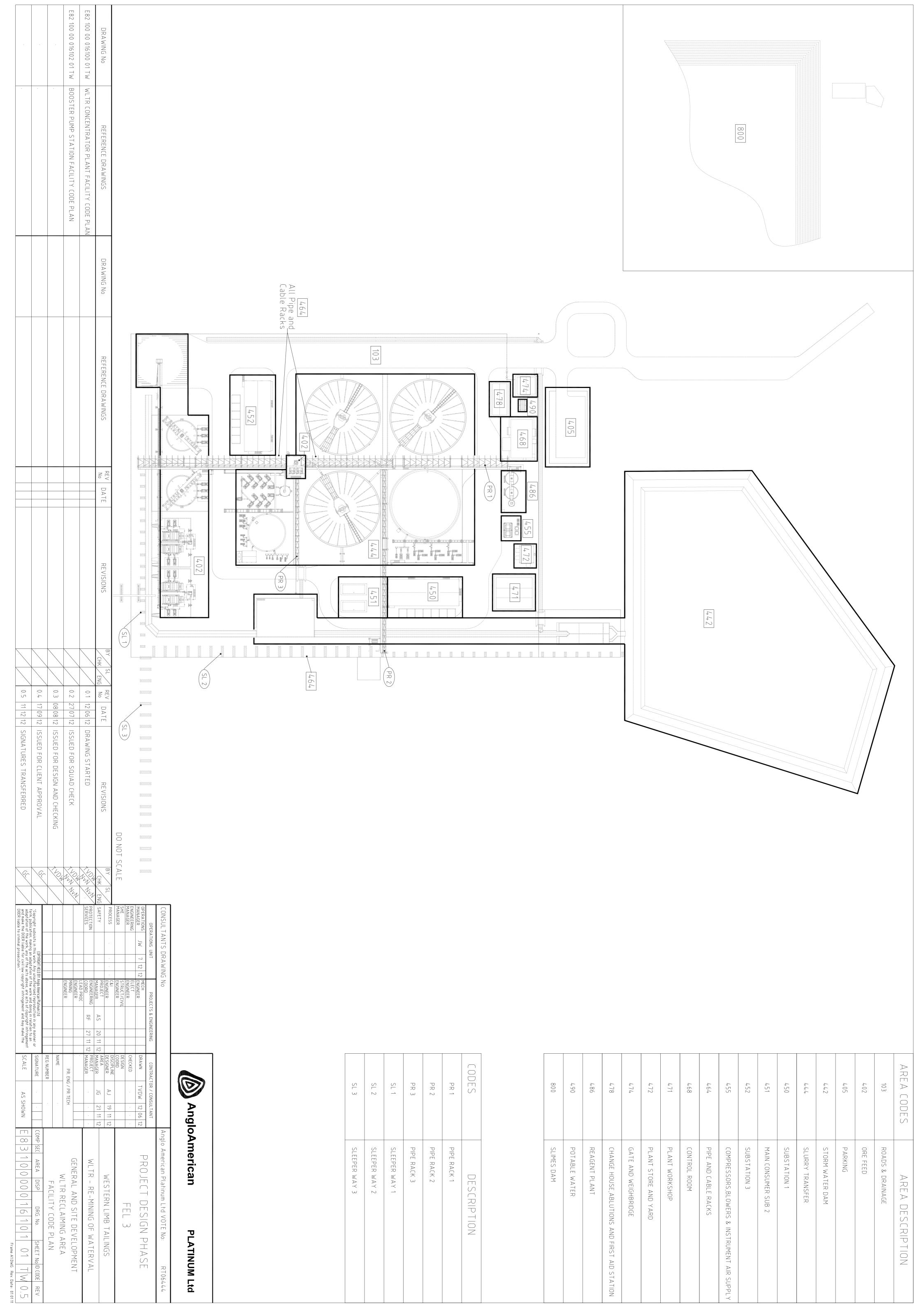
# Appendix B. Specialist CV's & Declaration of Independence

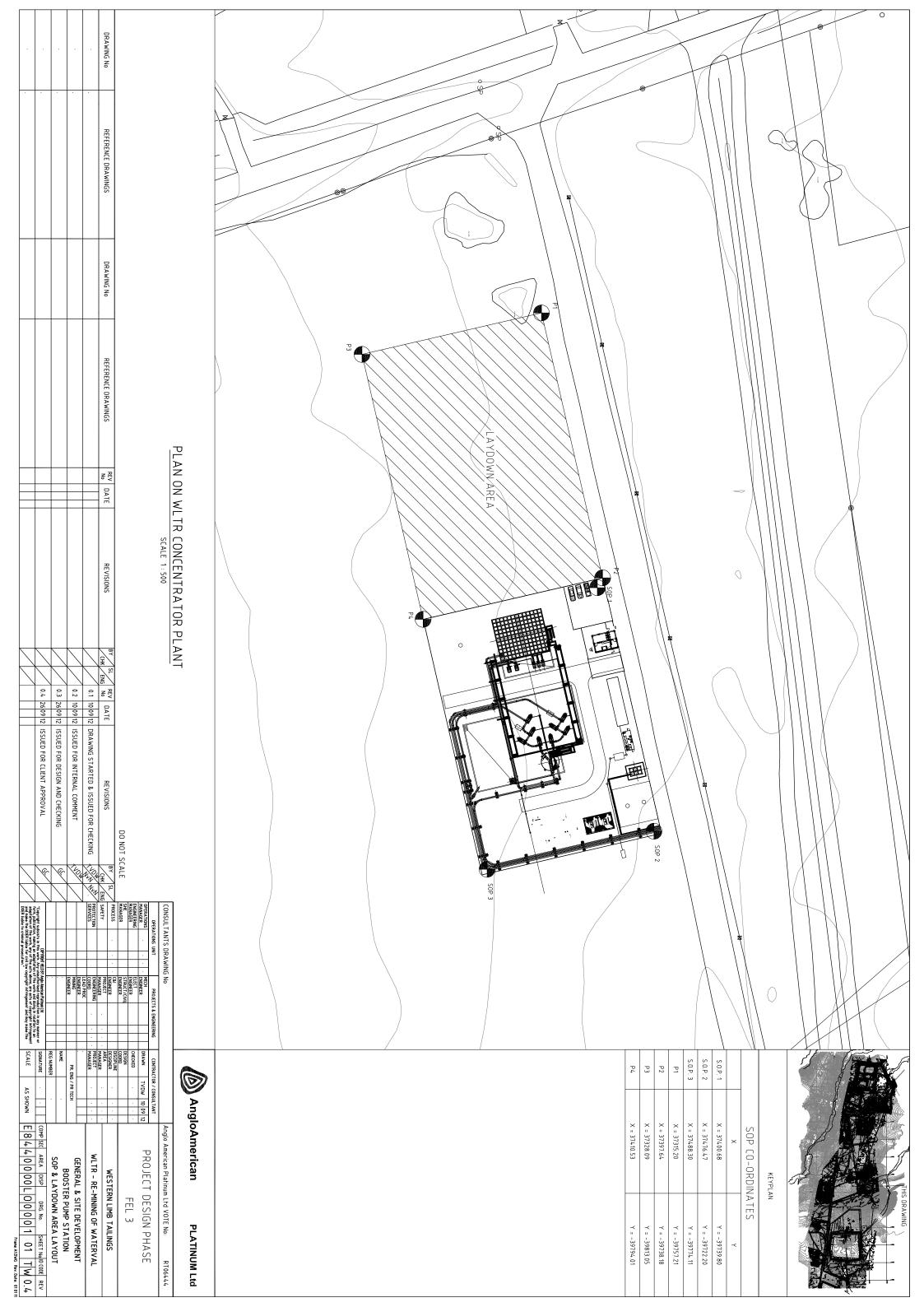


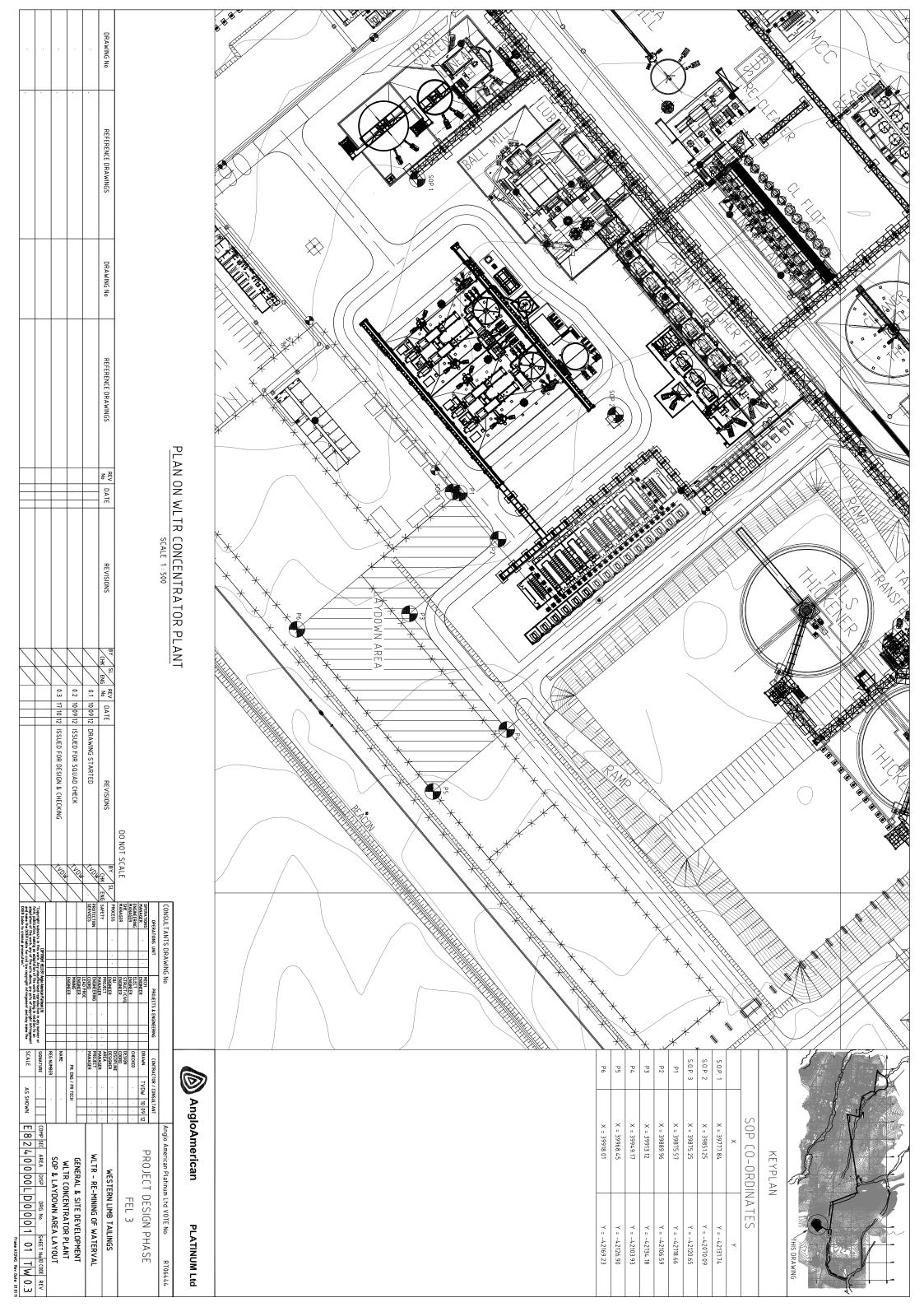
Appendix C: Detailed Design Drawings

Project number: 39354 Dated: 2013/10/22 Revised:









# Appendix D: Public Participation



ISSUES RAISED BY VARIOUS STAKEHOLDERS (INCLUDING AUTHORITIES) AND ASSOCIATED MANAGEMENT RESPONSES - SCOPING PHASE.

|                                  | IMPACTS   |  |                                |            |   |  |   |   |  |  |
|----------------------------------|---|--|--------------------------------|------------|---|--|---|---|--|--|
| Stakeholder                      | Issue   | Concern  | Source                         | Date       | Implications  | Responses  | Action P  | lan   |  |  |
|                                  |   |  |                                |            |   |  | Plan  | Responsible person and completion date                                      |  |  |
| Phumudzo<br>Nethwadzi<br>(DMR)   | Phumudzo enquired about the final destination of the tailings after re-processing and the need to upgrade the Hoedspruit TSF in terms of the structure of the facility.   | N/A  | DMR<br>Notification<br>Meeting | 13/09/2012 | N/A   | It was explained that the tailings will be transferred via an existing pipeline to the Hoedspruit TSF, which has an approved capacity to store all the tailings material resulting from the process and this would be accommodated through an increase in the height of the Hoedspruit TSF. Requirements for the Hoedspruit TSF will be included in the Environmental Management Programme amendment (EMPR). | To be included in the<br>EMPR document.   | WSP (April/May<br>2013)   |  |  |
| Phumudzo<br>Nethwadzi<br>(DMR)   | Phumudzo emphasised that the stakeholder engagement process must be comprehensive to ensure that all stakeholders are included, that information on all potential impacts (positive and negative) is provided and made clear as early as possible to avoid public issues at a later stage in the project. | Lack of stakeholder notification   | DMR<br>Notification<br>Meeting | 13/09/2012 | A non-comprehensive stakeholder engagement process.                         | WSP will host various notification meetings including meetings with the part landowner, the authorities and the local leaders in the project area. In addition, WSP will use an existing comprehensive Rustenburg Platinum Mines (RPM) stakeholder database to notify the stakeholders via sms, fax and email. Furthermore site notices were placed around the affected communities.                         | A comprehensive<br>stakeholder<br>engagement process<br>will take place<br>throughout the project<br>duration.              | WSP<br>(September<br>2012 – October<br>2013)                                |  |  |
| Phumudzo<br>Nethwadzi<br>(DMR)   | Phumudzo stated that WSP need to ensure that continuous correspondence is maintained with the Department to avoid unnecessary delays of the process.  | Lack of sufficient communication with the authorising departments.   | DMR<br>Notification<br>Meeting | 13/09/2012 | A lack of sufficient information/understanding of requirements.             | Noted. WSP will ensure the departments are kept up to date on the process via email.   | Continuous monitoring.  | WSP (on-going,<br>final Scoping<br>report to be<br>submitted<br>March 2013) |  |  |
| Phumudzo<br>Nethwadzi<br>(DMR)   | Phumudzo put emphasis on the quality of information provided in environmental reporting. He explained the need to ensure that all the information provided is relevant to the project, concise and auditable.   | An overload of information not relevant to the project at hand.  | DMR<br>Notification<br>Meeting | 13/09/2012 | A delay in the review process due to the review of unnecessary information. | Noted.   | WSP to streamline all reporting to ensure only relevant information is included in the project reports.                     | WSP<br>(submission of<br>Final Scoping<br>report and EIA<br>report)         |  |  |
| Catherine<br>Greengrass<br>(WSP) | Catherine Greengrass (CG) raised the current unrest in the mining industry as a point of concern. She asked for advice from Phumudzo on the approach WSP is to undertake in terms of public   | Potential delays due to strikes. In addition, safety issues associated with striking miners in the communities in which WSP are targeting in terms of PPP. | DMR<br>Notification<br>Meeting | 13/09/2012 | Delay in the project, and health and safety issues.                         | Phumudzo responded indicating that the current situation on the ground will settle down over time. Phumudzo indicated that he does not believe the unrest will impact on the public  | WSP are to assess the situation in the communities prior to conducting site visits to determine potential risks associated. | WSP (on-going)  |  |  |

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|                          | IMPACTS   |  |                                |            |  |   |  |   |  |  |  |
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| Stakeholder              | Issue   | Concern  | Source                         | Date       | Implications   | Responses   | Action Pl  | tion Plan   |  |  |  |
|                          |   |  |                                |            |  |   | Plan   | Responsible<br>person and<br>completion<br>date   |  |  |  |
|                          | participation.  |  |                                |            |  | participation process as the majority of people who will be engaged will be members of the general public and not necessarily members of Anglo American Platinum (AAP) or any other mining organisation. Phumudzo went on to say that public unrest cannot be ruled out during the process and the team must ensure that appropriate risk assessments are conducted prior to going to site. |  |   |  |  |  |
| Teresa<br>Taljaard (RBN) | Teresa Taljaard (TT) wished to verify that the area upon which the project and the Hoedspruit TSF is located in part owned by the, RBH, FIKE Trust (for which a lease agreement is in place) and part owned by RPM. She subsequently requested that Andre Britz (AB) of RPM send her all the relevant portion numbers for the Hoedspruit TSF, and for the rest of the project area. | The land upon which the project is proposed.   | RBN<br>Notification<br>Meeting | 17/09/2012 | N/A  | Maps were provided on 8<br>October and 11 November<br>2012 (WSP submitted a<br>response letter on 11<br>November 2012).   | WSP are to await any<br>information<br>requirements from the<br>RBN  | WSP (On-going)  |  |  |  |
| Ernie Kemm<br>(RBN)      | Ernie questioned the crossing of the power lines along the proposed pipeline route.   | Legal compliance associated with the activity.   | RBN<br>Notification<br>Meeting | 17/09/2012 | The lack of approval will lead to legal implications.            | Pierre Malan (PM) responded indicating that AAP has appointed Green Gain (legal consultant) to ensure legal compliance in terms of the crossings.   | Green Gain<br>applications have been<br>submitted, awaiting a<br>response from the<br>various organisations. | Green Gain Consulting (Road crossing approval received however the timeframes are not correct, on- going monitoring of Eskom and Transnet applications. |  |  |  |
| Ernie Kemm<br>(RBN)      | Ernie questioned the location of the proposed booster station and pipeline route, adding that he believes there may be housing stands allocated on the land proposed.   | The proposed project area may already be occupied or allocated to an alternative land use. | RBN<br>Notification<br>Meeting | 17/09/2012 | Possible additional feasibility required on an alternative site. | PM said the land has been inspected and the land is currently vacant.   | N/A  | N/A   |  |  |  |
| Khalid Patel<br>(RBN)    | Khalid Patel (KP) questioned<br>which components of the<br>proposed project are within<br>the AAP mine lease area and   | N/A  | RBN<br>Notification<br>Meeting | 17/09/2012 | Lease agreement issues.  | Maps provided 8 October and<br>11 November 2012 (WSP letter<br>11 Nov 2012).  | RBN indicated that they are content with the information which was provided by WSP.                          | N/A   |  |  |  |

|                                  | IMPACTS   |  |                                |            |                                       |   |   |  |  |  |  |  |
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| Stakeholder                      | Issue   | Concern  | Source                         | Date       | Implications                          | Responses   | Action P  | an   |  |  |  |  |
|                                  |   |  |                                |            |                                       |   | Plan  | Responsible<br>person and<br>completion<br>date  |  |  |  |  |
|                                  | which lie outside of the mining lease area. KP subsequently requested detailed mapping of exactly where AAP's mining rights are currently.  |  |                                |            |                                       |   |   |  |  |  |  |  |
| Khalid Patel<br>(RBN)            | KP indicated that he will review the information (including the map) presented during the meeting along with the SG mapping and decide if the RBN is impacted upon by the project.  | Impact on RBN land.  | RBN<br>Notification<br>Meeting | 17/09/2012 | Possible lease agreement implication. | Noted.  | WSP has not yet received a response from the RBN directly relating to the issue raised however WSP did receive a general response from the RBN indicating they are comfortable with the information provided. | WSP to monitor<br>the requirement<br>of a follow up<br>meeting with the<br>RBN (on-going). |  |  |  |  |
| Ernie Kemm<br>(RBN)              | Ernie asked on which side of<br>the property boundary the<br>slurry/return water pipeline<br>will be located.   | Land ownership related issues.   | RBN<br>Notification<br>Meeting | 17/09/2012 | Possible lease agreement implication. | AB indicated it would be on the southern side which is Rustenburg Local Municipality (RLM) land. AB added there is an existing pipeline corridor for which servitudes are not yet registered. An agreement for the pipeline corridor on the RLM land is however in place. | RPM are to register the corridor as an official servitude.  | AAP to register with authorities in due course.  |  |  |  |  |
| Teresa<br>Taljaard (RBN)         | TT emphasised that the future of the project is dependent on the consent of the RBN, which will be subject to the amicable resolution of the current and wider lease agreement adjudication. Therefore, if their requirements are not met, RBN will oppose the project. TT emphasised that RBN's comments need to be included in the process and this must be made known. | If the lease agreement<br>agreements between RBN and<br>the RPM, the RBN will oppose<br>the project. | RBN<br>Notification<br>Meeting | 17/09/2012 | Project delay.                        | WSP noted the comment. AB added that there is currently a separate process in progress to resolve the lease agreement with the RBN (Royalties).   | RPM and RBN to<br>resolve the lease<br>agreement issues as a<br>separate process.   | AAP prior to<br>beginning of the<br>construction<br>phase (January<br>2014).               |  |  |  |  |
| Reotshopile<br>Tlhapane<br>(RBN) | Reotshopile Tlhapane (RT) queried if Dudu Ratshefola (community Engagement representative) (DR) from AAP is involved in the arranging of the public meetings and the rest of the PPP.   | N/A  | RBN<br>Notification<br>Meeting | 17/09/2012 | N/A                                   | WSP responded yes. CG stated that WSP will communicate with RT in terms of PPP going forward. It was noted that DR had recently resigned and her replacement would be announced.  | WSP are to include the RBN in the PPP for the project and RPM is to indicate DR's replacement. Since the meeting AAP has confirmed that Dikago Mathule is the replacement for DR.                             | N/A  |  |  |  |  |
| Khalid Patel<br>(RBN)            | KP requested that he be registered on the database  | N/A  | RBN<br>Notification            | 17/09/2012 | N/A                                   | Noted.  | WSP have since added the RBN to the   | N/A  |  |  |  |  |

|                                  | IMPACTS  |   |                                |            |   |   |  |   |  |  |
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| Stakeholder                      | Issue  | Concern   | Source                         | Date       | Implications  | Responses   | Action P   | lan   |  |  |
|                                  |  |   |                                |            |   |   | Plan   | Responsible person and completion date                              |  |  |
|                                  | PPP notifications.   |   | Meeting                        |            |   |   | database.  |   |  |  |
| Khalid Patel<br>(RBN)            | KP queried the initiation date of PPP.   | N/A   | RBN<br>Notification<br>Meeting | 17/09/2012 | N/A   | CG said that WSP would like to have initiated PPP soon after this meeting however, PPP was on hold as a result of the current unrest in Rustenburg.   | WSP to initiate PPP<br>once the strike action in<br>Rustenburg comes to<br>an end.   | WSP<br>(November<br>2012)   |  |  |
| Khalid Patel<br>(RBN)            | KP questioned the need to undertake Water Use License amendment (WULA) for the project, and if so which water uses will trigger the amendment.   | N/A   | RBN<br>Notification<br>Meeting | 17/09/2012 | A Water Use license is required prior to commencement of the project. | A WULA amendment will be required for the river crossings and the Pollution Control Dam proposed for the project.   | WSP to clarify the way forward with the Department of Water Affairs. The project will either amend the RPM integrated Water Use license or generate a new application specifically for this project. | WSP (as soon<br>as possible)  |  |  |
| Teresa<br>Taljaard (RBN)         | TT requested a timeline for<br>the WUL amendment and if<br>the RBH will be informed of<br>the amendment (RBN<br>Notification Meeting -<br>17/09/2012).   | N/A   | RBN<br>Notification<br>Meeting | 17/09/2012 | N/A   | Unknown at the stage of the meeting however, the RBN will be informed via the PPP.  | WSP to ensure the<br>RBN are kept up to<br>date.   | WSP (once<br>clarity has been<br>obtained from<br>the Department)   |  |  |
| Teresa<br>Taljaard (RBN)         | TT re-emphasised that if the RBH are not informed, as a landowner then RBH will oppose the project.  | If the lease agreement agreements between RBN and the RPM, the RBN will oppose the project. | RBN<br>Notification<br>Meeting | 17/09/2012 | Project delay.  | WSP noted the comment. AB added that there is currently a separate process in progress to resolve the lease agreement with the RBN (Royalties).   | RPM and RBN to<br>resolve the lease<br>agreement issues as a<br>separate process.  | AAP<br>(completion date<br>is currently<br>unknown)                 |  |  |
| Khalid<br>Patel(RBN)             | KP questioned the word "may" in the BID referring to the need to undertake a WULA. He believes the existing WUL will need to be amended or a new WULA will need to be submitted based on the project description. KP indicated that clear information on water uses needed to be provided. | KP is concerned that the project will not register the project water uses.                  | RBN<br>Notification<br>Meeting | 17/09/2012 | Lack of a project related water use license.                          | WSP replied stating the existing integrated WUL will be amended (or a separate application will be submitted to expedite the process) however, it will only be known if the water uses fall under general authorisation once design of river crossings has been determined. AB stated that a second meeting will be held with the RBN to clarify WULs and any other license requirements. | WSP are to set up an additional meeting once the details of the information requires can be provided.  | WSP (EIA<br>phase)  |  |  |
| Reotshopile<br>Tlhapane<br>(RBN) | RT asked where the wetland areas are for which the aquatic study is being conducted.   | Impact on the Klipgatspruit.  | RBN<br>Notification<br>Meeting | 17/09/2012 | Loss of biodiversity.   | WSP indicated this area to be on the north-eastern side of the Waterval West TSF. AB indicated the Klipgat river running from west to east, crossing the pipeline at certain stages.  | The aquatic specialist to assess the associated impacts on the aquatic eco-system.   | WSP specialist<br>(report to be<br>integrated into<br>the EIR/EMPR) |  |  |

|  | IMPACTS  |  |                                |            |   |   |   |   |  |  |  |
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| Stakeholder  | Issue  | Concern  | Source                         | Date       | Implications  | Responses   | Action Pl   | an  |  |  |  |
|  |  |  |                                |            |   |   | Plan  | Responsible<br>person and<br>completion<br>date   |  |  |  |
| Khalid Patel<br>(RBN)                                | KP questioned the submission of WSP's environmental application form.  | N/A  | RBN<br>Notification<br>Meeting | 17/09/2012 | N/A   | WSP indicated it had been submitted to NWDEDECT. Copy provided in WSP response letter on 11 November 2012.  | N/A   | N/A   |  |  |  |
| Khalid Patel<br>(RBN)                                | KP stated that according to the new environmental legislation the applicant is required to include proof of communication with relevant landowners with the application for authorisation.   | The proof of communication was not included in the application form. | RBN<br>Notification<br>Meeting | 17/09/2012 | Rejection of the application by the authority.        | Proof of communication with RBN is included in the Scoping Report. Proof of future discussions with other landowner (Makhatle Tribe and Fike Trust) will be included in the Final Scoping Report or the EIA report that will be submitted to the NWDEDECT and DMR for approval. | WSP to include the landowner communication in the scoping report/EIA report.  | WSP to include<br>the RBN, Flke<br>trust and any<br>other public<br>notification<br>records in the<br>EIR/EMPR<br>(April 2013). |  |  |  |
| Khalid Patel<br>(RBN)                                | KP asked if a Section 102 process in terms of the MPRDA would be conducted. KP requested that WSP/ AAP inform him once the application is lodged.  | N/A  | RBN<br>Notification<br>Meeting | 17/09/2012 | N/A   | WSP indicated that the process to be undertaken would be an EMPR amendment with the first submission to the DMR being the Scoping Report.   | WSP to inform the RBN on submission of the scoping report to the DMR.   | Completed   |  |  |  |
| Reotshopile<br>Tlhapane<br>(RBN)                     | RT questioned the need for a traffic impact assessment, questioning the extent of the expected impact.   | How many vehicles will the project involve?                          | RBN<br>Notification<br>Meeting | 17/09/2012 | Impact on surrounding roads.                          | WSP indicated that during the construction phase, trucks will utilise the surrounding roads, however the impact is expected to be low during operation (slurry transported via pipeline). Information regarding the traffic study has been included in the Scoping Report.      | WSP to include the traffic information in the project reports.  | WSP (April<br>2013)   |  |  |  |
| Reotshopile<br>Tlhapane /<br>Teresa<br>Taljaard(RBN) | RT and TT requested information on sensitive social receptors which may be influenced by the project e.g. schools, old age homes, disabled homes, etc. She requested a map indicting the location of the receptors relative to the project layout. | Which communities will be impacted by the project?                   | RBN<br>Notification<br>Meeting | 17/09/2012 | Social impact   | Map in WSP letter of 11 Nov<br>2012.  | WSP received a response from the RBN confirming they are content with the information provided in the 11 Nov 2012 letter. | WSP to<br>determine a<br>future follow up<br>meeting date.  |  |  |  |
| Khalid Patel<br>(RBN)                                | KP asked which alternatives had been considered for the project.   | N/A  | RBN<br>Notification<br>Meeting | 17/09/2012 | N/A   | PM responded saying the route indicated on the presentation is the final preferred route. He described that many (approximately 6) pipeline routes had been considered for the project during the 2002 EMPR.  | N/A   | N/A   |  |  |  |
| Teresa<br>Taljaard (RBN)                             | TT asked if the designs submitted to RBN as part of the lease application process  | The project designs submitted to the RBH are not the final drawings. | RBN<br>Notification<br>Meeting | 17/09/2012 | The lease agreement process will need to be repeated. | PM responded yes.   | N/A   | N/A   |  |  |  |

| IMPACTS               |  |   |                                |            |   |  |   |  |  |
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| Stakeholder           | Issue  | Concern   | Source                         | Date       | Implications  | Responses  | Action P  | lan  |  |
|                       |  |   |                                |            |   |  | Plan  | Responsible person and completion date             |  |
|                       | were final. She emphasised that should designs change after any lease for servitudes had been agreed to, the lease application process with the RBN would need to start again from the beginning.  |   |                                |            |   |  |   |  |  |
| Khalid Patel<br>(RBN) | KP requested that RBN be provided with the specialist "Terms of Reference".  | Ensure the specialist studies are covering the correct areas. | RBN<br>Notification<br>Meeting | 17/09/2012 | Possible project delay if all the areas of concern are not covered by the assessments.          | Specialist methodologies (TOR) are included in the Scoping Report which will be submitted to the RBN for review.   | N/A   | Completed.   |  |
| Khalid Patel<br>(RBN) | KP enquired whether pollution plume modelling will be done during the project.   | Pollution potential   | RBN<br>Notification<br>Meeting | 17/09/2012 | N/A   | AB said pollution monitoring is currently taking place.  | AB to follow up with the RBN once the modelling is complete.                        | AAP (date to be determined)                        |  |
| Unknown(RBN)          | RBN asked if they will receive the minutes from Department meetings and Fike trust meetings in the future.   | Lease agreement issues.                                       | RBN<br>Notification<br>Meeting | 17/09/2012 | Potential effect on the lease agreement negotiations between RBN and RPM.                       | WSP indicated that these would form part of the documents produced in the process (Scoping and EIA reports) which will be made available for public review.  | WSP to determine the necessity for a formal meeting with the Fike trust.            | WSP to<br>determine<br>during the EIA<br>phase.    |  |
| Khalid<br>Patel(RBN)  | KP requested the following information:  A map with both parent farms and associated portions on which the proposed pipeline, plants and tailings facility will be located;  The exact extent (in hectares) that the TSF on Hoedspruit will occupy;  A copy of the NEMA application already submitted; and  A list of landowners already identified. | N/A   | RBN<br>Notification<br>Meeting | 17/09/2012 | N/A   | Map and list of landowners<br>provided in WSP letter dated 11<br>November 2012. Information on<br>the Hoedspruit TSF is provided<br>in the Scoping report.   | N/A   | Completed.   |  |
| Khalid<br>Patel(RBN)  | KP requested that he is informed when WSP understand exactly what water uses will be applied for and over which properties. He further requested that the terms of reference (once drawn up) for the specialist studies are sent to him.   | The application does not include all the water uses.          | RBN<br>Notification<br>Meeting | 17/09/2012 | The lack of authorisation for the project.  | WSP intend to either amend the current IWUL for the Rustenburg Section or as an alternative, submit a new standalone application to ensure the authorization is received in time for construction. | WSP to communicate with the Department of Water Affairs to clarify the way forward. | WSP (to be<br>conducted as<br>soon as<br>possible) |  |
| Local leader          | The community leaders complained of traffic in the   | Increased traffic congestion and the damaging of the local    | Local leader<br>Notification   | 27/11/2012 | A direct effect on the local communities, since the communities use the roads on a daily basis. | Maintenance of road is critical to the success of the project.   | Outcome of the Traffic Impact Assessment will                                       | WSP to forward the Traffic                         |  |

|              | IMPACTS  |   |  |            |   |   |   |   |  |  |  |
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| Stakeholder  | Issue  | Concern   | Source   | Date       | Implications  | Responses   | Action P  | lan   |  |  |  |
|              |  |   |  |            |   |   | Plan  | Responsible person and completion date                |  |  |  |
|              | communities which is said to be caused by RPM. In addition, the community claims that potholes in and around the communities have been caused by the use of mining vehicles / machinery which travel on the roads. | community roads.  | Meeting  |            |   | The good condition of the roads is just as important to the project as it is to the community. A Traffic Impact Assessment is currently taking place for the project which will identify any project specific related traffic issues. The environmental study report (including traffic study) will be submitted to the authorities who will review the impacts. (Response issued - 10/01/2013).  | be forwarded to the RLM. The community will be notified before any road works are undertaken. (Response issued - 10/01/2013)  | Impact Assessment report to the RLM WSP (20/03/2013). |  |  |  |
| Local leader | Restriction of access to roads during the project construction period. If temporary roads are used, will the roads be maintained?  | Lack of access to local<br>businesses, clinics and schools<br>during the construction period.<br>The lack of maintenance of the<br>temporary roads. | Local<br>leadership<br>notification<br>meeting | 27/11/2012 | The community members cannot travel to work, school and/or clinics safely.  | No detours are foreseen for the project. PM indicated that there may be potential impacts during project construction phase but not during operation (Response issued - 10/01/2013).  | There will be speed restrictions and flagmen in cases where construction occurs around the public roads. All the traffic impact assessment mitigation measures will be implemented during the construction phase (Response issued - 10/01/2013).  | WSP (April<br>2013)                                   |  |  |  |
| Local leader | The cracking of houses in the communities is claimed to be a result of RPM mining operations.  | The damaging of the houses in the communities.  | Local<br>leadership<br>notification<br>meeting | 27/11/2012 | The decrease in the structural integrity of the buildings, the decrease in the selling price of the homes, and the repair costs incurred. | This project does not involve conventional mining. The reclamation activity will be conducted via hydraulic sluicing which involves no blasting activities. At most, the construction activities will involve the use of jack-hammers. A study was conducted on cracked houses in the past (2007) which confirmed that the cracking was not caused as a result of RPM operations. If projects which include blasting are conducted in the future a post project study will be undertaken to assess any damage incurred to surrounding buildings. RPM has been caught up trying to clarify the employment issues therefore have not been able to engage the communities about this issue (Response issued - 10/01/2013). | The RLM and the RPM is aware of the existing non-project related issue and is / will be addressing it. During the construction period a complaints register will be available at the site entrance within which members of the community can record any blasting related issues (Response issued - 10/01/2013). | Contractors<br>(January 2014-<br>December<br>2014)    |  |  |  |
| Local leader | Safety and Security Issues   | How will RPM better manage  | Local  | 27/11/2012 | Potential death and injury resulting from employees   | AAP's Protection Services work  | Safety and Security   | AAP (discussion                                       |  |  |  |

| IMPACTS      |   |  |  |            |  |   |   |   |  |  |
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| Stakeholder  | Issue   | Concern  | Source   | Date       | Implications   | Responses   | Action Plan   | an  |  |  |
|              |   |  |  |            |  |   | Plan  | Responsible<br>person and<br>completion<br>date   |  |  |
|              | associated with the recent strikes.   | the safety and security issues experienced by the communities during similar scenarios in the future? The RLM does not live in the community therefore concerned that the RLM will not follow up with the issue.   | leadership<br>notification<br>meeting          |            | striking in communities. Lack of access to schools, clinics and business impacted on during industrial action. | closely with the South African Police Services (SAPS) who has primary responsibility to ensure that safety and security is maintained during strike action. Anglo American Platinum (AAP) relied on SAPS as much as did the community. The Community Engagement Department (CED) will record the issues/ questions raised and follow up with relevant AAP Departments (Response issued - 10/01/2013). Feedback and tracking of safety and security issues will be discussed at upcoming CEF meetings.   | during strike action, is seen as a SAPS responsibility, however, by working closely with the Local Municipality and SAPS, as well as trying to improve Human Resources (HR) relations through the RPM Social and Labour Plan (SLP) as well as the Socio-economic Assessment Toolbox Version 3 (SEAT 3), the company is doing what they can to aid in safety and security issues (Response issued - 10/01/2013).   | at next CEF meeting)  |  |  |
| Local leader | The community leaders complain about security issues associated with the influx of RPM employees from outside areas. The community leaders want RPM to ensure that employment is provided to local community members. No local skills development plan is in place. Contractors are employed without the prior consideration of the locals. Assumption is made that local skills are not available. | Increased crime due to the influx of RPM employees from outside areas. A lack of employment for local residents. Employment promises not being fulfilled. If the project plans according to the Integrated Development Plan (IDP) and the Master Plan there will be no jobs created for locals. Need to clarify the issue before meeting with the communities next week. The community will become angry if a resolution is not decided upon. Complain of the manipulation of the RLM CV database. No skills transfer from outside contractors to local residents. | Local<br>leadership<br>notification<br>meeting | 27/11/2012 | Increased crime statistics in the local communities.  Lack of income for local residents.                      | During the project contractor tender process, the project team will encourage the tenderers to utilise local. The tender process will be rated upon the numbers of local labour used during the construction phase. The ward councillors consulted in the Scoping phase can provide to the elected contractors (unknown at this stage), the names of local persons who can be considered for employment for the construction phase. The selection of the labourers will depend on the availability of the relevant skills required. The employment will be inherently temporary. A number of permanent operational jobs will be created by the project (number to be determined). If this project does not go-ahead the current jobs created by the Klipgat operation will be lost. | WSP sent the Construction Management Plan to all the attendees whom can tender for the contractor work. In addition, the project team will encourage the contract tenderers to utilise local labour as and when required (when the appropriate skills are available). The Community Engagement Forum (CEF) will address the issue further during future meetings. There will be future meetings, during the EIA phase in which the LLC can express the issue further. The RLM Local Economic Development (LED) Director indicated that his Department would arrange a workshop in which to disseminate employment opportunities to the locals. The project cannot guarantee opportunities until the project initiation phase (Response issued - | <ul> <li>AAP         <ul> <li>(discuss at next CEF meeting)</li> <li>RLM (to arrange a workshop in the EIA phase)</li> <li>TWP (to include in tender documentati on)</li> </ul> </li> </ul> |  |  |

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|              | IMPACTS  |  |  |            |  |  |  |  |  |  |  |
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| Stakeholder  | Issue  | Concern  | Source   | Date       | Implications   | Responses  | Action PI  | an   |  |  |  |
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|              |  |  |  |            |  |  | 10/01/2013).   |  |  |  |  |
| Local leader | Health impacts caused by RPM mining operations.  | The communities are concerned with the health implications of living within a close proximity to the RPM mining operations. Dust is referred to as the main concern. | Local<br>leadership<br>notification<br>meeting | 27/11/2012 | Respiratory related health issues for local residents.   | This is an RPM operations issue and will be approached as part of the SLP. In line with the SLP, commitment is made to provide primary health care. Furthermore, HIV/ VCT services are currently provided through mobile units. WSP is undertaking an air quality impact assessment for the project which will rate the significance of the dust impacts relating directly to the proposed project (Response issued - 10/01/2013). | The RPM SLP will be adhered to. The dust mitigation measures contained within the Air Quality Management Plan will be taken into consideration during construction and operation phases. The project has been designed and budgeted for dust suppression which will mitigate the impacts of dust (Response issued - 10/01/2013). | WSP (April<br>2013)  |  |  |  |
| Local leader | The impact which the project may have on community agricultural land.  | A decrease in the land<br>available for cattle grazing and<br>cropping.  | Local<br>leadership<br>notification<br>meeting | 27/11/2012 | A decrease in the grasslands available for grazing and a decrease in the land area potentially available for cropping. | The pipelines will be located within an existing pipeline corridor hence no impact is foreseen.  | A Social Impact Assessment (SIA) will identify any potential impacts and subsequent management measures will be developed and implemented accordingly. The issue will be followed up in the CEF meeting at the end of the month (Response issued - 10/01/2013).  | <ul> <li>WSP (April 2013)</li> <li>CED (during the next CEF meeting in 2013)</li> </ul>                        |  |  |  |
| Local leader | Legacy issues which have never been resolved by RPM.   | Local leaders do not want to report back to the communities on solutions which will not be implemented.  | Local<br>leadership<br>notification<br>meeting | 27/11/2012 | Frustration in the communities and a negative impact on the reputation of AAP.   | The CEF is in place and RPM have monthly meetings with leadership representatives to address these legacy issues (Response issued - 10/01/2013).   | CED to follow up on the issues through the CEF. CED to call a meeting to follow up on outstanding legacy issues (Response issued - 10/01/2013).  | CED (2013)   |  |  |  |
| Local leader | Will there be any form of financial compensation for surrounding communities in terms of tangible items/infrastructure which will benefit the communities outside of the scope of the IDP and the Master Plan. In addition, the local leaders requested that consultants, including TWP and WSP, consider project specific Corporate Social Input (CSI) when undertaking projects in | A lack of financial provision for the surrounding communities.   | Local<br>leadership<br>notification<br>meeting | 27/11/2012 | Frustration amongst community members.   | No significant impacts are foreseen that may require compensation. There is no physical resettlement as a result of the project and no foreseen impact on grazing land. An SIA is being undertaken for the project which will identify any potential oversights (Response issued - 10/01/2013).  | An SIA will identify any potential impacts and management measures will be developed and implemented accordingly. AAP during future projects will ensure that the contractors/consultants hired have a CSI strategy document for the specific project in which employment opportunities may be                                   | <ul> <li>WSP (April 2013)</li> <li>AAP (during all future projects)</li> <li>RLM director (ongoing)</li> </ul> |  |  |  |

|              | IMPACTS   |  |   |            |  |   |   |  |  |  |  |
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| Stakeholder  | Issue   | Concern  | Source  | Date       | Implications   | Responses   | Action PI   | an   |  |  |  |
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|              | the region. They further recommended that AAP insist on a CSI strategy when procuring consultants.            |  |   |            |  |   | created (this will be determined on a case by case basis). The RLM will consult with the local councillors, consolidate the potential sustainable business opportunities and revert back to RPM to determine what RPM can assist with in terms of their required donation as a corporate entity (Response issued - 10/01/2013). |  |  |  |  |
| Local leader | Will a budget be made<br>available to develop<br>infrastructure in the<br>communities.                        | A lack of infrastructural development in the communities.  | Local<br>leadership<br>notification<br>meeting  | 27/11/2012 | A lack of schooling and health care facilities in the communities as well as an increase in crime statistics due to the lack of street lights. | Infrastructure development is an integrated development planning imperative which should be addressed in accordance with the RLM IDP and the Royal Bafokeng Nation (RBN) Master Plan. The SLP will be revised in line with the SEAT 3 report in 2013/14. Opportunities for infrastructure development would be explored accordingly in the context of the IDP. Currently project Alchemy is being rolled out which seeks to benefit the communities. Alchemy was awarded shares from AAP which will be allocated to development initiatives in the surrounding communities. The project lifespan is approximately 30 years. The communities will get the opportunity to nominate individuals whom will be responsible for deciding on the allocation of the funds (Response issued - 10/01/2013). | Implementation of<br>SEAT 3. Roll-out of<br>Project Alchemy. The<br>RPM SLP will be<br>adhered to.  | AAP (tie in with completion dates of SEAT 3, project Alchamy)            |  |  |  |
| Local leader | The community leaders requested a meeting with RPM, RBH and the RLM at which all the issues can be discussed. | The community members want to ensure that the authorities are aware of the issues in the communities.  | Local<br>leadership<br>notification<br>meeting  | 27/11/2012 | N/A  | WSP extended an invitation to the said parties.   | WSP emailed the invitation to the RLM and the RBN. WSP to send invitation during the EIA phase.   | WSP (April /<br>May 2013)  |  |  |  |
| Local leader | Local Labour  The Local Leadership  Committee (LLC) is aware  | Labour resources for the project are not being sourced from the local affected communities. The RLM CV | Local<br>leadership<br>notification<br>response | 10/01/2013 | The local community will remain unemployed should the recruitment process not be altered.  | RPM responded that for short-<br>term labour opportunities<br>(during construction phase), the<br>local (immediate vicinity)  | WSP included the<br>Construction<br>management Plan in<br>the meeting minutes as  | <ul><li>WSP<br/>(completed)</li><li>RPM (during<br/>the tender</li></ul> |  |  |  |

|             | IMPACTS  |                                 |         |      |              |  |   |   |  |  |  |
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| Stakeholder | Issue  | Concern                         | Source  | Date | Implications | Responses  | Action PI   | an  |  |  |  |
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|             | that construction will be short-term. Local labour should be utilised as first priority for new employment opportunities, and the members requested RPM's commitment to use of local labour as part of this project as well as future projects. The LLC members, however, understand that skilled services could be sourced from outside, should services not be available from within the local community.  The request was that RPM utilise the current database as per RLM but take responsibility for job allocations, and the committee requested commitment from RPM with regards to this concern. Members of the LLC want an undertaking in writing that local labour would be sourced directly. They were concerned that, should the recruitment process take place via the RLM Database (as per current system), the system might be at risk of manipulation – and employment opportunities for local residents could be jeopardised.  Members of the LLC requested information and CVs still be forwarded to existing database through Royal Bafokeng and RLM. However, the system will be spearheaded by the local councillors.  Skilled labour should also be defined. The database will be considered if required skills aren't directly available. The construction phase of this Local leadership notification response meeting project should consider short-term employment | database system is manipulated. | meeting |      |              | expertise will be given first priority on the basis of skills availability (depending on the project tender process). The contractor tender process will include the scoring of contractors based on the number of local labourers employed during construction. This will ultimately include Ward 33, Ward 34 and Ward 29. However, much of the required labour is skilled/ specialised services and thus may not be able to be sourced from local communities (to be determined on receipt of the tenders from prospecting contractors).  The Construction Management Plan has been made available to the community to ensure the local community members are able to pursue possible business opportunities during the project tender process (Response issued - 10/01/2013). | an appendix and submitted the final minutes to all the local leaders whom attached the meeting. RPM to ensure that project tender process includes the scoring of prospectors based on the predicted number of local employment expected. | process)  |  |  |  |

| IMPACTS               |  |  |  |            |   |   |  |  |  |
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| Stakeholder           | Issue  | Concern  | Source   | Date       | Implications  | Responses   | Action Pl  | an   |  |
|                       |  |  |  |            |   |   | Plan   | Responsible<br>person and<br>completion<br>date                          |  |
|                       | opportunities and skills transfer should also be considered for future projects.  An example was provided: "WSP (including all AAP's service providers / suppliers) should consider possible Joint Venture (JV) opportunities within the RLM to assist in the potential transfer of skills. This would assist in future opportunities for the locals".  Point to note: Definition of "local" in this context: Ward 33, Ward 34 and only the Thekwane Village in Ward 29. It should also be noted that should local skills / services not be available, the labour can then be sourced from beyond the immediately surrounding communities. |  |  |            |   |   |  |  |  |
| RLM<br>representative | The RLM indicated that the mentioned wards should, however, not be isolated from other wards. Perhaps allocate 10 – 20% of opportunities to other wards to ensure that the current wards being considered are also considered in projects which do not lie within the ward boundaries.   | RLM concerned that the wards affected by this project will not be considered for other future projects which do not impacted directly on the wards in question.  | Local<br>leadership<br>notification<br>response<br>meeting | 10/01/2013 | Future job opportunities may be limited to other wards (i.e. no employment will be sourced from the wards in question).   | Comment noted and agreed upon.  | RPM to ensure that a small percentage of jobs are sourced from other wards during RPM operations 9as well as the current project). | RPM (to include<br>the condition in<br>the contractor<br>tender process) |  |
| Local leader          | Local Economic Development Opportunities  Requested local development initiatives (e.g. JV with WSP). Sub-contracting opportunities related to the project, should give preference to SMMEs (Local Small, Micro and Medium Enterprises). JV opportunities, in terms of subcontracting must also be considered.  The LLC requested that the RLM be made aware of which sub-contractors are  | Communities concerned that the local organisations are not being given first priority. The LLC are concerned that the local resources will not be ready to deal with the required services if not allowed to prepare the resources prior to the service requirement. RPM concerned that quality will be compromised should local labour resources be utilised. | Local<br>leadership<br>notification<br>response<br>meeting | 10/01/2013 | Lack of employment opportunities in the local communities. The local enterprises will not be able to provide the required service if not given appropriate notification. The quality of work may be compromised due to a lack of skilled / qualified human resources. | RPM responded that such opportunities, should any arise, will be made freely available to the local community to pursue. RPM will also explore methods of developing further skills within communities to aid in the development of future sustainable business opportunities. The Construction Management Plan was attached to the Meeting Minutes as Appendix C for the LLC to potentially tender for the project work during the open tender process (Response issued - 10/01/2013). | RPM to communicate opportunities and make the opportunities available to the locals as and when the opportunities arise.           | <ul> <li>RPM         (Constructio</li></ul>                              |  |

| IMPACTS      |   |   |  |            |   |   |  |  |  |  |
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| Stakeholder  | Issue   | Concern   | Source   | Date       | Implications  | Responses   | Action P   | lan                                    |  |  |
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|              | required to ensure the community can commence with the developing of such capacities prior to the tender process (beginning of construction). This action is also to be implemented for future projects.  The RLM suggested that service providers and suppliers to RPM such as WSP, to discuss potential sub-contracting opportunities for communities with RPM. Subsequently, it was suggested by the members of the LLC that RPM package ToR to be drawn up for suppliers and service providers to help facilitate local SMMEs and work together. The Terms of Reference (TOR) is to encourage skills transfer between contractors and local SMMEs.  The LLC also commented that quality, in terms of providing these services, will not be compromised. The LLC would like to be given the opportunity to explore future business / employment opportunities. |   |  |            |   |   |  |  |  |  |
| Local leader | Compensation  The members of the LLC requested tangible compensation rather than compensation in terms of monetary value. The LLC expressed concern that the IDP is referred to which does not address their requests. They requested some sort of sustainable project / business to be funded by RPM to benefit the communities on a larger scale.  The RLM Director added that the financial assistance from RPM should be in the form of   | The community is concerned that only small scale initiatives are undertaken in the local communities. The initiatives are not sustainable in the long term. | Local<br>leadership<br>notification<br>response<br>meeting | 10/01/2013 | A lack of long term sustainable projects for community members/enterprises. | RPM's Social and Labour Plan Projects (SLP) are reviewed annually and seek to identify in alignment with the IDP of the Rustenburg Local Municipality and the Master Plan of the Royal Bafokeng Nation, sustainable community Development initiatives.  The CEF (Community Engagement Forum) is one platform in which the development agenda of the SLP is discussed and thus communities through their community leadership have an opportunity to influence prioritization of development | RPM to determine what sustainable development options can be explored in order to satisfy the request. | RPM (on-going)                         |  |  |

|              |  |  |  |            | IMPACTS   |  |   |   |
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| Stakeholder  | Issue  | Concern  | Source   | Date       | Implications  | Responses  | Action P  | lan   |
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|              | a donation, due to RPM being a corporate entity. A sustainable catalytic project such as a Personal Protection Equipment Manufacturing Company or a bakery or even the supply of chemicals. This will ensure a sustainable business opportunity in the area as the area is mostly associated with mining and related activities.   |  |  |            |   | initiatives and projects. RPM will continue engaging communities through the CEF structure.  |   |   |
|              | Once such projects have been identified, an engagement process should be initiated. It is suggested that other mining companies in the area form part of this initiative to ensure the sustainability of the projects are achieved. Implementation of the CSI responsibility to build schools, clinics, etc. The RLM replied that it is the responsibility of the RLM to build schools, clinics, etc.  |  |  |            |   |  |   |   |
|              | A question was raised to confirm whether the donation was to be provided from the project budget or from the mine (RPM). It was confirmed that this should be a minewide donation; however, this project provides a significant platform to ensure that possible investment in communities would not be lost. Smaller opportunities, as part of the current project, (e.g. sanitation management and assistance with public meetings) should be sourced from the local community as far as possibly. |  |  |            |   |  |   |   |
| Local leader | Additional requests  - Request a document with agreements for LLC's records; - Request for the gravel road to be constructed over pipeline so community can  | Community is concerned that the requests will not be documented and agreements not upheld. Community is concerned that access to fire wood will be limited.  Concerned that the Public Participation Process was not | Local<br>leadership<br>notification<br>response<br>meeting | 10/01/2013 | Should the decisions made not be documented the commitments will not be upheld. If no access road is constructed the communities access to fire wood will be restricted. Concerned that the same PPP will take place for this project as per past projects in the area. | WSP have generated minutes from the local leadership meeting which includes the agreements made.  The public participation process thus far has been comprehensive and WSP will continue to be diligent in their | WSP will continue to record all agreements in the EIA phase of the project. WSP will include the mitigation measures in the SIA report which is yet to be finalised. On | WSP (on-going<br>to October<br>2013)<br>RPM/TWP (prior<br>to project<br>construction<br>phase). |

|   | IMPACTS   |  |                         |            |  |   |  |  |  |  |  |
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| Stakeholder   | Issue   | Concern  | Source                  | Date       | Implications                             | Responses   | Action P   | lan  |  |  |  |
|   |   |  |                         |            |  |   | Plan   | Responsible person and completion date   |  |  |  |
|   | collect wood in field; - Security –issues and concerns with regards to previous projects (not related to this project) with building explosion operations near villages (specifically construction of a Refrigeration Plant); and - Emphasis was placed by the members on the need to keep minutes and records. Feedback of these meetings should also be provided.   | properly conducted in past projects.                               |                         |            |  | processes going into the EIA phase.  There is an existing air pipeline parallel to which the proposed project pipelines will be positioned/routed therefore there is no foreseen notable impact to the ability of locals to access firewood. There are existing crossing stiles over the air pipeline which will be extended to cater for the additional pipelines. If the community view the access issue as a significant impact then they should indicate the severity of the concern during the EIA phase public meeting. The impact will be rated and mitigation measures indicated within the SIA report. | conclusion of the SIA report RPM/TWP are to determine if additional crossing stiles are required.  |  |  |  |  |
| Francois<br>Joubert<br>(Tabacks<br>Consulting)      | Requested to schedule a meeting between your RPM and the RBN in order to discuss the project in more detail (as part of the formal EIA Public Participation Process), especially as same relates to the potential impact of the project on the RBN as landowner.  | Landowner issues   | Telephone<br>call/Email | 11/02/2013 | Land owner issues may delay the project. | WSP responded stating that need to understand the purpose and the potential points of discussion for the meeting in order for WSP to revert back to RPM with a clear request.   | WSP will await the response from the RBN and act accordingly once the clarification is received. The meeting will most likely take place during the EIA phase. | WSP (once a<br>response is<br>received (EIA<br>phase)).  |  |  |  |
| Bob Moepie<br>(MOGWELE<br>TRADING 393<br>(PTY) LTD) | Your company's notice on the above-mentioned matter in the Rustenburg Herald of the Week 4th to 5th February 2013 is referred to.  Your advertisement refers to the Waterval TSFs located in Rustenburg. As Management of Mogwele Trading, we would like to be assured that these "Tailings Storage Facilities, (TSFs)" do not refer to the old tailings dam situated on portions 10, 13, 19 and the remaining extend of the farm Waterval 303 JQ in Rustenburg?  Our company has prospecting rights on the economic minerals on those tailings dams (renewal | The submission of an application on behalf of RPM on the same TSF. | Letter (Email)          | 11/02/2013 | A dispute between the companies.         | The Mogwele Prospecting<br>Right is disputed and the<br>subject of a judicial review.   | Pending dispute.   | AAP Legal team<br>to follow up on a<br>continual basis<br>(prior to<br>completion of<br>the EIA) |  |  |  |

| IMPACTS                             |   |                             |  |            |   |   |  |   |  |
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| Stakeholder                         | Issue   | Concern                     | Source   | Date       | Implications  | Responses   | Action Pl  | lan   |  |
|                                     |   |                             |  |            |   |   | Plan   | Responsible<br>person and<br>completion<br>date   |  |
|                                     | pending). We do have an approved EMP for the rights we applied. The matter is currently under dispute between us and AAP:RPM.  Should you however not be referring to the tailings situated on the portions of the farm as described above, please ignore my email? |                             |  |            |   |   |  |   |  |
| Rustenburg<br>Local<br>Municipality | Rustenburg Local Municipality representative requested Anglo use the current/existing labour on the mine and if additional human resources are required, to source the labour locally.  | The use of external labour. | Integrated<br>Environmental<br>Management<br>Meeting | 14/02/2013 | A high unemployment rate in the communities surrounding the mine. | The contractors commissioned on-site will be encouraged to use local labourers/ managers. However, this will depend on the availability of skills (with associated qualifications). If required, the contractors will source the labour via the local ward councillors (local employment cannot be guaranteed, this will depend on the feedback obtained from the tenderers). The employment will be inherently temporary. A number of permanent operational jobs will be created by the project. Most of the project work involves qualified teams in order to guarantee the quality of work therefore local employment will be reviewed and determined by the contractors if criteria are met by local community members. If this project does not go-ahead the current jobs created by the Klipgat operation will be lost. | WSP sent the project Construction Management Plan to all the attendees whom can tender for the contractor work. A policy which encourages the employment of local labourers will be followed by entering into contractual agreements with the construction contractors within the requirements of the project. The Community Engagement Forum (CEF) will address the issue further during future meetings. There will be future meetings, during the EIA phase in which the community local leadership can express the issue further. The RLM Local Economic Development (LED) Director indicated that his Department would arrange a workshop in which to disseminate employment opportunities if required by locals. The opportunities will be assessed at the project initiation phase. | <ul> <li>AAP (discuss at next CEF meeting)</li> <li>RLM (to arrange a workshop in the EIA phase)</li> </ul> |  |

|                                     | IMPACTS   |  |  |            |  |   |   |  |  |  |  |
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| Stakeholder                         | Issue   | Concern  | Source   | Date       | Implications   | Responses   | Action P  | an   |  |  |  |
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| Rustenburg<br>Local<br>Municipality | The community needs to be informed of what skills are required for potential jobs.  | A lack of communication in terms of potential employment opportunities being created as a result of the project. | Integrated<br>Environmental<br>Management<br>Meeting | 14/02/2013 | Local community members cannot make use of the employment opportunities on the mine.   | The RLM Local Economic Development (LED) Director indicated during the local leadership response meeting, that his Department would arrange a workshop in which to disseminate employment opportunities, if required by locals. The project cannot guarantee opportunities until the project initiation phase.  | The RLM are to arrange a workshop following communication with RPM (as part of the CEF).                                    | RLM (prior to<br>project<br>construction<br>phase)           |  |  |  |
| Rustenburg<br>Local<br>Municipality | What is going to happen to the rest of the minerals in the reprocessing as Anglo only has a license for to remove the platinum? | N/A  | Integrated<br>Environmental<br>Management<br>Meeting | 14/02/2013 | Anglo cannot extract any minerals other than the platinum in the Waterval TSF's.   | RPM are currently resolving this issue via the relevant departments.  | RPM are to monitor the progress of this issue.  | RPM (prior to<br>the operational<br>phase of the<br>project) |  |  |  |
| Rustenburg<br>Local<br>Municipality | During the rehabilitation phase of the project Anglo are to retain jobs created as a result of the project.                     | The temporary nature of the jobs.  | Integrated<br>Environmental<br>Management<br>Meeting | 14/02/2013 | Employees will only benefit from the employment for a limited period of time.  | During the rehabilitation phase a limited number of specialists will be required to ensure the site is correctly rehabilitated to meet the conditions of the environmental authorisation.  Jobs will be maintained where possible/feasible.   | RPM to determine<br>which jobs can be<br>retained at the project<br>facilities following the<br>rehabilitation phase.       | RPM (during the project rehabilitation phase)                |  |  |  |
| Rustenburg<br>Local<br>Municipality | Anglo must rehabilitate the area appropriately once complete with the mining activities.  | The land is left in a unacceptable condition.  | Integrated<br>Environmental<br>Management<br>Meeting | 14/02/2013 | Degradation of the environment and heath and safety issues associated with the exposed footprint of a prior tailings storage site. | The rehabilitation costs have been taken into account via a Closure Liability Assessment undertaken by SRK. The rehabilitation of the site will form part of the project Environmental Management Programme. The current RPM rehabilitation plan will be updated as part of the project.  | The Closure Liability Assessment has been undertaken. The report will be contained within the Draft EIR/EMPR.               | WSP<br>(12/04/2013)  |  |  |  |
| Local<br>community<br>member        | What methods were used to notify the public meeting?  | The communities in the area were not sufficiently notified of the public meeting.                                | Public<br>meeting                                    | 14/02/2013 | The public participation process may not be comprehensive.   | HM responded indicating that faxes, emails, site notices, newspaper adverts, local leadership meetings, and an announcement by the ward councillors (at a local funeral in Thekwane and at a church service in the community) were used to notify the public. However, the team cannot guarantee the public turn-out on the day of the meeting. HM requested a local leader, who attended the local leadership meetings to indicate what process, had been followed by the councillors and any other community leader to convey the | WSP will continue to<br>run a comprehensive<br>stakeholder<br>engagement process<br>during the EIA phase of<br>the project. | WSP (on-going<br>to end October<br>2013)                     |  |  |  |

| IMPACTS                      |  |  |                   |            |   |  |  |   |  |  |  |
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| Stakeholder                  | Issue  | Concern  | Source            | Date       | Implications  | Responses  | Action Plan                                  |   |  |  |  |
|                              |  |  |                   |            |   |  | Plan   | Responsible<br>person and<br>completion<br>date |  |  |  |
|                              |  |  |                   |            |   | notification of the public meeting to the local communities. Furthermore, HM indicated that all the questions raised by the public will be included in the Scoping Report which in turn will be reviewed by the authorities, proponent and consulting team feeding to the authorities or regulators, who will make an informed decision regarding the future of the project. LR indicated that WSP can be contacted at any stage with any issues or concerns during the process regarding the project and the details provided in the presentation. In addition LR noted that there would be another public meeting during the EIA phase (date to be confirmed). |  |   |  |  |  |
| Local<br>community<br>member | A community member indicated that not all members of the community have cell phones therefore, many of them were not informed via sms. He further indicated that the point he raises was not a complaint, merely an observation.   | Concerned that all the community members never received the public meeting notification due to the lack of cell phones.        | Public<br>meeting | 14/02/2013 | Not all community members were notified of the project and given sufficient opportunity to raise issues and concerns. | Various methods of communication were used to inform the surrounding communities. A newspaper advert was placed in both a national and a local/regional newspaper, site notices were erected in and around the proposed project area and faxes/emails were also distributed to a stakeholder database which included authorities, organisations, the public and the local leaders whom were consulted as part of the project.  | N/A  | N/A   |  |  |  |
| Local<br>community<br>member | A community member indicated that better feedback in terms of the entire communities issues can be obtained from the local trustees of Photsoneng and Mfidikwe. That consultation through structures such as the Fike Trust will provide a more meaningful participation for communities such as those from Photsaneng Village since they have office bearers that are more knowledgeable and informed | The feedback obtained from the general public in the community may not be value adding due to the lack of education/knowledge. | Public<br>meeting | 14/02/2013 | The public participation process may not provide beneficial information to the project team or the authorities.       | Comment noted. WSP will<br>endeavour to obtain further<br>feedback from the trusts.  | WSP to action the item during the EIA phase. | WSP (EIA<br>phase)                              |  |  |  |

| IMPACTS                      |  |  |                   |            |  |   |   |   |  |  |  |  |
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| Stakeholder                  | Issue  | Concern  | Source            | Date       | Implications   | Responses   | Action Plan   |   |  |  |  |  |
|                              |  |  |                   |            |  |   | <br>  Plan  | Responsible<br>person and<br>completion<br>date |  |  |  |  |
|                              | about such processes.  |  |                   |            |  |   |   |   |  |  |  |  |
| Local<br>community<br>member | A member of the meeting asked whether WSP was in possession of the Photsoneng and Mfidikwe trust contact details. The member stated that no one present at the meeting had the mandate to comment on the Hoedspruit farm (on which the Hoedspruit TSF is situated). He further indicated that the Fike Trust should be consulted as they are the owners of the Farm. | Concerns raised that the<br>Photsoneng and Mfidikwe trust<br>have not been informed of the<br>project.                         | Public<br>meeting | 14/02/2013 | The public participation process may not provide beneficial information to the project team or the authorities unless more knowledgeable members of the community are consulted. | JO responded saying WSP may have the details however the details will be obtained after the meeting to make sure they are informed about future meetings. The comment has been noted (AAP have notified the Fike trust of the increased height of the Hoedspruit TSF).  | WSP to ensure that the details are include on the EIA stakeholder database.   | WSP (currently taking place).                   |  |  |  |  |
| Local<br>community<br>member | A community member expressed that the general public in the area often cannot comprehend the detail of the project therefore cannot make informed decisions.   | The feedback obtained from the general public in the community may not be value adding due to the lack of education/knowledge. | Public<br>meeting | 14/02/2013 | The public participation process may not provide beneficial information to the project team or the authorities.  | The stakeholders making comments and inputs are doing so to inform the decision maker of the issues to be considered in decision making. Therefore, the DMR will be notified of the issues raised by the community and subsequently make an informed decision on the project.   | N/A   | N/A   |  |  |  |  |
| Local<br>community<br>member | A community member said that he is concerned that the DMR is not represented at this meeting, despite their previous calls for the department to attend so that they can explain process and legislation followed building up to decision making?  | The DMR are not fully aware of the issues raised by the communities.   | Public<br>meeting | 14/02/2013 | The communities issues are not taken cognisance of and/or actioned by the government or the proponent.   | Ishmael (RPM CED representative) detailed the role of the DMR. Ishmael said that the DMR do not get involved at this level however the Department was notified of the public meeting time/date/venue.  The issues and questions raised by local leadership and community members are considered by the DMR in the Scoping Report and the EIA report which is then reviewed by the Department. The DMR or other departments then respond in the form of a Record of Decision/ Environmental Authorisation. The proponent is also required to detail how any impacts associated with the project will be mitigated. | WSP to update and submit the final scoping report including all the issues which were raised at the public meeting. | WSP<br>(20/03/2013)                             |  |  |  |  |
| Local<br>community<br>member | A community member is concerned that the community is not being well represented in the process.   | The public participation process is not comprehensive and has not captured the social issues.                                  | Public<br>meeting | 14/02/2013 | The issues submitted to the DMR are not comprehensive and representative of the true issues being experienced in the communities.  | Herbert Mudupi (HM) (public<br>meeting facilitator) indicated<br>that the issue will be included in<br>the Issues Trail and submitted<br>to the Department. HM further  | WSP to ensure that as many lines of communication as possible are utilized during the EIA phase.                    | WSP (EIA<br>Phase)                              |  |  |  |  |

|                              | IMPACTS   |  |                   |            |   |  |  |   |  |  |  |  |
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| Stakeholder                  | Issue   | Concern  | Source            | Date       | Implications  | Responses  | Action P   | lan   |  |  |  |  |
|                              |   |  |                   |            |   |  | Plan   | Responsible<br>person and<br>completion<br>date   |  |  |  |  |
|                              |   |  |                   |            |   | indicated that the current meeting is one of many meetings which have been held to date for the project. There will be an additional public meeting in the next phase of the project in which the public can raise any additional issues/ questions, however comment is noted and that the proponent and the consultants do not have control on who and how many people attend to qualify a meeting as a community meeting. Public Meetings require that you use as many mechanisms as possible to ensure effort to reasonable publication for invite and not guarantees for attendance. |  |   |  |  |  |  |
| Local<br>community<br>member | The RBN representative said that he believes that the public attended the meeting in order to get notified of the potential impacts which may affect them. He requested that WSP elaborate on the impacts which may occur as a result of this project.  | WSP are focusing too much on other issues and not spending enough time on the true concerns of the public. | Public<br>meeting | 14/02/2013 | The objective of the public meeting is not achieved.  | HM requested that the community submit a list, to WSP, of all the questions, comments and suggestions which they would like to raise. WSP indicated that the community can submit comments for the scoping phase until Friday 22 February 2013. However, comments for the EIA phase can be submitted until July 2013.  | N/A  | N/A   |  |  |  |  |
| Local<br>community<br>member | A local leadership member indicated his concern with the lack of community representation in the work force/ contractors used by RPM. He further indicated that local enterprises needs are to be considered when appointing consultants. He further elaborated that WSP should appoint a member of the community to form part of the WSP team. He concluded that many of the issues between the community and RPM could have been avoided if the community was considered first. | A lack of local employment generation.   | Public<br>meeting | 14/02/2013 | The maintenance of low employment statistics in the communities.  | HM responded that the comment/suggestion is noted and will be included in the issues trail and submitted to the Department. The issue was raised in the local leadership meeting and the response meeting which was held last month. The issues trail from the meetings will also be provided to the Department for review.  Certain agreements were recorded between the locals and the proponent regarding procurement opportunities and sustainable long term local economic development.   | RPM to ensure that the RLM is informed of potential procurement opportunities early in order to prepare the necessary resources in the communities. RPM to investigate various joint venture opportunities and sustainable long-term economic development opportunities for the local community enterprises. | <ul> <li>RPM (on-going throughout project)</li> <li>CED (during upcoming forum meetings)</li> </ul> |  |  |  |  |
| Local community              | A local leadership member said that he has an issue with  | RPM do not benefit the local communities however the mine  | Public<br>meeting | 14/02/2013 | The community does not benefit from the mining activities. The community suffers from strikes resulting | RPM benefit the GDP of the country however there are not   | Various options are being explored by the  | AAP CED (to discuss joint   |  |  |  |  |

| IMPACTS                      |   |   |                   |            |  |  |  |  |  |
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| Stakeholder                  | Issue   | Concern   | Source            | Date       | Implications   | Responses  | Action P   | lan  |  |
|                              |   |   |                   |            |  |  | Plan   | Responsible person and completion date                   |  |
| member                       | the manner in which RPM operate. How will the remining project benefit the community? He further highlighted the hardships faced by the communities as a result of the RPM strikes and other environmentally related impacts.   | impacts the community.  |                   |            | from the mining activities.  | major benefits for the community other than the maintenance of the current jobs and the creation of an additional limited number of jobs during the operational phase.   | project team following<br>the local leadership<br>notification meetings.   | venture social initiatives during upcoming CEF meetings) |  |
| Local<br>community<br>member | A local community member suggested that WSP host a meeting per community due to the unique nature of the needs of each community.   | All the affected communities are not appropriately represented.   | Public<br>meeting | 14/02/2013 | The objective of the public meeting is not achieved.   | WSP will consider the recommendation during the EIA phase public participation process.  | To be considered during the EIA phase of the project.  | WSP (April 2013<br>– November<br>2013)                   |  |
| Local<br>community<br>member | WSP must run a transparent process by including the community members in the specialist studies.  | WSP are not providing the community with comprehensive feedback on the specialist studies. WSP are to ensure that the community members are included in the Social Impact assessment study. | Public<br>meeting | 14/02/2013 | If the community is not included in the study the finding will not be representative of the situation on the ground. | WSP are in the process of undertaking an SIA.  | WSP will include the findings of the assessment in the EIA report which will be made available to the public for review.   | WSP (April<br>2013)                                      |  |
| Local<br>community<br>member | A local leadership member indicated that the small number of jobs which may be created by the project is a concern, due to the fact that these jobs are for a short term, and that the real issue is the lack of big meaningful opportunities for the communities such as equity ownership. | The lack of big meaningful<br>opportunities for the<br>communities such as equity<br>ownership.   | Public<br>meeting | 14/02/2013 | The lack of sustainable Local Economic Development opportunities for local enterprises.                              | RPM will investigate potential sustainable opportunities. In addition, RPM have provided the local leadership with the project Construction management Plan to enable local enterprises to tender for the current project contracts. | The project team to inform the RLM if/when human resources are required in order to give the local leadership sufficient opportunity to consolidate resources in preparation for the work associated with the project (however, this will be determined based on the commitments made by the project contractors). Various sustainable economic development options are being explored by the project team following the local leadership notification meetings. | RPM (prior to<br>the project<br>construction<br>phase)   |  |
| Local<br>community<br>member | A local leadership member said that he believes that there are white people are benefiting from the mining related opportunities which seems to be ring-fenced for them thereby excluding black people or businesses, including the issue of  | Black people are not benefiting from mining operations.   | Public<br>meeting | 14/02/2013 | Lack of local black economic development.  | The comment is noted and will be recorded in the issues trail.   | RPM are to investigate sustainable economic opportunities for local black community members.   | RPM (on-going)   |  |

| IMPACTS                                       |   |  |  |            |   |  |  |   |  |  |
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| Stakeholder                                   | Issue   | Concern  | Source   | Date       | Implications  | Responses  | Action P   | lan   |  |  |
|   |   |  |  |            |   |  | Plan   | Responsible person and completion date                              |  |  |
|   | community equity ownership. As with this proposed amendment project.  |  |  |            |   |  |  |   |  |  |
| Local<br>community<br>member                  | A local community member indicated that the community members are poor and therefore could not attend the meeting due to the lack of transport provision from RPM. WSP/RPM should have provided transport for the community.  | No transport was provided therefore many did not get informed about the project.                                     | Public<br>meeting                              | 14/02/2013 | The public meeting did not inform a sufficient number of people.  | The comment is noted and will be investigated in the EIA phase.  | To be investigated by the project team.  | RPM provide<br>comment prior<br>to the EIA phase<br>public meeting) |  |  |
| Local<br>community<br>member                  | Were the people from<br>Bokomoso invited to the<br>meeting?   | People of the other affected communities were not involved in the public meeting.                                    | Public<br>meeting                              | 14/02/2013 | The public participation may not have involved all the affected communities                                   | Yes, the community was informed. In addition, the local leadership in the community were informed via an SIA notification meeting.   | WSP to include any additional stakeholders discovered during the scoping phase into the EIA database.  | WSP (on-going<br>till EIA process<br>completion)                    |  |  |
| Local<br>community<br>member                  | A local community member requested the hosting of a mining indaba by RPM in order to make the community aware of the possible opportunities associated with the mining operations in the area. He further added that he is not against the project but would like to know how the project/ operations will benefit the community. | The communities are not made aware of the opportunities relating to mining in the area.                              | Public<br>meeting                              | 14/02/2013 | The community members do not benefit from mining operations in the surrounding areas.                         | The comment is noted and engagement with other role players/Mining houses is critical in hosting proposed Mining Indaba.   | Engagement with Leadership and other Mining houses to be undertaken by AAP to determine if the need is critical to the wellbeing of the communities. | AAP (on-going)  |  |  |
| Local<br>community<br>member                  | A community member indicated that the community doesn't understand the decision making process which takes place after notifying the public.  | Concerned that the community is unaware of the process which is undertaken following the notification of the public. | Public<br>meeting                              | 14/02/2013 | The community becomes frustrated as they are unaware of the reason for decisions being made by the authority. | The meeting presentation did include a detailed process flowchart of the authorisation process.  | N/A  | N/A   |  |  |
| Local<br>community<br>member                  | A local community member indicated that she is happy to hear the issues of the communities voiced. The project team must do the best they can in order to satisfy or meet the needs of the communities.   | N/A  | Public<br>meeting                              | 14/02/2013 | N/A   | Comment noted.   | The project team will run a diligent Public Participation Process to ensure all the community issues are captured.                                   | WSP (EIA<br>phase)  |  |  |
| Royal<br>Bafokeng<br>Nation<br>Representative | As there are only temporary jobs being created from this project, the community must benefit in another form.   | A lack of any significant benefit to the surrounding communities.  | SIA: Royal<br>Bafokeng<br>Nation<br>Engagement | 15/02/2013 | No significant economic development in the area.  | The employment will be inherently temporary during the construction phase. A number of permanent operational jobs will be created by the project during the operational phase (employees however will need | WSP included the Construction management Plan in the local leadership response meeting minutes as an appendix and submitted the final                | RPM (Project<br>life)   |  |  |

|   | IMPACTS  |   |   |            |  |  |   |   |  |  |  |  |
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| Stakeholder   | Issue  | Concern   | Source  | Date       | Implications   | Responses  | Action PI   | an  |  |  |  |  |
|   |  |   |   |            |  |  | Plan  | Responsible<br>person and<br>completion<br>date |  |  |  |  |
|   |  |   |   |            |  | to be skilled in order to satisfy the positions). Most of the project work involves qualified teams in order to guarantee the quality of work. The activities associated with the construction phase will go out for open tender (the local leaders were provided with the project Construction management Plan therefore they can tender for the project work). The tenderers will be scored on the number of locals they will employ amongst other rating aspects.  If this project does not goahead the current jobs created by the Klipgat operation will be lost. | minutes to all the local leaders whom attended the meeting. During the tender process the contractors will be encouraged to use local labour.                                     |   |  |  |  |  |
| Royal<br>Bafokeng<br>Nation<br>Representative         | RBN want to see community raise their voice regarding these issues because the community members are directly affect by these projects (including past and future projects). | Community needs to be empowered to raise their issues.  | SIA: Royal<br>Bafokeng<br>Nation<br>Engagement  | 15/02/2013 | The community does not raise issues relevant to the project.                     | It is up to the community members (leaders) to raise issues or concerns during the transparent Public Participation Process.   | WSP to continue with the current authorisation process within which all the relevant stakeholders will be given sufficient opportunity to raise any issues.                       | WSP (duration of the authorisation process)     |  |  |  |  |
| Royal<br>Bafokeng<br>Nation<br>Representative         | RBN want to see more actions within the local communities. There needs to be more than the SLP. Communities want to see action being undertaken.                             | AAP only provide jobs in line with the SLP, little community development is seen on the ground. | SIA: Royal<br>Bafokeng<br>Nation<br>Engagement  | 15/02/2013 | There is no community development for communities directly affected by the mine. | The issue will be discussed further in the upcoming CED meetings.  | To be discussed further as part of RPM operational issues during the CED meetings.  | CED (On-going)                                  |  |  |  |  |
| Community<br>Leader (Ward<br>Councillor,<br>Bokamoso) | Near Bokomoso there are footpaths which children use to get to school at Mfidikwe.   | The pipeline will prevent children getting to school.   | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Difficulty of children accessing schools.  | The current situation (paths, etc) on-site will not be changed. The SIA study will rate the impact and issue associated mitigation measures.   | WSP will include the mitigation measures in the SIA report which is yet to be finalised   | WSP<br>(20/03/2013)                             |  |  |  |  |
| Community<br>Leader (Ward<br>Councillor,<br>Bokamoso) | The existing air pipeline along the pipeline corridor restricts cattle grazing activities. RPM need to assist with improving access to grazing                               | The proposed additional pipelines will make the situation worse.                                | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Prevent easy access to grazing land.   | The existing set up will not be altered. There are existing crossing stiles over the air pipeline which will cater for the additional pipelines. If the community view the access issue as a significant impact then they should indicate the severity of the concern during the EIA phase public meeting. The impact will be rated and mitigation measures indicated within the SIA report.   | WSP will include the mitigation measures in the SIA report which is yet to be finalised. The requirement for additional action will be determined during EIA public communication | WSP<br>(20/03/2013)                             |  |  |  |  |

|  | IMPACTS   |  |   |            |  |   |   |   |  |  |
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| Stakeholder  | Issue   | Concern  | Source  | Date       | Implications   | Responses   | Action Pla  | an  |  |  |
|  |   |  |   |            |  |   | Plan  | Responsible<br>person and<br>completion<br>date |  |  |
| Community<br>Leader (Ward<br>Councillor,<br>Bokamoso)        | If there is a breakage in the pipeline, cattle may drink the dirty water.   | Cattle may get sick or get stuck.  | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Cattle may die.  | The design of the pipelines is to ensure that leakages are minimised. In the case of a leakage the resulting slurry will contained and the pipeline will be repaired on detection of the leakage. The pipelines will be regularly monitored to detect any issues. The slurry will not be palatable to the cattle (fine grain silt material).  | The mitigation measures to prevent such an occurrence and to act should a spillage occur will be included in the draft EIR/EMPR.  | WSP (April<br>2013)                             |  |  |
| Community<br>Leader (Ward<br>Councillor,<br>Bokamoso)        | If the pipeline bursts, this could cause a health and safety impact.  | Concern for local community walking along and living near pipeline.  | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Potential health and safety issues for local communities.  | The design of the pipelines is to ensure that leakages are minimised. In the case of a leakage the resulting slurry will contained and the pipeline will be repaired on detection of the leakage. The pipelines will be regularly monitored to detect any issues.   | WSP will include the mitigation measures in the draft EIR/EMPR.   | WSP (April<br>2013)                             |  |  |
| Community<br>Leader (Ward<br>Councillor,<br>Bokamoso)        | If WSP want to inform this community for the project, the best way is to call a community meeting (through the ward councillor) | The need to ensure that the project informs the community of the proposed activities and advise them on risks. | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | The lack of communication to all affected stakeholders of the risks associated with the project. | WSP have held a local leadership meeting with all the local leaders whom are considered affected by the proposed project. Following this meeting a follow up response meeting was held in order to respond to all the raised issues. In addition, a public meeting was held in February 2013 to which all stakeholders were invited via the local leadership members and the project stakeholder database.  | WSP will continue to invite the local leadership members to upcoming EIA meetings.  | WSP (EIA<br>phase of the<br>project)            |  |  |
| Community<br>Leadership<br>(Ward<br>Councillor,<br>Thekwane) | Why was the community not involved with WSP on the SIA? The community asked to be involved at the project public meeting.       | The community does not understand the difference between the SIA study and the overall project public meeting. | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Community resistance to the EIA process and project.   | The public meeting was minuted and responses prepared within the Issues and Responses Trail. Local leaders from the community were informed of the public meeting and were tasked with notifying the relevant individuals in the communities.  The SIA study meeting is only an information gathering process in order to understand the current situation in the communities surrounding the project area. | WSP will complete the SIA study report in which the answers received from the SIA local leader notification meeting will be included in order to give the departments an understanding of the status of the impacted communities. | WSP<br>(20/03/2013)                             |  |  |

|   | IMPACTS   |  |   |            |  |   |  |   |  |  |  |  |
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| Stakeholder   | Issue   | Concern  | Source  | Date       | Implications   | Responses   | Action P   |   |  |  |  |  |
|   |   |  |   |            |  |   | Plan   | Responsible person and completion date        |  |  |  |  |
| Reotshepile<br>Tlhapane<br>(RBA)                      | Perhaps the community requires training to understand the EIA process and specialist studies?   | The lack of understanding of the EIA process from the communities.                                 | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | The public do not raise relevant questions and don't understand the purpose and objective of the authorisation process.                    | A response/action plan will be contained within the SIA report. The suggestion will be considered going forward in the project.   | WSP will include the finding and the proposed mitigation measures in the SIA report which is yet to be finalised. However, a decision has not yet been made on the matter. | WSP<br>(20/03/2013)                           |  |  |  |  |
| Community<br>Leader (Ward<br>Councillor,<br>Bokamoso) | The lack of education in the communities is a legacy issue. The RBN administration needs to assist with transfer of skills to local communities.          | This training will not happen, as no one has done it so far, and lack of trust of Anglo            | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Community resistance to the EIA process and project  | The matter is to be dealt with by the RBN   | WSP will forward the issue onto the RBN for review via the EIR/EMPR submission.  | WSP<br>(20/03/2013)                           |  |  |  |  |
| Community<br>Leader (Ward<br>Councillor,<br>Bokamoso) | The locals do not trust Anglo<br>American Platinum because<br>of unresolved past issues on<br>the mine.   | The authorisation process will<br>be influenced by past<br>unresolved Anglo operational<br>issues. | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | The project authorisation process will be hindered by standing mine issues which were raised in the past and have not since been resolved. | AAP strive to develop and maintain and long standing winwin relationship with surrounding communities via the Community Engagement Forum on a mine operational on-going basis. During each proposed AAP project, the AAP ensure that a PPP process is undertaken to adequately involve and resolve any issues. The legacy issues will be dealt with in the upcoming CEF meetings. | AAP to include this<br>statement in the CEF<br>meeting agenda to<br>discuss any outstanding<br>issues.   | AAP (next CEF<br>meeting)                     |  |  |  |  |
| Local Ward<br>councillor                              | Have WSP spoken with all<br>the relevant land owners? He<br>specifically identified<br>Hoedspruit as an issue? The<br>land is owned by the Fike<br>Trust. | May have not considered the land owner in the project PPP.   | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Legal issues associated with the land.   | AAP RPM are currently in negotiations with the Fike trust to agree on the current lease agreement between the parties as the Fike trust do own the land. The lease issues are taking place as a separate process.   | AAP RPM are to resolve the lease agreement as a separate process.  | AAP (prior to the project construction phase) |  |  |  |  |
| Local<br>leadership<br>member                         | Will the project site be fenced off from communities (Bokamoso specifically)?   | Potential danger/restriction to local communities.   | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | The mobility of the communities may be restricted.   | The pipeline will not be fenced off however ,the proposed pretreatment plant and the proposed pump station will be fenced off to unauthorised entry (prevent safety and security issues at the plants).   | N/A  | N/A   |  |  |  |  |
| Local<br>leadership<br>member                         | By adding additional pipelines along the existing air pipeline route, the activity will result in the further disturbance of grazing land.                | Prevent access to grazing land for local communities.  | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | The livelihood of the community is impacted.   | The access to grazing land will not change from the existing situation (i.e. the existence of the compressed air pipeline parallel to the proposed  | To be included in the SIA report along with associated mitigation measures if considered necessary.  | WSP<br>(20/03/2013)                           |  |  |  |  |

|   | IMPACTS  |   |   |            |   |   |  |   |  |  |  |
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| Stakeholder                                     | Issue  | Concern   | Source  | Date       | Implications  | Responses   | Action PI  | an  |  |  |  |
|   |  |   |   |            |   |   | Plan   | Responsible<br>person and<br>completion<br>date |  |  |  |
|   |  |   |   |            |   | pipelines). The issue will be rated and mitigation measures indicated within the SIA report, where necessary. The pipeline will be routed within an existing RPM pipeline corridor.   |  |   |  |  |  |
| Ward councillor                                 | Will stock farmers be compensated? This needs to be discussed with the Farmers' Association representatives. Cllr Kuno will facilitate if specialists sees a need to engage with this group.         | Financial compensation for loss. This group needs to be communicated with   | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Budget is to be made available to compensate the stock farmers.   | The project surface team has not identified the requirement for financial compensation at this stage as the project surface area is contained within an existing pipeline corridor therefore the land use will not be altered. The requirement for financial compensation is being investigated as part of the SIA study.   | Requirement to be<br>determined in the SIA<br>report.  | WSP<br>(20/03/2013)                             |  |  |  |
| Local<br>leadership<br>(Councillor<br>Thekwane) | The community needs to be involved to understand as they know exactly what is happening on the ground. We cannot talk for the whole community. Need to have two-way communications.                  | Lack of community involvement means the specialist might not understand the full impacts associated with the project. | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | The significant findings are not captured as the community was not involved in the environmental authorisation process. | The SIA study process does not allow for detailed investigations at this stage as the specialist is still gathering information on the site. WSP will continue to involve the communities in the process going forward as has been the case to this point in the process.   | WSP will continue to facilitate a fluent and comprehensive PPP.  | WSP (duration of the project)                   |  |  |  |
| Local<br>leadership<br>(Councillor<br>Thekwane) | The public meeting that was held in February was not well attended in the opinion of the Councillor. The project needs to hold a meeting in each village or provide transport to a central location. | The greater community did not have access to the public meeting.  | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Non-comprehensive stakeholder engagement process.   | WSP will consider the best approach to the next community meetings.   | WSP to discuss the options with the project team and the AAP CED representatives.  | WSP<br>(EIA phase)                              |  |  |  |
| Leadership –<br>Mfidikwe                        | A lot of people cross from Bokamoso to Mfidikwe. And children walk to school adjacent schools therefore the project needs to build a bridge over the pipeline to ensure access is available.         | Pipeline will cut off access to schools and communities.  | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Difficulty of people moving between communities.  | Existing access will be maintained. There are existing crossing stiles over the air pipeline which will cater for the additional pipelines. If the community view the access issue as a significant impact then they should indicate the severity of the concern during the EIA phase public meeting. The impact will be rated and mitigation measures indicated within the SIA report. | WSP will include the rating of the impact and include relevant practical mitigation measures in the SIA report which is yet to be finalised. | WSP<br>(20/03/2013 – to<br>the EIA phase)       |  |  |  |
| Ward councillor                                 | Need more details on the proposed pipelines including: - Pressure; and - The height above  | Need to know technical details to understand what the issues may be.  | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Lack of understanding could lead to poor engagement process and false assumption of impacts.                            | All details will be incorporated into the EIR/EMPR which will be made available for public review. This will be   | To be included in the EIR/EMPR which will be placed on public review for stakeholders  | WSP (April<br>2013)                             |  |  |  |

| IMPACTS                           |  |   |   |            |  |   |   |  |  |
|-----------------------------------|--|---|---|------------|--|---|---|--|--|
| Stakeholder                       | Issue  | Concern   | Source  | Date       | Implications   | Responses   | Action P  | lan  |  |
|                                   |  |   |   |            |  |   | Plan  | Responsible person and completion date       |  |
|                                   | ground   |   |   |            |  | communicated at the next public meetings.   | to extract required information.  |  |  |
| Ward councillor                   | Cattle may get trapped between pipelines (existing and new)  | May lose cattle as a result of being trapped.   | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Loss of livelihood.  | The design will be to prevent cattle from being able to get between the pipeline. The pipeline will form an obstacle to the cattle. The existing crossings can be used by cattle farmers (As Per The Current Situation).  | N/A   | N/A  |  |
| Ward councillor                   | If a bridge is installed to enable community members and cattle to move from one area to the next, then there needs to be a decent access road on either side of the pipeline. | AAP will not cater for vehicles.  | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | No suitable vehicle access road to enable vehicles to drive parallel to the pipelines. | All details will be incorporated into the EIR/EMPR which will be made available for public review. This will be communicated at the next public meetings.   | To be included in the EIR/EMPR which will be placed on public review for stakeholders to extract required information.    | WSP (April<br>2013)                          |  |
| Ward councillor                   | Concern was expressed that children may climb in between pipelines.  | Death or injury caused due to children playing on the pipeline.   | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Loss of life.  | The associated danger will be less than the current existing pipeline risk as the proposed pipelines have a smaller diameter than the existing pipeline.  | N/A   | N/A  |  |
| Ward councillor                   | The local communities need to be educated on how to react if there is a breakage in the pipeline.  | Local communities may be negatively affected if they do not know how to manage/react to incidents/events.                                 | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Possible health and safety issues associated.  | A pipeline rupture is considered a risk for the project. The pipeline will be inspected regularly to detect any possible fractures/weaknesses.  Operational emergency incident control measures will be enforced to ensure that immediate action is taken to minimise the impact/consequence should an event take place. The training recommendation will be further considered in the EIA phase.   | The mitigation<br>measures are to be<br>included in the EMPR.   | WSP (April<br>2013)                          |  |
| Local<br>Leadership<br>(Thekwane) | Beneficiation – the community must get some direct benefit out of this project.  | If the community are not going to receive benefits through job opportunities then they need to have direct involvement in another aspect. | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Community resistance to the EIA process and project.                                   | There will be jobs created during the construction phase of the project (however the jobs will be determined by the outcome of the tender process). WSP distributed the project Construction management Plan to all the local leaders whom attended notification meetings which provides for an open transparent tender process. As such the tender opportunities have been made available to the communities.  Such opportunities/benefits, should any arise, will be made | To be discussed further during RPM CEF meetings. RPM will ensure that contractors are encouraged to utilise local labour. | RPM (on-going<br>during the<br>project life) |  |

|                                     | IMPACTS   |   |   |            |  |   |  |   |  |  |  |  |
|-------------------------------------|---|---|---|------------|--|---|--|---|--|--|--|--|
| Stakeholder                         | Issue   | Concern   | Source  | Date       | Implications   | Responses   | Action PI  | an  |  |  |  |  |
|                                     |   |   |   |            |  |   | Plan   | Responsible<br>person and<br>completion<br>date |  |  |  |  |
|                                     |   |   |   |            |  | freely available to the local community to pursue. RPM will also explore methods of developing further skills within communities to aid in the development of future sustainable business opportunities (to be discussed in the CEF). The RLM Local Economic Development (LED) Director indicated (during the local leadership meeting) that his Department would arrange a workshop in which to disseminate employment opportunities at AAP if required by locals. The tenderers will be encouraged to make use of local community labour. |  |   |  |  |  |  |
| Local Leader<br>(Photshaneng)       | What will the traffic impact be between Photshaneng and Thekwane?   | Impact on traffic flow.   | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Traffic congestion between the communities.                    | There will be expected increases in the traffic volume during the construction phase of the project however the impact will not be significant.  There will be little to no increase in traffic volumes during the operational phase.   | To be included in the traffic impact assessment report,        | WSP<br>(20/03/2013)                             |  |  |  |  |
| Local Leader<br>(Photshaneng)       | The proposed pipelines are passing through the tunnel under the railway near Photshaneng. There is an issue with this tunnel during rain events as people accessing the grave yard via foot or vehicle report that the rain water flows through the tunnel (culvert). | Existing issue with the access to graveyard during rainy season will be exacerbated by the addition of the slurry and return water pipelines. | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Reduced access to the graveyard area.                          | The proposed pipelines are not going through the said tunnel.   | N/A  | N/A   |  |  |  |  |
| Local Leader<br>(Thekwane<br>Local) | Community must be skilled/educated from this project in terms of how to undertake the EIA process. WSP are to be involved in terms of mentoring. There are two graduates that could be used for this purpose.   | The local communities do not see the benefits of these projects for the communities.  | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | Lack of economic development and education in the communities. | AAP during future projects will ensure that the contractors/consultants hired have a CSI strategy document for the specific project in which employment opportunities may be created for locals (this will be determined on a case by case basis). The RLM will consult with the local councillors to consolidate the potential sustainable business opportunities and revert back to RPM to determine what RPM can assist with in terms of their   | To be determined in the EIA phase and through future projects. | RPM (no<br>associated<br>timeframe)             |  |  |  |  |

|                                   |  |   |   |            | IMPACTS                          |   |  |   |  |
|-----------------------------------|--|---|---|------------|----------------------------------|---|--|---|--|
| Stakeholder                       | Issue  | Concern   | Source  | Date       | Implications                     | Responses   | Action P   | Plan  |  |
|                                   |  |   |   |            |                                  |   | Plan   | Responsible<br>person and<br>completion<br>date |  |
|                                   |  |   |   |            |                                  | required donation as a corporate entity.  |  |   |  |
| Leadership<br>(Thekwane<br>Local) | Need to ensure that the public meeting communication with communities is improved. | Community cannot get involved if they are not aware of the process. | Local<br>Leadership<br>Meeting for<br>SIA study | 27/02/2013 | A non-comprehensive EIA process. | WSP during the scoping phase used an extensive stakeholder database compiled from previous projects. In addition, WSP communicated with the communities via the local leaders whom attended the local leadership notification meetings. WSP will update the project database based on all the additional individuals whom have indicated their interest in the project. | WSP to ensure all the interested parties are invited to participate in the process in the EIA phase. | WSP (on-going<br>throughout the<br>EIA process) |  |



Project number: 39354 Dated: 2013/10/22 Revised:



# Anglo American Platinum Limited Amandelbult Platinum, Tumela Mine, Dishaba Mine and Amandelbult Concentrator

Thabazimbi Road Amandelbult Mine 0362 Chromite South Africa

Bureau Veritas Certification certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

Standards

ISO 14001:2004

Scope of certification

The mining and concentration of platinum group metals.

Certification cycle start date:

**03 November 2012** 

Subject to the continued satisfactory operation of the organisation's Management System, this certificate expires on:

02 November 2015

Certificate No. UK004434

Version 1, Revision date:

01 November 2012



Ken Smith Managing Director



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Certification body address: Brandon House, 180 Borough High Street, London SE1 1LB, United Kingdom.

Local office: Brandon House, 180 Borough High Street, London SE1 1LB, United Kingdom.

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organisation.

To check this certificate validity please call: 020 7661 0700



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