- Permission of the Municipality from where the remains are exhumed and where it will be
  reburied must be obtained. The second is usually included in the process of obtaining new burial
  plots for re-internment. If the graves in question are not located in the jurisdiction of a
  Municipality but in an area under a Traditional Authority, permission from said authority is
  required.
- The permission of the landowner where the remains are to be exhumed as well as where the remains will be buried is required.
- If the agreement allows for the remains to be placed in a collection, the permission of the head of the institution that houses the collection must be obtained. If the agreement with the interested parties allows for the study of the remains before re-internment, this implies temporary storage which also requires the permission of the head of the institution involved.
- A SAHRA permit must be obtained for graves and remains listed above, in short for graves older than 100 years, older than 60 years if located outside the jurisdiction of a municipality and for other graves of cultural significance irrelevant of their age (Note that this may vary between provinces).
- Permission from the Commonwealth War Graves Commission must be obtained for any graves under their administration.
- The local South African Police Services must be notified of the exhumation seven days prior to the action.
- Only a certified funeral undertaker, or an institution with a similar legal status and facilities, is legally allowed to handle, transport and store human remains. South African medical schools legally have this status.

#### 7.4.4 Threats or sources of risk and their impact on the burial grounds and graves

• The graves will be affected by the construction activities on the proposed alignment.

# 7.4.5 Description of the Artefacts, Faunal, Botanical or Other Finds and Features associated with the burial grounds and graves

• Some object of personal use, such as cups and pots ("burial objects") were observed in association with these graves.

# 7.4.6 Statement of Significance (Heritage Value)

- Although the graves might fall under any legislation that specifically indicates them as culturally significant, they remains graves and will have significance on local and family level.
- All graves are protected by legislation whether it is archaeological, heritage, or recent modern, and no actions affecting the graves may be undertaken without legislated permission.

# 7.4.7 Field Rating (Recommended grading or field significance) of the site:

While formal grading is the responsibility of the heritage resources authorities, this report includes Field Ratings for sites, to comply with section 38 of the national legislation.

• Generally Protected A (Field Rating IV A): this site should be mitigated before destruction (generally High/Medium significance);

# 7.4.8 Recommendations

# 7.4.8.1 Assessment of the potential impact of the development on these sites, relative to sustainable social and economic benefits.

• It is recognised that the need for water distribution in the area is high and this is considered relative to well established practice of grave relocation to recognised Municipal and other cemeteries.

#### 7.4.8.2 Proposals for protection or mitigation

- The possibility of changing the alignment of the proposed pipeline should be considered as the most suitable measure.
- If an impact on the graves is unavoidable the full NHRA Sec 36 will come to bear. This is an extensive and expensive process and should only be considered as a last resort.
- Other cases of proposed grave relocation in this region have met with serious social, political and cultural objections.

#### 7.4.9 Action/s required at the site

- At the onset of construction all graves that might be affected should be clearly demarcated and if possible fenced off to protect them from any accidental damage, whether they are earmarked for relocation, or not.
- Should the decision be taken to propose the relocation of the affected graves, a suitably
  accredited and experienced service provider must be appointed to undertake the relocation.
  Please note that grave relocation is dependent on permission for the action by the close
  relatives and interested and affected parties from the community, and the requirement is that
  the developer must assist this community to fulfil their cultural and religious requirement
  during the process.

Figure 69. Graves at Site ORW 16.



### 6.5. Site ORW 17 ORWRDP Phase 2D

#### 7.5.1 Location of burial grounds and graves

S24 32 17.3 E30 08 59.4 – Refer Figure 47 for locality map, and Appendix 2 for survey transect logs.

#### 7.5.2 Description of burial grounds and graves

Another large cemetery with over 250 graves was identified at this location. A large area was fenced to serve as official graveyard for the surrounding communities. This fenced area extended right across the proposed route of the pipeline. This cemetery is still in an early stage of being utilized, with large areas still to be filled. Due to the inherent inaccuracy GPS and relatively large scale and poor print quality of the printed maps it was difficult to say if the proposed pipeline missed all of the graves or could possibly pass over some of them. It seemed however, that the proposed route of the pipeline passed over an area of the cemetery which was already filled with graves (Fig. 70).

#### 7.5.3 Legal implications of graves

The NHRA identifies the following categories of human remains whether as incidentally discovered remains, or in burial grounds and graves:

- Human remains older than 100 years, which are defined as archaeological.
- "Victims of Conflict" that include:
  - Persons who died in the present territory of the Republic of South Africa as a direct result of any war or conflict (the act requires regulations to list these but none has been published to date) excluding those covered by the Commonwealth War Graves Act (Act 8 of 1992) (effectively persons who were citizens of Commonwealth Countries other than South Africa who died in South Africa after 4 August 1914).

- Members of the forces of Great Britain and the former British Empire who died on active duty in the present territory of the Republic of South Africa before 4 August 1914.
- Persons that were exiled from the present territory of the Republic of South Africa and died outside of South Africa during the Anglo-Boer War (1899-1902).
- Certain persons who died in the "liberation struggle" (the act requires regulations to list such persons but none have been published to date) in the present territory of the Republic of South Africa and outside South Africa.
- Ancestral graves.
- Persons of royal descent and traditional leaders.
- Individuals indicated by the Minister of Arts and Culture in notices in the Government Gazette.
- Historical graves and burial grounds.

Graves are defined as the place of burial as well as the contents, headstone or any other marker and any other structure on, or associated with such a place.

Under the provisions of the NHRA a SAHRA permit is therefore required for any action affecting a burial ground or grave or human remains (including the handling and housing thereof) older than 100 years; that of a victim of conflict, a person of royal descent or a traditional leader and those from historical and ancestral graves as well as any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a recognized local authority. In addition to the normal requirements for an archaeological excavation permit, the following requirements must be met in applications involving any of the above:

• The applicant must illustrate a concerted effort to trace and identify any person or community with an interest in the grave, burial ground or remains. This should be done by means of

documentary and archival research, a process of public participation and social consultation and the placing of site and newspaper notices.

• If any interested parties are identified their permission for the exhumation of the remains or any action affecting the graves must be obtained and an agreement as to the requirements for exhumation, the research on and the re-internment of, or any other arrangement for the long term storage of the remains must be met.

If the grave or burial ground in question is that of a member of the military forces of a Commonwealth Country other than South Africa, permission must be obtained from the Commonwealth War Graves Commission.

The handling, storage and transport of human remains, whether they be of archaeological or recent origin, is further regulated by the Graves and Dead Bodies Ordinance (Ord 7 of 1925 (re-instituted by Proclamation 109 of 17 June 1994), the Exhumations Ordinance (Ord 12 of 1980) as well as either the Human Tissues Act (Act 65 of 1983 as Amended) or the National Health Act (Act 61 of 2003). With the promulgation of the Health Act not all of the sections of the Human Tissues Act were repealed, and since this process is ongoing these acts must be used in conjunction with each other. In addition, graves and human remains in municipal cemeteries are regulated by the applicable Municipal By-Laws.

For practical purposes the following is required to legally excavate and handle human remains:

• Notices advertising the proposed exhumation of graves must be placed in a local newspaper in English and one of the common additional official languages of the area. These notices must invite possible objections to the proposed exhumation. A period of two weeks must be allowed for comments.

- Site notices similar in content to the newspaper notices must be placed at the site and should remain in place for a period of 60 days.
- A concerted effort to identify and contact persons or groups with an interest in the graves must be undertaken through documentary and archival research, public participation and social consultation. The process must be documented and this record must accompany the application.
- If any interested parties are identified, their permission for the proposed action must be obtained in an agreement that states the preferred place of reburial or mode of long term retention of the remains and the cultural and/or religious requirements that must be met. The applicant must assist the group in question to meet the agreed requirements.
- If the grave is located in a National Park the requirements of the SANParks policy must be met.
- The permission of the Premier of the Province, or the delegated official, must be obtained.
- A permit from the Provincial Department of Health must be obtained.
- Permission of the Municipality from where the remains are exhumed and where it will be
  reburied must be obtained. The second is usually included in the process of obtaining new burial
  plots for re-internment. If the graves in question are not located in the jurisdiction of a
  Municipality but in an area under a Traditional Authority, permission from said authority is
  required.
- The permission of the landowner where the remains are to be exhumed as well as where the remains will be buried is required.
- If the agreement allows for the remains to be placed in a collection, the permission of the head of the institution that houses the collection must be obtained. If the agreement with the interested parties allows for the study of the remains before re-internment, this implies temporary storage which also requires the permission of the head of the institution involved.
- A SAHRA permit must be obtained for graves and remains listed above, in short for graves older than 100 years, older than 60 years if located outside the jurisdiction of a municipality and for

other graves of cultural significance irrelevant of their age (Note that this may vary between provinces).

- Permission from the Commonwealth War Graves Commission must be obtained for any graves under their administration.
- The local South African Police Services must be notified of the exhumation seven days prior to the action.
- Only a certified funeral undertaker, or an institution with a similar legal status and facilities, is legally allowed to handle, transport and store human remains. South African medical schools legally have this status.

#### 7.5.4 Threats or sources of risk and their impact on the burial grounds and graves

• The graves will be affected by the construction activities on the proposed alignment.

# 7.5.5 Description of the Artefacts, Faunal, Botanical or Other Finds and Features associated with the burial grounds and graves

• Some object of personal use, such as cups and pots ("burial objects") were observed in association with these graves.

# 7.5.6 Statement of Significance (Heritage Value)

- Although the graves might fall under any legislation that specifically indicates them as culturally significant, they remains graves and will have significance on local and family level.
- All graves are protected by legislation whether it is archaeological, heritage, or recent modern, and no actions affecting the graves may be undertaken without legislated permission.

#### 7.5.7 Field Rating (Recommended grading or field significance) of the site:

While formal grading is the responsibility of the heritage resources authorities, this report includes Field Ratings for sites, to comply with section 38 of the national legislation.

• Generally Protected A (Field Rating IV A): this site should be mitigated before destruction (generally High/Medium significance);

# 7.5.8 Recommendations

# 7.5.8.1 Assessment of the potential impact of the development on these sites, relative to sustainable social and economic benefits.

• It is recognised that the need for water distribution in the area is high and this is considered relative to well established practice of grave relocation to recognised Municipal and other cemeteries.

### 7.5.8.2 Proposals for protection or mitigation

- The possibility of changing the alignment of the proposed pipeline should be considered as the most suitable measure.
- If an impact on the graves is unavoidable the full NHRA Sec 36 will come to bear. This is an extensive and expensive process and should only be considered as a last resort.
- Other cases of proposed grave relocation in this region have met with serious social, political and cultural objections.

# 7.5.9 Action/s required at the site

- At the onset of construction all graves that might be affected should be clearly demarcated and if possible fenced off to protect them from any accidental damage, whether they are earmarked for relocation, or not.
- Should the decision be taken to propose the relocation of the affected graves, a suitably accredited and experienced service provider must be appointed to undertake the relocation.

Please note that grave relocation is dependent on permission for the action by the close relatives and interested and affected parties from the community, and the requirement is that the developer must assist this community to fulfil their cultural and religious requirement during the process. Figure 70. Graves at Site ORW 17.



### 6.6. Site ORW 21 ORWRDP Phase 2E

#### 7.6.1 Location of burial grounds and graves

S24 29 30.5 E30 07 08.5 – Refer Figure 71 for locality map, and Appendix 2 for survey transect logs.

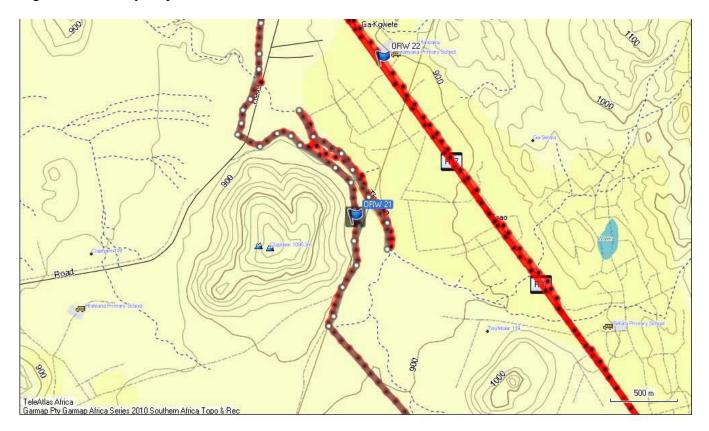


Figure 71. Locality map for Site ORW 21 and 22.

#### 7.6.2 Description of burial grounds and graves

A small informal cemetery with twelve graves was identified at this location. The informal cemetery was situated approximately 20m east of the gravel road in an open area in between the stands. The graves were placed in three unequal lines and all were orientated from east to west. Five of the graves had formal granite dressings and the rest of them had informal mounds of packed rocks and soil as dressings. The graves were well maintained and some of them had grave goods (such as cups and plates) placed on them (Fig. 72).

#### 7.6.3 Legal implications of graves

The NHRA identifies the following categories of human remains whether as incidentally discovered remains, or in burial grounds and graves:

- Human remains older than 100 years, which are defined as archaeological.
- "Victims of Conflict" that include:
  - Persons who died in the present territory of the Republic of South Africa as a direct result of any war or conflict (the act requires regulations to list these but none has been published to date) excluding those covered by the Commonwealth War Graves Act (Act 8 of 1992) (effectively persons who were citizens of Commonwealth Countries other than South Africa who died in South Africa after 4 August 1914).
  - Members of the forces of Great Britain and the former British Empire who died on active duty in the present territory of the Republic of South Africa before 4 August 1914.
  - Persons that were exiled from the present territory of the Republic of South Africa and died outside of South Africa during the Anglo-Boer War (1899-1902).
  - Certain persons who died in the "liberation struggle" (the act requires regulations to list such persons but none have been published to date) in the present territory of the Republic of South Africa and outside South Africa.
- Ancestral graves.
- Persons of royal descent and traditional leaders.
- Individuals indicated by the Minister of Arts and Culture in notices in the Government Gazette.
- Historical graves and burial grounds.

Graves are defined as the place of burial as well as the contents, headstone or any other marker and any other structure on, or associated with such a place.

Under the provisions of the NHRA a SAHRA permit is therefore required for any action affecting a burial ground or grave or human remains (including the handling and housing thereof) older than 100 years; that of a victim of conflict, a person of royal descent or a traditional leader and those from historical and ancestral graves as well as any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a recognized local authority. In addition to the normal requirements for an archaeological excavation permit, the following requirements must be met in applications involving any of the above:

- The applicant must illustrate a concerted effort to trace and identify any person or community with an interest in the grave, burial ground or remains. This should be done by means of documentary and archival research, a process of public participation and social consultation and the placing of site and newspaper notices.
- If any interested parties are identified their permission for the exhumation of the remains or any action affecting the graves must be obtained and an agreement as to the requirements for exhumation, the research on and the re-internment of, or any other arrangement for the long term storage of the remains must be met.

If the grave or burial ground in question is that of a member of the military forces of a Commonwealth Country other than South Africa, permission must be obtained from the Commonwealth War Graves Commission.

The handling, storage and transport of human remains, whether they be of archaeological or recent origin, is further regulated by the Graves and Dead Bodies Ordinance (Ord 7 of 1925 (re-instituted by Proclamation 109 of 17 June 1994), the Exhumations Ordinance (Ord 12 of 1980) as well as either the

Human Tissues Act (Act 65 of 1983 as Amended) or the National Health Act (Act 61 of 2003). With the promulgation of the Health Act not all of the sections of the Human Tissues Act were repealed, and since this process is ongoing these acts must be used in conjunction with each other. In addition, graves and human remains in municipal cemeteries are regulated by the applicable Municipal By-Laws.

For practical purposes the following is required to legally excavate and handle human remains:

- Notices advertising the proposed exhumation of graves must be placed in a local newspaper in English and one of the common additional official languages of the area. These notices must invite possible objections to the proposed exhumation. A period of two weeks must be allowed for comments.
- Site notices similar in content to the newspaper notices must be placed at the site and should remain in place for a period of 60 days.
- A concerted effort to identify and contact persons or groups with an interest in the graves must be undertaken through documentary and archival research, public participation and social consultation. The process must be documented and this record must accompany the application.
- If any interested parties are identified, their permission for the proposed action must be obtained in an agreement that states the preferred place of reburial or mode of long term retention of the remains and the cultural and/or religious requirements that must be met. The applicant must assist the group in question to meet the agreed requirements.
- If the grave is located in a National Park the requirements of the SANParks policy must be met.
- The permission of the Premier of the Province, or the delegated official, must be obtained.
- A permit from the Provincial Department of Health must be obtained.
- Permission of the Municipality from where the remains are exhumed and where it will be reburied must be obtained. The second is usually included in the process of obtaining new burial plots for re-internment. If the graves in question are not located in the jurisdiction of a

Municipality but in an area under a Traditional Authority, permission from said authority is required.

- The permission of the landowner where the remains are to be exhumed as well as where the remains will be buried is required.
- If the agreement allows for the remains to be placed in a collection, the permission of the head of the institution that houses the collection must be obtained. If the agreement with the interested parties allows for the study of the remains before re-internment, this implies temporary storage which also requires the permission of the head of the institution involved.
- A SAHRA permit must be obtained for graves and remains listed above, in short for graves older than 100 years, older than 60 years if located outside the jurisdiction of a municipality and for other graves of cultural significance irrelevant of their age (Note that this may vary between provinces).
- Permission from the Commonwealth War Graves Commission must be obtained for any graves under their administration.
- The local South African Police Services must be notified of the exhumation seven days prior to the action.
- Only a certified funeral undertaker, or an institution with a similar legal status and facilities, is legally allowed to handle, transport and store human remains. South African medical schools legally have this status.

### 7.6.4 Threats or sources of risk and their impact on the burial grounds and graves

• The graves will be affected by the construction activities on the proposed alignment.

# 7.6.5 Description of the Artefacts, Faunal, Botanical or Other Finds and Features associated with the burial grounds and graves

• Some object of personal use, such as cups and pots ("burial objects") were observed in association with these graves.

# 7.6.6 Statement of Significance (Heritage Value)

- Although the graves might fall under any legislation that specifically indicates them as culturally significant, they remains graves and will have significance on local and family level.
- All graves are protected by legislation whether it is archaeological, heritage, or recent modern, and no actions affecting the graves may be undertaken without legislated permission.

# 7.6.7 Field Rating (Recommended grading or field significance) of the site:

While formal grading is the responsibility of the heritage resources authorities, this report includes Field Ratings for sites, to comply with section 38 of the national legislation.

• Generally Protected A (Field Rating IV A): this site should be mitigated before destruction (generally High/Medium significance);

# 7.6.8 Recommendations

# 7.6.8.1 Assessment of the potential impact of the development on these sites, relative to sustainable social and economic benefits.

• It is recognised that the need for water distribution in the area is high and this is considered relative to well established practice of grave relocation to recognised Municipal and other cemeteries.

# 7.6.8.2 Proposals for protection or mitigation

• The possibility of changing the alignment of the proposed pipeline should be considered as the most suitable measure.

- If an impact on the graves is unavoidable the full NHRA Sec 36 will come to bear. This is an extensive and expensive process and should only be considered as a last resort.
- Other cases of proposed grave relocation in this region have met with serious social, political and cultural objections.

### 7.6.9 Action/s required at the site

- At the onset of construction all graves that might be affected should be clearly demarcated and if possible fenced off to protect them from any accidental damage, whether they are earmarked for relocation, or not.
- Should the decision be taken to propose the relocation of the affected graves, a suitably
  accredited and experienced service provider must be appointed to undertake the relocation.
  Please note that grave relocation is dependent on permission for the action by the close
  relatives and interested and affected parties from the community, and the requirement is that
  the developer must assist this community to fulfil their cultural and religious requirement
  during the process.

Figure 72. Graves at Site ORW 21.



### 6.7. Site ORW 22 ORWRDP

#### 7.7.1 Location of burial grounds and graves

S24 28 52.9 E30 07 15.7

This site is on one of the alternative alignments indicated (Refer Fig. 71) and is not affected by the current proposed alignment. It is included for the sake of consideration when alternatives are assessed.

#### 7.7.2 Description of burial grounds and graves

A small informal cemetery with approximately twenty graves was identified at this location. The informal cemetery was situated approximately 15m east of the R37 tar road in an open area in between the stands and the road. The graves were placed in several unequal lines and some were orientated from east to west and others were orientated from north to south. Several of the graves had formal granite dressings and the rest of them had informal mounds of packed rocks and soil as dressings. The graves were well maintained and some of them had grave goods (such as cups and plates) placed on them.

(Fig. 73).

Figure 73. Graves at Site ORW 22.



# 6.8. Site ORW 23 ORWRDP Phase 2F

#### 7.8.1 Location of burial grounds and graves

S24 25 56.8 E30 04 57.1 – Refer Figure 54 for locality map, and Appendix 2 for survey transect logs.

#### 7.8.2 Description of burial grounds and graves

A large, fenced cemetery with over 200 graves was identified here. The cemetery was situated next to and on the western side of the R37 tar road. The cemetery's fence was approximately 20m from the tar road. The cemetery was being used by the surrounding communities. It seemed as if the proposed pipeline will be situated in the area between the tar road and the cemetery (Fig. 74).

#### 7.8.3 Legal implications of graves

The NHRA identifies the following categories of human remains whether as incidentally discovered remains, or in burial grounds and graves:

- Human remains older than 100 years, which are defined as archaeological.
- "Victims of Conflict" that include:
  - Persons who died in the present territory of the Republic of South Africa as a direct result of any war or conflict (the act requires regulations to list these but none has been published to date) excluding those covered by the Commonwealth War Graves Act (Act 8 of 1992) (effectively persons who were citizens of Commonwealth Countries other than South Africa who died in South Africa after 4 August 1914).
  - Members of the forces of Great Britain and the former British Empire who died on active duty in the present territory of the Republic of South Africa before 4 August 1914.
  - Persons that were exiled from the present territory of the Republic of South Africa and died outside of South Africa during the Anglo-Boer War (1899-1902).

- Certain persons who died in the "liberation struggle" (the act requires regulations to list such persons but none have been published to date) in the present territory of the Republic of South Africa and outside South Africa.
- Ancestral graves.
- Persons of royal descent and traditional leaders.
- Individuals indicated by the Minister of Arts and Culture in notices in the Government Gazette.
- Historical graves and burial grounds.

Graves are defined as the place of burial as well as the contents, headstone or any other marker and any other structure on, or associated with such a place.

Under the provisions of the NHRA a SAHRA permit is therefore required for any action affecting a burial ground or grave or human remains (including the handling and housing thereof) older than 100 years; that of a victim of conflict, a person of royal descent or a traditional leader and those from historical and ancestral graves as well as any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a recognized local authority. In addition to the normal requirements for an archaeological excavation permit, the following requirements must be met in applications involving any of the above:

- The applicant must illustrate a concerted effort to trace and identify any person or community with an interest in the grave, burial ground or remains. This should be done by means of documentary and archival research, a process of public participation and social consultation and the placing of site and newspaper notices.
- If any interested parties are identified their permission for the exhumation of the remains or any action affecting the graves must be obtained and an agreement as to the requirements for

exhumation, the research on and the re-internment of, or any other arrangement for the long term storage of the remains must be met.

If the grave or burial ground in question is that of a member of the military forces of a Commonwealth Country other than South Africa, permission must be obtained from the Commonwealth War Graves Commission.

The handling, storage and transport of human remains, whether they be of archaeological or recent origin, is further regulated by the Graves and Dead Bodies Ordinance (Ord 7 of 1925 (re-instituted by Proclamation 109 of 17 June 1994), the Exhumations Ordinance (Ord 12 of 1980) as well as either the Human Tissues Act (Act 65 of 1983 as Amended) or the National Health Act (Act 61 of 2003). With the promulgation of the Health Act not all of the sections of the Human Tissues Act were repealed, and since this process is ongoing these acts must be used in conjunction with each other. In addition, graves and human remains in municipal cemeteries are regulated by the applicable Municipal By-Laws.

For practical purposes the following is required to legally excavate and handle human remains:

- Notices advertising the proposed exhumation of graves must be placed in a local newspaper in English and one of the common additional official languages of the area. These notices must invite possible objections to the proposed exhumation. A period of two weeks must be allowed for comments.
- Site notices similar in content to the newspaper notices must be placed at the site and should remain in place for a period of 60 days.

- A concerted effort to identify and contact persons or groups with an interest in the graves must be undertaken through documentary and archival research, public participation and social consultation. The process must be documented and this record must accompany the application.
- If any interested parties are identified, their permission for the proposed action must be obtained in an agreement that states the preferred place of reburial or mode of long term retention of the remains and the cultural and/or religious requirements that must be met. The applicant must assist the group in question to meet the agreed requirements.
- If the grave is located in a National Park the requirements of the SANParks policy must be met.
- The permission of the Premier of the Province, or the delegated official, must be obtained.
- A permit from the Provincial Department of Health must be obtained.
- Permission of the Municipality from where the remains are exhumed and where it will be
  reburied must be obtained. The second is usually included in the process of obtaining new burial
  plots for re-internment. If the graves in question are not located in the jurisdiction of a
  Municipality but in an area under a Traditional Authority, permission from said authority is
  required.
- The permission of the landowner where the remains are to be exhumed as well as where the remains will be buried is required.
- If the agreement allows for the remains to be placed in a collection, the permission of the head of the institution that houses the collection must be obtained. If the agreement with the interested parties allows for the study of the remains before re-internment, this implies temporary storage which also requires the permission of the head of the institution involved.
- A SAHRA permit must be obtained for graves and remains listed above, in short for graves older than 100 years, older than 60 years if located outside the jurisdiction of a municipality and for other graves of cultural significance irrelevant of their age (Note that this may vary between provinces).

- Permission from the Commonwealth War Graves Commission must be obtained for any graves under their administration.
- The local South African Police Services must be notified of the exhumation seven days prior to the action.
- Only a certified funeral undertaker, or an institution with a similar legal status and facilities, is legally allowed to handle, transport and store human remains. South African medical schools legally have this status.

# 7.8.4 Threats or sources of risk and their impact on the burial grounds and graves

• The graves will be affected by the construction activities on the proposed alignment.

# 7.8.5 Description of the Artefacts, Faunal, Botanical or Other Finds and Features associated with the burial grounds and graves

• Some object of personal use, such as cups and pots ("burial objects") were observed in association with these graves.

# 7.8.6 Statement of Significance (Heritage Value)

- Although the graves might fall under any legislation that specifically indicates them as culturally significant, they remains graves and will have significance on local and family level.
- All graves are protected by legislation whether it is archaeological, heritage, or recent modern, and no actions affecting the graves may be undertaken without legislated permission.

# 7.8.7 Field Rating (Recommended grading or field significance) of the site:

While formal grading is the responsibility of the heritage resources authorities, this report includes Field Ratings for sites, to comply with section 38 of the national legislation.

• Generally Protected A (Field Rating IV A): this site should be mitigated before destruction (generally High/Medium significance);

#### 7.8.8 Recommendations

# 7.8.8.1 Assessment of the potential impact of the development on these sites, relative to sustainable social and economic benefits.

• It is recognised that the need for water distribution in the area is high and this is considered relative to well established practice of grave relocation to recognised Municipal and other cemeteries.

### 7.8.8.2 Proposals for protection or mitigation

- The possibility of changing the alignment of the proposed pipeline should be considered as the most suitable measure.
- If an impact on the graves is unavoidable the full NHRA Sec 36 will come to bear. This is an extensive and expensive process and should only be considered as a last resort.
- Other cases of proposed grave relocation in this region have met with serious social, political and cultural objections.

### 7.8.9 Action/s required at the site

- At the onset of construction all graves that might be affected should be clearly demarcated and if possible fenced off to protect them from any accidental damage, whether they are earmarked for relocation, or not.
- Should the decision be taken to propose the relocation of the affected graves, a suitably
  accredited and experienced service provider must be appointed to undertake the relocation.
  Please note that grave relocation is dependent on permission for the action by the close
  relatives and interested and affected parties from the community, and the requirement is that
  the developer must assist this community to fulfil their cultural and religious requirement
  during the process.

Figure 74. Graves at Site ORW 23.



6.9.



### 6.9. Site ORW 25 ORWRDP Phase 2F

#### 7.9.1 Location of burial grounds and graves

S24 18 05.2 E29 49 29.2 – Refer Figure 57 for locality map, and Appendix 2 for survey transect logs.

#### 7.9.2 Description of burial grounds and graves

A single grave was identified at this location. The grave was situated at the foot of a small hill. The grave was orientated from west to east and a large rock was placed upright at the western end to serve as headstone. The grave had a rectangular shaped cement slab as dressing. The cement slab was inscribed with the words:

"Ramakgahlele Ramosedi Maphakhane Rest In Peace"

The grave was well maintained and some glass bottle fragments were found behind the headstone and were probably part of the grave goods which were placed at the grave (Fig. 75).

### This grave is directly associated with Site ORW 26.

#### 7.9.3 Legal implications of graves

The NHRA identifies the following categories of human remains whether as incidentally discovered remains, or in burial grounds and graves:

• Human remains older than 100 years, which are defined as archaeological.

- "Victims of Conflict" that include:
  - Persons who died in the present territory of the Republic of South Africa as a direct result of any war or conflict (the act requires regulations to list these but none has been published to date) excluding those covered by the Commonwealth War Graves Act (Act 8 of 1992) (effectively persons who were citizens of Commonwealth Countries other than South Africa who died in South Africa after 4 August 1914).
  - Members of the forces of Great Britain and the former British Empire who died on active duty in the present territory of the Republic of South Africa before 4 August 1914.
  - Persons that were exiled from the present territory of the Republic of South Africa and died outside of South Africa during the Anglo-Boer War (1899-1902).
  - Certain persons who died in the "liberation struggle" (the act requires regulations to list such persons but none have been published to date) in the present territory of the Republic of South Africa and outside South Africa.
- Ancestral graves.
- Persons of royal descent and traditional leaders.
- Individuals indicated by the Minister of Arts and Culture in notices in the Government Gazette.
- Historical graves and burial grounds.

Graves are defined as the place of burial as well as the contents, headstone or any other marker and any other structure on, or associated with such a place.

Under the provisions of the NHRA a SAHRA permit is therefore required for any action affecting a burial ground or grave or human remains (including the handling and housing thereof) older than 100 years; that of a victim of conflict, a person of royal descent or a traditional leader and those from

historical and ancestral graves as well as any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a recognized local authority. In addition to the normal requirements for an archaeological excavation permit, the following requirements must be met in applications involving any of the above:

- The applicant must illustrate a concerted effort to trace and identify any person or community with an interest in the grave, burial ground or remains. This should be done by means of documentary and archival research, a process of public participation and social consultation and the placing of site and newspaper notices.
- If any interested parties are identified their permission for the exhumation of the remains or any action affecting the graves must be obtained and an agreement as to the requirements for exhumation, the research on and the re-internment of, or any other arrangement for the long term storage of the remains must be met.

If the grave or burial ground in question is that of a member of the military forces of a Commonwealth Country other than South Africa, permission must be obtained from the Commonwealth War Graves Commission.

The handling, storage and transport of human remains, whether they be of archaeological or recent origin, is further regulated by the Graves and Dead Bodies Ordinance (Ord 7 of 1925 (re-instituted by Proclamation 109 of 17 June 1994), the Exhumations Ordinance (Ord 12 of 1980) as well as either the Human Tissues Act (Act 65 of 1983 as Amended) or the National Health Act (Act 61 of 2003). With the promulgation of the Health Act not all of the sections of the Human Tissues Act were repealed, and since this process is ongoing these acts must be used in conjunction with each other. In addition, graves and human remains in municipal cemeteries are regulated by the applicable Municipal By-Laws.

For practical purposes the following is required to legally excavate and handle human remains:

- Notices advertising the proposed exhumation of graves must be placed in a local newspaper in English and one of the common additional official languages of the area. These notices must invite possible objections to the proposed exhumation. A period of two weeks must be allowed for comments.
- Site notices similar in content to the newspaper notices must be placed at the site and should remain in place for a period of 60 days.
- A concerted effort to identify and contact persons or groups with an interest in the graves must be undertaken through documentary and archival research, public participation and social consultation. The process must be documented and this record must accompany the application.
- If any interested parties are identified, their permission for the proposed action must be obtained in an agreement that states the preferred place of reburial or mode of long term retention of the remains and the cultural and/or religious requirements that must be met. The applicant must assist the group in question to meet the agreed requirements.
- If the grave is located in a National Park the requirements of the SANParks policy must be met.
- The permission of the Premier of the Province, or the delegated official, must be obtained.
- A permit from the Provincial Department of Health must be obtained.
- Permission of the Municipality from where the remains are exhumed and where it will be
  reburied must be obtained. The second is usually included in the process of obtaining new burial
  plots for re-internment. If the graves in question are not located in the jurisdiction of a
  Municipality but in an area under a Traditional Authority, permission from said authority is
  required.
- The permission of the landowner where the remains are to be exhumed as well as where the remains will be buried is required.

- If the agreement allows for the remains to be placed in a collection, the permission of the head of the institution that houses the collection must be obtained. If the agreement with the interested parties allows for the study of the remains before re-internment, this implies temporary storage which also requires the permission of the head of the institution involved.
- A SAHRA permit must be obtained for graves and remains listed above, in short for graves older than 100 years, older than 60 years if located outside the jurisdiction of a municipality and for other graves of cultural significance irrelevant of their age (Note that this may vary between provinces).
- Permission from the Commonwealth War Graves Commission must be obtained for any graves under their administration.
- The local South African Police Services must be notified of the exhumation seven days prior to the action.
- Only a certified funeral undertaker, or an institution with a similar legal status and facilities, is legally allowed to handle, transport and store human remains. South African medical schools legally have this status.

#### 7.9.4 Threats or sources of risk and their impact on the burial grounds and graves

• The graves will be affected by the construction activities on the proposed alignment.

# 7.9.5 Description of the Artefacts, Faunal, Botanical or Other Finds and Features associated with the burial grounds and graves

• Some glass fragments, possibly indicating "burial objects" was observed in association with this grave.

### 7.9.6 Statement of Significance (Heritage Value)

- Although the graves might fall under any legislation that specifically indicates them as culturally significant, they remains graves and will have significance on local and family level.
- All graves are protected by legislation whether it is archaeological, heritage, or recent modern, and no actions affecting the graves may be undertaken without legislated permission.

# 7.9.7 Field Rating (Recommended grading or field significance) of the site:

While formal grading is the responsibility of the heritage resources authorities, this report includes Field Ratings for sites, to comply with section 38 of the national legislation.

• Generally Protected A (Field Rating IV A): this site should be mitigated before destruction (generally High/Medium significance);

### 7.9.8 Recommendations

# 7.9.8.1 Assessment of the potential impact of the development on these sites, relative to sustainable social and economic benefits.

• It is recognised that the need for water distribution in the area is high and this is considered relative to well established practice of grave relocation to recognised Municipal and other cemeteries.

#### 7.9.8.2 Proposals for protection or mitigation

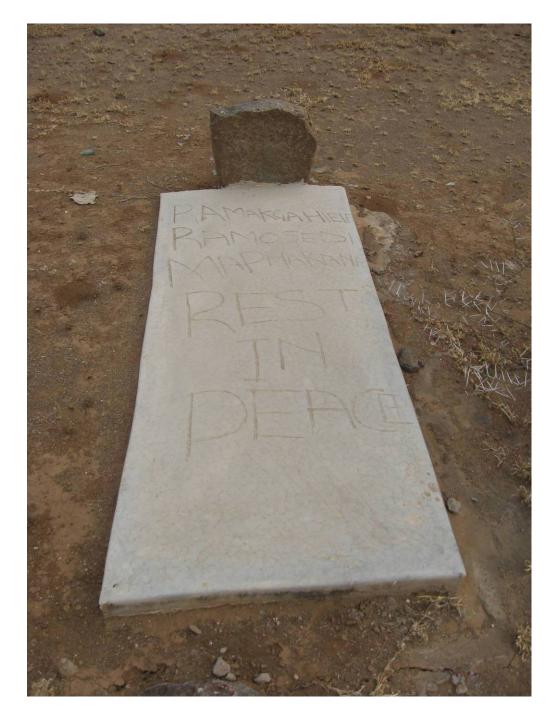
- The possibility of changing the alignment of the proposed pipeline should be considered as the most suitable measure.
- If an impact on the graves is unavoidable the full NHRA Sec 36 will come to bear. This is an extensive and expensive process and should only be considered as a last resort.

- If the grave is to relocated this should be considered in conjunction with the actions for Site ORW 26.
- Other cases of proposed grave relocation in this region have met with serious social, political and cultural objections.

### 7.9.9 Action/s required at the site

- At the onset of construction all graves that might be affected should be clearly demarcated and if possible fenced off to protect them from any accidental damage, whether they are earmarked for relocation, or not.
- Should the decision be taken to propose the relocation of the affected graves, a suitably
  accredited and experienced service provider must be appointed to undertake the relocation.
  Please note that grave relocation is dependent on permission for the action by the close
  relatives and interested and affected parties from the community, and the requirement is that
  the developer must assist this community to fulfil their cultural and religious requirement
  during the process.

Figure 75. Grave at Site ORW 25.



### 7. CONCLUSIONS

From the literature review and archival sources it is clear that the area affected is rich in diverse and varied heritage resources dating from the Stone Age to historical times. Although several heritage resources were identified as part of this study none were assessed to be significant, apart from graves which occur near or on the proposed alignments surveyed. The reason for this is that the proposed alignments, for the most part, follow existing road, or other infrastructure (pipe or power lines) reserves. The nature of the development (water distribution) also requires it to proceed through mostly built-up and in some areas heavily disturbed areas. Al of the archaeological sites is previously disturbed and only potshard scatters were observed to indicate their presence. Several recent modern homesteads, which fall outside of the scope identified as heritage resources because of their age were also identified. These are included to ensure that notice is taken of the fact that they might contain the graves of mainly young children in the floors of such houses in order to prevent the inadvertent discovery of such human remains when construction commences. Other graves identified can be mitigated by slightly changing the alignment of the proposed development, or by carefully managing the construction activities where these graves are near, and not directly on, the proposed alignment. Grave relocation is not deemed an appropriate measure in this case.

# **BIBLIOGRAPHY**

Berg, J.S. 1999. *Geskiedenis Atlas van Suid-Afrika*: Die Vier Noordelike Provinsies. Pretoria: J.J. Van Schaiks.

Boshoff, W. 2005. Summary report on Maleoskop on the Rietkloof farm in the district of Groblersdal.

Bosman, I.D. 1977. *Die Groot trek 1838-1854*. Geskiedenis van Suid-Afrika. Elsiesrivier: Nasionale Boekdrukkery.

Delius, P. 1983. *The Land Belongs To Us: The Pedi Polity, the Boers and the British in the Nineteenthcentury Transvaal.* Johannesburg: Ravan Press.

Delius, P. 2007. *Mpumalanga. History and heritage*. University of KwaZulu-Natal: University of KwaZulu-Natal Press.

Evers, T. M. 1975. Recent Iron Age research in the Eastern Transvaal, South Africa. *South African Archaeological Bulletin*. 30(119/120): 71-83.

Eloff, J. F. 1969. Bushman Rock Shelter, Eastern Transvaal: Excavations 1967-1968. South African Archaeological Bulletin 24: 60.

Huffman, T. N. 1998. The antiquity of lobola. South African Archaeological Bulletin. 53: 57-62.

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.

Jacobs, M. 2006. Process Description and Abbreviated History of Anglo Platinum's Waterval Smelter. *Southern African Pyrometallurgy*. 17-23.

Klein, R. G. 1984. Later Stone Age faunal samples from Heuningneskrans shelter (Transvaal) and Leopard's Hill Cave (Zambia). *South African Archaeological Bulletin* 39:109-116.

Korsman, S. 1994. Two later Stone Age sites on the farm Honingklip in the Eastern Transvaal. *South African Archaeological Bulletin* 49:24-32.

Louw, A. W. 1969. Bushman Rock Shelter, Ohrigstad, Eastern Transvaal, a preliminary investigation. *South African Archaeological Bulletin* 24: 39-57.

Massie, R.H. 1905. The *Native Tribes of the Transvaal: Prepared for the general staff, war office*. London: Harrison and Sons.

Mitchell, P. 2002. The archaeology of southern Africa. Cambridge: Cambridge University Press.

Mönning, H.O. 1967. The Pedi. Pretoria: J.J. Van Schaik.

Muller, C.F.J. 1985. 500 Jaar Suid-Afrikaans Geskiedenis. Pretoria: Academica.

Nell, C. 2009. An archaeozoology of the Ndzundza Ndebele in the Steelpoort River Valley, Mpumalanga, South Africa, c. 1700 AD tot 1883 AD. *South African Archaeological Bulletin*. 64(190): 184-192.

Ntrama, O.Y. 2006. Replacement of the existing Merensky Reef operations at Lebowa Platinum Mines: an integrated business and operational readiness approach. *International Platinum Conference 'Platinum Surges Ahead'*. *The Southern African Institute of Mining and Metallurgy*. 295- 300.

Plug, I. 1981. Some research results on the Late Pleistocene and Early Holocene deposits of Bushman Rock Shelter. Eastern Transvaal. *South African Archaeological Bulletin*. 133:14-21.

Plug, I. 1982. Bone tools and shell, bone and ostrich eggshell beads from Bushman Rock Shelter (BRS), Eastern Transvaal. *South African Archaeological Bulletin.* 37(136): 57-62.

Schoeman, M. H. 1997. *The Ndzundza archaeology of the Steelpoort River Valley*. An unpublished MA thesis. University of Witwatersrand.

Schoeman, M. H. 1998a. Excavating Ndzundza Ndebele at Kwamaza. *South African Field Archaeology*. 7: 42-52.

Schoeman, M. H. 1998b. Material culture "under the animal skin": excavations at Esikhunjini, a Mfecane period Ndzundza Ndebele site. *South African Field Archaeology*. 7: 72-81.

Schoonraad, M. and Beaumont. 1971. The Welgelegen Shelter, Eastern Transvaal. Supplement to the *South African Journal of Science Special* number 2.

Theal, G.M. 1964. History of South Africa from 1873 to 1884, vol. 10. London: Allen and Unwin

Van der Merwe, D.W. 1975. Die Geskiedenis van die Berlynse Sendingsgenoodskap in Transvaal, 1860-1900. Unpublished MA thesis. University of Pretoria.

Van Jaarsveld, F. A. 1985. From Van Riebeeck to Vorster, 1652-1974 : an introduction to the history of the Republic of South Africa. Johannesburg: Perskor.

Whitelaw, G. 1996. Lydenburg revisited: another look at the Mpumalanga Early Iron Age sequence. *South African Archaeological Bulletin.* 51: 75-83.

Wright, J. 2010. Putting the Bakoni on the Historian's map. African Studies. 69(2): 229-233.

#### **ARCHIVAL SOURCES**

National Archives Depot, Pretoria: Transvaal Archives Depot, BAO 10155 D52/1608/68

National Archives Depot, Pretoria: Transvaal Archives Depot, BAO 2829 32/3/2697

National Archives Depot, Pretoria: Transvaal Archives Depot, BAO 10157 D52/1608/143

National Archives Depot, Pretoria: Transvaal Archives Depot, BAO 1/2034 D48/1608/97/1

National Archives Depot, Pretoria: Transvaal Archives Depot, CD 159 AG54144/02

National Archives Depot, Pretoria: Transvaal Archives Depot, CD 746 AG26/0/04

National Archives Depot, Pretoria: Transvaal Archives Depot, CS 181 15494/02

National Archives Depot, Pretoria: Transvaal Archives Depot, CS 366 8533/03

National Archives Depot, Pretoria: Transvaal Archives Depot, HKN 1/1/146 28N2/11/3(3) National Archives Depot, Pretoria: Transvaal Archives Depot, HKN 1/1/94 26N2/11/3(5) National Archives Depot, Pretoria: Transvaal Archives Depot, NTS 6849 46/319 National Archives Depot, Pretoria: Transvaal Archives Depot, NTS 692 345/319(5) National Archives Depot, Pretoria: Transvaal Archives Depot, NTS 2823 247/302 National Archives Depot, Pretoria: Transvaal Archives Depot, NTS 7119 438/323 National Archives Depot, Pretoria: Transvaal Archives Depot, NTS 7107 241/323 National Archives Depot, Pretoria: Transvaal Archives Depot, NTS 1963 T20583 National Archives Depot, Pretoria: Transvaal Archives Depot, NTS 10963 T220563 National Archives Depot, Pretoria: Transvaal Archives Depot, SNA 310 NA595/06 National Archives Depot, Pretoria: Transvaal Archives Depot, SNA 450 NA3983/09 National Archives Depot, Pretoria: Transvaal Archives Depot, SS 1139 R6199/85 National Archives Depot, Pretoria: Transvaal Archives Depot, SS 3043 R123/3/91 National Archives Depot, Pretoria: Transvaal Archives Depot, SS 1169 R629/86 National Archives Depot, Pretoria: Transvaal Archives Depot, SS 0 R280/96 National Archives Depot, Pretoria: Transvaal Archives Depot, THD 4 10/2/99

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# APPENDIX A

# Farm name and number

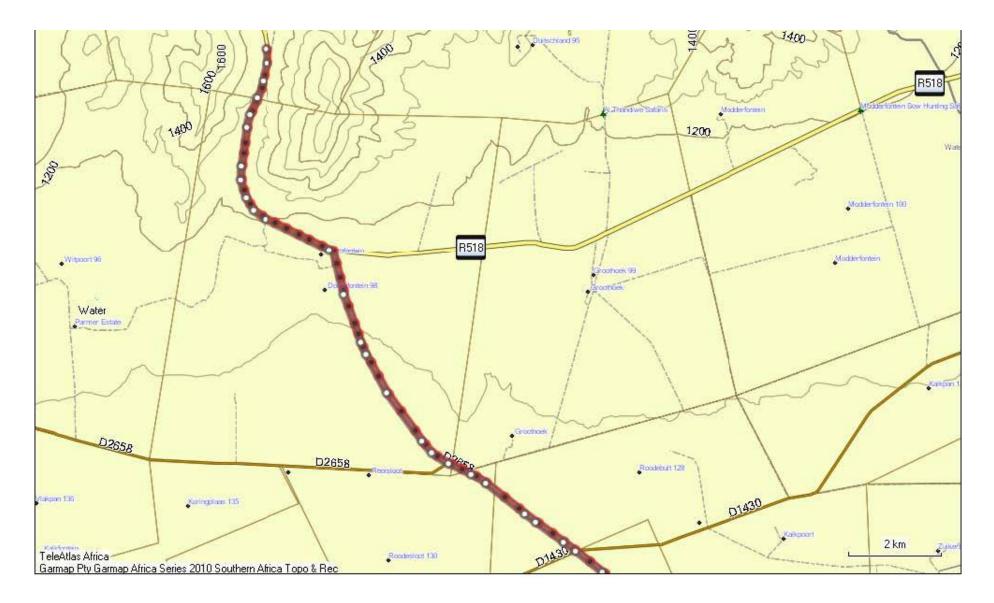
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2B	Hindostan 680 KS	RE/1	2C	Belvedere 362 KT	33
2B	Tambootieboom 686 KS	2	2C	Belvedere 362 KT	34
2B	Roodewal 678 KS	1	2C	Belvedere 362 KT	21
2B	Roodewal 678 KS	RE	2C	Belvedere 362 KT	17
2B	Gaasterland 677 KS	1	2C	Belvedere 362 KT	16
2B	Gaasterland 677 KS Hinloopen 647 KS	RE RE	2C 2C	Belvedere 362 KT Belvedere 362 KT	15 3
2B					
2B	Elandskraal 936 KS		2C	Belvedere 362 KT	14
2B	Mutue Fides 648 KS		2C	Belvedere 362 KT	2
2B	Weltevreden 646 KS	1	2C	Belvedere 362 KT	25
2B	Weltevreden 646 KS	3	2C	Belvedere 362 KT	22
2B	Weltevreden 646 KS	RE/2	2C	Belvedere 362 KT	6
2B	Tygerpad 633 KS	1	2C	Kennedy's Vale 361 KT	25
2B	Vooruitgang 634 KS	1	2C	Kennedy's Vale 361 KT	28
2B	Vooruitgang 634 KS	RE	2C	Kennedy's Vale 361 KT	9
2B	Restaurant 588 KS	RE/1	2C	Kennedy's Vale 361 KT	19
2B	Restaurant 588 KS	RE	2C	Kennedy's Vale 361 KT	22
2B	Restaurant 588 KS	3	2C	Kennedy's Vale 361 KT	29
2B	Foleys Rust 583 KS	RE	2C	Kennedy's Vale 361 KT	27
2B	Klipfontein 587 KS	RE	2C	Kennedy's Vale 361 KT	8
2B	Mokkafontein 584 KS	1	2C	Spitskop 333 KT	30
2B	Mokkafontein 584 KS	RE	2C	Spitskop 333 KT	11
2B	Singapore 585 KS	RE/1	2C	Spitskop 333 KT	3
2B	Singapore 585 KS	RE	2C	Spitskop 333 KT	2
2B	Singapore 585 KS	2	2C	Spitskop 333 KT	1
2B	Singapore 585 KS	3	2C	Annex Grootboom 335 KT	1
2B	Doornboom 586 KS	RE	2C	Annex Grootboom 335 KT	RE
2B	Calais 563 KS	RE	2C	Grootboom 336 KT	3
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2B	Malgas 154 KS	RE	2C	Grootboom 336 KT	1
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2B	Malgas 154 KS	1	2C	Goudmyn 337 KT	RE
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2B	Brakfontein 152 KS	RE/3	2C	Goudmyn 337 KT	10
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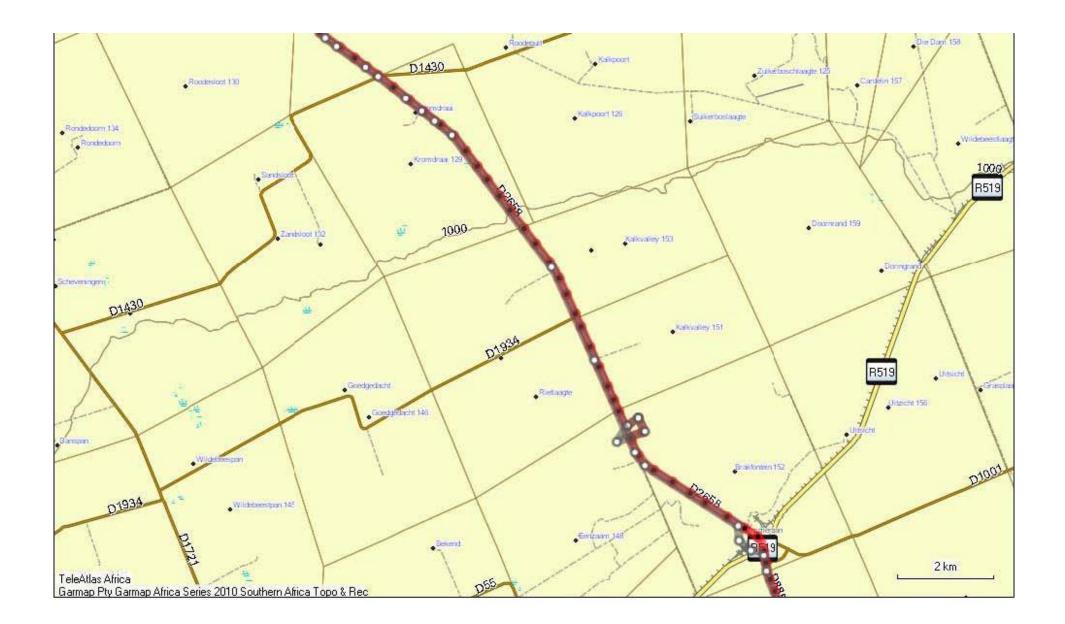
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2B	Kromdraai 129 KS	1	2D	Mooihoek 255 KT	RE
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2B	Doornfontein 98 KS	3	2F	Twickenham 114 KT	RE
2B	Doornfontein 98 KS	9	2F	Paschaskraal 466 KS	1
2B	Doornfontein 98 KS	8	2F	Klipfontein 465 KS	RE
2B	Doornfontein 98 KS	1	2F	Brakfontein 464 KS	RE
2B	Pruissen 48 KS	RE	2F	Umkoanesstad 419 KS	RE
2B	Pruissen 48 KS	2	2F	Middelpunt 420 KS	RE
2C	De Hoop 886 KS	RE	2F	Diamand 422 KS	RE
2C	De Hoop 886 KS	1	2F	Schoonoord 462 KS	RE
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2C	Steelpoort Park 366 KT	2	2F	Locatie van M'Phatlele 457 KS / Koppieskraal 475 KS	RE
2C	Steelpoort Park 366 KT	11			

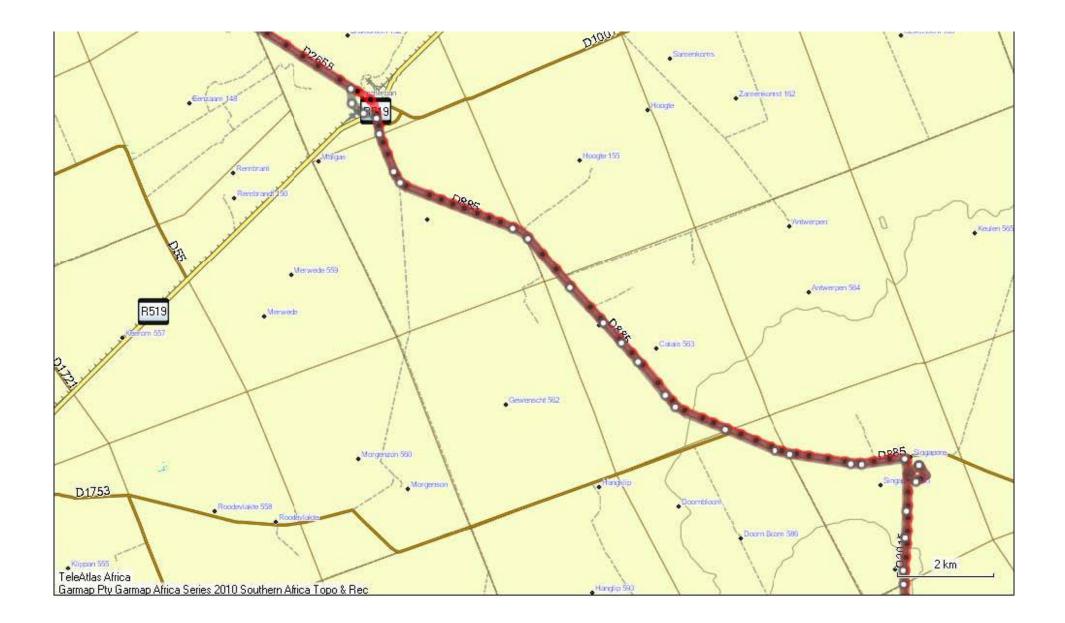
# **APPENDIX B**

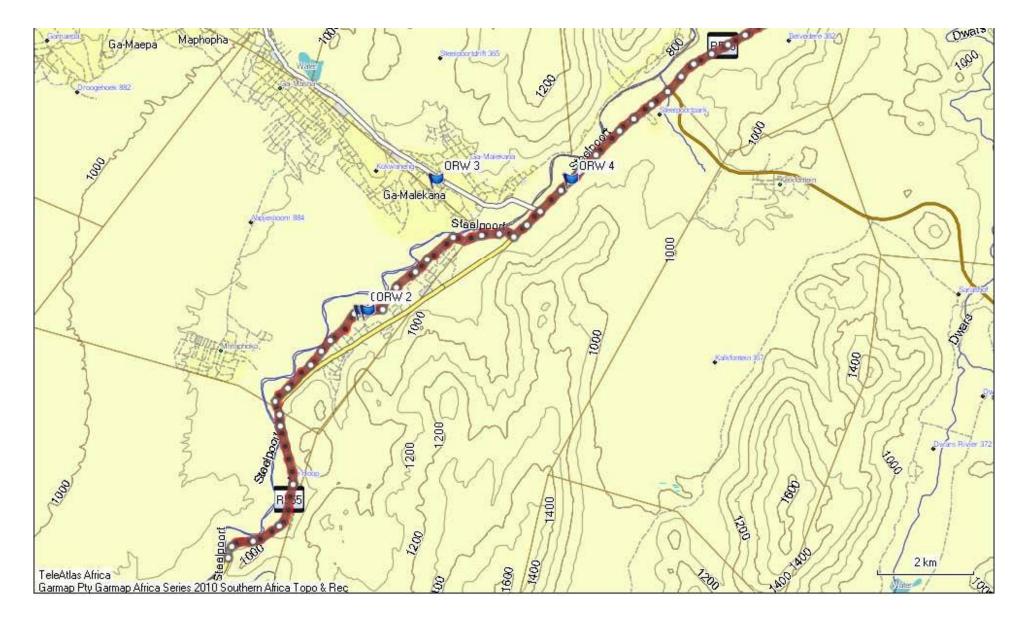
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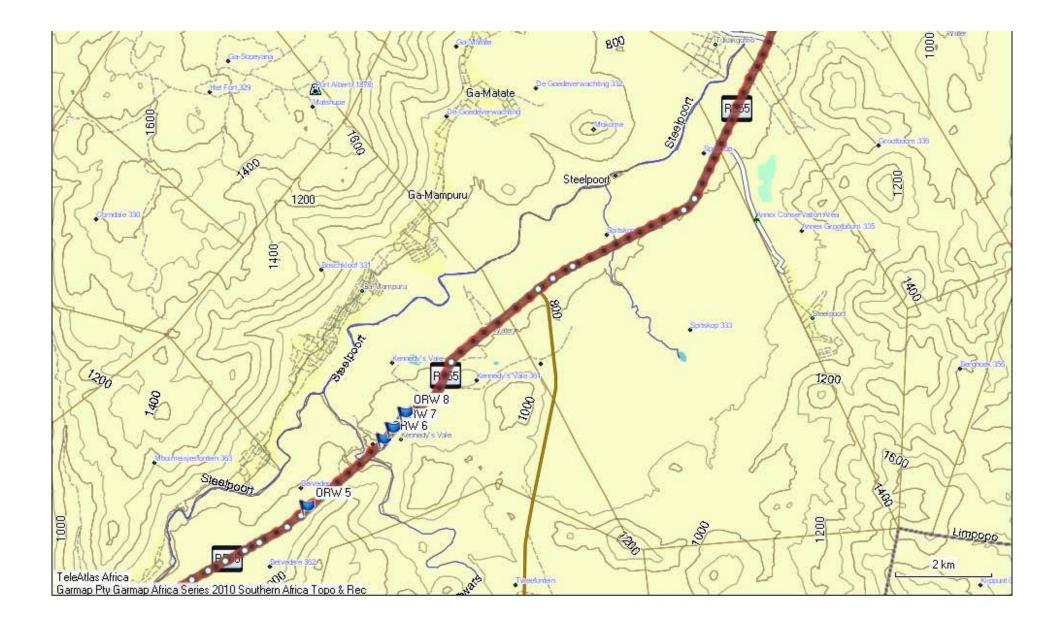
#### **ORWRDP** Phase 2B

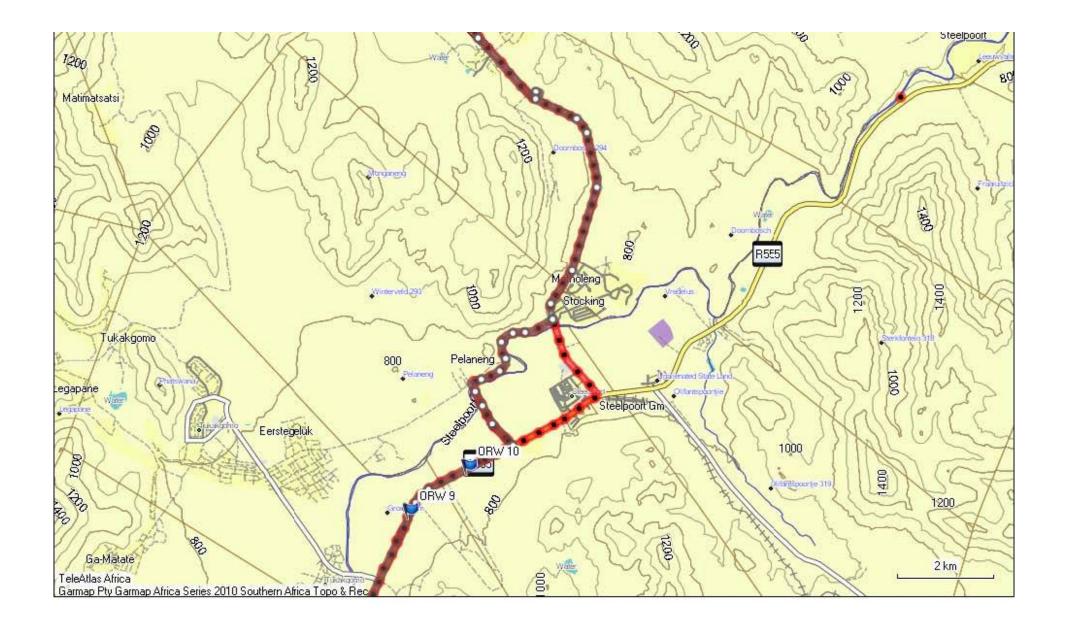












#### **ORWRDP** Phase 2D

