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FIRST PHASE ARCHAEOLOGICAL & HERITAGE ASSESSMENT OF THE PROPOSED RIVERTON – BOSHOF – DEALESVILLE WATER PIPE LINE, FREE STATE

“The past is sincerely connected to the present by an uninterrupted chain of events, one flowing from another. Stirring on one side brings a ripple on the other side. This can be caused by a picture, a gravestone, a conversation or a sudden encounter”.

(Winnie Rust, 2011. Margie of the seminary. My own translation.)

EXECUTIVE SUMMARY

Tokologo Local Municipality, which is part of the Lejweleputswa District Municipality, is planning an extraction water pipeline from the Vaal River at Riverton in the Northern Cape, to supply water to the towns of Boshof and Dealesville in the Free State. The pipeline will follow the existing 56km gravel road from Riverton to Boshof and another 60km of farm tracks to Dealesville. The installation will include a raw water dam, water treatment works and a storage reservoir at Boshof. The Boshof – Dealesville line will deliver treated water through two booster pump stations to the existing infrastructure at Dealesville.

Thewo Engineering, from Bloemfontein, commissioned the first phase archaeological and heritage impact assessment. The investigation is based on an inspection along the route, with focus on the occurrence of archaeological, historical and any other cultural material.

Except for research during the early 1930s, very little is known about the archaeology of the Boshof – Dealesville districts and the area along this part of the Vaal River.

During a more recent survey on the farms Serfonteinshoop 43, Napier 662 and Garvoch 367, Boshof District, a scatter of heavily patinated Later Stone Age flakes was collected on the surface in one specific area. At the time, I have

considered the scatter of flakes as a general occurrence, which seemed to be of minor significance. No other archaeological and cultural remains occurred.

In the present survey no archaeological material were found anywhere along the water pipeline route.

A considerable but neglected cemetery is located next to the road outside Boshof. Another two small graveyards are found on the farms Doornbult and De Hoop along the route.

A sturdy stone built farmhouse is located next to the road at the farm Joubertshoop. The buildings seem to be in a well-preserved condition.

I recommend that these farm buildings and graveyards should be avoided during the planning of the pipeline. Mitigation measures will be necessary during the construction phase where any other human skeletal material or unidentified heritage resources are found.

Further planning of the proposed project may continue.

INTRODUCTION & DESCRIPTION

Scope and Limitations

Tokologo Local Municipality, which is part of the Lejweleputswa District Municipality, is planning an extraction water pipeline from the Vaal River at Riverton in the Northern Cape, to supply water to the towns of Boshof and Dealesville in the Free State (Map 1).

The present investigation is based on an inspection of the proposed water pipeline route (Maps 2-13). The study focuses on the occurrence of archaeological, historical and other cultural material.

The investigation provided the opportunity to:

- Examine the route proposed for the water pipe line.
- Document and plot all sites and features of archaeological, historical and heritage value.
- Evaluate any potential impact on heritage resources caused by construction, operational and maintenance activities.
- Recommend mitigation measures preventing damage to areas of heritage importance.

Methodology

1. Standard archaeological survey and recording methods applied.
2. Survey of literature & previous HIA reports.
3. Route inspection on foot and by vehicle.
4. Layout of the route and features plotted by GPS.
5. Surroundings and features recorded on camera.
6. Preparation of maps & literature.
7. Research on the history, archaeology & heritage remains.
8. Prepare map with coordinates transferred to Google Earth.

Previous experience includes heritage impact investigations at Boshof (Dreyer 2004) and along the Sishen-Saldanha railway line at Garona, Bokpoort and Sanddraai.

The criteria used in the identification of sites, is based on the mere finding of archaeological and/or cultural material. In the present case, it was expected that significant finds of Stone Age material would occur.

INVESTIGATION

The field inspection was done on 9 October 2015. No limitations or obstacles were experienced during the site visit.

The route was examined for possible archaeological, historical and other cultural material and to establish the potential impact on any cultural material. The Heritage Impact Assessment (HIA) is done in terms of the National Heritage Resources Act (NHRA), (25 of 1999) and under the National Environmental Management Act, 1998 (Act. 108 of 1998).

The study aimed to locate and evaluate the significance of cultural heritage sites, archaeological material, manmade structures older than 60 years, and sites associated with oral histories and graves that could be affected by the proposed developments. Planted and self-sown trees and other types of vegetation determine a major part of the historical landscape of human settlements and in villages and towns, on farmyards or even deserted places of human activity.

The route is characterised by a repeating pattern of alternating calcrete scatters, red sand cover, quartzite and calcrete outcrops (Figs.).

Anglo-Boer War (1900-1902) camping and skirmish sites occur in the Northern Cape. Distinctive food cans and specific types and calibres of fired cartridge cases normally identify these sites. Conflict sites between early White farmers and Bushmen in the Northern Cape could contain gunflints and fired cartridge cases. From a previous archaeological and heritage assessment, we are aware

that ash heaps with remains of Anglo-Boer War material occur on strategic places (cf. Dreyer 2007 Pampoenpan, Douglas).

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The archaeological environment of the Northern Cape Province is rich and diverse, representing a long time span of the human occupation. The area around Kathu is exceptionally rich in terms of Stone Age material (Beaumont et al. 1995, Beaumont & Morris 1990). For various reasons, there is still a relative lack in research records. Certain known sites such as Wonderwerk Cave in the Kuruman Hills, several ancient specularite mines near Postmasburg and a number of significant Stone Age sites and the Kathu Archaeological Complex, made substantial contributions to our knowledge (Beaumont 1990, 2007). According to the technology, these artefacts fit in with the later part of the Early Stone Age (Acheulean).

Morris (2007) reported on Pleistocene material at the base of dune sands at borrow pits along the Sishen-Saldanha railway line.

Khoi stock farmers moved into this area between AD 400 and AD 1100. Black farming communities followed into the Northern Cape. This phase known as the Later Iron Age (AD 1300 to about 1840 AD), brought people who cultivated crops, kept livestock, produced an abundance of pottery in a variety of shapes and sizes and smelted metals. Extensive stone walled enclosures characterised their semi-permanent settlements. These remnants are known from the prominent Sotho/Tswana settlements at Dithakong, a Bathlaping capital near Kuruman. A number of Korana and Griqua groups, remnants of the Later Stone Age peoples, managed to survive the assimilation by Sotho/Tswana tribes in the region.

Dramatic climate changes resulted in a rapid population growth along the east coast of South Africa. Increased pressure on natural resources and attempts to control trade during the early 19th century brought the emergence of powerful leaders in the area. The subsequent power struggle resulted in a period of instability in the central parts of Southern Africa. This period of strife or wars of devastation, known as “difaqane” (Sotho/Tswana) or “Mfecane” (Nguni), affected many of the Black tribes in the interior. Attacks from east of the escarpment initiated by the AmaZulu impis of Chaka in about 1822, were continued by the AmaNdebele of Mzilikazi and the AmaNgwane of Matiwane into the Free State, thus uprooting among others, the Batlokwa of Sekonyela and Mantatise and various smaller Sotho/Tswana tribes. On their turn, the Batlokwa of Mantatise and Sekonyela drove off the Bafokeng of Sebetoane from Kurutlele near Senekal, who, in their effort to escape the pursuit by the AmaNdebele forces, eventually landed up in the Caprivi (Dreyer & Kilby 2003).

This period of unrest also affected the peoples of the Northern Cape, resulting in the displacement of scores of tribesmen, women and children. The stronger tribal groups, such as the AmaNdebele of Mzilikazi, assimilated many of these Batswana and other refugees.

Early European missionaries and travellers ventured into the inland of the country during the 19th century and reached Dithakong as early as 1801. Several of the marauding hordes affected the lives of the Batswana people living at Dithakong near the mission station of Robert and Mary Moffat near Kuruman.

Except for the now long outdated research by Söhnge, Visser & Van Riet Lowe (1937), very little is known about the archaeology of the Boshof – Dealesville districts and the area along this part of the Vaal River.

ANGLO-BOER WAR HISTORY

It was at Boshof where the first British columns advancing on the western front came into contact with armed Boers on 22 September 1899. A certain Capt O'Meara, an intelligence officer, riding into town in the guise of an ordinary cyclist, stumbled across a great gathering of armed Boers. After being rather unpleasantly shadowed, he got back to Kimberley, bringing the first definite news that the Boers were on commando, and that warlike movements on the Western Border had begun (Maree 1977).

While preparing for war, General Jan Smuts realised that the Boer forces would need a trained militiaman to advise them.

A French nobleman named Georges Henri Anne-Marie Victor De Villebois-Mareuil was born on 22 March 1847. He was educated at the Jesuit College in Paris, after which he joined the Military Academy of St. Cyr in 1865. When unrest started in French-Indo-China in 1868, he was transferred east; actually arriving at Hanoi after the up-rise came under control. While in camp here, he nearly died of enteric fever. In Saigon later on, while serving as the aide-de-camp of Vice-Admiral De Cornulier, his mother's brother, De Villebois-Mareuil got his promotion to the rank lieutenant in 1870.

Back home in France, the Franco-Prussian War broke out and De Villebois-Mareuil returned to Europe, only to learn that the core of his marine-infantry had almost been wiped out in battle. He then requested a transfer to the infantry brigade and was sent to Bordeaux, as part of the forces of Genl. Pourcet on the Loire River. The winter conditions there was extremely dreadful and the march horribly painful. In the chaos and fighting during the ensuing battle, De Villebois-Mareuil was wounded in the leg. He refused evacuation from the battlefield and urged his men into the attack instead. In a magnificent bayonet manoeuvre, his men were able to conquer the German barricades and to cross the river. The

battle for the control of Blois was the last hostility of the war and the white peace flags were hoisted on the walls of the ancient castle.

It took him six months to recover from his wounds, and for his part in the triumphant Battle of Blois, De Villebois-Mareuil was promoted to the rank of captain. Other promotion followed and De Villebois-Mareuil received the rank of Major (or Commandant) in 1882. However, he had to wait for another ten years to be awarded the full rank of colonel (1892). During this time, he took command of the First Regiment of the French Foreign Legion in Algeria. He also gathered experience by testing his military theories on the small island of Port Cros in the Mediterranean off the coast of Toulon. Likewise, he visited the different fighting armies on the battlefields during the Russian-Turkey war.

After the Franco-Prussian war, De Villebois-Mareuil met with an Englishman, the later Lord Kitchener, who was destined to play such a big role during the Anglo-Boer War in South Africa.

Colonel De Villebois-Mareuil had a brilliant military record and became a renowned author of several novels and other authoritative books on military strategy. The disorganized political state in France, together with many other local problems, had become an irritation to him. The unbearable circumstances compelled him to write to Dr Willem Leyds, mandatory envoy of the Transvaal Republic in Brussels: "The tension in diplomatic relations between South Africa and England could lead to a war. Should that happen, I would like the honour of defending your country with my sword."

Shortly after his arrival in this country, De Villebois travelled to Natal, where heavy fighting was in progress under Commander-in-Chief Piet Joubert. From there he travelled to Kimberley, Magersfontein and Perdeberg. It must have been a severe blow to De Villebois when neither Joubert nor General Piet Cronje paid attention to his advice or gave his military skills and experience any recognition.

Sincerely demotivated and fuming with irritation, De Villebois departed for Kroonstad, which had become the new capital of the Free State after the fall of Bloemfontein. A meeting of the War Council was scheduled for 17 March 1900. When De Villebois arrived at the meeting, President Paul Kruger of the Transvaal and President M. T. Steyn of the Free State stood up to greet him. Kruger requested he take the seat next to him. To his own surprise, De Villebois was appointed commander of the Foreign Legion with the rank of general. Serving under him were troops from France, Holland, Germany, Ireland, America, Italy, Scandinavia and even a number of South Africans. Given the task of damaging the railway line near the Modder River south of Kimberley, De Villebois left for Hoopstad to collect horses and supplies.

The railway line between the Cape and Kimberley was vitally important to the British Military operations. The town of Boshof, occupied by a garrison of about

400 British soldiers, was en route and De Villebois decided to attack the British garrison at Boshof. On 3 April 1900, his commando arrived at Leeukop, 25 kilometres north of Boshof. There they encountered a Boer patrol under the command of one Field-Cornet Daniels. Daniels' orders were to encircle Boshof and cut the telephone line to Kimberley, while De Villebois and his company would attack the town from the east.

Meanwhile, the forces of British commander Lord Methuen, was marching on Boshof where he would complement the forces with 7000 men. Daniels received word of this and told De Villebois that an attack would be foolish. The Frenchman, realising that they were outnumbered, ordered his men to continue their journey. During the night, the Boer company and its commanders became lost in the dark. After midnight on the morning of 5 April, they arrived at Spitskop, north east of Boshof, where they rested for some time. When they were ordered to march, the unwilling Boers were complaining that their horses were in no condition to proceed. Nonetheless, De Villebois ordered the Boers to leave and so lost 20 men in the process. At daybreak, Boshof could still be seen in the distance and the company continued in a southerly direction until they reached Lewis Beck, a merchant at Merriesfontein. Beck said he could not let them stay on his farm as British patrols came to the area every day. Despondent and exhausted, the company continued to the area just south of Pionierskoppie, on the farm Karreepan of which the owner, Hendrik Groenewald, was held in the Kimberley prison for some reason. They decided to stay there and allowed the horses to graze, while they rested in the shade of some trees.

Shortly after the company had left Merriesfontein, Beck took a horse-cart to Boshof. By mid-morning Methuen knew where De Villebois and his company were. In his official report, Methuen afterwards claimed that he got the information from some black informants. Soon after receiving word, Methuen, accompanied by a contingent of troops and heavy artillery, departed for Karreepan.

A little earlier, two ladies – a Mrs Ryneveld and one Miss Enslin - who were in the store overheard two black men telling the owner, that they had given the note to Methuen. The women suspected trouble and left the shop immediately. On their way to Karreepan, British guards stopped them. The two women were concealed behind a hill, where a Maxim machine gun had been deployed and they became reluctant spectators to the battle. (Afterwards, Miss Lenie Enslin would marry Chris van Niekerk, President of the Senate in the pre-democratic South African Government) (Hopkins 1963).

Shortly after midnight, De Villebois realised that the British were approaching and he ordered his company to take up their positions on the koppie, about 700m to the north west of the hills from where the British would launch their attack. When they saw the size of the approaching army, some Boers took to their heels. The British forces executed a pincer movement in an effort to intercept the fleeing

Boers. Half an hour later, the battle broke out in all fury. There were several Boer casualties and although the remaining troops wanted to surrender, their French commander decided to fight to the bitter end. He was hopeful that a looming thunderstorm would save them from their desperate situation, but not a drop of rain fell. It was only the continuous rain of British bombs and bullets.

The embattled Boer company was able to maintain its position for more than four hours until De Villebois went down, his heart pierced by a piece of shrapnel. Minutes later the storm broke out. It is claimed that De Villebois' fanatical pride caused his own death and those of eight other men. The white flag was raised and from behind the hill, the two women heard the cries of joy by the British soldiers. The ladies were allowed to continue their journey in the pouring rain and reached their destination late that night.

The remaining 51 Boers were captured and with eleven other wounded men, had to spend the night in the Karreepan farmhouse. At dusk on 6 April 1900, Colonel Kekewich and 1500 British troops marched to the cemetery with its limestone walls to attend the funeral of De Villebois. The British commander Lord Roberts ordered the funeral to be carried out in full military honours. Touched by the sombre atmosphere of the event, Lord Methuen later wrote in his journal "I have never seen so beautiful or impressive a scene, the moon giving light to the little Dutch churchyard surrounded by cypresses."

The British casualties were buried while a Dutch Reformed Church minister conducted the funerals of the Boer dead in the southern part of the cemetery. One of the British fatalities was Sergeant Patrick Campbell (Fig.45), the estranged husband of the well-known actress, Beatrice Stella Tanner (*9 February 1865 – †9 April 1940, for whom George Bernard Shaw wrote a part in *Pygmalion*, a play named after a Greek mythological character. Campbell was buried close to De Villebois (Fig.46).

Sometime later Methuen corresponded with De Villebois' only child, 16-year-old Simone. In his letter Methuen included a photograph of the marble tombstone he had had erected over her father's grave (Fig.44). Inscribed on the stone, in French, are the words: "In memory of the Count De Villebois-Mareuil, in life colonel of the French Foreign Legion and general of the Transvaal. Died on the battlefield near Boshof on April 5 1900 in his 53rd year." It is regrettable that De Villebois' remains were exhumed and reburied at Magersfontein in 1969, as it had been his last will and wish to be buried where he died. The French authorities made a national hero of De Villebois. Several monuments were erected to his honour and a memorial service for him in the Notre Dame in Paris was attended by nearly 10 000 people (Macnab 1977, Rossouw & Botes 2000, Nieman 2001). A marker was erected on the Boshof battlefield a few years ago, but unfortunately, the memory of his bravery, which had been preserved in the Chris van Niekerk Museum in Boshof, went down with the closing of the museum.

LOCALITY

Tokologo Local Municipality, which is part of the Lejweleputswa District Municipality, is planning an extraction water pipeline from the Vaal River at Riverton in the Northern Cape, to supply water to the towns of Boshof and Dealesville in the Free State. The pipeline will follow the existing 56km gravel road from Riverton to Boshof and another 60km of farm tracks to Dealesville (Map 1).

Vegetation is mainly limited to grassland with mesquite (*Prosopis* sp.), Kameeldoring (*Acacia erioloba*) and scattered Eucalyptus species (Blue gum trees).

Archaeological visibility was good throughout the investigation.

The following GPS coordinates (Cape scale) were taken (Maps 2-13).

Dealesville	28°40'30"S 025°45'35"E Altitude 1258m (Figs.1&2).
A	28°38'47"S 025°40'48"E Altitude 1265m (Fig.3).
B	28°38'02"S 025°37'51"E Altitude 1261m (Fig.4).
C	28°37'16"S 025°35'40"E Altitude 1277m (Fig.5).
D	28°35'46"S 025°31'24"E Altitude 1290m (Fig.6).
E	28°35'10"S 025°28'45"E Altitude 1275m (Fig.7).
F	28°35'18"S 025°22'05"E Altitude 1245m (Fig.8).
G	28°34'12"S 025°18'07"E Altitude 1272m (Fig.9).
H	28°33'30"S 025°16'49"E Altitude 1264m (Fig.10).
G1 (Many graves)	28°32'32"S 025°15'31"E Altitude 1252m (Figs.11&12).
Boshof	28°32'38"S 025°13'57"E Altitude 1254m (Fig.13).
J	28°32'34"S 025°12'55"E Altitude 1258m (Fig.14).
K	28°32'27"S 025°10'42"E Altitude 1256m (Fig.15).
L	28°31'46"S 025°05'20"E Altitude 1234m (Fig.16).

M (Cheval)	28°31'57"S 025°00'26"E	Altitude 1204m (Fig.17).
N	28°31'19"S 024°59'20"E	Altitude 1205m (Fig.18).
P (Emmerentia)	28°30'51"S 024°56'47"E	Altitude 1198m (Fig.19).
Doornbult	28°30'48"S 024°55'50"E	Altitude 1190m (Fig.20).
G2	28°30'50"S 024°55'42"E	Altitude 1181m (Fig.21).
G3	28°31'31"S 024°54'23"E	Altitude 1171m (Fig.28).
R	28°31'30"S 024°53'11"E	Altitude 1164m (Figs.29-31).
S	28°29'09"S 024°47'51"E	Altitude 1134m (Fig.32).
T (N12)	28°30'10"S 024°47'20"E	Altitude 1144m (Figs.33&34).
U	28°30'34"S 024°45'58"E	Altitude 1148m (Figs.35&36).
V	28°30'24"S 024°43'19"E	Altitude 1113m (Figs.37).
W	28°29'53"S 024°43'07"E	Altitude 1106m (Figs.38&39).
X	28°30'54"S 024°41'27"E	Altitude 1098m (Fig.40).

RESULTS

FINDS

The route is characterised by a repeating pattern of alternating calcrete scatters, with either grass or shrub cover.

During a previous investigation, on the farms Serfonteinshoop and Tarentaalrand (Dreyer 2008), located some 18km south east of Doornbult and 26km south west of Boshof, a collection of stone flakes was made. The flakes were heavily patinated. Points have convergent edges and single or multiple flaking on the dorsal side. Percussion bulbs are clearly recognisable in most cases. Prepared platforms are narrow and bent and are either faceted or plain. Through the application of standard tool typology and basic characteristics, the material is arbitrarily classified as Middle Stone Age.

During the present survey, no stone flakes or any other lithic material was found.

A graveyard (G1), with many graves is located along the road outside Boshof (Maps 7&11). The tombstones are broken and severely damaged, possibly by roaming cattle. A significant number of graves are unidentified stone or calcrete covered and without names (Figs.11&12). Others have inscriptions in Afrikaans or English or Setswana. The names indicate that the graves are the last resting place of Black and Coloured inhabitants of the town and date between 1948 and 1978.

Graveyard G2 is located on the farm Doornbult (Maps 7&9). The cemetery has a robust surrounding stone wall (Fig.21) and contains about eight (8) graves (Fig.22-27). Not all the gravestones have inscriptions, but those with readable lettering are of people of Afrikaner origin.

A very prominent grave is the one of General Gideon Francois Joubert (*17/8/1823 †21/6/1907) (Fig.22). Not much could be gathered about him, but it could be ascertained that the General Gideon Joubert was active during the 1850s. Opportunistic Korana and Batswana freebooters and robbers such as Skeelkoos, Gasibone and Mahura, went on the rampage along the Vaal River in the west, while the commandos of Free State Government were actively occupied to restrain the Basotho invaders (1858) in the east along the Lesotho border (Jacobs 1952, Van Heerden 1908).

A fired Martini-Henry (,577x,450 calibre) rifle cartridge case with head stamp K C II, and a fired Mauser (7x57 calibre) rifle cartridge case with head stamp DM 1896 K, were found near the cemetery at Doornbult farm. Both these cases date from the Anglo-Boer War (1899-1902). (Fig.43). The origin of the cartridges at the specific site cannot be explained.

A small graveyard (G3) (Fig.28) is located on the farm De Hoop (Map 7). Access could not be gained to this piece of land some distance from the road. I assume that the graves could be of European farm-owners and their family.

A sturdy stone built farmhouse is located at Point R (Joubertshoop), Riverton – Boshof pipeline (2824DB) (Fig.30&31).

No other archaeological or cultural remains could be found on any other site.

IMPACT ASSESSMENT

Research elsewhere showed that Middle Stone Age artefact scatters could be found across the study area. Stone Age lithic material seems to be a general scatter in specific areas and appear to be of low significance.

The scatters are widespread and are considered of low significance. It is possible that Later Stone Age settlements could occur along the Orange River. These

sites could contribute to our knowledge about hunter-gatherer and early stock-keeping settlements along the River.

In the present survey no archaeological material were found anywhere along the water pipeline route.

A neglected cemetery of considerable size is located next to the road outside Boshof. Another two small graveyards are found on the farms Doornbult and De Hoop along the route.

A sturdy stone built farmhouse is located next to the road at the farm Joubertshoop. The buildings seem to be in a well-preserved condition.

I consider that the installation of a water pipeline will have a minor impact on the archaeological, cultural or historical heritage of the area.

I anticipate that disturbance will mainly occur during the construction and maintenance phases of the water pipeline.

No other cultural or historical remains or graves were found along the proposed route.

It is anticipated that the installation of the water pipeline will be hampered by about three graveyards (Figs. 12, 21, 28), distribution power lines (Fig. 6), plough lands, several game farms (Figs. 9, 10, 41, 42), cell-phone masts (Fig. 6), farm houses and out-buildings (Figs. 30, 31) and many Camel Thorn trees (Fig. 42).

MITIGATION

The Stone Age finds of this particular region are considered as of little archaeological significance, because of low frequencies, mixed nature and unstratified context.

I recommend that the farm buildings and graveyards should be avoided during the planning of the pipeline. Mitigation measures will be necessary during the construction phase when any other human skeletal material or unidentified heritage resources are found.

Further planning of the proposed project may continue.

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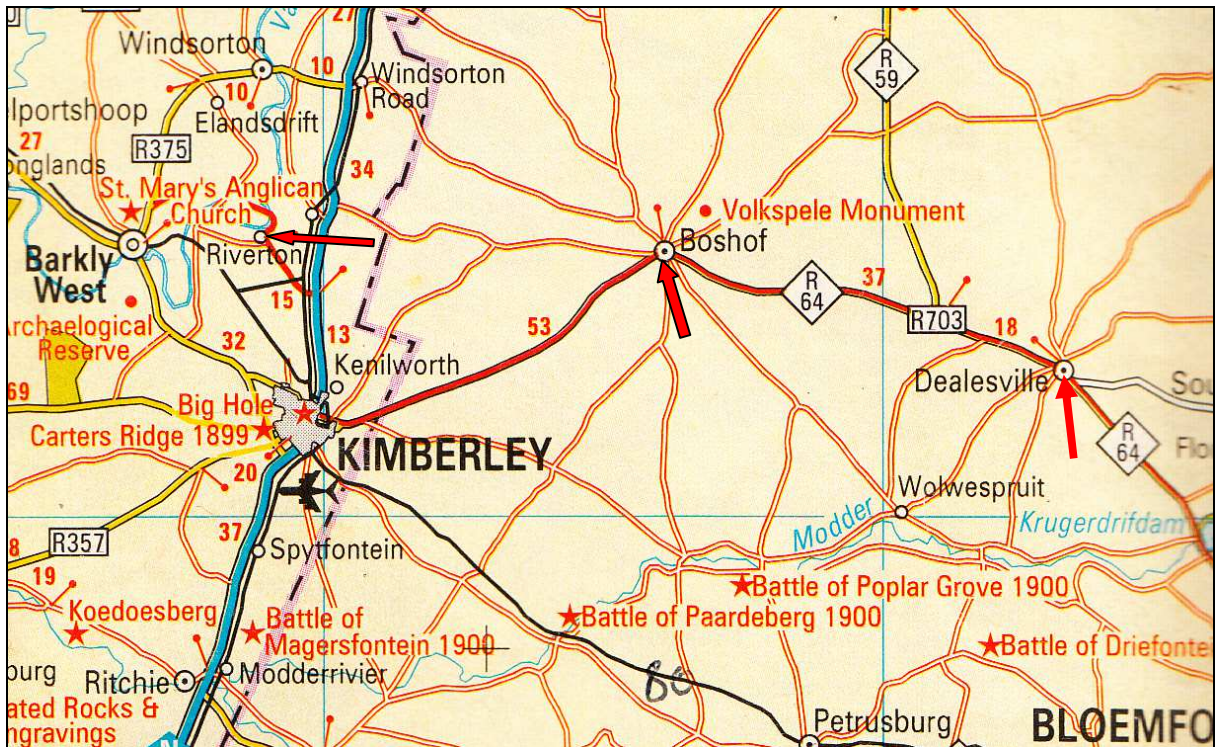
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LIST OF ILLUSTRATIONS



Map 1 Water pipeline route from Riverton – Boshof - Dealesville.



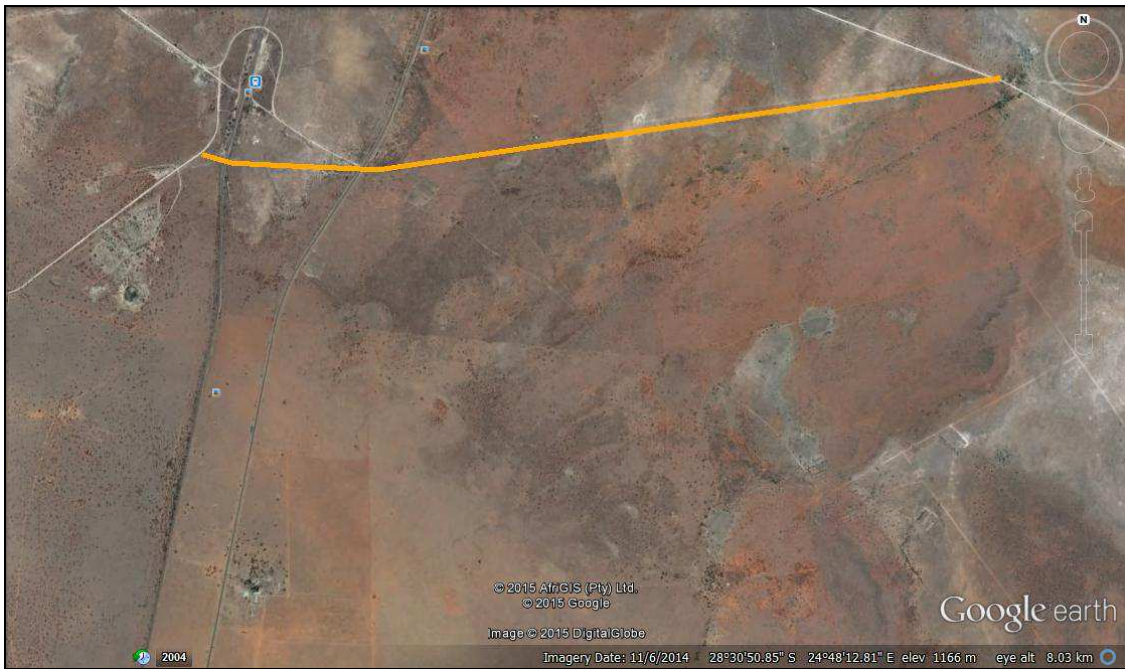
Fig.1 Water reservoir at Dealesville (Point DV).



Map 2 Proposed water abstraction points and pipeline route at Riverton. See Figure 39.



Map 3 Option 1 abstraction point above bridge. See Figures 37 &38.



Map 4 Alternative pipeline route near Riverton.



Map 5 Pipeline route from Riverton to Boshof.



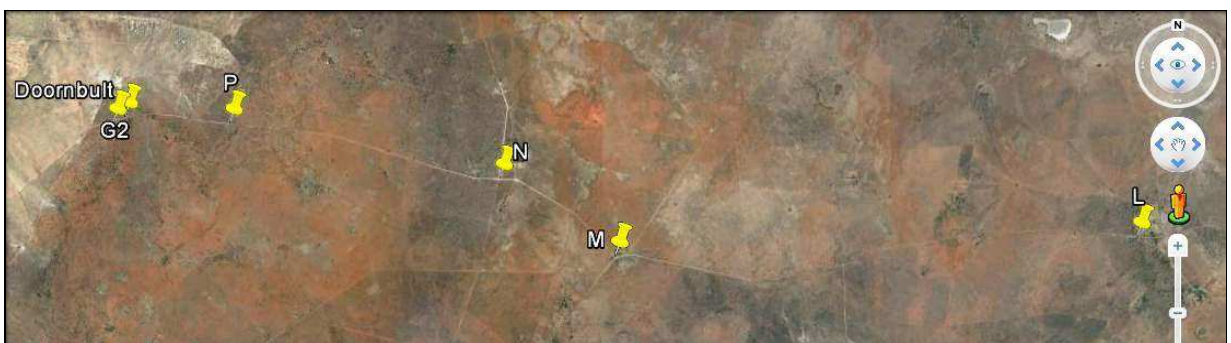
Map 6 Pipeline route from Boshof to Dealesville.



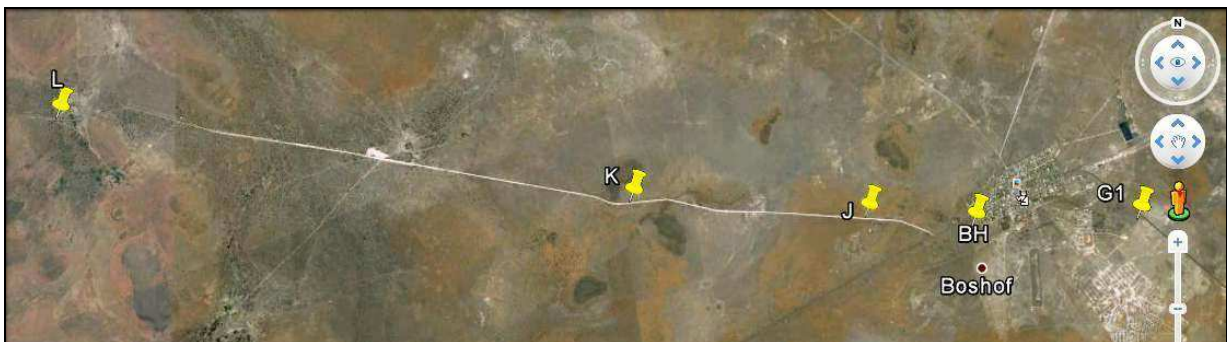
Map 7 Coordinate points along the pipeline route Riverton – Boshof – Dealesville.



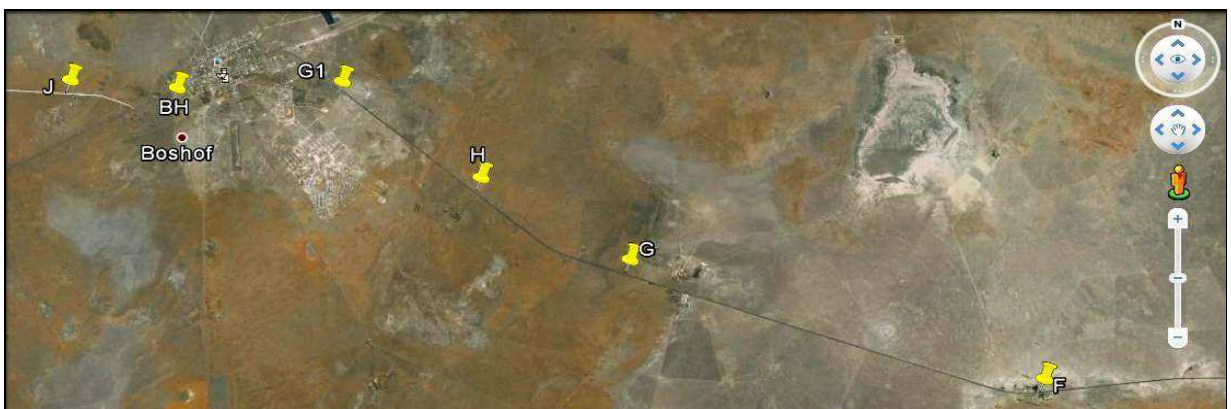
Map 8 Pipeline route from Riverton to Doornbult. Coordinate point indicated.



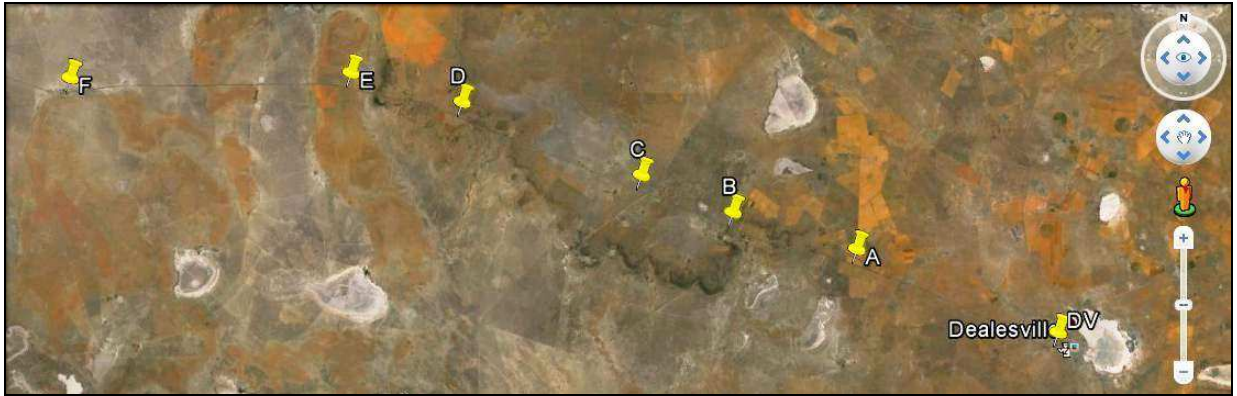
Map 9 Pipeline route from Doornbult to Point L. Coordinate points indicated.



Map 10 Pipeline route from Point L to Boshof. Coordinate points indicated.



Map 11 Pipeline route from Boshof to Point F. Coordinate points indicated.



Map 12 Pipeline route from Point F to Dealesville. Coordinate points indicated.



Fig.2 Water reservoir at Dealesville (Point DV).



Fig.3 Point A along the Riverton – Boshof – Dealesville water pipeline.



Fig.4 Point B along the Riverton – Boshof – Dealesville water pipeline.



Fig.5 Point C along the Riverton – Boshof – Dealesville water pipeline.

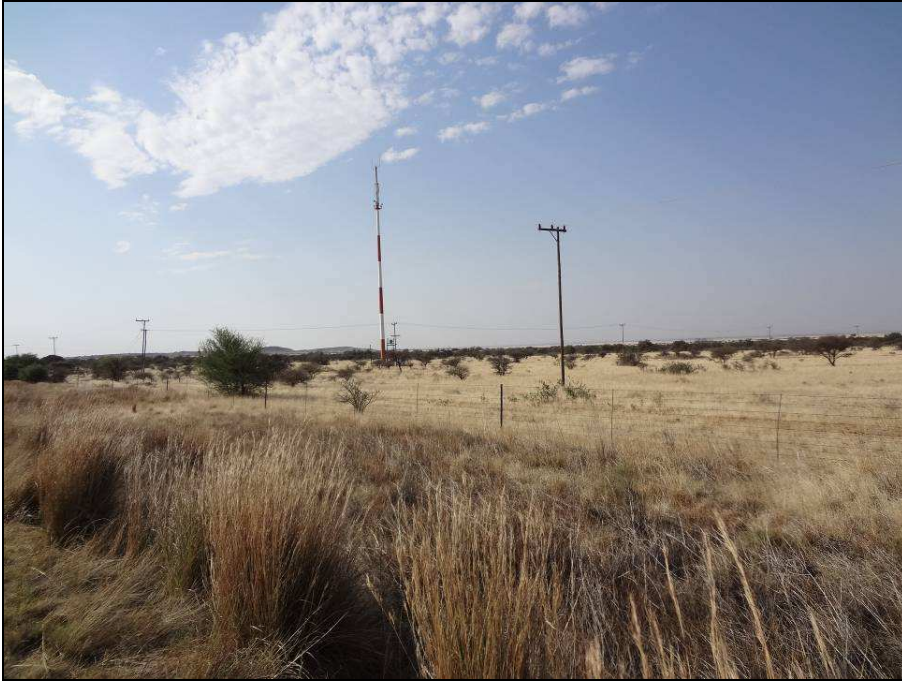


Fig.6 Point D along the Riverton – Boshof – Dealesville water pipeline.



Fig.7 Point E along the Riverton – Boshof – Dealesville water pipeline.



Fig.8 Point F along the Riverton – Boshof – Dealesville water pipeline.



Fig.9 Point G along the Riverton – Boshof – Dealesville water pipeline.



Fig.10 Point H along the Riverton – Boshof – Dealesville water pipeline.



Fig.11 Some of the many graves in cemetery (G1) outside Boshof.



Fig.12 More graves in old cemetery (G1) outside Boshof.



Fig.13 Water reservoir at Boshof.



Fig.14 Point J along the Riverton – Boshof – Dealesville water pipeline.



Fig.15 Point K along the Riverton – Boshof – Dealesville water pipeline.



Fig.16 Point L along the Riverton – Boshof – Dealesville water pipeline.



Fig.17 Point M (Cheval) Riverton – Boshof – Dealesville water pipeline (2825CA).



Fig.18 Point N along the Riverton – Boshof – Dealesville water pipeline.



Fig.19 Point P (Emmerentia) Riverton – Boshof- Dealesville water pipeline (2824DB).



Fig.20 Coordinate point at Doornbult farm Riverton – Boshof water pipeline (2824DB).



Fig.21 Stone walled Graveyard (G2) on Doornbult farm (2824DB).



Fig.22 Grave of General Gideon Francois Joubert *17/8/1823 †21/6/1907 Graveyard (G2), Doornbult.



Fig.23 Grave of Maria Johanna Gertruida Joubert (Born Van Wyk) (G2), Doornbult.

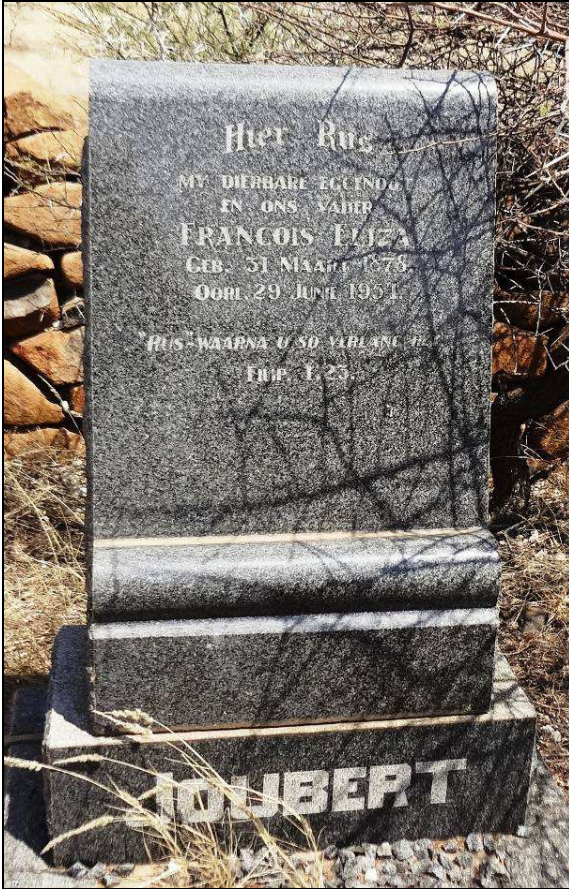


Fig.24 Grave of Francois Eliza? Joubert *31/3/1878 †29/6/1954 Graveyard (G2), Doornbult.



Fig.25 Unmarked grave in Graveyard (G2), Doornbult.

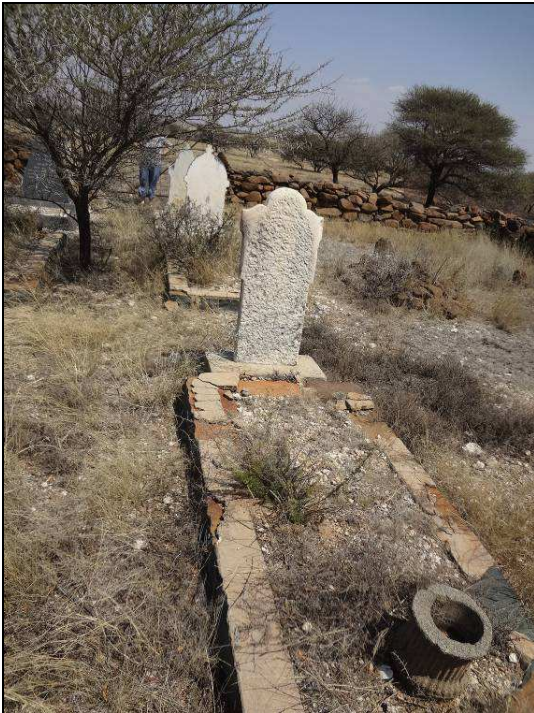


Fig.26 Graveyard (G2), Doornbult



Fig.27 Unmarked grave in Graveyard (G2), Doornbult



Fig.28 Graveyard (G3), Point P (De Hoop) Riverton – Boshof pipeline (2824DB).



Fig.29 Point R (De Hoop) along the Riverton – Boshof – Dealesville water pipeline.



Fig.30 Stone built farmhouse at Point R (Joubertshoop), Riverton – Boshof pipeline (2824DB).



Fig.31 Stone farm buildings Point R (Joubertshoop), Riverton – Boshof water pipeline



Fig.32 Point S along the Riverton – Boshof – Dealesville water pipeline.



Fig.33 Point T (N12) along the Riverton – Boshof – Dealesville water pipeline.



Fig.34 Point T (N12) along the Riverton – Boshof – Dealesville water pipeline.



Fig.35 Point U along the Riverton – Boshof – Dealesville water pipeline.



Fig.36 Point U along the Riverton – Boshof – Dealesville water pipeline.



Fig.37 Point V along the Riverton – Boshof – Dealesville water pipeline.



Fig.38 Point W alternative abstraction point for Riverton - Boshof – Dealesville water pipeline.



Fig.39 Point W alternative abstraction point for Riverton - Boshof – Dealesville water pipeline.



Fig.40 Point X proposed abstraction point for Riverton - Boshof – Dealesville pipeline.



Fig.41 Game along the proposed Riverton - Boshof – Dealesville pipeline



Fig. 42 Camel Thorn Trees (*Acacia erioloba*) along the Riverton - Boshof – Dealesville pipeline.



Fig.43 Fired Martini-Henry (,577X,450 calibre) rifle cartridge case (K C II) left, with inserted fired Mauser (7x57 calibre) rifle cartridge case (DM 1896 K), found near the cemetery at Doornbult farm. Both these cartridge cases date from the Anglo-Boer War (1899-1902). (Pocketknife = 84mm)



Fig.44 General George Henri Anne-Marie Victor de Villebois-Mareuil (*22 March 1847, Montaigu, Brittany, France †6 April 1900 near Boshof, Orange Free State

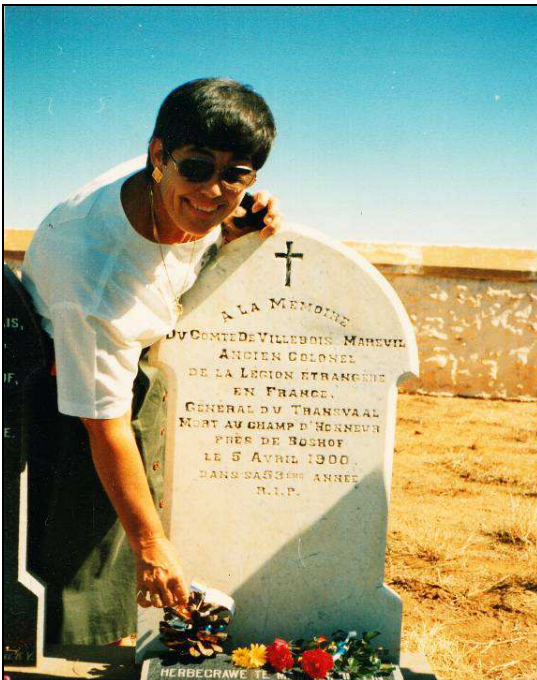


Fig.45 Joan Abrahams ("Tannie Mossie") of Bloemfontein at the grave of Genl. De Villebois-Mareuil.



Fig.46 A beaming Joan Abrahams (“Tannie Mossie”) of Bloemfontein at the grave of Sergeant Patrick Campbell, estranged husband of the well-known actress for whom George Bernard Shaw wrote *Pygmalion*.



Fig.47 Mrs. Patrick Campbell, born Beatrice Stella Tanner (*9 February 1865 – †9 April 1940),) as Eliza Doolittle on 22 April 1914. George Bernard Shaw wrote the part of Eliza expressly for Campbell who played opposite Herbert Beerbohm Tree as Henry Higgins.