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A. CULTURAL HERITAGE RESOURCES DESKTOP STUDY FOR THE CHARLIE 1 LANDFILL OPTIMISATION AND STORM WATER MANAGEMENT PROJECT – SASOL SYNFUELS SECUNDA MPUMLANGA PROVINCE

(a) REPORT COMPILED BY

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(b) DEVELOPER AND CONSULTANT INFORMATION

Project Developer:

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DATE OF REPORT: 25 November 2015

B. EXECUTIVE SUMMERY

The Secunda region like the Highveld is poor in Heritage Sites. This is due to the climate and lack of trees for building or fire purposes.

A survey of all existing literature on the area shows that the area has very few heritage sites. It is only after white farmers settled there that farm settlements and later small towns developed. This also gave rise to cemeteries. Today large scale development in the field of industries and mining has destroyed the few heritage sites in the area.

We do not expect any important heritage sites to be present on the proposed development site. There is no objection from a Cultural Heritage Resources point of view against the proposed development.

If during development any heritage remains or graves are found all work has to stop till the site has been mitigated by a heritage specialist.

Declaration:

I Udo Siegwalt Küsel, declare that I don't have any financial or personal interest in the proposed development, nor its developers or any of their subsidiaries, apart from the provision of heritage desktop report.

A handwritten signature in black ink, appearing to read 'Udo Siegwalt Küsel', written over a set of horizontal lines.

Dr. U.S. Küsel

- MA Archaeology.
- DPhil Cultural History.

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D. BACKGROUND INFORMATION ON THE PROJECT

(a) Whether the report is part of a scoping report/EIA/HIA or not

Report is part of a Environmental Impact Assessment

(b) Type of development (e.g. low cost housing project, mining etc).

Contaminated storm water pond and contaminated leachate pond

(c) Whether re-zoning and/or subdivision of land is involved.

Yes

(d) Developer and consultant and owner and name and contact details;

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E. TERMS OF REFERENCE

To conduct a desktop study to determine if there is any possibility that cultural heritage resources may occur on the development site.

F. LEGISLATIVE REQUIREMENTS OF ACT 25 OF 1999.

PROTECTED SITES IN TERMS OF THE NATIONAL HERITAGE RESOURCES ACT,
ACT NO. 25 OF 1999

- The following are the most important sites and objects protected by the National Heritage Act:
 - Structures or parts of structures older than 60 years.
 - Archaeological sites and objects.
 - Paleontological sites.
 - Meteorites.
 - Ship wrecks.
 - Burial grounds.
 - Graves of victims of conflict.
 - Public monuments and memorials.
 - Structures, places and objects protected through the publication of notices in the Gazette and Provincial Gazette.
 - Any other places or objects, which are considered to be of interest or of historical or cultural significance.
 - Geological sites of scientific or cultural importance.
 - Sites of significance relating to the history of slavery in South Africa.
 - Objects to which oral traditions are attached.
 - Sites of cultural significance or other value to a community or pattern of South African history.

Description of the Property of Affected Environment

Details of area surveyed:

- Full location Data for Province, Magisterial District/Local Authority and property (e.g. farm/erf) name and number etc.;

To construct a contaminated storm water pond and contaminated leachate pond on approximately 2 hectare on the western boundary of the Farm Driehoek 275 IS Portion 43 remaining extent.

1/50 000 Map Secunda 2629 – see page 14

G. ARCHAEOLOGICAL CONTEXT FOR SECUNDA

The early history of the region

Large sections of the study area have been impacted by mining, other industrial and infrastructural developments, the establishment and growth of towns and through extensive farming. The numerous previous heritage surveys that have been conducted recorded extant historical remains mostly as farmstead complexes with associated outbuildings, household middens and graveyards of owners and farm workers (e.g. some of the more recent include Pistorius 2008a-e, 2009, 2010, 2012a-b, 2013c, 2014a-c, 2014c, 2015; Coetzee 2011, 2013; Digby Wells 2014a-c; van der Walt 2014). Formal and informal cemeteries and unmarked graves accordingly represent an important component of the more recent social heritage of the general region. Many of the graves have already been exhumed (e.g. Fourie and Nienaber 2006 Permit No. 80/06/07/002/51; van Schalkwyk 2006 Permit No. 80/06/04/004/51).

This used to be a rural area that was settled first by hunting and gathering groups over a very long period of time; subsequently by African farmers during the more recent past and, lastly, by white settlers. Whereas there certainly are indications of Stone Age people on the landscape in the form of mostly Middle Stone Age (MSA) and Later Stone Age (LSA) stone tools, very little data on Stone Age localities have been recorded despite the very numerous heritage resource assessments conducted within the greater region (e.g. Vhubvo Archaeo-Heritage Consultants CC 2011; Coetzee 2013; Pistorius 2013a, 2014c, 2015). The patchy distribution of Stone Age sites can be ascribed to a possible lack of comprehensive research but it is more likely that such archaeological sites have been destroyed by coal exploration, early mining practices, farming and other infrastructural developments.

Also refer to Bergh 1998:4-5, Maps 2.1(a) and 2.1(b) for some of the recorded Stone Age and rock art sites within the region. Note that these maps indicate a clustering of sites around Badplaas, Carolina, Chrissiesmeer and Ermelo and a complete lack of sites within the study area. There are no records of localities with sealed deposits around Secunda. Nomadic hunting and gathering groups such as the //Xegwi of Lake Chrissie visited points on the landscape during their yearly rounds until they were displaced to marginal areas subsequent to the intensive settlement of their ancestral territories by African farmers and later on, white settlers. The survivors of this group were still in the region during the historical period. Some of them were ultimately incorporated into farmer groups (Potgieter 1955; Ziervogel 1955; Colson 1956, Barnard 1992). The cultural material at an overhang, Welgelegen Shelter near Ermelo, shows interaction between the hunter-gatherers of the region and African farmers (Schoonraad & Beaumont 1971). All the hunting and gathering communities were ultimately hunted down or lived as servants and labourers with African farmers and colonists.

The movement of African farmers onto the Highveld regions began around 1500, a period referred to as the Late Iron Age (LIA) (Huffman 2007). The extensive stone-walled sites associated with the LIA dating from the 17th century and the Historical Period are more restricted to the eastern parts of the Mpumalanga Province where there are more mountainous areas or around dolerite dykes and outcrops (Coetzee 2013; Pistorius 2015). The Iron Age

Tafelkop settlement near Ermelo comprises the exceptional remains of dome-shaped or corbelled stone houses (Hoernlé 1930). This site is now a Provincial Heritage Site (SAHRIS 9/2/222/0003).

The demography reflects concentrated pockets of African farmer settlement. The remains of Sotho-Tswana, Swazi and Ndebele communities are found mainly as stone-walled enclosures for houses and livestock (Evers 1981). For detail on LIA distribution refer to Bergh 1998:7, Map 2.2b that shows settlements to the east of Chrissiesmeer and dense concentration of stonewalled sites between Bethal and Standerton. During the more recent past Sotho-Tswana-speakers and Nguni-speakers also moved into the study region. According to Bergh (1998:10 Map 3.2) the general area was settled by the Phuting. The histories compiled by McGregor 1905:43 as Assistant Commissioner at Leribe note that '[t]hese people say they come from Seratoe (Standerton)...' from where they were displaced by Mzilikazi in his raids. The Ndzundza-Ndebele also utilized the resources of the Highveld (Van Vuuren 1987). Internal wars between the Sotho-Tswana communities and the in-moving Ndebele under Mzilikazi, commonly referred to as the *difaqane* period, resulted in the displacement of the former within the Highveld regions (van der Walt 2014).

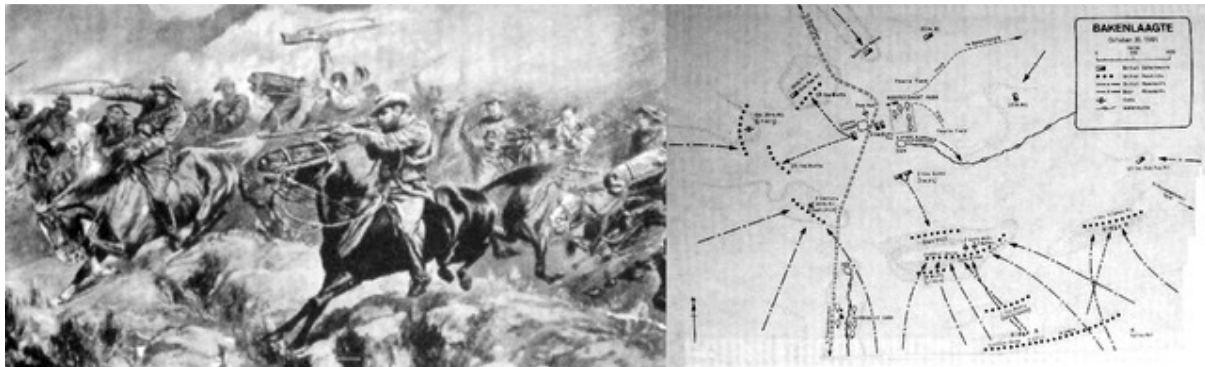
The historical period

According to the artist and explorer Thomas Baines coal deposits in the neighbourhood of Bethal were already extracted by farmers for domestic use by 1868 (Pistorius 2015). The industrial history of coal mining in South Africa is closely linked with the economic development of the region (Coetzee 2011, 2013). The discovery of diamonds in Kimberley in 1867 and a high demand for coal from the Witwatersrand gold fields that followed on the discovery of rich gold deposits in 1886, intensified prospecting for coal and the mining of early collieries.

The Battle of Bakenlaagte on the 30th of October 1901 is an important event within the general region during the Anglo-Boer War of 1899-1902 (Digby Wells 2014a). It was the last major battle on the eastern Transvaal Highveld before peace was signed (see Pistorius 2014c for a synopsis of the battle). It was aimed at the rear-guard of Benson's British No. 3 Flying Column to minimize the threat of night raids on the Boers. The battle was fought during the guerrilla phase of the Anglo-Boer War when the combined Boer commandos of Generals Grobler, Brits, Viljoen and Louis Botha attacked the British under Colonel G.E. Benson who was also fatally wounded. The battle was characterized by bravery on both sides with 87 killed and 182 wounded. The 73 British buried on Gun Hill were reinterred in the Primrose Cemetery, Germiston.

Although the battle became known as Bakenlaagte after a Boer farm in the vicinity, the position of the main camp was at the junction of the boundaries with two other farms, Schaapkraal and Nooitgedacht, and the action at Gun Hill took place only on Nooitgedacht (<http://www.geni.com/projects/Battle-of-Bakenlaagte-%25E2%2580%2593-30-October-1901/16548>). The Bakenlaagte battlefield is 35 kilometres north-west of Bethal on the Kriel-

Kinross road at the intersection of the R547 and R580 roads just south of the Matla Power Station.



<http://www.geni.com/projects/Battle-of-Bakenlaagte-%25E2%2580%2593-30-October-1901/16548>.

The long-term extraction of coal after the Anglo-Boer War required vast infrastructural developments. These early mining practices took place before investigations of heritage resources had been legally required. Most of the data relating to hunter-gatherer groups and early African farmers who would have utilized the resources of this area were probably destroyed. Intensive farming and mining impacted severely on the preservation of historical heritage sources.

The mining activities, and also farming, subsequently resulted in the movement of diverse ethnic and language groups into the area. The demand for labour on the mines attracted people and communities who established themselves in the region but also included groups that provided seasonal and migrant labour from other regions from as distant as Mozambique (Alexander 2001). Farm labourers also settled around farming centres (Van Vuuren 1987; Murray 1993).

The historical buildings of the eastern Highveld represent an important part of our heritage. Pistorius (2008d, 2009, 2015) remarks on the vernacular stone architectural heritage that developed in the eastern Highveld around the second half of the 19th century. Timber is a scarce resource on the Highveld, both for use in the construction and for brick burning (Naudé 2000). Stone was the main material available for construction. Local materials such as shale, slate, sandstone, ferricrete and granites were used to build houses and outbuildings on the early settler farms (Naudé 2000). A lack of firewood for the inhabitants of the town of Middelburg, established in 1859, resulted in a ruling that wood from farms was to be made available to the town burgers and that farmers were restricted in their use of this commodity (Naudé 2000).

Pistorius (e.g. 2008b, 2008d, 2009, 2010a, 2011) recorded numerous farmstead complexes and historical graveyards dating from the late 19th and early 20th centuries on the Highveld. He also noted that most farmsteads contain a core of historical buildings older than 60 years that has been extensively altered or are beyond repair or renovation. The historical

agricultural economy based on the deep fertile soils is now being superseded by mining practices, in particular coal mining. The buildings on the land acquired by large companies are stripped of their roofs, trusses, doors and windows resulting in fine buildings becoming ruins (Naudé 2000:32).

The more recent settlement by European farmers during the colonial period occasioned the development of small towns over the past 150 years. The mining activities and the Sasol developments gave rise to the towns of Leandra, Kinross, Evander and Secunda in the immediate study area. Pistorius (2008b, 2008d, 2008e, 2015) provides a synthesis of the establishment and subsequent development of the various Sasol plants since the 1950s. The open-cast mine of Syferfontein is one of the largest underground mining complexes (Digby Wells 2014c; Pistorius 2015).

H. CONCLUSION AND RECOMMENDATIONS

The Secunda area has been a prime development area for mining and industries. These developments would have destroyed possible heritage sites in the area.

We do not expect any important heritage sites to be present on the proposed development site. There is no objection from a Cultural Heritage Resources point of view against the proposed development.

If during development any heritage remains or graves are found all work has to stop till the site has been mitigated by a heritage specialist.

I. REFERENCES

Barnard, A. 1992. *Hunters and herders of southern Africa: A comparative ethnography of the Khoisan Peoples*. Cambridge: Cambridge University Press.

Bergh, J.S. (ed.) 1998. *Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies*. Pretoria: J.L. Van Schaik.

Colson, E. 1956. Review of the disappearing bushmen of Lake Chrissie: a preliminary survey. E.F. Potgieter. *American Anthropological Association* 58(5): 933-934.

Coetzee, F.P. 2011. Cultural Heritage Survey of the proposed Sasol fine ash dams on the Farm Rietvley 320 IS, Secunda, Mpumalanga. For SRK Consulting (Pty) Ltd.

Coetzee, F.P. 2013. Cultural Heritage Assessment for the proposed realignment of the D714 Provincial Road from Brandspruit Mine to Impumelelo Mine for Sasol Mining (Pty) Ltd, near Secunda, Mpumalanga. For SRK Consulting (South Africa) (Pty) Ltd.

Digby Wells Environmental. 2014a. Sasol Sigma Mooikraal - Basic Assessment. Notification of Intent to Develop. Prepared for: Sasol Mining (Pty) Ltd.

Digby Wells Environmental. 2014b. Sasol Sigma Sasol Sigma Mooikraal 7Mℓ Pipeline. Heritage Watching Brief Report. Prepared for: Sasol Mining (Pty) Ltd.

Digby Wells Environmental. 2014c. Heritage statement for the Syferfontein Expansion Project, Dieplaagte 123 IS, Langsloot 99 IS, Vaalbank 96 IS, Wildebeestfontein 122 IS, Zondagsfontein 124 IS and Zondagskraal 125 IS, Secunda, Mpumalanga Province Sasol Mining (Pty) Ltd.

Evers, M. 1981. The Iron Age in the Eastern Transvaal, South Africa. In Voigt (ed.) Guide to the archaeological sites in the northern and eastern Transvaal. Pretoria: Southern African Association of Archaeologists.

Fourie, W. and Nienaber, W.C. 2006. Permit No. 80/06/07/002/51. SAHRIS data base accessed 21 November 2015.

Hoernlé, RFA. 1930. The stone-hut settlement on Tafelkop, Near Bethal. *Bantu Studies* 4: (1)33-45, DOI:10.1080/02561751.1930.

Huffman, TN. 2007. *Handbook to the Iron Age: the archaeology of pre-colonial farming societies in Southern Africa*. Scottsville: University of KwaZulu-Natal Press.

<http://www.geni.com/projects/Battle-of-Bakenlaagte-%25E2%2580%2593-30-October-1901/16548>.

Macgregor, J.C. 1905. *Basuto traditions : being a record of the traditional history of the more important of the tribes which form the Basuto nation of to-day up to the time of their being absorbed*. Cape Town: Argus Printing and Publishing Co. Full catalog record MARCXML.

Murray, M. 1993. 'Slave driving' and 'the poor man's friend': Capitalist farming in the Bethal District ca. 1910-1940. *African Studies Seminar Paper*. No. 342: 1-30.

Naudé, M. 2000. The use of stone on farmsteads on the eastern Transvaal. *Africana Society of Pretoria* (11): 49-55.

Pistorius, J.C.C. 2008a. A Phase I Heritage Impact Assessment (HIA) study for Sasol's South Block on the eastern Highveld in the Mpumalanga Province of South Africa. Unpublished report for Clean Stream Environmental Services.

Pistorius, J.C.C. 2008b. A Phase I Heritage Impact Assessment (HIA) study for Sasol's proposed new shaft complex on Strybult 542 and for the North Block on the Eastern Highveld in the Mpumalanga Province of South Africa. Unpublished report for Clean Stream Environmental Services.

Pistorius, J.C.C. 2008c. A Phase I Heritage Impact Assessment (HIA) study for Sasol's North Block on the eastern Highveld in the Mpumalanga Province of South Africa. Unpublished report for Clean Stream Environmental Services.

Pistorius, J.C.C. 2008d. A Phase I Heritage Impact Assessment (HIA) study for Sasol's proposed new gas and liquid pipelines (along a corridor) from Sasol Synfuels in Secunda (Mpumalanga) to Sasol Infrachem and Natref in Sasolburg (Free State) on the Highveld in the Republic of South Africa. Unpublished report for Nature and Business Alliance Africa (Pty) Ltd.

Pistorius, J.C.C. 2008e. A Phase I Heritage Impact Assessment (HIA) study for Sasol's proposed new conveyor belt running from the Strybult Shaft Complex to the Sasol Secunda Plant on the Eastern Highveld in the Mpumalanga Province of South Africa. Unpublished report for Clean Stream Environmental Services.

Pistorius, J.C.C. 2009. A Phase I Heritage Impact Assessment (HIA) study for Eskom's proposed railway line and associated infrastructure between the existing Pretoria Witbank railway and the Kusile Power Station in the Gauteng and Mpumalanga Provinces of South Africa.

Pistorius, J.C.C. 2010a. A Phase I Heritage Impact Assessment study for a proposed photovoltaic solar power installation (solar plant) at Grootvlei near Balfour in the Mpumalanga Province of South Africa. Prepared for: Mark Wood Consultants Clear Energy.

Pistorius, J.C.C. 2010b. A Phase I Heritage Impact Assessment (HIA) study for Sasol's Mining's Brandspruit, Middelbult, Twistdraai en Bosjespruit mining areas on the eastern Highveld in the Mpumalanga Province of South Africa. Unpublished report for Sasol Mining.

Pistorius, J.C.C. 2011. A Phase 1 Heritage Impact Assessment (HIA) study for the Sasol Shononi conveyer amendment project on the eastern Highveld in the Mpumalanga Province. Prepared for: JMA Consulting (Pty) Ltd and Sasol Mining Secunda.

Pistorius, J.C.C. 2012a. A Phase I Heritage Impact Assessment (HIA) study for a proposed 600mw power plant and associated infrastructure for Kipower (Pty) Ltd near Delmas on the eastern Highveld in the Mpumalanga Province of South Africa. Prepared for: Jones and Wagener Consulting Civil Engineers (Pty) Ltd Kuyasa Mining.

Pistorius, J.C.C. 2012b. A Phase I Heritage Impact Assessment study for Sasol Mining's proposed borrow pits on the eastern Highveld in the Mpumalanga Province. Unpublished report prepared for JMA Consulting (Pty) Ltd and Sasol Mining.

Pistorius, J.C.C. 2013a. An archaeological (heritage) survey for Taung Gold International's proposed Evander Gold Project involving the construction of a new tailings storage facility (TSF) between Evander and Secunda on the eastern Highveld in the Mpumalanga Province. Report for SLR Consulting.

Pistorius, J.C.C. 2013b. A (revised) baseline heritage study for Sasol mining's proposed Shononi Project and for the Block 8 reserves on the eastern Highveld in the Mpumalanga Province of South Africa. Prepared for: JMA Consulting (Pty) Ltd Sasol Mining Secunda.

Pistorius, J.C.C. 2013c. A Phase I Heritage Impact Assessment (HIA) study for Sasol Mining's proposed borrow pits on the eastern Highveld in the Mpumalanga Province. Prepared for: JMA Consulting (Pty) Ltd.

Pistorius, J.C.C. 2013d. A brief heritage report on possible graves in Sasol's Borrow Pit 07 on the eastern Highveld in the Mpumalanga Province. Prepared for: JMA Consulting (Pty) Ltd.

Pistorius, J.C.C. 2014a. A Phase I Heritage Impact Assessment (HIA) study for Taung Gold (Secunda) (proprietary) Limited (Taung Gold's) proposed construction of dewatering infrastructure and a decant water pipeline near Secunda on the eastern Highveld in the Mpumalanga Province. Unpublished report for SLR Consulting.

Pistorius, J.C.C. 2014b. A Phase I Heritage Impact Assessment (HIA) study for the EMP Amendment for Evander Shaft 6 and a proposed new tailings dam and associated tailings delivery and return water pipeline near Secunda on the eastern Highveld in the Mpumalanga Province. Unpublished report for SLR Consulting.

Pistorius, J.C.C. 2014c. A Phase I Heritage Impact Assessment (HIA) study for the proposed Exxaro Matla Mine 1 relocation project on the farm Bakenlaagte 84IS near Kriel on the eastern highveld in the Mpumalanga Province of South Africa. Prepared for Golder Associates Africa (Pty) Ltd.

Pistorius, J.C.C 2015. A Phase I Heritage Impact Assessment (HIA) study for the proposed Lake Umuzi South Bank Extension in Secunda in the Mpumalanga Province. Prepared for: Shangoni Management Services Pty (Ltd).

Schoonraad, M. & Beaumont, P. 1971. The Welgelegen Shelter, Eastern Transvaal. In Schoonraad M. (ed.). Rock paintings of Southern Africa (*Supplement to the South African Journal of Science*. Special Publication No. 2).

Van der Walt, J. 2014. Archaeological Impact Assessment for the proposed for the proposed Highveld Haven filling station close to Ermelo, Mpumalanga Province. Prepared for Midturon Information Consultants.

Van Schalkwyk, J. 2006. Permit No. 80/06/04/004/51. SAHRIS data base accessed 21 November 2015.

Van Vuuren, C.J. 1987. Die Hoëveldboer en die Ndebelestamskool. *S.Afr.J.Cult.Art Hist.* 1(2): 163-169.

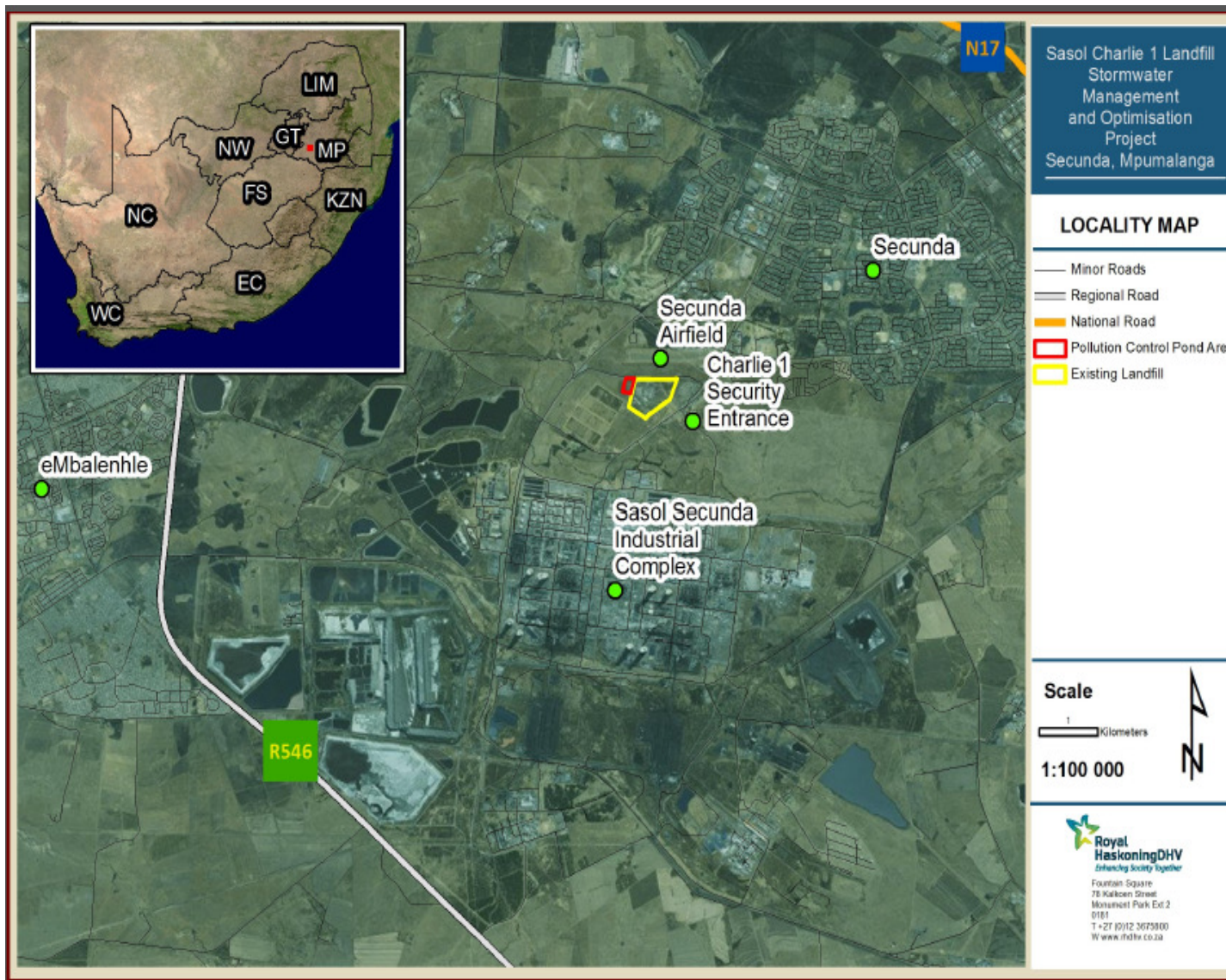
Vhubvo Archaeo-Heritage Consultants CC 2011. Phase 1 Archaeological Impact Assessment specialist study report for the proposed township establishment of 5760 stands on portion 6 of farm Rietspruit 437-IS in Ermelo region within Msukaligwa Local Municipality of Gert Sibande District, Mpumalanga Province. Conducted for Dynamic Integrated Geo-Environmental Services

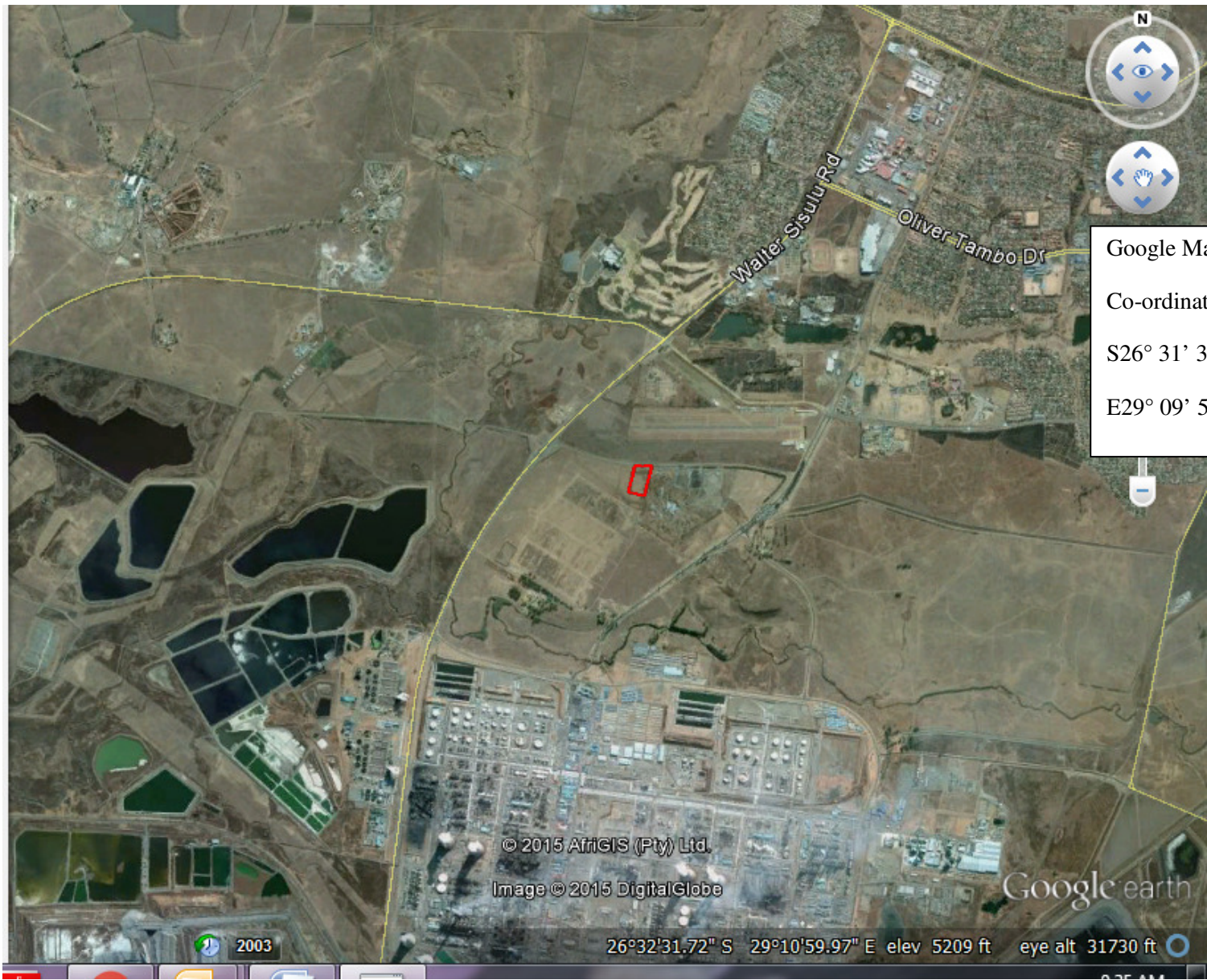
Ziervogel, D. 1955. Notes on the language of the Eastern Transvaal Bushmen. In Potgieter, E.F. The Disappearing Bushmen of Lake Chrissie: A Preliminary Survey. Pretoria: van Schaik.

Pistorius (2015:6) in a Phase I HIA for the proposed Lake Umuzi South Bank Extension Project that forms part of the Lake Umuzi Waterfront Development in Secunda

J. APPENDICES

See map pages 14 & 16





Google Map of area
Co-ordinates of study area
S26° 31' 35.43" &
E29° 09' 55.24"

