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LETTER OF RECOMMENDATION FOR THE EXEMPTION FROM A FIRST PHASE ARCHAEOLOGICAL & HERITAGE INVESTIGATION OF THE PROPOSED ETHANOL FUEL PLANT AT BOTHAVILLE, FREE STATE

EXECUTIVE SUMMARY

Mabele Fuels (Pty) Ltd is planning the construction of an ethanol production plant at Bothaville in the Free State. The site is located on the outskirts of the industrial area and covers about 17ha. It is envisaged that the installations will take up to about 14ha, leaving the remaining land for future extensions. The total area proposed for development has already been enclosed by a devil's fork palisade barrier.

The land is part of the old Black location, which has been relocated elsewhere. The houses were demolished leaving only indications of wall foundations, floors and gardens trimmings of former dwellings visible on the surface. These remnants are also found inside the palisade enclosure.

The ransacked ruin of the old Dutch Reformed mission church are still very prominent on the horizon, but the building falls outside the proposed area of development.

No archaeological, cultural or any historical remains were found at the site.

It is clear that the new developments will have no impact on any cultural heritage and historical remains in the area.

I recommend that the proposed new extensions of the school facilities could be exempted from a full Phase I investigation.

Further planning of the proposed project may continue, and no mitigation measures will be needed.

INTRODUCTION & DESCRIPTION

SKP Consulting, from Northlands, Johannesburg, had been commissioned to compile the Environmental Impact Assessments on behalf of Mabele Fuels (Pty) Ltd.

Scope and Limitations

Mabele Fuels (Pty) Ltd is planning the installation of an ethanol production plant at Bothaville in the Free State. The site is located on the outskirts of the industrial area and covers about 17ha. The total area of development has already been enclosed by a devil's fork palisade barrier.

The area contains a grass cover with scatters of trees and thorn bushes (Fig.9).

No limitations were experienced during site visit.

Methodology

- 1. Standard archaeological survey and recording methods were applied.
- 2. A survey of the literature was done to obtain information about the archaeology and cultural heritage of the area.
- 3. The site was inspected on foot and was patrolled by vehicle.
- 4. The layout of the area was plotted by GPS and the coordinates transferred to Google Earth.
- 5. Surroundings and features were recorded on camera.

INVESTIGATION

The heritage investigation provided the opportunity to examine the piece of land proposed for the ethanol plant installations. The land is part of the old Black location, which has previously been relocated elsewhere. The houses had been demolished and remains of foundations and walls, floors and garden features of former dwellings are visible on the surface. These remnants also occur inside the palisade enclosure (Map 3).

The ransacked ruin of the old Dutch Reformed mission church are still very prominent on the horizon, but the building falls outside the proposed area of development.

The site was examined on 24 May 2013. Mabele Fuels (Pty) Ltd gave directions to the site.

The study aims 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 might be affected by the proposed developments. In many cases, planted and self-sown trees and other types of vegetation determine a major part of the historical landscape of human settlements in villages and towns, on farmyards or even deserted places in the open veld. These features should be recognised and taken into consideration during any cultural investigation.

The site was examined for possible archaeological and historical material and to establish the potential impact on any cultural material that might be found. The Heritage Impact Assessment (HIA) is done in terms of the National Heritage Resources Act (NHRA), (25 of 1999) and under the Environmental Conservation Act, (73 of 1989).

Extensive farming activities around Bothaville had been at the order of the day before the land was earmarked for residential and industrial purposes. Various Archaeological and Heritage Impact Assessments at Bothaville (Dreyer 2007, 2009, 2010) and the surrounding region at Hoopstad (Dreyer 2004a&b, 2012), Christiana (Dreyer 2011) and Viljoenskroon (Dreyer 2005a-c, 2006a&b), produced no material of any cultural or historical importance.

It is important to take note of the Anglo-Boer War (1900-1902) camping and skirmish sites in the Free State and Northern and Eastern Cape and especially in the Hoopstad and Bothaville area (Dreyer 2003). Distinctive food cans and specific types of fired cartridge cases normally identify these sites. Historians and Anglo-Boer War experts are aware of military activities in the Bothaville and Hoopstad areas during the years 1899 to 1902 (Wessels 2002, Van den Berg 1996).

ARCHAEOLOGICAL BACKGROUND

The archaeological environment of the Free State and North West Province is rich and diverse, representing a long time span during the human past. The area is exceptionally rich in terms of Iron Age living sites (Maggs 1976). For various reasons, there is still a relative lack in research records, but certain Later Iron Age sites, have produced important archaeological information (Maggs 1976, Dreyer 1996). These Iron Age sites date between 1660 AD and 1810 AD.

The Later Iron Age phase 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 permanent

settlements. These living places are known from the prominent Sotho/Tswana settlements along the Renoster and Vals Rivers near Kroonstad and Bothaville. A number of Taaibos Korana and Griqua groups, remnants of the Later Stone Age peoples, managed to survive the assimilation by Sotho/Tswana tribes in the region at Mamusa near Schweizer Reneke, for instance (Van den Berg 1996).

Dramatic climate changes resulted in a rapid population growth along the east coast. Increased pressure on natural resources and attempts to control trade during the early 19th century brought the emergence of powerful leaders to the area. The subsequent power struggles resulted in a period of instability in the central parts of Southern Africa. This period of strife or wars of devastation, known as the "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 carried on 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 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 directly affected the peoples of the Free State and 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 refugees.

Early European missionaries and travellers ventured into the interior of the country during the 19th century (Dreyer 2001) and the Rev James Archbell established the missionary at Thaba Nchu by 1834. 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.

The Iron Age archaeology of the Free State and North West Province is characterised by a wide distribution of stone walled sites on the flat-topped ridges and hills. There is detail and consistency in the arrangement and design of the structures. People's expression of culture has left its imprint on the material environment. The settlement patterns display human perceptions with regard to social clustering, economic system and political organisation. Patterns culminate in the arrangement of huts, byres and middens in a particular order and in relation to one another. Spatial organisation in general is characterised by the central position of stock byres and the placing of the main dwelling area on the perimeter of the settlement.

The classification of sites is based on the assumption that settlement layout is bound and prescribed by cultural perceptions. The identification of different ethnic groups is thus possible from the way in which these traditional peoples organised their different living places in terms of space and time. The result was directed by cultural preference (choice) and function. The importance of livestock, personal status, kinship, social organisation and the diverse roles of men, women and offspring have always been important in the understanding of settlement patterns.

The Later Iron Age classification of settlement patterns formulated by Maggs (1976), produced a standardised archaeological framework for the ordering of structures and sites characterised respectively by stock enclosures with connecting walls, in certain cases including corbelled huts (Type V), surrounding walls (Type N) and huts with bilobial courtyards (Type Z). Associated pottery assemblages with different decoration styles confirm the classification of sites based on layout (Maggs 1976:290). Different settlement patterns also produced huts of different materials in different styles.

LOCALITY

Mabele Fuels (Pty) Ltd is planning the installation of an ethanol production plant at Bothaville in the Free State. The site is located in 2nd Street on the outskirts of the industrial area and covers about 17ha. The total area of development had been enclosed by a devil's fork palisade barrier.

The heritage investigation provided the opportunity to examine the piece of land proposed for the ethanol plant installations. The land is part of the old Black location, which has previously been relocated elsewhere. The houses had been demolished and remains of foundations and walls (Fig.10&11), floors (Fig.13) and garden features (Fig.12) of former dwellings are visible on the surface. These remnants also occur inside the palisade enclosure (Map 3).

The ransacked ruin of the old Dutch Reformed mission church are still very prominent on the horizon (Fig.1), but the building falls outside the proposed area of development (Map 3).

The following GPS coordinate (Cape scale) was taken (Maps 2&3):

В	27°22'22"S 026°37'06"E	Altitude 1288m	(Fig.3).
E	2722'25"S 02637'04"E	Altitude 1287m	(Figs.4&5)
F	2722'28"S 02637'14"E	Altitude 1287m	(Fig.7).
С	2722'43"S 02637'07"E	Altitude 1287m	(Fig.8).
D	27°22'36"S 026°36'47"E	Altitude 1288m	(Fig.9).

G 27²2'23"S 026³6'52"E Altitude 1296m CHURCH 27²2'18"S 026³7'05"E Altitude 1310m (Fig.1).

FINDS

The land is part of the old Black location, which has previously been relocated elsewhere. The houses had been demolished and remains of foundations and walls (Fig.10&11), floors (Fig.13) and garden features (Fig.12) of former dwellings are visible on the surface. These remnants also occur inside the palisade enclosure (Map 3). Large trees (Fig.9) and other plants associated with human settlement (Fig.14) are still on the site.

New buildings and steel structures inside the palisade barrier at the site have been looted and destroyed recently (Figs.15-17).

The ransacked ruin of the old Dutch Reformed mission church are still very prominent on the horizon (Fig.1), but the building falls outside the proposed area of development (Map 3).

No archaeological, cultural or any historical remains were found.

IMPACT ASSESSMENT

The potential impact caused by the new ethanol production plant will have no impact on any heritage or historical resources.

RECOMMENDATIONS

There are no obvious reasons to delay further planning of the developments at the specific site.

I recommend that the proposed new developments should be exempted from a full Phase I report and that the planning of the proposed developments may proceed.

MITIGATION

No mitigation measures will be required.

ACKNOWLEDGEMENTS

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SELECT BIBLIOGRAPHY:

DEACON, J. 1992. Archaeology for Planners, Developers and Local Authorities. Cape Town: National Monuments Council.

DREYER, J. 1996. Introduction to Free State Iron Age Archaeology. In: Guide to archaeological sites in the Free State and Lesotho. Southern African Association of Archaeologists (SA3), 14th Biennial Conference, Bloemfontein, Post-conference tour 5-8 July 1996. Bloemfontein: National Museum.

DREYER, J. 2000. Mountains and Rivers of the Free State - Manual for field research / Berge en Riviere van die Vrystaat – Handleiding vir veldnavorsing. Bloemfontein: University of the Free State, Department of Anthropology, Occasional Paper No. 2.

DREYER, J. 2003. A brief account of the life and war experiences of Commandant T.F.J. Dreyer (1860-1943). South African Journal of Cultural History 17(1):16-32.

DREYER, J. 2004a. Archaeological and historical investigation of the proposed residential developments at Hoopstad, Free State. EIA Report for Cebo Environmental Consultants, Bloemfontein.

DREYER, J. 2004b. Archaeological and historical investigation of the proposed truck stop developments at Hoopstad, Free State. EIA Report for Cebo Environmental Consultants, Bloemfontein.

DREYER, J. 2005a. Archaeological and cultural heritage investigation of the proposed landfill sites at Viljoenskroon, Free State. CIA Report MDA Environmental Consultants, Bloemfontein.

DREYER, J. 2005b. Archaeological and historical investigation of the proposed residential developments on Subdivision 13 of the farm Pretoriuskraal 53, Viljoenskroon, Free State. CIA Report MDA Environmental Consultants, Bloemfontein.

DREYER, J. 2005c. Archaeological and cultural heritage investigation of the proposed water supply pipeline at Viljoenskroon, Free State. CIA Report MDA Environmental Consultants, Bloemfontein.

DREYER, J. 2006a. First phase archaeological and cultural heritage investigation of the proposed residential development on the farm Northleigh 422, Viljoenskroon, Free State. CIA Report MDA Environmental Consultants, Bloemfontein.

DREYER, J. 2006b. Archaeological and cultural heritage investigation of the proposed poultry farm at Weltevreden Noord 17, Viljoenskroon, Free State. CIA Report for MDA Environmental Consultants, Bloemfontein.

DREYER, J. 2007. First phase archaeological and historical investigation of the proposed residential developments on the farm Kransdrift 243, Bothaville, Free State. EIA Report for Ecoscope Environmental Consultants, Parys.

DREYER, J. 2009. First phase archaeological and cultural heritage investigation of the proposed water monitoring weir at Klipplaatsdrift 82HP, Bothaville, Free State. EIA Report for Enviroworks Environmental Consultants, Bloemfontein.

DREYER, J. 2010. First phase archaeological and cultural heritage investigation of the bag silo site at Golden Fleece 22, Bothaville, Free State. Incline Environmental Consultants, Bloemfontein,

DREYER, J. 2011. First phase archaeological & heritage investigation of the pump site at Zoutpansdrift 354, Christiana-Hertzogville pipeline, Free State. Aurecon Engineering Consultants, Bloemfontein,

DREYER, J. 2012. First phase archaeological & heritage investigation of the proposed R700 truck stop on Portion 65 of Kameeldoorn 35, Hoopstad, Free State. EIA Report for H2ON Environmental Consultants, Bloemfontein.

MAGGS, T.M. 1976. Iron Age Communities of the Southern Highveld. Pietermaritzburg: Natal Museum.

PISTORIUS, J.C.C. 1994. Eskom Archaeological Site Identification Guide. Johannesburg: Eskom.

SURVEYOR-GENERAL O.F.S. 1973. Index of Orange Free State Farms. Bloemfontein.

VAN DEN BERG, G. 1996. 24 Battles and battle fields of the North-West Province. North West Tourism Association. Potchefstroom.

WESSELS, E. 2002. Veldslae – Anglo-Boereoorlog 1899-1902. LAPA Uitgewers, Pretoria.

LIST OF ILLUSTRATIONS:



Map 1 Locality of Bothaville in relation to Klerksdorp, Viljoenskroon and the N12 main road.



Fig.1 Abandoned ruin of the Dutch Reformed mission church outside Bothaville.



Map 2 Locality of the proposed ethanol plant site, industrial area, Bothaville (2726BC).



Fig.2 Point A at the ethanol plant site near Bothaville. Abandoned church visible.



Map 3 Proposed development site with GPS coordinates plotted.



Fig.3 Point B at the ethanol plant site near Bothaville. Facing Point E.



Fig.4 Flood water ditch between Point B and Point E at the Bothaville ethanol plant site.



Fig.5 Point E at the Bothaville ethanol plant site, facing Point F along the devil's fork palisade.



Fig.6 Building material inside the Bothaville ethanol plant site.



Fig.7 Point F at the Bothaville ethanol plant site, facing Point E along the devil's fork palisade.



Fig.8 Point C at the Bothaville ethanol plant site.



Fig.9 Point D at the Bothaville ethanol plant site. Note large trees at the site.



Fig.10 House rubble at the Bothaville ethanol plant site.



Fig.11 House rubble at the Bothaville ethanol plant site.



Fig.12 House and garden rubble at the Bothaville ethanol plant site.



Fig.13 Concrete floor at the Bothaville ethanol plant site.



Fig.14 Plants at the Bothaville ethanol plant site.



Fig.15 Stripped structures at the Bothaville ethanol plant site.



Fig.16 Ransacked structures at the Bothaville ethanol plant site.



Fig.17 Ransacked structures at the Bothaville ethanol plant site.