

# **Phase 1 Heritage Impact Assessment with regard to planned Township development on the Farm Lilyvale 30/2313, Bloemfontein, Free State Province.**

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## **Summary**

The assessment yielded no evidence for the accumulation and preservation of *in situ* Stone Age archaeological material, capped or distributed as surface scatters. There are also no indications of rock art (engravings on dolerite outcrop), prehistoric structures, graves or buildings with historical significance older than 60 years situated within the boundaries of the study areas. The remains of several sangars (temporary fortified positions with a breastwork originally constructed of stones) and part of a stone wall, associated with the occupation by British military forces of the area during and after the South African War have been recorded. The sangar structures and stone wall form part of a historically significant landscape central to the South African War and its aftermath and should not be destroyed. Accordingly it is advised that the development can proceed provided that the cluster of sangars located on a dolerite hill at the north-eastern boundary of the footprint is avoided and protected by a durable and clearly visible fence to be erected before the start of the development and under supervision of a qualified heritage specialist; that the remains of two small falcate-shaped sangars are, pending a removal permit from SAHRA, removed and reconstructed within a designated open or green area within the footprint, before the start of the construction phase of the development and under supervision of a qualified heritage specialist; and that the 30 m – section of stone wall structure located along the southeastern boundary of the footprint is avoided and protected as part of a designated open or green area with a clearly visible fence in place during the period of construction, or alternatively, that the section is, pending a removal permit from SAHRA, carefully removed and reconstructed within a designated open or green area within the footprint, before the start of the construction phase of the development and under supervision of a qualified heritage specialist.

## **Introduction**

A Phase 1 Heritage Impact assessment was carried out with regard to planned township development on the Farm Lilyvale 30/2313 in Bloemfontein, FS Province. (**Fig. 1**). The assessment is required as a prerequisite for new development in terms of the National Environmental Management Act and is also called for in terms of the National Heritage Resources Act (NHRA) 25 of 1999. The region's unique and non-renewable archaeological heritage sites are 'Generally' protected in terms of the National Heritage Resources Act (Act No 25 of 1999, section 35) and may not be disturbed at all without a permit from the relevant heritage resources authority. As many such heritage sites are threatened daily by development, both the environmental and heritage legislation require impact assessment reports that identify all heritage resources in the area to be developed, and that make recommendations for protection or mitigation of the impact of such sites.

## **Methodology**

The heritage significance of the affected area was evaluated on the basis of existing field data, database information and published literature. This was followed by a field assessment by means of a pedestrian survey. A Garmin Etrex Vista GPS hand model (set to the WGS 84 map datum) and a digital camera were used for recording purposes. Maps and aerial photographs (incl. Google Earth) were consulted and integrated with data acquired during the on-site inspection.

### Field Rating

Site significance classification standards prescribed by SAHRA (2005) were used to indicate overall significance and mitigation procedures where relevant (**Table 1**).

### Terms of Reference

The task involved the following:

- Identify and map possible heritage sites and occurrences using available resources.
- Determine and assess the potential impacts of the proposed development on potential heritage resources;
- Recommend mitigation measures to minimize potential impacts associated with the proposed development.

## Locality Data

The site covers approximately 20 ha and is situated east of Bloemendal Street and about 1 km south of the Free State Botanical Gardens (**Fig. 2 & 3**).

### Site Coordinates (Fig. 2):

A) 29° 3'42.62"S 26°12'44.40"E

B) 29° 3'41.61"S 26°12'57.53"E

C) 29° 4'5.65"S 26°12'46.37"E D)

29° 4'2.09"S 26°12'36.79"E

## Background

Cultural remains previously recorded around the northern outskirts of Bloemfontein can be divided into four categories: Stone Age remains, South African War remnants, graveyards and historical structures, including residential buildings, stone-built kraal and dam walls (Dreyer 2004a, 2004b, 2004c, 2004d, 2005; Henderson 2006; Henderson *et al.* 2008; Rossouw 2012) (**Fig. 4**). The Stone Age archaeological record of the Modder River catchment north of Bloemfontein spans back to the early Middle Stone Age. Widespread traces of prehistoric human habitation, in the form of stone tool scatters and individual surface finds, have previously been recorded at Bayswater 286, Lilyvale 2313 and Hillandale 249 (Goodwin and Van Riet Lowe 1929, Henderson *et al.* 2008; Rossouw 2012). After Bloemfontein was occupied by British forces on 13 March 1900, the city became a major military centre, with several farms north of Bloemfontein requisitioned for military purposes which also included military hospitals, rifle ranges, sangars and a large remount camp at Hillandale (**Fig. 5**). Hillandale was owned by Abraham Fischer, and was expropriated by the British along with the Tempe farms. In the military correspondence it is referred to as Fischer's Farm (FS Archives). The Tempe Farms were originally expropriated as grazing for the horses of the South African Constabulary in August 1901, and eventually bought by the War Office in 1904. Archaeological remains related to British military activities in the area include stone wall structures and rubbish dumps, kraals and graveyards (**Fig. 6 & 7**). A large military rubbish dump was recorded on Lilyvale 2313/25(33), the property adjacent to the survey area. The stone wall structures are one of the last remaining traces of the British military occupation of the northern part of Bloemfontein. The walls were built by the British Engineers, which had their camp stationed at

Tempe. They formed part of a wall which originally ran from the water towers east of Tempe to the edge of Hillandale farm. Some sections can still be seen at the Botanical Gardens, as well as in the Lilyvale and Bayswater areas, between Hillsboro and the R700 road south of the N1. Graveyards and isolated graves are also known from this area.

### **Field Assessment**

A foot survey of the terrain revealed no evidence for the accumulation and preservation of *in situ* Stone Age archaeological material, capped or distributed as surface scatters on the landscape. There are also no indications of rock art (engravings on dolerite outcrop), prehistoric structures, graves or formal buildings with historical significance older than 60 years situated within the boundaries of the study area. However, the remains of several sangars (temporary fortified positions with a breastwork originally constructed of stones) and part of an historical stone wall, associated with the occupation by British military forces of the area during and after the South African War have been recorded within the proposed development footprint and are listed in **Table 2**.

### **Impact Statement and Recommendations**

The sangar structures and stone wall form part of a historically significant landscape central to the South African War and its aftermath and should not be destroyed. The stone wall structures are one of the last remaining traces of the British military occupation of the northern part of Bloemfontein. The walls were built by the British Engineers, which had their camp stationed at Tempe. The following structures will be impacted by the proposed development:

- The remains of two falcate-shaped sangars, about 2m-3m in length and 60 cm in height, respectively (Sites 198 and 199; **Fig. 8 & 9**). Both localities are assigned a site rating of Local Significance Grade 3B.
- The remains of a cluster of three of sangars located on a dolerite outcrop at the north-eastern boundary of the footprint (Sites 191, 192 & 195; **Fig. 8 & 10**). The localities are assigned a site rating of Local Significance Grade 3A.
- A 30 m - section of the stone wall located along the southeastern boundary of the footprint (**Fig. 8 & 11**). The section is assigned a site rating of Local Significance Grade 3B.

Accordingly, it is advised that the development can proceed provided that:

- The cluster of sangars located on a dolerite hill at the north-eastern boundary of the footprint is avoided and protected by a durable and clearly visible fence to be erected before the start of the of the development and under supervision of a qualified heritage specialist.
- The remains of the two small falcate-shaped sangars are, pending permission from SAHRA, are removed and reconstructed within a designated open or green area within the footprint, before the start of the construction phase of the development and under supervision of a qualified heritage specialist. This process will require a removal permit from SAHRA. The reconstruction must be accompanied by appropriate information displays.
- The 30 m – section of stone wall structure located along the southeastern boundary of the footprint is avoided and protected as part of a designated open or green area with a clearly visible fence in place for the period of construction or;  
the 30 m – section of stone wall structure is, pending permission from SAHRA, carefully removed and reconstructed within a designated open or green area within the footprint, before the start of the construction phase of the development and under supervision of a qualified heritage specialist. This process will require a removal permit from SAHRA. The reconstruction must be accompanied by appropriate information displays.

## **References**

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the remainder of the farm Boven Teme 203, Bloemfontein. Unpublished report for CEBO Environmental Consultants cc.

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Rossouw, L. 2012. Phase 1 Archaeological Impact Assessment of Portions of Lilyvale 2313 and Bayswater 2865, Bloemfontein. Unpublished report for Terraworks Environmental Consultants.

#### DECLARATION OF INDEPENDENCE

I, Lloyd Rossouw, declare that I act as an independent specialist consultant. I do not have or will not have any financial interest in the undertaking of the activity other than remuneration for work as stipulated in the terms of reference. I have no interest in secondary or downstream developments as a result of the authorization of this project and have no conflicting interests in the undertaking of the activity.



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## Tables and Figures

**Table 1.** Field rating categories as prescribed by SAHRA.

Field Rating	Grade	Significance	Mitigation
National Significance (NS)	Grade 1	-	Conservation; national site nomination
Provincial Significance (PS)	Grade 2	-	Conservation; provincial site nomination
Local Significance (LS)	Grade 3A	High significance	Conservation; mitigation not advised
Local Significance (LS)	Grade 3B	High significance	Mitigation (part of site should be retained)
Generally Protected A (GP.A)	-	High/medium significance	Mitigation before destruction
Generally Protected B (GP.B)	-	Medium significance	Recording before destruction
Generally Protected C (GP.C)	-	Low significance	Destruction

**Table 2.** GPS coordinates of historical structures recorded during the survey.

Site #	Item	Coordinates
190	Stone wall	S29 04 4.04 E26 12 46.6
191	Sangar	S29 03 43.8 E26 12 55.0
192	Sangar	S29 03 43.1 E26 12 56.1
195	Sangar	S29 03 41.9 E26 12 53.9
198	Sangar	S29 03 51.1 E26 12 42.7
199	Sangar	S29 03 54.1 E26 12 43.7

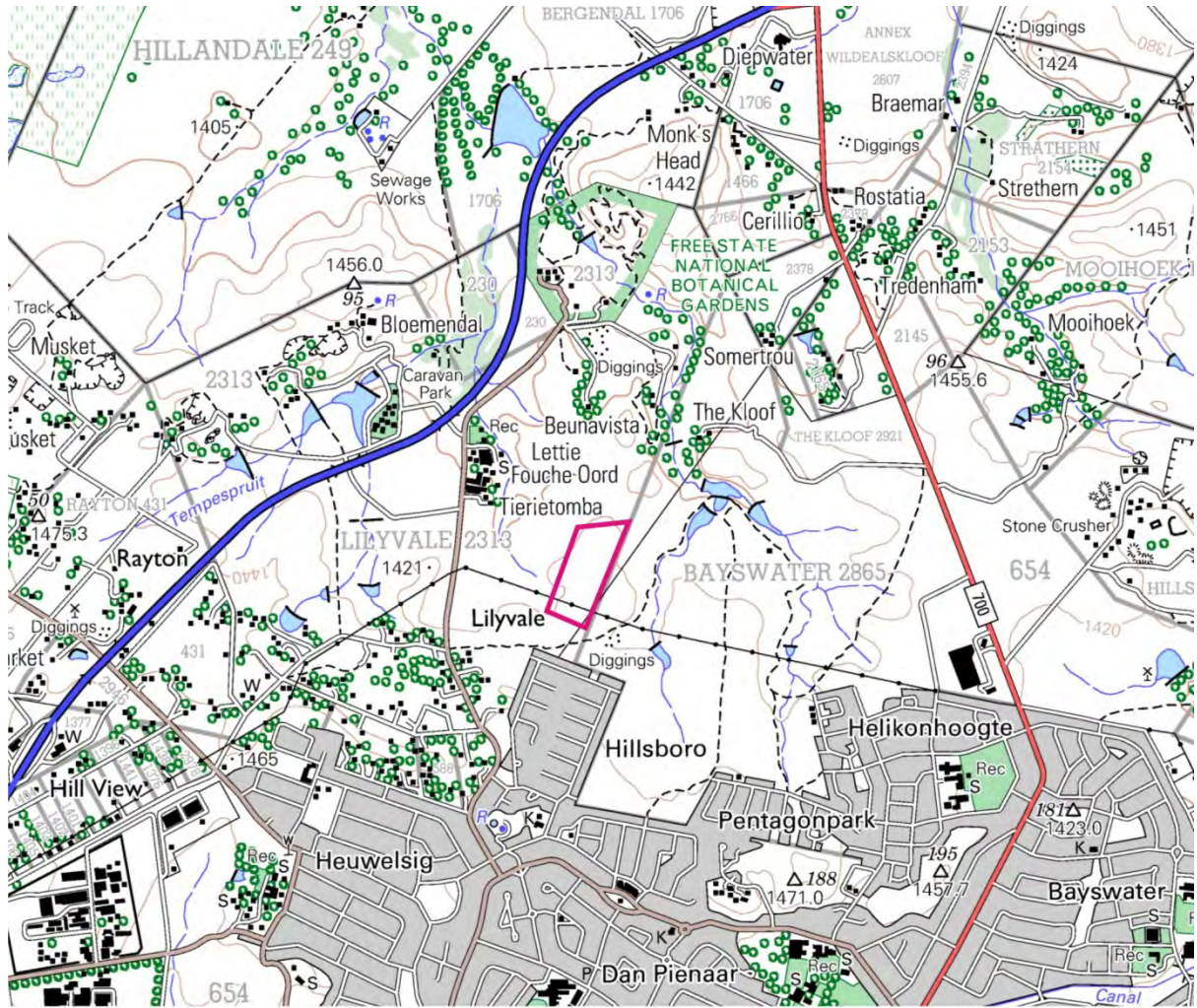


Figure 1. Map of the study area (portion of 1:50 000 scale topographic 2926 Bloemfontein).

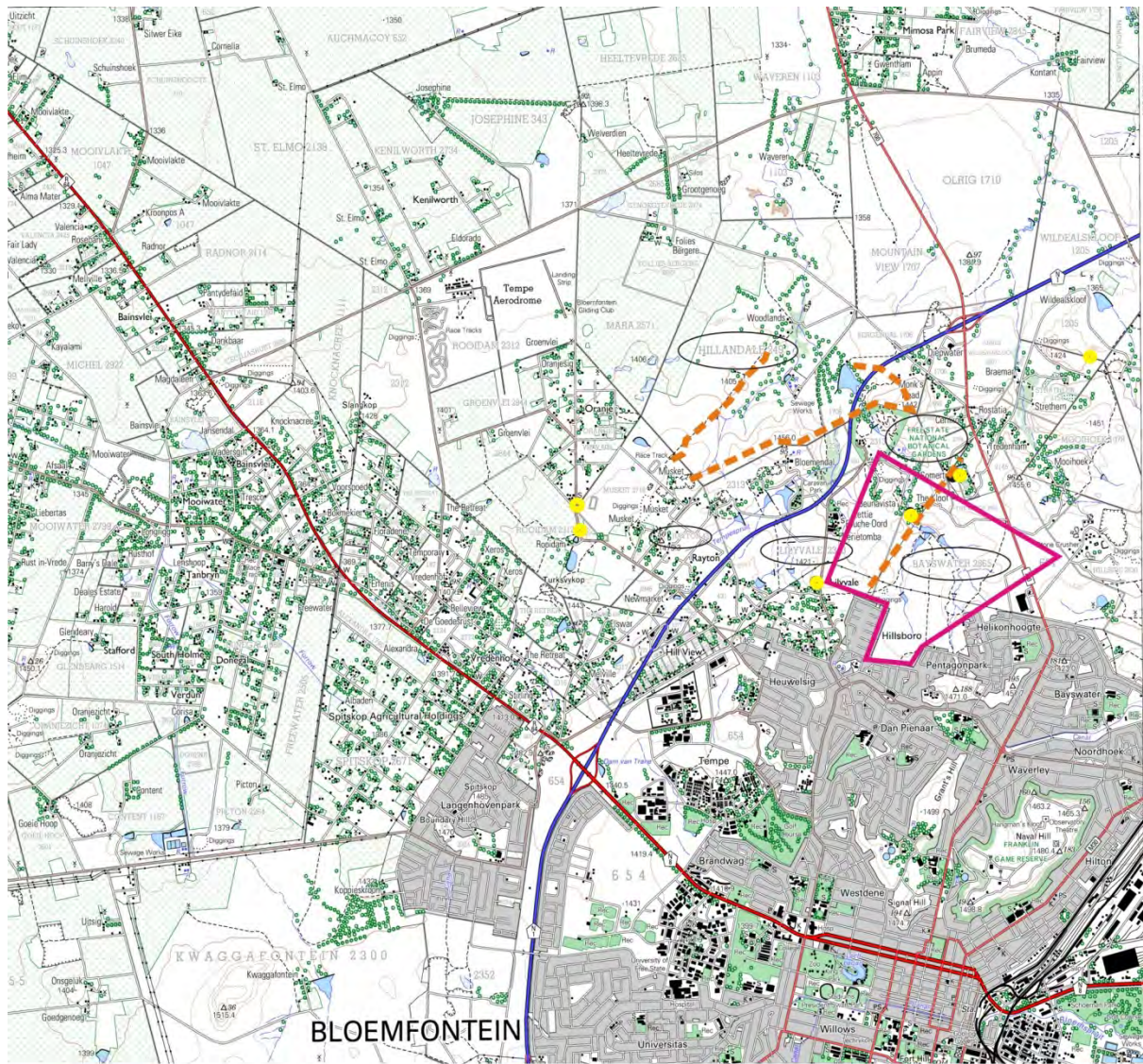




Figure 2. Aerial view and layout of the site.



Figure 3. General view of the terrain, looking west



- - - Stone walling
- Graves / Graveyards
- ▭ Stone Age artifacts

Figure 4. Low stone wall structures are one of the last remaining traces of the British military occupation of the northern part of Bloemfontein. The walls were built by the British Engineers, which had their camp stationed at Tempe. They formed part of a wall that originally ran from the water towers east of Tempe to the edge of Hillandale farm.

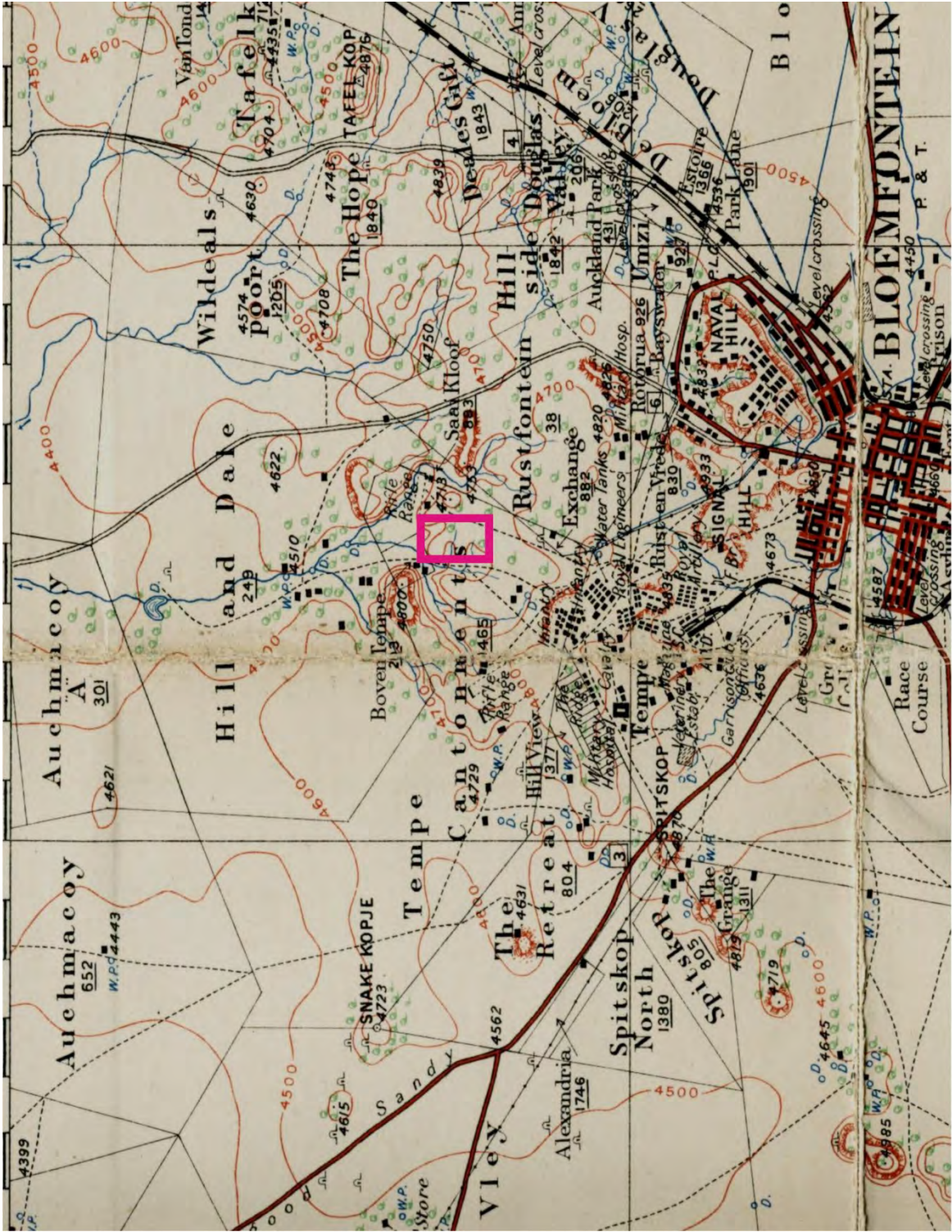


Figure 5. Position of the study area marked on a British military map circa 1913.

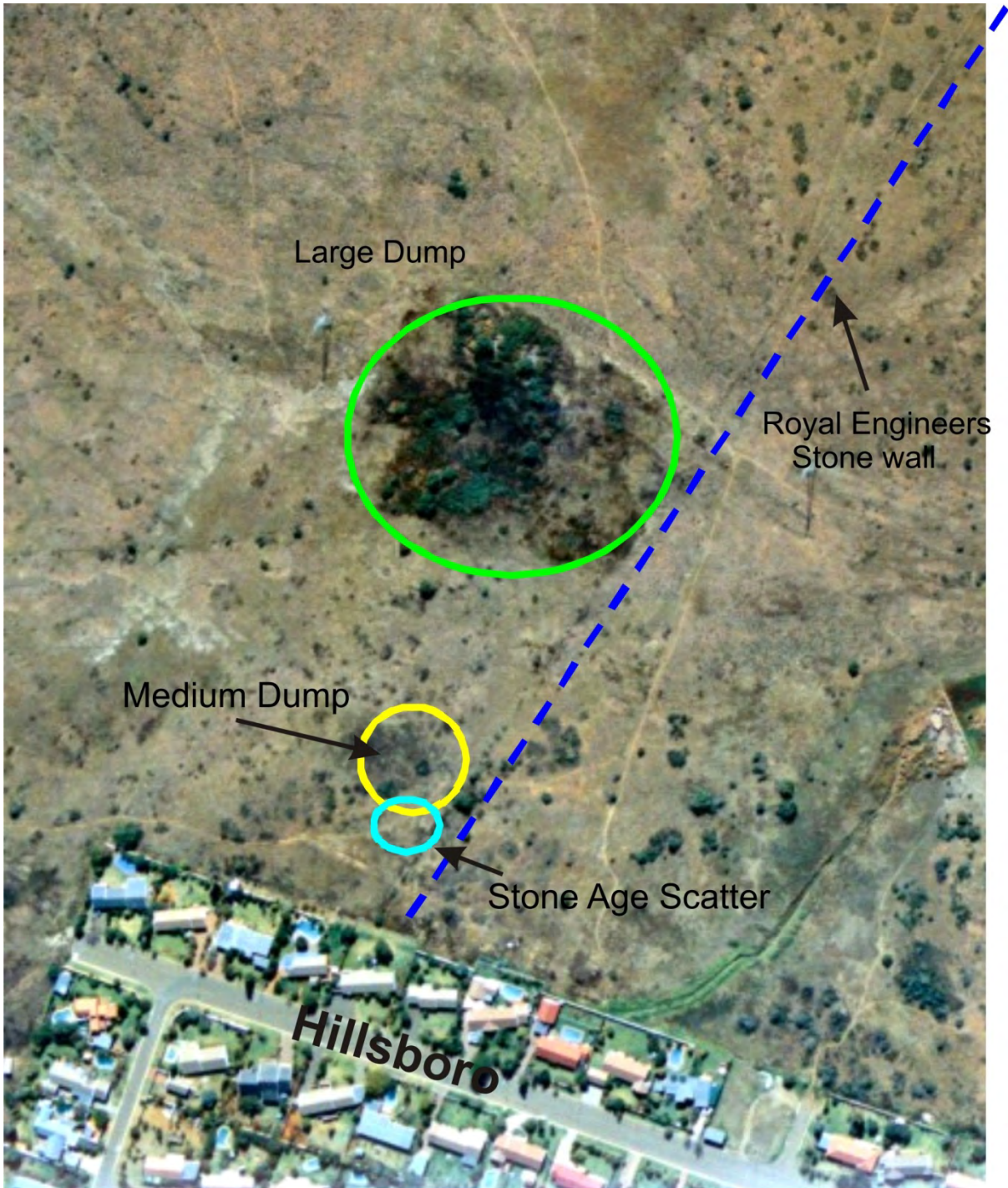


Figure 6. Aerial view and layout of Stone Age open sites, military rubbish dumps and associated stone wall structure recorded on Lilyvale 2313 about 700 south southwest of the study area.



Figure 7. Military rubbish dump and its remains (top & center left), graves (bottom left) and stone wall structure (right) recorded south of the study area.



Figure 8. Map of historically significant structures identified during the survey.



Figure 9. Remains of two more or less falcate-shaped sangars (sites 198 and 199), looking northwest (top) and west (below).  
Scale 1 = 10 cm.





Figure 10. Remains of sangar structures located on a dolerite outcrop at the north-eastern boundary of the site. Scale 1 = 10 cm.



Figure 11. Remains of historical stone wall, looking north-northeast. Scale 1 = 10cm