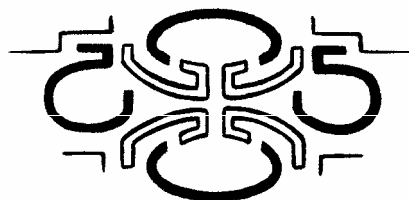


**Cultural Heritage Survey of the Loftus Power Substation, Clydesdale,
Pretoria, Tshwane Metropolitan Municipality, Gauteng**



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Completion Date: October 2012
Version 3: Final Report

Executive Summary

This report contains a heritage impact assessment investigation in accordance with the provisions of Sections 38(1) and 38(3) of the *National Heritage Resources Act* (Act no 25 of 1999). This report focuses on the results from a cultural heritage survey that was conducted of the survey area which is situated on the north-west portion of the Loftus Versfeld terrain at the junction of Park Street and Kirkness Street. The survey area is located on Portion 418 of the farm Elandspoort 357 JR.

Historical structures

The old Pretoria power network is represented by four remaining 33kV substations which are:

- Loftus Substation (c/o Park Street and Kirkness Street)
- Nieuw Muckleneuk Substation (Giovanetti Street)
- Mayville Substation (Paul Kruger Street)
- Claremont Substation (Market Street)

To evaluate the significance of the Loftus Substation it should be seen in context with the other remaining substations. As such, an overview of these four structures is presented.

Recommendations

Loftus Substation: The following general guidelines also have relevance:

- The Substation is older than 60 years and is therefore protected under Section 34 of the National Heritage Resources Act (Act no 25 of 1999)
- Permit from SAHRA for any alterations
- Guidance from a restoration architect in terms of future developments in the area

Definitions and abbreviations

Midden:	Refuse that accumulates in a concentrated heap.
Stone Age:	An archaeological term used to define a period of stone tool use and manufacture
Iron Age:	An archaeological term used to define a period associated with domesticated livestock and grains, metal working and ceramic manufacture
NHRA:	National Heritage Resources Act (Act no 25 of 1999)
SAHRA:	South African Heritage Resources Agency
PHRA-G:	Provincial Heritage Resources Authority - Gauteng
HIA:	Heritage Impact Assessment

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1. Introduction

The aim of this cultural heritage survey is to determine the age and significance of the power substation situated at Loftus Versfeld sport stadium, Clydesdale, Pretoria. The survey is part of the proactive assessment and evaluation plan of Abland Development.

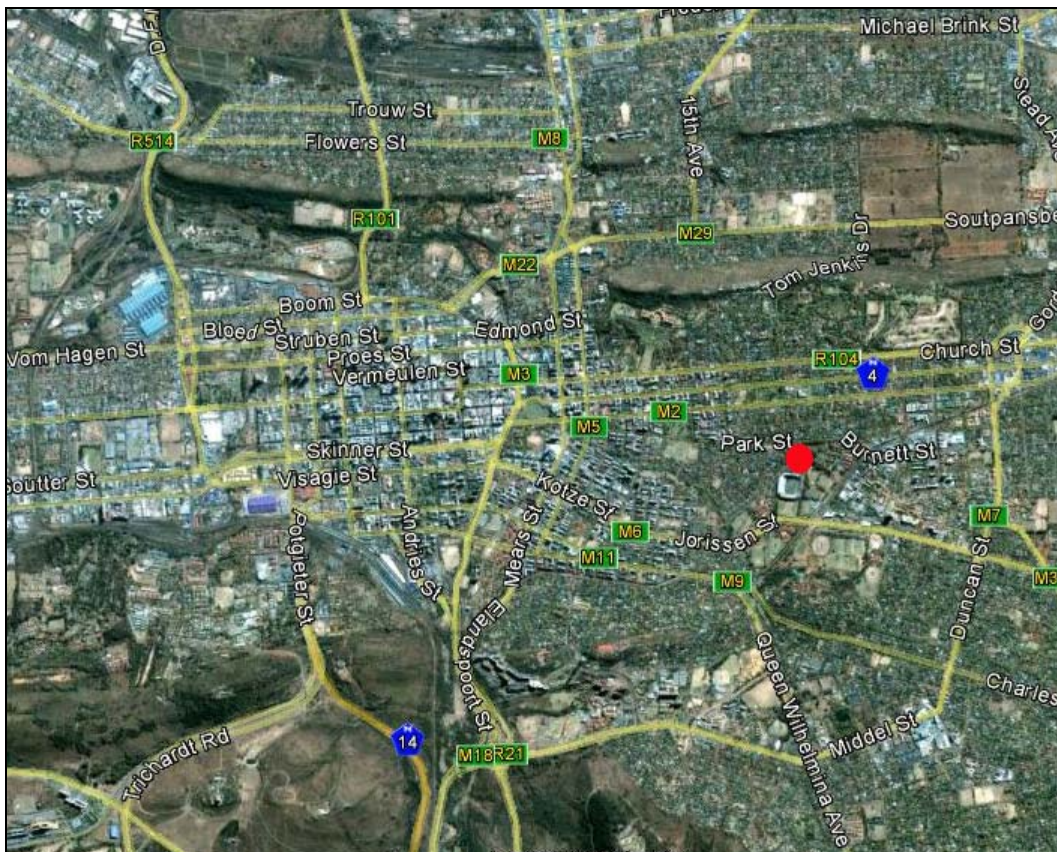
2. Objectives

The terms of reference of this survey are as follows:

- Provide a detailed description of the power substation
- Estimate the level of significance/importance of the structure
- Assess any possible impact on the substation as a result of the proposed development activities
- Propose possible mitigation measures which will limit or prevent any negative impact

3. Study Area

The survey area is situated on the north-west portion of the Loftus Versfeld terrain at the intersection of Park Street and Kirkness Street. The survey area is located on Portion 418 of the farm Elandsport 357 JR. The power substation is situated on an small portion of land on Kirkness Street near the entrance to the Loftus Versfeld Stadium.



Map 1: Regional context of the survey area (indicated in red)

4. Proposed Development

The proposed development will consist of various aspects, including but not limited to the following:

- Plenary hall and services area
- Commercial offices
- Retail area, including restaurants
- Hotel – 120 rooms including public areas
- Sports related retail
- Gymnasium
- Rugby museum
- Miscellaneous

As a result of the proposed development the portion on which the substation is located will also be utilized. As such, it is proposed to demolish the substation main building and build a smaller structure to house the power infrastructure.

5. Legal Framework

- Archaeological and historical remains can be defined as human-made objects, which reflect past ways of life, deposited on or in the ground.
- Heritage resources have lasting value in their own right and provide evidence of the origins of South African society and they are valuable, finite, non-renewable and irreplaceable.
- All archaeological remains, features, structures and artefacts older than 100 years and historic structures older than 60 years are protected by the relevant legislation, in this case the **National Heritage Resources Act (NHRA) (Act No. 25 of 1999, Section 34 & 35)**. The Act makes an archaeological impact assessment as part of an EIA and EMPR mandatory (see **Section 38**). No archaeological artefact, assemblage or settlement (site) may be moved or destroyed without the necessary approval from the **South African Heritage Resources Agency (SAHRA)**. Full cognisance is taken of this Act in making recommendations in this report.
- Cognisance will also be taken of the **National Environmental Management Act (Act No 107 of 1998)** when making any recommendations.
- **Mitigation guidelines (The significance of the site):**

Rating the **significance of the impact** on a historical or archaeological site is linked to the significance of the site itself. If the significance of the site is rated high, the significance of the impact will also result in a high rating. The same rule applies if the significance rating of the site is low (also see Table 1).

Significance Rating	Action
Not protected	1. None

Low	2a. Recording and documentation (Phase 1) of site adequate; no further action required
	2b. Controlled sampling (shovel test pits, auguring), mapping and documentation (Phase 2 investigation); permit required for sampling and destruction
Medium	3. Excavation of representative sample, C ¹⁴ dating, mapping and documentation (Phase 2 investigation); permit required for sampling and destruction [including 2a & 2b]
High	4a. Nomination for listing on Heritage Register (National, Provincial or Local) (Phase 2 & 3 investigation); site management plan; permit required if utilised for education or tourism 4b. Graves: Locate demonstrable descendants through social consulting; obtain permits from applicable legislation, ordinances and regional by-laws; exhumation and reinterment [including 2a, 2b & 3]

Table 1: Rating the significance of sites

- With reference to the evaluation of sites, the certainty of prediction is definite, unless stated otherwise.
- The guidelines as provided by the **NHRA (Act No. 25 of 1999)** in Section 3, with special reference to subsection 3, and the Australian ICOMOS (International Council on Monuments and Sites) Charter (also known as the Burra Charter) are used when determining the cultural significance or other special value of archaeological or historical sites.
- It should be kept in mind that archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal material be revealed in the area during development activities, such activities should be halted, and a university or museum notified in order for an investigation and evaluation of the find(s) to take place (*cf.* **NHRA (Act No. 25 of 1999)**, Section 36 (6)).
- **Architectural significance:**
 - Does the site contain any important examples of a building type?
 - Are any of the buildings important examples of a style or period?
 - Do any of the buildings contain fine details and or reflect fine workmanship?
 - Are any of the buildings the work of a major architect or builder?
 - Are the buildings important examples of an industrial, technological or engineering development?
 - What is the integrity of the buildings?
 - Are the buildings still utilised?
 - Has the buildings been altered and are these alterations sympathetic to the original intent of the design?
- **Spatial significance of architecture:**
 - Is the site or any of the buildings a landmark in the city or town?

- Does the plant contribute to the character of the neighbourhood/region?
- Do the buildings contribute to the character of the street or square?
- Is the place or building part of an important group of buildings?

- **Architecture: Levels of significance** are:

- Protect
- Highly significant
- Possible significance
- Least significance
- No significance

- **Architecture: Levels of protection** are:

Retain and protect	Considered to be of high significance. The building or structure can be used as part of the development but must be suitably protected. Should not include major structural alterations. If the building is older than 60 years a modification permit is required from SAHRA.
Retain and re-use	Considered to be of moderate significance. The building or structure can be altered to be accommodated within the development plans. Structural alterations can be included. If the building is older than 60 years a modification permit is required from SAHRA.
Alter and re-use	Considered to be of low significance. The building or structure can be structurally altered or destruction can be considered following further documentation. If the building is older than 60 years a modification/destruction permit is required from SAHRA.
Can be demolished	Considered to be of negligible significance and can be demolished. If the building is older than 60 years a destruction permit is required from SAHRA.

Table 2: Level of protection of buildings/structures

- A copy of this report will be lodged with the **SAHRA** as stipulated by the National Heritage Resources Act (NHRA) (Act No. 25 of 1999), Section 38 (especially subsection 4) and the relevant Provincial Heritage Resources Authority (PHRA).
- Note that the final decision for the approval of permits, or the removal or destruction of sites, structures and artefacts identified in this report, rests with the SAHRA (or relevant PHRA).

6. Study Approach/Methods

Regional maps and other geographical information were supplied by Abland Development. In addition Google Earth aerial images were used to indicate the survey area.

6.1 Review of information/data

Additional information on the cultural heritage of the area was sourced from the following records:

- National Mapping Project by SAHRA (which lists heritage impact assessment reports submitted for South Africa)
- Maps and information documents supplied by the client
- Published literature
- Personal Communications: Trevor Lloyd Evans, Johan Erwee and Cliff Kocknel

6.2 Site visit

The site investigation took place on 20 May & 29 September 2012.

6.3 Assumptions, uncertainties and gaps in knowledge

No severe physical restrictions were encountered. However accessing primary (archival) documents on the site, especially site plans and photographs remains problematic.

7. Description and Evaluation of Cultural Heritage Site

The old Pretoria power network was upgraded with the construction of five 33kV substations (Pers. Comm: Cliff Kocknel). Of the original five only four remain and they are located the following:

- Loftus Substation (C/o Park Street and Kirkness Street)
- Nieuw Muckleneuk Substation (Giovanetti Street)
- Mayville Substation (Paul Kruger Street)
- Claremont Substation (Market Street)

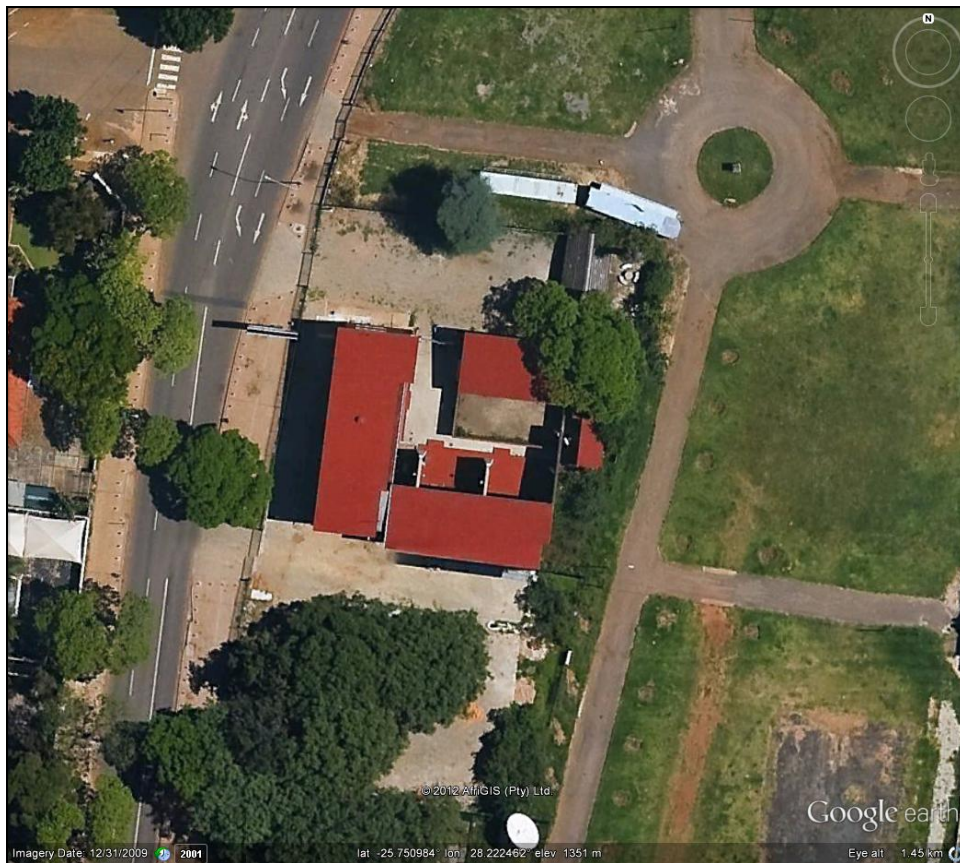
To evaluate the significance of the Loftus Substation it should be seen in context with the other remaining substations. As such, an overview of these four structures is presented.

7.1 Loftus Substation

Due to a lack of documentation a sequence of aerial photographs and oral tradition were used to try and pinpoint the date of the building. The earliest aerial photographs of the survey area are 1937 (Job no: 125) and 1945 (Job no: 55). Both these clearly indicate that the substation has not been constructed at that time. However, the aerial photograph of 1958 (Job no: 411) indicates that the construction of the substation was already completed. It is therefore acceptable to assume that the substation was constructed in the 1950s.



Map 2: Substation in top left-hand corner of the Eastern Sports Ground



Map 3: Google image of substation indicating the layout



Figure 1: Northern face of the substation



Figure 2: Oblique view of substation

7.2 Nieuw Muckleneuk Substation

The substation is located in Giovanetti Street near the Anton van Wouw Primary School. According to Cliff Kocknel the Electricity Department was stopped by the SAHRA in the past when changes were proposed to the facade of the building (Pers. Comm.)



Figure 3: Southern face of the substation



Map 4: Layout of the substation

7.3 Mayville Substation

The Mayville substation is located in Paul Kruger Street.



Figure 4: The current view of the eastern facade



Map 5: Layout of the substation

7.4 Claremont Substation

The substation is located on Market Street. Please note that extensive alterations and extensions have been completed and is still on-going. The original building seems to have been a single-level building. The facade (front) building has been extended by the additional of another level. Several additions have also been made on the eastern side of the building.



Figure 5: Front (southern) facade of the building, additions are clearly visible



Figure 6: Additions on the eastern side of the building



Figure 7: Additions on the eastern side of the building



Figure 8: It seems that more additions are planned on the northern side of the building



Map 6: Aerial view of the substation in 2009



Map 7: Aerial view of the substation in 2012, indicating that building activities are taking place

8. Discussion

As indicated, the four remaining substations are all that is left of an earlier legacy (33kV) of power supply to Pretoria. It also seems that these structures date more or less to the same date, which is the 1950s. As such they are all probably older than 60 years and are therefore protected under the NHRA (Act no 25 of 1999), specifically Section 34 (Structures).

However, it is of interest to note that the Claremont Substation is currently undergoing extensive alterations and additions on the one hand, but that proposed changes to the Nieuw Muckleneuk Substation were rejected by SAHRA. I have been unable to ascertain whether the City Council has obtained permission from SAHRA to conduct their building activities at Claremont Substation. This however does have implications for any suggested alterations to the Loftus Substation.

None of the substation buildings represent important architectural or design elements, but they do represent a specific style of municipal building from a specific time period.

9. Recommendations

Although it has been determined that the Loftus Substation is older than 60 years and therefore protected by the NHRA (Act no 25 of 1999) the building should be assessed by a restoration architect to ascertain its significance.

Please note that any alterations, or in this case demolishing, will require a permit from SAHRA and should be guided by the recommendations of a restoration architect.

10. References (reviewed and cited)

Personal Communications

Johan Erwee

Cliff Kocknel (Tshwane Municipality)