

Sumitomo Rubber Plant. Emnambithi Local Municipality. SIVEST.

**FIRST PHASE DESKTOP HERITAGE IMPACT ASSESSMENT  
OF THE PROPOSED CONSTRUCTION OF THE SUMITOMO,  
RUBBER PLANT, EMNAMBITHI LOCAL MUNICIPALITY,  
KWAZULU-NATAL.**

**EIA Reference No: TBA**



**For: SIVEST**

**Frans Prins**

**Cell: 834739657**

**Email: [activeheritage@gmail.com](mailto:activeheritage@gmail.com)**

**Fax: 0867636380**

**Sian Hall**

**Cell: 0835300273**

**Email: [active.heritage.africa@gmail.com](mailto:active.heritage.africa@gmail.com)**

## Contents

<b>1</b>	<b>BACKGROUND INFORMATION ON THE PROJECT</b> .....	<b>2</b>
1.1	Basic Background.....	2
1.1.1	<i>Surrounding Environment</i> .....	3
1.1.2	<i>Vegetation</i> .....	3
1.1.3	<i>Geology and Soils</i> .....	4
<b>2</b>	<b>HERITAGE LEGISLATION APPLICABLE TO THIS PORPOSED PROJECT</b> .....	<b>4</b>
<b>3</b>	<b>BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA</b> .....	<b>8</b>
3.1	Short History of the Siege of Ladysmith .....	11
<b>4</b>	<b>BACKGROUND INFORMATION OF THE SURVEY</b> .....	<b>13</b>
4.1	Methodology .....	13
4.2	Restrictions encountered during the survey .....	13
4.2.1	<i>Visibility</i> .....	13
4.2.2	<i>Disturbance</i> .....	14
4.3	Details of equipment used in the survey.....	14
<b>5</b>	<b>DESCRIPTION OF SITES AND MATERIAL OBSERVED</b> .....	<b>14</b>
5.1	Locational data .....	14
5.2	Heritage Description of the general area surveyed.....	14
<b>6</b>	<b>FIELD RATING</b> .....	<b>16</b>
6.1	Heritage Material Observed on the Project Footprint.....	17
6.2	Figures Associated with Table 4 .....	18
6.3	Dating the findings .....	21
<b>7</b>	<b>RECOMMENDATIONS</b> .....	<b>21</b>
<b>9</b>	<b>REFERENCES</b> .....	<b>22</b>

## LIST OF TABLES

- Table 1. Background information
- Table 2. Evaluation and statement of significance
- Table 3. Field rating and recommended grading of sites (SAHRA 2005)
- Table 4. Description and Data relating to Heritage Sites

## LIST OF PLATES

- Plate 1. Sign Board Showing Battle Sites.
- Plate 2. Photo taken during the Siege of Ladysmith ([www.britishbattles.com/battle-of-ladysmith/](http://www.britishbattles.com/battle-of-ladysmith/)).
- Plate 3. Photo of Boer Forces during the Battle of Ladysmith ([www.instinsky.de/theron\\_instinsky\\_boer\\_.html](http://www.instinsky.de/theron_instinsky_boer_.html)).

## LIST OF FIGURES

- Figure 1. Proposed Footprint outlined in Red.
- Figure 2. Showing the Surrounds of the Proposed Footprint.
- Figure 3. Heritage Sites Cluster occurring near the Footprint.
- Figure 4. Heritage Sites occurring near, or on the Footprint.
- Figure 5. Heritage Sites occurring on the Footprint.
- Figure 6. Heritage Sites occurring to the south-east of the proposed Footprint.

## LIST OF ABBREVIATIONS AND ACRONYMS

<b>CHA</b>	<b>Cultural Heritage Assessment</b>
<b>DEA</b>	<b>Department of Environmental Affairs</b>
<b>EIA</b>	<b>Early Iron Age</b>
<b>ESA</b>	<b>Early Stone Age</b>
<b>HIA</b>	<b>Heritage Impact Assessment</b>
<b>HISTORIC PERIOD</b>	<b>Since the arrival of the white settlers - c. AD 1836 in this part of the country</b>
<b>IRON AGE</b>	<b>Early Iron Age AD 200 - AD 1000 Late Iron Age AD 1000 - AD 1830</b>
<b>LIA</b>	<b>Late Iron Age</b>
<b>LSA</b>	<b>Late Stone Age</b>
<b>MSA</b>	<b>Middle Stone Age</b>
<b>NEMA</b>	<b>National Environmental Management Act, 1998 (Act No. 107 of 1998 and associated regulations (2006).</b>
<b>NHRA</b>	<b>National Heritage Resources Act, 1999 (Act No. 25 of 1999) and associated regulations (2000)</b>
<b>SAHRA</b>	<b>South African Heritage Resources Agency</b>
<b>STONE AGE</b>	<b>Early Stone Age 2 000 000 - 250 000 BP Middle Stone Age 250 000 - 25 000 BP Late Stone Age 30 000 - until c. AD 200</b>

## **EXECUTIVE SUMMARY**

A First Phase Desktop Heritage Survey of the proposed Sumitomo Rubber Plant in Ladysmith, Emnambithi Local Municipality, uThukela District Municipality, KwaZulu-Natal. The Greater Ladysmith area is extremely rich in Cultural Heritage sites of various traditions and periods. The proposed footprint lies upon, and is surrounded by the remains of, a possible Late Iron Age/Historical Settlement. There is also a possible Historical site on the hill to the right. One kilometre to the east of the proposed factory site lies a previously recorded Later Stone Age and another Later Iron Age site. Ladysmith town and surrounds also forms part of the Battlefields Cultural Heritage Landscape. All heritage sites are protected by National and Provincial Heritage Legislation.

These factors complicate the possibility for construction to go ahead immediately without mediation, negotiation, and further enquiry and assessment. For this reason the consultants at Active Heritage cc advice that a Second Phase Heritage survey take place on the proposed development area before any construction, or further disturbance of the footprint go ahead. This Second Phase Heritage Impact Assessment should include a systematic ground survey and mitigation recommendations. Only a Second Phase Heritage Survey (CHS) will be able to provide a Field Rating Score that may aid in the mitigation of these sites

The fact that the footprint lies upon an Iron Age-Historic domestic landscape suggests the possibility of hidden graves lying below the surface. These may well be exposed during construction and should graves be identified then mitigation measures which may include grave exhumation and reburial should be put in place.

We also draw stakeholders attention to the South African National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) and the KwaZulu-Natal Heritage Act (Act No. 4 of 2008) which requires that operations that expose archaeological or historical remains should cease immediately, pending evaluation by the provincial heritage agency.

## 1 BACKGROUND INFORMATION ON THE PROJECT

### 1.1 Basic Background

The consultant was approached by SIVEST Environmental Consultants to conduct a Heritage Impact Assessment (HIA) of the proposed construction of a Truck Bus Radial Plant in Ladysmith, Emnambithi Local Municipality, and uThukela District Municipality, KwaZulu-Natal.

SIVEST Environmental Division has been appointed by Sumitomo Rubber South Africa (PTY) LTD, to conduct an Environmental Basic Assessment Process and Water Use Licence Application for the proposed construction of the Truck Bus Radial Manufacturing Plant. Sumitomo Rubber South Africa has a large manufacturing plant based in Ladysmith, which produces Dunlop passenger and light truck tyres for the local and export markets. In order to meet growing demands, the company proposes to construct a Truck Bus Radial manufacturing plant on a new site, directly adjacent to their current plant. The proposed site is currently zoned for industrial use (SIVEST BID Document 2015).

The proposed area for expansion is highlighted in red on the aerial photograph below



Figure 1. Aerial Photograph showing the location of the footprint (red polygon).



**Figure 1. Proposed Footprint outlined in Red**

### 1.1.1 Surrounding Environment

The proposed footprint is located within light industrial area in Ladysmith town. 229m to the north northwest lies the Sumitomo Rubber factory. Immediately to the north-east and south-east are old quarry workings, which may be historical, and of some heritage significance. A Second Phase Heritage Survey will determine how significant these diggings are from a Heritage perspective. Further to the north-east are extended peri-urban homesteads which will not be impacted by the proposed development. To the west and south-west lies the expansive Steadville Township (Fig 2).



**Figure 2. Showing the Surrounds of the Proposed Footprint**

### 1.1.2 Vegetation

The vegetation within the study area, in the Ladysmith town area, and to the immediate west, and south-west is classified as Gs 6 KwaZulu-Natal Highland Thornveld. This vegetation unit is found most extensively in the region from Ladysmith, Winterton, Estcourt and Colenso, up to a large patch around Newcastle. Svs2 Thukela Thornveld is also found in the Ladysmith region.

The topography of the surrounding study area is hilly and rolling covered by tall tussock grassland, and dominated by *Themeda triandra* and *Hyparrhenia hirta* grasses. Open

Sumitomo Rubber Plant. Emnambithi Local Municipality. SIVEST.

*Acacia sieberiana* var. *woodii* savannoid woodlands grow in the valleys, most often on Disturbed and eroded areas.

### 1.1.3 Geology and Soils

The geology and soils in the study area varies with the incidence of the vegetational units. It is generally described as having a variety of Karoo sub-group rocks, including Dwyka, Ecca and Beaufort West groups with intrusions by dolerites of Jurassic age. The soils in the area are generally yellow-brown over plinthic sub-soil, shallow duplex soils, and red and black heavy soils derived from dolerites with a high resistance to erosion (ibid).

<b>Consultants:</b>	<b>Active Heritage cc for Janet Edmonds Consulting (JEC)</b>
<b>Type of development:</b>	The proposed construction of a Truck Bus Radial manufacturing plant in Ladysmith, Emnambithi-Ladysmith Local Municipality, KwaZulu Natal.
<b>Rezoning or subdivision:</b>	Rezoning.
<b>Terms of reference</b>	To carry out a Heritage Impact Assessment.
<b>Legislative requirements:</b>	The Heritage Impact Assessment was carried out in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and following the requirements of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) and the KwaZulu Natal Heritage Act (Act No. 4 of 2008).  This proposed project also requires Environmental Authorisation, and a Water Use Licence.

Table 1. Background information

## 2 HERITAGE LEGISLATION APPLICABLE TO THIS PROPOSED PROJECT

According to the National Heritage Resources Act, 1999 (NHRA) (Act No. 25 of 1999), the heritage resources of South Africa include:

- a. places, buildings, structures and equipment of cultural significance;
- b. places to which oral traditions are attached or which are associated with living heritage;
- c. historical settlements and townscapes;
- d. landscapes and natural features of cultural significance;



Sumitomo Rubber Plant. Emnambithi Local Municipality. SIVEST.

- e. geological sites of scientific or cultural importance;
- f. archaeological and palaeontological sites;
- g. graves and burial grounds, including-
- i. ancestral graves;
- ii. royal graves and graves of traditional leaders;
- iii. graves of victims of conflict;
- iv. graves of individuals designated by the Minister by notice in the Gazette;
- v. historical graves and cemeteries; and
- vi. other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
- h. sites of significance relating to the history of slavery in South Africa;
- i. movable objects, including-
- i. objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
- ii. objects to which oral traditions are attached or which are associated with living heritage;
- iii. ethnographic art and objects;
- iv. military objects;
- v. objects of decorative or fine art;
- vi. objects of scientific or technological interest; and
- vii. books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

The newly promulgated KwaZulu-Natal Heritage Act (Act No. 4 of 2008) also makes specific mention to rock art and archaeological sites.

It is furthermore stated that:

—(1) No person may destroy, damage, excavate, alter, write or draw upon, or otherwise disturb any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the KwaZulu-Natal Heritage Council.

(2) Upon discovery of archaeological or palaeontological material or a meteorite by any person, all activity or operations in the general vicinity of such material or meteorite must

cease forthwith and a person who made the discovery must submit a written report to the Council without delay.

(3) The Council may, after consultation with an owner or controlling authority, by way of written notice served on the owner or controlling authority, prohibit any activity considered by the Council to be inappropriate within 50 metres of a rock art site.

(4) No person may exhume, remove from its original position or otherwise disturb, damage, destroy, own or collect any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.

(5) No person may bring any equipment which assists in the detection of metals and archaeological and palaeontological objects and material, or excavation equipment onto any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, or meteorite impact site, or use similar detection or excavation equipment for the recovery of meteorites, without the prior written approval of the Council having been obtained on written application to the Council.

(6) (a) The ownership of any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site, on discovery, vest in the Provincial Government and the Council is regarded as the custodian on behalf of the Provincial Government.

(b) The Council may establish and maintain a provincial repository or repositories for the safekeeping or display of—

(i)

archaeological objects;

(ii)

palaeontological material;

(iii)

ecofacts;

(iv)

objects related to battlefield sites;

(v)

material cultural artefacts; or

(vi)

meteorites.

Sumitomo Rubber Plant. Emnambithi Local Municipality. SIVEST.

(7) The Council may, subject to such conditions as the Council may determine, loan any object or material referred to in subsection (6) to a national or provincial museum or institution.

(8) No person may, without the prior written approval of the Council having been obtained on written application to the Council, trade in, export or attempt to export from the Province—

(a)

any category of archaeological object;

(b)

any palaeontological material;

(c)

any ecofact;

(d)

any object which may reasonably be regarded as having been recovered from a battlefield site;

(e)

any material cultural artefact; or

(f) any meteorite.

(9) (a) A person or institution in possession of an object or material referred to in paragraphs (a) – (f) of subsection (8), must submit full particulars of such object or material, including such information as may be prescribed, to the Council.

(b) An object or material referred to in paragraph (a) must, subject to paragraph (c) and the directives of the Council, remain under the control of the person or institution submitting the particulars thereof.

(c) The ownership of any object or material referred to in paragraph (a) vest in the Provincial Government and the Council is regarded as the custodian on behalf of the Provincial Government.

This study aims to identify and assess the significance of any heritage and archaeological resources occurring on the site. Based on the significance, the impact of the development on the heritage resources would be determined. Then appropriate actions to reduce the impact on the heritage resources would be put forward. In terms of the NHRA, a place or object is to be considered part of the national estate if it has cultural significance or other special value because of:

a. its importance in the community, or pattern of South Africa's history;

Sumitomo Rubber Plant. Emnambithi Local Municipality. SIVEST.

- b. its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- c. its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- d. its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- e. its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- f. its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- g. its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- h. its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
- i. sites of significance relating to the history of slavery in South Africa.

### **3 BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA**

Portions of the greater Ladysmith area have been systematically surveyed for archaeological heritage sites in the past. These were mostly conducted by archaeologists attached to the KwaZulu-Natal Museum, as well as by Amafa staff. Sixty one sites are recorded in the data base of the KwaZulu-Natal Museum. These include five Early Stone Age sites, five Middle Stone Age sites, six Later Stone Age sites, three rock art sites (two rock paintings and one rock engraving), eleven Later Iron Age sites, and twenty historical period Nguni homesteads.

The majority of the Later Iron Age and historical period Nguni homesteads are demarcated by characteristic stone walling. Stone walling and graves related to the Anglo-Boer War period of 1899-1901 are also abundant in the area. Ten sites are recorded in the KwaZulu-Natal Museum data base but many more sites belonging to this period should occur in the greater Ladysmith area. The project area has not been systematically surveyed in the past and no heritage sites are known from the footprint. However, various Later Iron Age sites occur approximately 1 – 5 km from the proposed development area.

Sumitomo Rubber Plant. Emnambithi Local Municipality. SIVEST.

The San were the owners of the land for almost 30 000 years but the local demography started to change soon after 2000 years ago when the first Bantu-speaking farmers crossed the Limpopo River and arrived in South Africa. Around 800 years ago, if not earlier, Bantu-speaking farmers also settled in the greater Ladysmith area. Although some of the sites constructed by these African farmers consisted of stone walling not all of them were made from stone.

Sites located elsewhere in the KwaZulu-Natal Midlands show that many settlements just consisted of wattle and daub structures. These Later Iron Age sites were most probably inhabited by Nguni-speaking groups such as the amaBhele and others (Bryant 1965). However, by 1820 the original African farmers were dispersed from this area due to the expansionistic policies of the Zulu Kingdom of King Shaka. Many individuals of former chiefdoms in the area became bandits and oral tradition suggests that cannibalism may also have been practised by some of these groups. African refugee groups and individuals were given permission to settle in the area by the British colonial authorities after 1845 where most of them became farm labourers. After the Anglo-Zulu War of 1879, and the Bambatha Rebellion of 1911, many of the African people in the study area adopted a Zulu ethnic identity.

European settlement of the area started soon after 1838 when the first Voortrekker settlers marked out large farms in the area. However, most of these farms were abandoned in the 1840's when Natal became a British colony only to be reoccupied again by British immigrants. Nevertheless, a group of Dutch farmers declared an independent republic in 1847 on the banks of the Klip River, and called it the Klip River Republic, with Andries Spies as commandant.

This pocket republic only survived for a few months before British authority over the area was declared. The British planned a town as an administrative centre for the Klip River District, proclaiming it on 20 June 1850 and called it Ladysmith. Ladysmith became world famous during the Anglo-Boer War of 1899-1901 when it was besieged by Boers from 2 November 1899 until 28 February 1900. Ghandi, Smuts and Churchill are figures of international significance who were also present during the siege of Ladysmith.



**Plate 1. Sign Board Showing Battle Sites**

During the 118 day long siege the stone Town Hall sustained considerable damage. It has since been restored to the original vision of the architects. Located next to the Town Hall the building housing the Siege Museum was erected in 1884. It was used as a rations post for civilians. The Museum displays relics from the time of the siege, including documents, uniforms and firearms. Several of the most celebrated battles of the war were fought around Ladysmith. These include the Battles of Elandslaagte, Spionkop, Wagon Hill, Caesars Camp, Lombards Kop and Umbulwana Hill. These battle field sites as well as associated graves and buildings of the era are proclaimed heritage sites and are protected by Provincial Heritage Legislation (Derwent 2006).





**Plate 2. Photo taken during the Siege of Ladysmith ([www.britishbattles.com/battle-of-ladysmith/](http://www.britishbattles.com/battle-of-ladysmith/)).**

### **3.1 Short History of the Siege of Ladysmith**

As war with the Boer republics appeared likely in June 1899, the War Office in Britain dispatched a total of 15,000 troops to Natal, expecting that if war broke out they would be capable of defending the colony until reinforcements could be mobilized and sent to South Africa by steamship. Some of these troops were diverted while returning to Britain from India, others were sent from garrisons in the Mediterranean and elsewhere. Lieutenant General Sir George White was appointed to command this enlarged force. White was 64 years old and suffered from a leg injury incurred in a riding accident. Having served mainly in India, he had little previous experience of South Africa (Lewis 1999).

Contrary to the advice of several British officials such as Sir Alfred Milner, the High Commissioner for Southern Africa, the Boer governments were not over-awed by the despatch of British troops to Natal. Instead, they regarded it as evidence of Britain's determination to seize control of the Boer republics. The Transvaal government under President Paul Kruger considered launching an attack in September, but President Steyn of the Orange Free State, who would later become the spiritual heart of the Boer resistance, dissuaded them for several weeks while he tried to act as intermediary. With

Sumitomo Rubber Plant. Emnambithi Local Municipality. SIVEST.

the complete breakdown in negotiations, both republics declared war and attacked on 12 October (ibid).

A total of 21,000 Boers advanced into Natal from all sides. White had been advised to deploy his force far back, well clear of the area of northern Natal known as the "Natal Triangle", a wedge of land lying between the two Boer republics. Instead, White deployed his forces around the garrison town of Ladysmith, with a detachment even further forward at Dundee. The entire British force could concentrate only after fighting two battles at Talana Hill and Elandsplaagte. As the Boers surrounded Ladysmith, White ordered a sortie by his entire force to capture the Boer artillery. The result was the disastrous Battle of Ladysmith, in which the British were driven back into the town having lost 1,200 men killed, wounded, or captured (ibid).

The Boers then proceeded to surround Ladysmith and cut the railway link to Durban. Major General French and his Chief of Staff, Major Douglas Haig escaped on the last train to leave, which was riddled with bullets. The town was then besieged for 118 days. White knew that large reinforcements were arriving, and could communicate with British units south of the Tugela River by searchlight and heliograph. He expected relief soon. Meanwhile, his troops carried out several raids and sorties to sabotage Boer artillery (ibid).

Louis Botha commanded the Boer detachment which first raided Southern Natal, and then dug in north of the Tugela to hold off the relief force. On 15 December, the first relief attempt was defeated at the Battle of Colenso. Temporarily unnerved, the relief force commander, General Redvers Henry Buller, suggested that White either break out, or destroy his stores and ammunition and surrender. White could not break out because his horses and draught animals were weak from lack of grazing and forage, but he also refused to surrender (ibid).

On Christmas Day 1899, the Boers fired into Ladysmith a carrier shell without fuse, which contained a Christmas pudding, two Union Flags and the message "compliments of the season". The shell is still kept in the museum at Ladysmith. A drive around Ladysmith and the surrounding hills will reveal many gravesites and memorials to the fallen soldiers on both sides (ibid).



**Plate 3. Photo of Boer Forces during the Battle of Ladysmith**  
([www.instinsky.de/theroninstinsky\\_boer\\_.html](http://www.instinsky.de/theroninstinsky_boer_.html)).

## **4 BACKGROUND INFORMATION OF THE SURVEY**

### **4.1 Methodology**

A desktop study was conducted of the SAHRA inventory of heritage sites as reflected on the SAHRIS website. In addition, the archaeological database of the KwaZulu-Natal Museum was consulted. Although the greater Ladysmith area is rich in archaeological and heritage sites none are listed for the footprint, nevertheless the footprint is located upon an apparent Iron Age-Historical site. There is also a LSA and LIA site located to the east of the footprint.

### **4.2 Restrictions encountered during the survey**

#### **4.2.1 Visibility**

The footprint is heavily degraded with evidence for overgrazing as well as sheet and donga erosion. The degraded landscape, however, facilitate archaeological site visibility. These are also visible from aerial photographs.

Sumitomo Rubber Plant. Emnambithi Local Municipality. SIVEST.

#### **4.2.2 Disturbance.**

The apparent Iron Age sites within the footprint area display extensive stone robbing and degradation. The immediate area surrounding the footprint appears to be very disturbed.

#### **4.3 Details of equipment used in the survey**

GPS: N/A

Digital cameras: N/A

### **5 DESCRIPTION OF SITES AND MATERIAL OBSERVED**

#### **5.1 Locational data**

Province: KwaZulu-Natal.

Town: Ladysmith.

Local Municipality: Emnambithi Local Municipality.

District Municipality: uThukela District Municipality.

#### **5.2 Heritage Description of the general area surveyed**

The greater Ladysmith area is rich in archaeological and other heritage sites. A number of apparent Iron Age-Historical sites appear on the actual project footprint, and there remains the possibility of there being hidden graves, loose cultural material, and MSA artefacts. Various periods attributed Heritage Significance by the NHRA can be viewed on Table 2 below.

Significance criteria in terms of Section 3(3) of the NHRA	
Significance	Rating
1. <b>Historic and political significance</b> - The importance of the cultural heritage in the community or pattern of South Africa's history.	None on footprint but greater area contains many sites
2. <b>Scientific significance</b> – Possession of uncommon, rare or endangered aspects of South Africa's cultural heritage.	Most probably none but needs further evaluation by means of a ground survey
3. <b>Research/scientific significance</b> – Potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage.	Unknown, needs further evaluation by means of a ground survey
4. <b>Scientific significance</b> – Importance in demonstrating the principal characteristics of a particular class of South Africa's cultural places/objects.	None.
5. <b>Aesthetic significance</b> – Importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.	None.
6. <b>Scientific significance</b> – Importance in demonstrating a high degree of creative or technical achievement at a particular period.	None.
7. <b>Social significance</b> – Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.	None.
8. <b>Historic significance</b> – Strong or special association with the life and work of a person, group or organization of importance in the history of South Africa.	Unknown, needs further evaluation by means of a ground survey.
9. The significance of the site relating to the history of slavery in South Africa.	None.

**Table 2. Evaluation and statement of significance.**

Developing out of this is the Field Rating Table

## 6 FIELD RATING

Developing out of this is the Field Rating Table (Table 3) which discusses and provides value ratings for sites observed in the field on in the study area. This rating uses criteria developed by the South African Heritage Resources Agency (SAHRA) (Table 3). However, as this is a desktop study and the visible sites are heavily degraded, it is impossible to ascribe a field rating score to each site. A ground survey will be required to investigate and rate the relevant heritage sites.

Level	Details	Action
National (Grade I)	The site is considered to be of National Significance	Nominated to be declared by SAHRA
Provincial (Grade II)	This site is considered to be of Provincial significance	Nominated to be declared by Provincial Heritage Authority
Local Grade IIIA	This site is considered to be of HIGH significance locally	The site should be retained as a heritage site
Local Grade IIIB	This site is considered to be of HIGH significance locally	The site should be mitigated, and part retained as a heritage site
Generally Protected A	High to medium significance	Mitigation necessary before destruction
Generally Protected B	Medium significance	The site needs to be recorded before destruction
Generally Protected C	Low significance	No further recording is required before destruction

**Table 3. Field rating and recommended grading of sites (SAHRA 2005)**



## 6.1 Heritage Material Observed on the Project Footprint

Seven clusters of heritage sites have been identified by the desktop study. These include five Later Iron Age/Historical period sites demarcated by stone walling or the remains thereof, a cluster of unknown heritage material possible historical, previously recorded Later Iron Age Site (LIA) and Later Stone Age (LSA) surface scatter situated to the immediate east of the proposed development site. The GPS coordinates of these sites are provided in Table 4.

Site No.	Description	Co-ordinates	Photo
<b>Iron Historical 1</b>	<b>Age-</b> Remains of Iron Age-Historical Circle Cluster.	28°33'9.00"S, 29°50'3.72"E	Figure 3
<b>Iron Historical 2</b>	<b>Age-</b> Remains of Iron Age-Historical Circle Cluster.	28°33'2.69"S, 29°50'8.82"E	Figure 4
<b>Iron Historical 3</b>	<b>Age-</b> Remains of Iron Age-Historical Circle Cluster.	28°32'58.48"S, 29°50'11.23"E	Figure 4
<b>Iron Historical 4</b>	<b>Age-</b> Remains of Iron Age-Historical Circle Cluster on the actual proposed Footprint.	28°33'6.10"S, 29°50'8.89"E	Figure 5
<b>Iron Historical 5</b>	<b>Age-</b> Remains of Iron Age-Historical Circle Cluster to the South-east of the proposed Footprint.	28°33'20.18"S, 29°50'31.55"E	Figure 6
<b>Cultural Material</b>	Cluster of Heritage-Cultural Material lying to the south-east of the proposed footprint.	28°33'11.32"S, 29°50'11.67"E	Figure 7
<b>LSA/LIA</b>	Recorded LSA and LIA Site to the east of the proposed Footprint.	28°33'3.81"S, 29°50'44.17"E	Figure 8

**Table 4. Description and Data relating to Heritage Sites**

## 6.2 Figures Associated with Table 4



Figure 3. Heritage Sites Cluster occurring near the Footprint



Figure 4. Heritage Sites occurring near, or on the Footprint.



Figure 5. Heritage Sites occurring on the Footprint.



Figure 6. Heritage Sites occurring to the south-east of the proposed Footprint





Figure 7. Potential Heritage-Cultural Cluster occurring to the south-east of the proposed Footprint.



Figure 8. LSA and LIA Site lying to the east of the proposed Footprint.

### **6.3 Dating the findings**

The cultural and heritage material found within the footprint of the study area, and surrounds, have variable dates, and may come from a variety of periods. According to the KwaZulu-Natal Museum Records, the earliest heritage material on site is that of the Late Stone Age and Late Iron Age site (Figure 8), dating between 20,000 BP-1,000 AD and 1,700 AD to mid-1900 AD. It does appear that sites and material dating to the Historical Period is also present. This dates to between the 1850's to about .1940. Some of the traces of stone-walling may fall to within this period, and some of the quarry workings may also be attributed to this period.

## **7 RECOMMENDATIONS**

Many potential Heritage structures and features were discovered on the study footprint. This is not unexpected coming from the Greater Ladysmith area which is known to be extremely rich in Cultural Heritage sites of various traditions and periods.

The proposed footprint lies upon, and is surrounded by, a possible Iron Age-Historical Settlement. One kilometre to the east of the proposed factory site lies a recorded LSA and LIA site (Figure 8). Ladysmith town and surrounds also forms part of the Battlefields Cultural Heritage Landscape. The recorded LSA and LIA site must have a buffer of 20 m protection from any form of disturbance, or construction.

These factors complicate the possibility for construction to go ahead immediately without mediation, negotiation, and further enquiry and assessment. For this reason the consultants at Active Heritage cc advice that a Second Phase Heritage survey should be initiated before any construction commence. This Second Phase Heritage Impact Assessment should include a systematic ground survey and mitigation recommendations. Only a Second Phase Heritage Assessment will be able to provide a Field Rating Score that may aid in the mitigation of these sites (see Table 3).

The fact that the footprint lies upon an Iron Age-Historic domestic landscape suggests the possibility of hidden graves lying below the surface. These may well be exposed during construction and should graves be identified then mitigation measures which may include grave exhumation and reburial should be put in place.

Sumitomo Rubber Plant. Emnambithi Local Municipality. SIVEST.

We also draw stakeholders attention to the South African National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) and the KwaZulu-Natal Heritage Act (Act No. 4 of 2008) which requires that operations that expose archaeological or historical remains should cease immediately, pending evaluation by the provincial heritage agency.

## 9 REFERENCES

Bryant, A. T. 1965. *Olden times in Zululand and Natal*. Cape Town: C. Struik.

Derwent, S. 2006. *KwaZulu-Natal Heritage Sites: a Guide to Some Great Places*. David Phillip: Claremont.

Lewis, C. 1999. *Ladysmith, the Siege*. Redwood Books. Trowbridge: Wiltshire.

Huffman, T. N. 2007. *Handbook to the Iron Age: The Archaeology of Pre-colonial Farming Societies in Southern Africa*. University of KwaZulu-Natal Press. Pietermaritzburg

Lewis-Williams, J. D. 2003. *Images of Mystery: Rock Art of the Drakensberg*. Double Storey Books: Cape Town

Lewis-Williams, J. D. & Dowson, T. 1992. *Rock Paintings of the Natal Drakensberg. Ukhahlamba Series, Number 5*. University of Natal Press: Pietermaritzburg

Mazel, A. 1989. People making history, the last ten thousand years of hunter-gatherer communities in the Thukela Basin. *Natal Museum Journal of Humanities*. 1: 1-168

McCarthy, T. & Rubidge, B. 2005. *The Story of Earth and Life: A Southern African Perspective on a 4.6 billion year journey*. Struik Publishers: Cape Town

Mitchell, P. 2002. *The Archaeology of Southern Africa*. University Press: Cambridge

SAHRA, 2005. Minimum Standards for the Archaeological and the Palaeontological Components of Impact Assessment Reports, Draft version 1.4.

SIVEST BID Document 2015.