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**PHASE 1 HIA REPORT FOR PROPOSED
TOWNSHIP DEVELOPMENTS (BOKSBURG WEST EXT.7 & LILANTION EXT.7)
LOCATED ON PORTIONS 410 & 411
OF THE FARM DRIEFONTEIN 85IR, BOKSBURG, GAUTENG**

For:

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REPORT: APAC015/02

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SUMMARY

A Pelser Archaeological Consulting (APAC) was appointed by Seaton Thomson & Associates to conduct a Phase 1 HIA on Portion 410 and Portion 411 of Driefontein 85IR, in Boksburg, Gauteng. Two separate township developments (Liliantion Ext.7 on Portion 411 & Boksburg West Ext.7 on Portion 410) are being proposed.

Background research indicated that there are some known archaeological sites and features located in the larger geographical area, although there are no known sites in the specific study area. A number of recent historical sites (homesteads and related structures), related to the early gold mining history of the area, are however located on both portions. The results of the assessment and basic recording of these structures are discussed in the report, also providing recommendations on proposed mitigation measures and the preservation of these historically significant buildings to minimize and negate the impacts of the proposed developments on them.

Finally, based on the background study and physical assessment it is recommended that the proposed development be allowed to continue, taking into cognizance the recommendations put forward at the end.

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1. INTRODUCTION

A Pelser Archaeological Consulting (APAC) was appointed by Seaton Thomson & Associates to conduct a Phase 1 HIA on Portion 410 and Portion 411 of Driefontein 85IR, in Boksburg, Gauteng. Two separate township developments (Liliantion Ext.7 on Portion 411 & Boksburg West Ext.7 on Portion 410) are being proposed.

Background research indicated that there are some known archaeological sites and features located in the larger geographical area, although there are no known sites in the specific study area. A number of recent historical sites (homesteads and related structures), related to the early gold mining history of the area, are however located on both portions.

The client indicated the location and boundaries of the study area and the assessment concentrated on this portion.

2. TERMS OF REFERENCE

The Terms of Reference for the study was to:

1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the portion of land that will be impacted upon by the proposed development;
2. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value;
3. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions;
4. Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources;
5. Review applicable legislative requirements;

3. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

3.1 The National Heritage Resources Act

According to the above-mentioned act the following is protected as cultural heritage resources:

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts

- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The National Estate includes the following:

- 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 features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Sites of Archaeological and palaeontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, palaeontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development thereon. An Archaeological Impact Assessment (AIA) only looks at archaeological resources. An HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m²
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

Structures

Section 34 (1) of the mentioned act states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A structure means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

Alter means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

Archaeology, palaeontology and meteorites

Section 35(4) of this act deals with archaeology, palaeontology and meteorites. The act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial)

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

Human remains

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position of otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- b. destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or

- c. bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated to) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

3.2 The National Environmental Management Act

This act states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

4. METHODOLOGY

4.1 Survey of literature

A survey of available literature was undertaken in order to place the development area in an archaeological and historical context. The sources utilized in this regard are indicated in the bibliography.

4.2 Field survey

The field assessment section of the study was conducted according to generally accepted HIA practices and aimed at locating all possible objects, sites and features of heritage significance in the area of the proposed development. The location/position of all sites, features and objects is determined by means of a Global Positioning System (GPS) where possible, while detail photographs are also taken where needed.

4.3 Oral histories

People from local communities are sometimes interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all

circumstances. When applicable, the information is included in the text and referred to in the bibliography.

4.4 Documentation

All sites, objects, features and structures identified are documented according to a general set of minimum standards. Co-ordinates of individual localities are determined by means of the Global Positioning System (GPS). The information is added to the description in order to facilitate the identification of each locality.

5. DESCRIPTION OF THE AREA

The study area is located on Portion 410 and Portion 411 of Driefontein 85IR, in Boksburg, Gauteng. Two separate township developments (Liliantion Ext.7 on Portion 411 & Boksburg West Ext.7 on Portion 410) are being proposed. The ERPM (East Rand Proprietary Mines) Golf Course borders the study areas on all sides, while Pretoria Road runs through and separates the two portions of land and therefore the two developments from each other. Major urban development surrounds the study area.

Visibility during the assessment was very good, with no dense grass cover present. Recent & historical (late 19th century) residential development (including the planting of trees, garden establishment, walkways, tennis courts, swimming pools) in the study areas would have had a fairly major impact on any possible archaeological and earlier historical sites or features that might have existed here, and any evidence would have been disturbed or destroyed as a result.

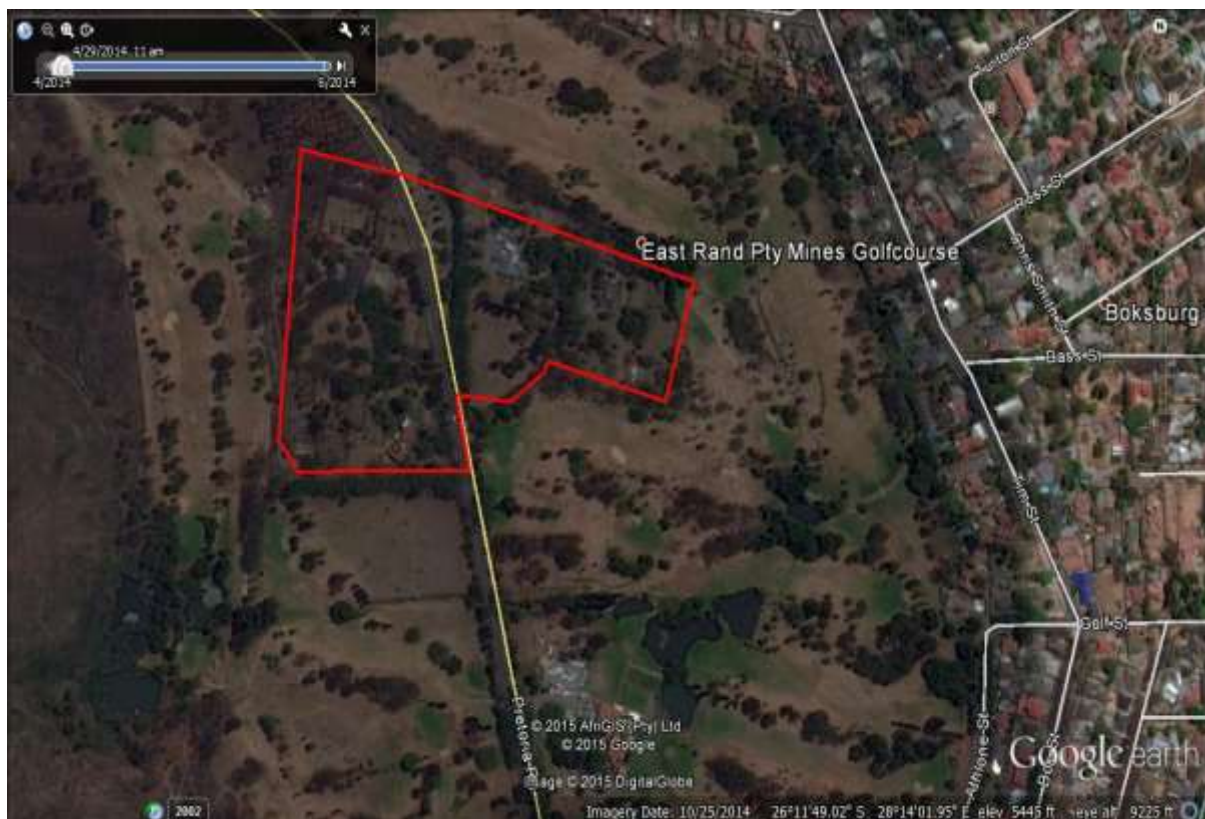


Figure 1: Aerial view of study areas location (Google Earth 2015).

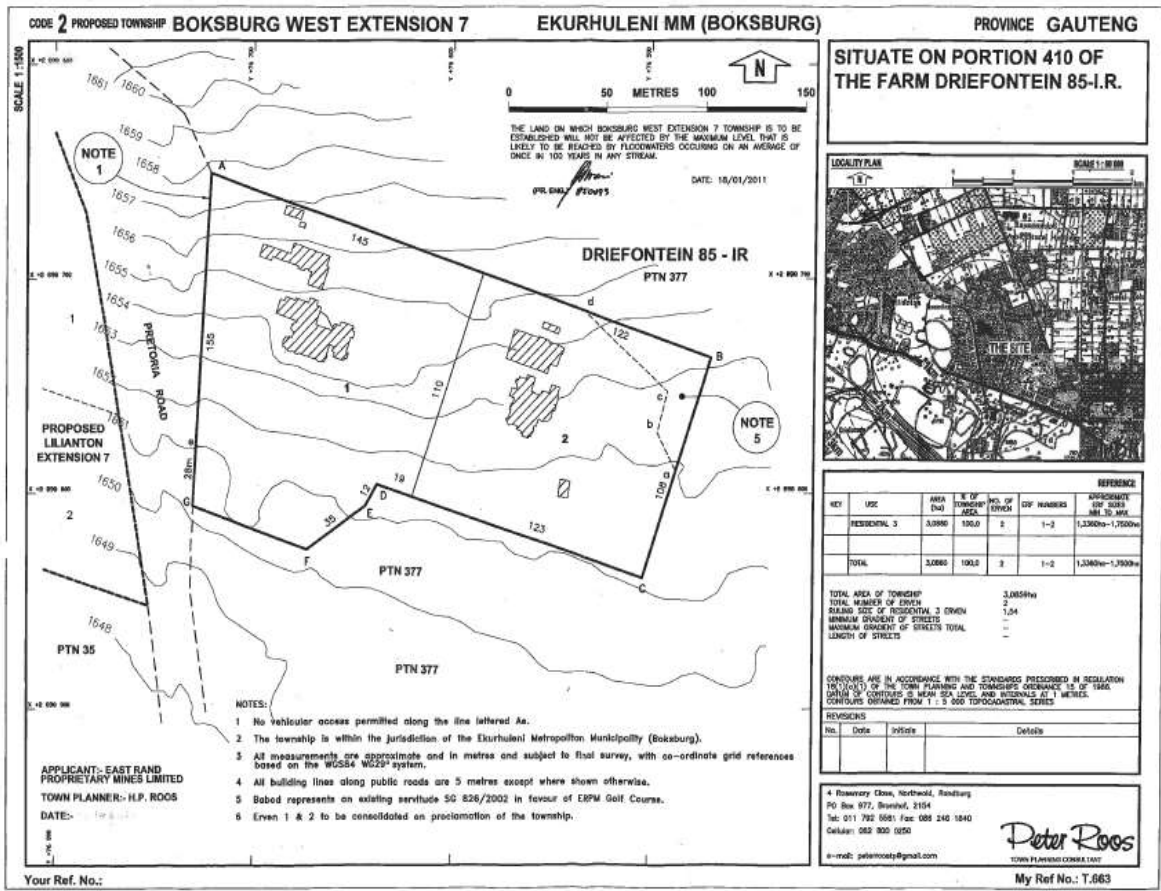


Figure 2: Boksburg West development plan (Portion 410 of Driefontein 85IR).
Provided by Seaton Thomson & Associates.

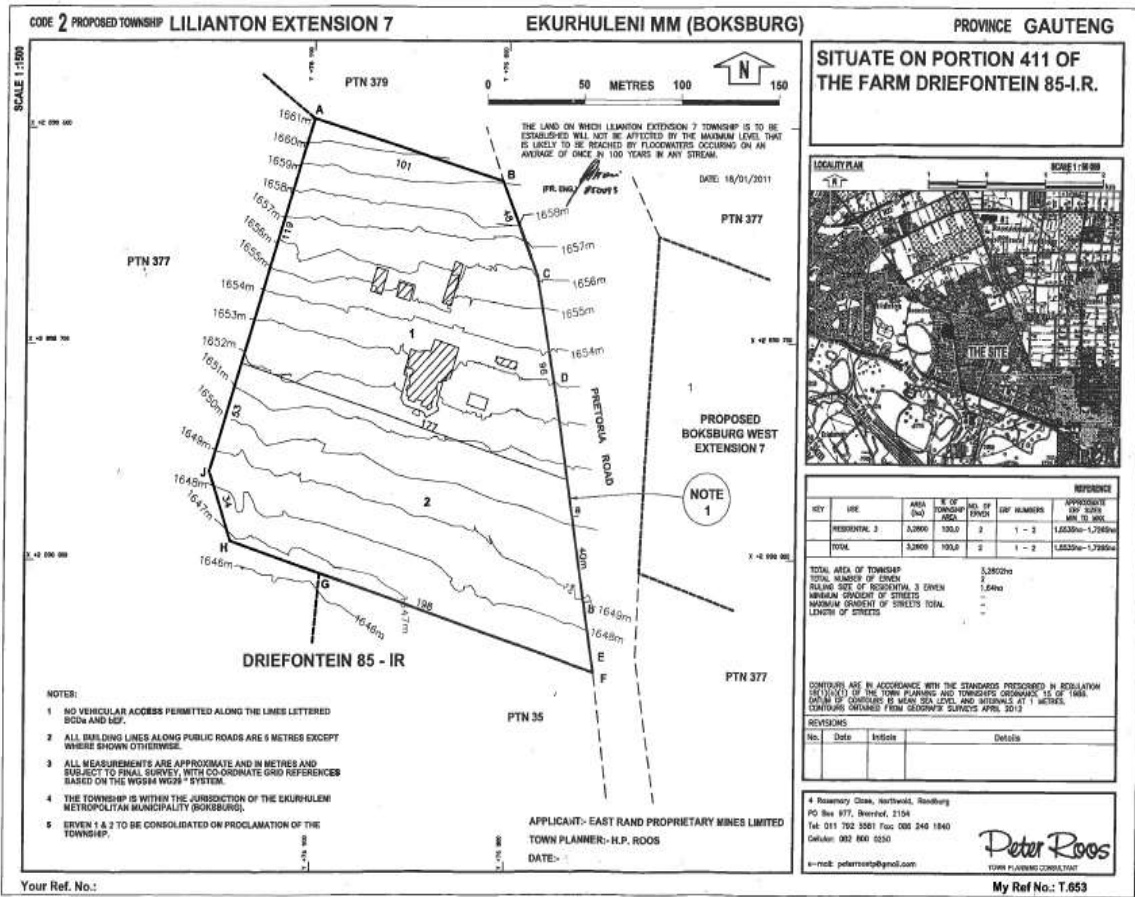


Figure 3: Lilianton development plan (Portion 411 of Driefontein 85IR).
Provided by Seaton Thomson & Associates.



Figure 4: A view of the garden and trees on Portion 411.



Figure 5: A view of one of the historical houses on Portion 411.



Figure 6: A view of one of the historical house on Portion 410.



Figure 7: A view of a section of the garden and trees on Portion 410.

6. DISCUSSION

The Stone Age is the period in human history when lithics (or stone) was mainly used to produce tools. In South Africa the Stone Age can be divided basically into three periods. It is important to note that these dates are relative and only provide a broad framework for interpretation. A basic sequence for the South African Stone Age (Lombard et.al 2012) is as follows:

Earlier Stone Age (ESA) up to 2 million – more than 200 000 years ago

Middle Stone Age (MSA) less than 300 000 – 20 000 years ago

Later Stone Age (LSA) 40 000 years ago – 2000 years ago

It should also be noted that these dates are not a neat fit because of variability and overlapping ages between sites (Lombard et.al 2012: 125).

No known Stone Age sites or artifacts are present in the area. The closest known Stone Age sites are those at Asvoelkop, Melvillekoppies, Linksfield and Primrose (Bergh 1999: 4). Records indicate that stone tools dating to the Early and Middle Stone Age occurred all over, for example in the Primrose Ridge area in adjacent Germiston, as well as to the south at Henley-On-Klip (Van Schalkwyk 2013: 7). If any Stone Age artifacts are to be found in the area then it would more than likely be single, out of context, stone tools.

No Stone Age tools were identified in the study area during the assessment.

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts. In South Africa it can be divided in two separate phases (Bergh 1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D
Late Iron Age (LIA) 1000 – 1850 A.D.

Huffman (2007: xiii) however indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D.
Middle Iron Age (MIA) 900 – 1300 A.D.
Late Iron Age (LIA) 1300 – 1840 A.D.

No Early Iron Age sites are known in the area (Bergh 1999: 6). The closest known LIA sites are at Melvillekoppies and Bruma Lake (Bergh 1999: 7). The occupation of the larger geographical area (including the study area) did not start much before the 1500s. By the 16th century things changed, with the climate becoming warmer and wetter, creating condition that allowed Late Iron Age (LIA) farmers to occupy areas previously unsuitable, for example the Witwatersrand in the region of Klipriviersberg. Here, a large number of settlements dating to the Later Iron Age occur and, according to Huffman et al (2006/2007) these sites can be related to the Bafokeng people (Van Schalkwyk 2013: 7).

No Iron Age sites, features or material were identified in the area during the assessment.

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write. The first Europeans to move through and into the area were the group of Cornwallis Harris in 1836 (Bergh 1999: 13). These groups were closely followed by the Voortrekkers after 1844 (Bergh 1999: 14).

White settlers moved into the area during the first half of the 19th century. They were largely self-sufficient, basing their survival on cattle/sheep farming and hunting. Few towns were established and it remained an undeveloped area until the discovery of gold and later of coal. From early days this region was subjected to intense gold mining activities). The result is that most sites and features of heritage significance in the larger region derive from this development.

The town of Boksburg was started in August 1887 with the sale of the first stands, but was created as municipality only in 1903. During the early years, the principal mining property was the East Rand Proprietary Mines, Ltd., while other mines were the Witwatersrand Deep, Ltd., Ginsberg, Driefontein Deep, Balmoral, Anglo Deep, Cinderella Deep, Boksburg Global Mines, and East Rand Extensions.

According to Handley (2004) Driefontein 85IR was declared as public diggings on 20 September 1886. A few years later it became Knights Central Gold Mine and was later incorporated in the East Rand Proprietary Mines (ERPM). Expansion of activities obviously took place, but some of the mines also played out quite quickly, some mostly due to flooding by water. By 1908 there were some 70 mines at work in the Witwatersrand. Sir Herbert Baker was very involved with the design of housing for the gold mines on the Witwatersrand. His commissions ranged from mansions for the managers to villages for workers. One of the mines for which he did some work was ERPM (Boksburg). According to Radford, Baker received three commissions from this mine, divided in three groups: Plantation (6), Cason (9)

and Angelo Mines (65). Unfortunately, information on the exact location of these buildings, especially the cottages for married staff, in contrast to the club houses or mine captain's houses, is very unspecific. However, it is known that Baker designed 14 cottages for Driefontein, which was built in the period 1908-1909 by a certain Ostland. In addition he also designed a total of 80 other houses: 5 Terrace units, 70 semi-detached units, 3 single storey and 2 double storey units.

The above historical information on Boksburg and Driefontein was obtained from a Phase HIA by Van Schalkwyk on proposed development on Driefontein 85IR (Portions 397 & 399).

The historical houses and related structures found on Portions 410 & 411 for the current study belong to this time period (late 19th to early 20th centuries). It could however not be determined as yet if these houses were designed by Baker and built by Ostland, but it is a possibility.

The oldest map that could be obtained from the Chief Surveyor General's database (www.csg.dla.gov.za), dating to 1908, show that Portion 1 of the farm was granted in October 1887 to the W.W. Rand Gold Mining Co.Ltd and that the farm was surveyed in January 1898 & February 1908 (CSG Document 10I0V101). No early historical maps on the two portions (410 & 411) forming part of the study area could be obtained.

Land acquired for: *East Rand Station Emplacement*

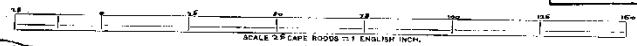
SIDES.	ANGLES.	(x) CO-ORDINATES (x)
AD 6.32	A 88.20.80	A +4166.00 +5870.75
BC 66.73	B 94.0.0	B +4172.42 +5865.22
CD 12.81	C 204.14.10	C +4182.11 +5812.56
DE 25.51	D 189.40.0	D +4130.44 +5800.54
EF 67.76	E 152.50.40	E +4129.19 +5775.06
FG 19.85	F 62.11.10	F +4095.485 +5716.200
GH 21.00	G 126.35.0	G +4034.289 +5762.061
HJ 51.69	H 174.20.40	H +4030.81 +5752.02
JK 28.70	J 176.26.0	J +4111.43 +5798.59
KL 26.66	K 167.16.50	K +4128.15 +5822.23
LM 2.40	L 94.1.20	L +4133.54 +5842.05
MA 58.96	M 266.24.10	M +4141.43 +5840.60
		KOV +4370.65 +5915.44
		MN +3960.69 +5906.24

Metric Area = 4.0057 Ha
Halla
 for Surveyor General
 9-3-1970

FOR PTN. 371
 SEE SG NO. 10170/1998

* Now known as
 Portion I of the farm
 DRIEFONTEIN No. 85
 Registration Division IR

Tans geregtig onder:
 Now registered under:
 No. 85
 REGISTRASIE AFDELING
 REGISTRATION DIVISION IR



The above Figure lettered A-M represents 4 Morgen 406
 Squares/Roods of Land being *Partion I of the farm* of the farm

DRIEFONTEIN No. 85

Was transferred to *W.W. Rand Gold Mining Co Ltd.* by Deed of Transfer No. 2115/1887 dated *30th July 1887* 18.10.1887.
 situated in the District of *Witwatersrand* Boksburg Ward *East Rand NORTH* Transvaal Colony.

The whole Farm was originally granted to _____ by Deed of Grant No. _____ dated _____
 the _____ day of _____ and was surveyed in *January 1898 & Apr 1909* by Surveyor *E.W. Ferguson* Drag. S.G.NºA 1690/04

Bounded as indicated above.
 The Beacons were pointed out by *P. Thomsen & R. Tucker* and have been properly erected according to Law.
 Acquired for Railway Purposes under the provisions of the *Expropriation Law of the South African Republic*
(Ordinance No. 90 of 1902, or amendments thereof)
 Surveyed in *February 1908* by me _____

R. J. van der Merwe
 Government Land Surveyor.

Examined. The numerical data of this Diagram are sufficiently
 correct.
T. A. S. 750/76
 Surveyor General.
 Pretoria. 7 APR 1909

This Diagram belongs to _____
 issued this day in favour of _____
 Registrar of Deeds

Figure 8: 1908 map of Portion 1 of Driefontein 85IR (www.csg.dla.gov.za).

Study Area Assessment

During the assessment no sites, features or objects of any archaeological origin were identified on the two land parcels (Portions 410 & 411). If any did exist here in the past historical mining and other developments (including residential) would have disturbed or destroyed any evidence of this. However, the subterranean presence of such sites, features or cultural material of archaeological nature should never be discounted.

Lilianton Extension 7 (Portion 411 of Driefontein 85IR)

There are a number of structures located on the property, including the main homestead and related structures that possibly originally dates to the late 19th/early 20th century and the early gold mining history of the area, as well as some later structures, tennis court and other features.

Access to the main house was not possible, but it is clear that although there have been some alterations and changes over time, that many of the Victorian (late 19th century) features are still present. A metal plaque on an outside lighting feature provides further evidence on the age of the house (See photos). It reads “*Hubert Davies Electrical Engineer Johannesburg*”. Hubert Davies was one of the pioneer electrical engineers in South Africa & Johannesburg during the 1890’s. In 1891, just five years after the discovery of gold on the Witwatersrand, J. Hubert Davies started an industrial equipment supply business in Johannesburg. By the turn of the century, the business was a major player in the distribution of mechanical and electrical industrial products. In 1917 it was converted into a private company (Hubert Davies & Co. Ltd), which facilitated the introduction of senior managers as shareholders and directors. This plaque is therefore presumed to date between 1891 and 1917. Today, the company is known as Hudaco (www.hudaco.co.za).

The house and many of the features and other related structures are therefore older than 60 years of age. The garden layout also retains some Victorian style, and should the proposed development impact negatively on the house and these features, a detailed assessment needs to be undertaken prior to the development taken place. The demolition of the main house should be avoided, as this is a unique feature in the landscape and history of the area. It needs to be noted that the developer’s representative, who was present for some part of the assessment, indicated that they would consider preserving the house intact and incorporating it in their development plans. From a Cultural Heritage perspective this would be encouraged.

It needs to be stated that a detailed study and recording of the main house and other structures were not undertaken during the assessment and it is recommended that an Architectural Historian conduct a detailed an expert assessment in order to determine the exact age, historical and cultural significance of the property and the associated structures and features. This expert report will also provide recommendations on the way forward in terms of preservation, a Conservation Management Plan and the re-use of these features in the development plans.

GPS Location: S26 11 43.70 E28 13 52.70

Cultural Significance: Medium to High

Heritage Significance: Grade III: Other heritage resources of local importance and therefore worthy of conservation (**this could change pending the expert assessment**)

Field Ratings: Local Grade IIIA: should be included in the heritage register and not be mitigated (high significance) OR Local Grade IIIB: should be included in the heritage register and may be mitigated (high/ medium significance). **Final rating to be determined once the detailed expert assessment had been undertaken**

Mitigation: Detailed assessment by Architectural Historian to determine heritage significance and mitigation measures to be implemented should the sites be impacted by the proposed development.



Figure 9: Another view of the main house.



Figure 10: View of the back of the house.



Figure 11: Another view of a section of the house.



Figure 12: Swimming pool and related structures.



Figure 13: View of the tennis court.



Figure 14: Partial view of garden and trees.



Figure 15: Plaque on lamp pole. Hubert Davies Electrical Engineer Johannesburg. Dating to between the late 19th and early 20th centuries.



Figure 16: Some of the other more recent structures on the property.



Figure 17: More recent structures on Portion 411.

Boksburg West Extension 7 (Portion 410 of Driefontein 85IR)

There are two historical houses and related structures and features on the property, with the one recently completely renovated recently and currently being used as office space. Although access to the main houses was not possible, it is clear that although there have been some alterations and changes over time, that many of the original (late 19th century/early 20th century) features are still present. These two houses are probably also related to the early gold mining history of the area.

As with the main house on Portion 411, the houses and many of the features and other related structures here are therefore older than 60 years of age. The demolition of these homestead and some of the associated structures should be avoided, as they are unique features in the landscape and history of the area. It needs to be noted that as with Portion 411 (Lilianton Ext. 7) the developer's representative indicated that they would consider preserving the houses intact and incorporating them in their development plans. From a Cultural Heritage perspective this would again be encouraged.

It needs to be stated that a detailed study and recording of the main houses and other structures were not undertaken during the assessment and it is recommended that an Architectural Historian conduct a detailed an expert assessment in order to determine the exact age, historical and cultural significance of the properties and the associated structures and features. This expert report will also provide recommendations on the way forward in terms of preservation, a Conservation Management Plan and the re-use of these features in the development plans.

GPS Location: S26 11 43.80 E28 13 58.10

Cultural Significance: Medium to High

Heritage Significance: Grade III: Other heritage resources of local importance and therefore worthy of conservation (**this could change pending the expert assessment**)

Field Ratings: Local Grade IIIA: should be included in the heritage register and not be mitigated (high significance) OR Local Grade IIIB: should be included in the heritage register and may be mitigated (high/ medium significance). **Final rating to be determined once the detailed expert assessment had been undertaken**

Mitigation: Detailed assessment by Architectural Historian to determine heritage significance and mitigation measures to be implemented should the sites be impacted by the proposed development.



Figure 18: View of the 1st main homestead. This one has been recently renovated.



Figure 19: The associated structures of this house have also been renovated.



Figure 20: One of the garden features.



Figure 21: Old water furrow.



Figure 22: Old greenhouse on the property.



Figure 23: The second house on the property.



Figure 24: Another view of the main house.



Figure 25: Another view of the house (back section).



Figure 26: Associated structures (labourer's houses?).



Figure 27: A closer view of Victorian-style features on the roof of the house.



Figure 28: Associated tennis court close to house no.2 on Portion 410.



Figure 29: Swimming pool and related structure.



Figure 30: Another structure on the property.



Figure 31: Aerial view of study area showing the two land portions studied. The various houses and related structures are visible. The white lines show the track paths followed during the assessment (Google Earth 2015).

7. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it is possible to say that the Phase 1 Heritage Impact Assessment for the Lilianton Extension 7 (Portion 411) and Boksburg West Extension 7 (Portion 410) township developments on Driefontein 85IR in Boksburg, Gauteng, has been conducted successfully. Although no archaeological sites, features or material were identified, a number of historical homesteads and related structures and features are present on both portions. These most likely date to between the late 19th and early 20th centuries, and would be related to the early gold mining history of the area (ERPM and others).

During the assessment, the developer's representative indicated that they would consider preserving the homesteads and some associated structures intact and incorporating them in their development plans. From a Cultural Heritage perspective this would be encouraged.

A detailed study and recording of the main houses and other structures were not undertaken during the assessment and it is recommended that an Architectural Historian conduct a detailed an expert assessment in order to determine the exact age, historical and cultural significance of the properties and the associated structures and features. This expert report will also provide recommendations on the way forward in terms of preservation, a Conservation Management Plan and the re-use of these features in the development plans.

From a cultural heritage point of view the development should therefore be allowed to continue taking cognizance of the above. Furthermore, the subterranean presence of archaeological or historical sites, features or objects is always a possibility. Should any be uncovered during the development process and archaeologist should be called in to investigate and recommend on the best way forward. The presence of low stone packed or unmarked graves should also be kept in mind.

8. REFERENCES

Aerial views of study areas: Google Earth 2015.

Boksburg West Ext.7 & Lilianton Ext.7 Location Maps and plans – Seaton Thomson & Associates

Bergh, J.S. (red.). 1999. **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies**. Pretoria: J.L. van Schaik.

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

Knudson, S.J. 1978. **Culture in retrospect**. Chicago: Rand McNally College Publishing Company.

Lombard, M., L. Wadley, J. Deacon, S. Wurz, I. Parsons, M. Mohapi, J. Swart & P. Mitchell. 2012. **South African and Lesotho Stone Age Sequence Updated (I)**. South African Archaeological Bulletin 67 (195): 120–144, 2012.

Republic of South Africa. 1999. **National Heritage Resources Act** (No 25 of 1999). Pretoria: the Government Printer.

Republic of South Africa. 1998. **National Environmental Management Act** (no 107 of 1998). Pretoria: The Government Printer.

Van Schalkwyk, J.A. 2013. **Cultural Heritage Impact Assessment for proposed Development on Portions 397 & 399 of Driefontein 85IR, Bosburg, Gauteng Province**. Unpublished Report 2013/JvS/031 For: INDEX. May 2013.

Chief Surveyor General Database (www.csg.dla.gov.za): Document 10I0V101

www.hudaco.co.za

It needs to be noted that as with Portion 411 (Lilianton Ext. 7) the developer's representative indicated that they would consider preserving the houses intact and incorporating them in their development plans. From a Cultural Heritage perspective this would again be encouraged.

It needs to be stated that a detailed study and recording of the main houses and other structures were not undertaken during the assessment and it is recommended that an Architectural Historian conduct a detailed an expert assessment in order to determine the exact age, historical and cultural significance of the properties and the associated structures and features. This expert report will also provide recommendations on the way forward in terms of preservation, a Conservation Management Plan and the re-use of these features in the development plans.

APPENDIX A DEFINITION OF TERMS:

Site: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

Structure: A permanent building found in isolation or which forms a site in conjunction with other structures.

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

APPENDIX B
DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE:

Historic value: Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.

Aesthetic value: Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.

Scientific value: Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period

Social value: Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

Rarity: Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.

Representivity: Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

APPENDIX C SIGNIFICANCE AND FIELD RATING:

Cultural significance:

- Low: A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.
- Medium: Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.
- High: Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

Heritage significance:

- Grade I: Heritage resources with exceptional qualities to the extent that they are of national significance
- Grade II: Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate
- Grade III: Other heritage resources of local importance and therefore worthy of conservation

Field ratings:

- i. National Grade I significance: should be managed as part of the national estate
- ii. Provincial Grade II significance: should be managed as part of the provincial estate
- iii. Local Grade IIIA: should be included in the heritage register and not be mitigated (high significance)
- iv. Local Grade IIIB: should be included in the heritage register and may be mitigated (high/medium significance)
- v. General protection A (IV A): site should be mitigated before destruction (high/medium significance)
- vi. General protection B (IV B): site should be recorded before destruction (medium significance)
- vii. General protection C (IV C): phase 1 is seen as sufficient recording and it may be demolished (low significance)

APPENDIX D
PROTECTION OF HERITAGE RESOURCES:

Formal protection:

National heritage sites and Provincial heritage sites – Grade I and II

Protected areas - An area surrounding a heritage site

Provisional protection – For a maximum period of two years

Heritage registers – Listing Grades II and III

Heritage areas – Areas with more than one heritage site included

Heritage objects – e.g. Archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

General protection:

Objects protected by the laws of foreign states

Structures – Older than 60 years

Archaeology, palaeontology and meteorites

Burial grounds and graves

Public monuments and memorials

APPENDIX E
HERITAGE IMPACT ASSESSMENT PHASES

1. Pre-assessment or Scoping Phase – Establishment of the scope of the project and terms of reference.
2. Baseline Assessment – Establishment of a broad framework of the potential heritage of an area.
3. Phase I Impact Assessment – Identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.
4. Letter of recommendation for exemption – If there is no likelihood that any sites will be impacted.
5. Phase II Mitigation or Rescue – Planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.
6. Phase III Management Plan – For rare cases where sites are so important that development cannot be allowed.