REVIEW OF CULTURAL HERITAGE RESOURCES IN THE MODDERFONTEIN AREA, EAST OF JOHANNESBURG, GAUTENG

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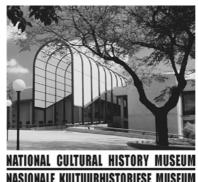
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NASIONALE KULTUURHISTORIESE MUSEUM

EXECUTIVE SUMMARY

REVIEW OF CULTURAL HERITAGE RESOURCES IN THE MODDERFONTEIN AREA, EAST OF JOHANNESBURG, GAUTENG

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GLOSSARY OF TERMS AND ABBREVIATIONS

HISTORIC PERIOD

Since the arrival of the white settlers - c. AD 1840 in this part of the country

EIA - Environmental impact assessment

HIA - Heritage impact assessment

HSD - Heritage Sites Database

Impact - A description of the effect of an aspect of the development on a specified component of the biophysical, social or economic environment within a defined time and space

PHRA – Provincial Heritage Resources Agency

SAHRA - South African Heritage Resources Agency

APP1 - 4 - Photographs of Appendices 1-4

HIST.1 – Historical photographs

DEFINITIONS AND ASSUMPTIONS

- Cultural resources are all non-physical and physical human-made occurrences, as well as
 natural occurrences that are associated with human activity. These include all sites, structures
 and artefacts of importance, either individually or in groups, in the history, architecture and
 archaeology of human (cultural) development.
- The significance of the sites and artefacts are determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. It must be kept in mind that the various aspects are not mutually exclusive, and that the evaluation of any site is done with reference to any number of these.
- Sites regarded as having low significance have already been recorded in full and require no further mitigation. Sites with medium to high significance require further mitigation.
- Archaeological sites: any area of land containing artefacts, ecofacts, features and structures in any combination of the above.
- Isolated occurrences: findings of artefacts or other remains located apart from archaeological sites. Although these are noted and samples are collected, it is not used in impact assessment and therefore do not feature in the report.
- Traditional cultural use: resources which are culturally important to people.
- The latitude and longitude of archaeological sites are to be treated as sensitive information by the developer and should not unduly be disclosed to members of the public.

REVIEW OF CULTURAL HERITAGE RESOURCES IN THE MODDERFONTEIN AREA, EAST OF JOHANNESBURG, GAUTENG

1. INTRODUCTION

The National Cultural History Museum, ¹ Pretoria, was appointed by Oryx Environmental to review the state of heritage resources in the Modderfontein area of Gauteng.

The aim of this report is therefore to review the current state of heritage preservation in the area. A number of threats face the area

- Encroaching urbanisation
- Gautrain rapid rail system will pass through the area
- General neglect and age of some of the structures

The information collected is to be used by the management of the facility to draw up a long term management plan the preserve the integrity of the area and its resources.

¹ The National Cultural History Museum is affiliated to the Northern Flagship Institution, which acts as parent body for a number of museums, all of which resort under the Department of Arts and Culture.

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2. STUDY APPROACH AND METHODOLOGY

2.1 Extent of the Study

This survey and impact assessment covers the areas of the proposed developments and its related infrastructure, as presented in Section 4 and illustrated in Figure 3.

2.2 Methodology

2.1 Preliminary investigation

2.1.1 Survey of the literature

A survey of the relevant literature was conducted with the aim of reviewing the previous research done and determining the potential of the area. In this regard, various reports, anthropological, archaeological and historical sources were consulted - see the list of references below. A number of sources pertaining to the area specific was found.

2.1.2 Data bases

The *Heritage Sites Database* and the *Environmental Potential Atlas* was consulted. The archives at the Dynamite Company Museum was also consulted.

2.1.3 Other sources

Topocadastral and other maps were also studied - see the list of references below.

2.2 Field survey

The area was divided into blocks by using natural (e.g. rivers) as well as manmade (e.g. roads), and each block was surveyed, either by foot, or by driving across it in a number of transects. Fences and rivers obviously necessitated a deviation from this strategy.

2.3 Documentation

Sites, objects and structures that are identified are documented according to the general minimum standards accepted by the archaeological profession. Coordinates of individual localities are determined by means of the *Global Positioning System* (GPS)² and plotted on a map. This information is added to the description in order to facilitate the identification of each locality.

Map datum used: Hartebeeshoek 94 (WGS84).

² According to the manufacturer a certain deviation may be expected for each reading. Care was, however, taken to obtain as accurate a reading as possible, and then to correlate it with reference to the physical environment before plotting it on the map.

3. SIGNIFICANCE

The *significance* of the sites and artefacts are determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. It must be kept in mind that the various aspects are not mutually exclusive, and that the evaluation of any site is done with reference to any number of these.

A standardised matrix, based on the requirements of the Heritage Act, was used for assessing the significance of each identified site/feature

1. Historic value									
Is it important in the community, or pattern of history									
Does it have strong or special association with the life or work of a person, group or									
organisation of importance in history									
Does it have significance relating to the history of slavery									
2. Aesthetic value									
It is important in exhibiting particular aesthetic characteristics valued by a	community c	or							
cultural group									
3. Scientific value									
Does it have potential to yield information that will contribute to an underst	anding of na	itural							
or cultural heritage									
Is it important in demonstrating a high degree of creative or technical achievable	evement at a	1							
particular period									
4. Social value									
Does it have strong or special association with a particular community or o	cultural group	o for							
social, cultural or spiritual reasons									
5. Rarity									
Does it possess uncommon, rare or endangered aspects of natural or cult	ural heritage	;							
6. Representivity									
Is it important in demonstrating the principal characteristics of a particular	class of natu	ıral or							
cultural places or objects									
Importance in demonstrating the principal characteristics of a range of lan									
environments, the attributes of which identify it as being characteristic of it									
Importance in demonstrating the principal characteristics of human activiti		way							
of life, philosophy, custom, process, land-use, function, design or technique	ie) in the								
environment of the nation, province, region or locality.	1								
7. Sphere of Significance	High	Medi	um	Low					
International									
National									
Provincial									
Regional									
Local Specific community									
Specific community									
8. Significance rating of feature			1						
1. Low			+						
2. Medium			+						
3. High									

4. PROBLEMS ENCOUNTERED / LIMITATIONS TO THE PROJECT

The following factors had an impact on the survey and the final results:

- Access could not be obtained to all areas as some are viewed to be high security areas.
- The grass cover (Kikuyu grass) covers most of the sites that Hall (1997) identified and, as a result, could not be verified.
- As nothing is known about possible future developments, it is difficult to determine potential impacts.

However, it is believed that what was seen is sufficiently representative of the heritage in order to make some generalised deductions.

5. SHORT HISTORY OF MODDERFONTEIN

Modderfontein was established in 1894, in answer to the urgent need of the gold mining industry for explosives to mine below ground (http://www.joburg.org.za).

The Zuid - Afrikaansche Fabrieken voor Ontplofbare Stoffen Beperk, a company formed expressly to supply dynamite to the mines, was the brainchild of President Paul Kruger. Construction started in April 1895 under the supervision of the first factory manager Frans Hoenig, an Austrian who was seconded from the Nobel explosives factory at Pressburg in Hungary (Modderfontein Centenary 1996: 2). For the factory to be built, it had to be located far away – a full day's wagon ride – from the hub of activity and people in Johannesburg for fear of explosions (http://www.joburg.org.za), as Beveridge, one of the new workers noted:

"What strikes me most is the quietness of the place....One walks through these quiet lanes with woods on either side...it is almost impossible to give any idea of the isolation of Modderfontein considering its proximity to Johannesburg....It is almost unique in that respect" (Beveridge 1919-1921:3)

Four explosive factories were built and by 1924 the formation of African Explosives and Industries (later African Explosives and Chemical Industries - AECI) breathed new life into the factory. Development commended on a scale which merited the title of the "biggest commercial explosives factory in the world". Aptly described as one of the greatest industrial developments of the 20th century in South Africa, the plant became a world leader in explosives and chemical technology (Modderfontein Centenary 1996:3).

Besides laying out the factory, housing had to be provided for factory personnel together with other civic amenities such as shops, a church, a school, sports facilities, a compound to house the Black labour force and a location to house married Black employees, a stable for company horses and draught animals, etc. and a hospital (Köhler1983:2). Prior to the erection of housing the early German employees lived in tents (Modderfontein Centenary 1996:7).

In the early days, the workforce was made up of many nationalities. Trained factory personnel were recruited from the various countries in Europe and Dr Frans Hoenig decided that it would be wise to house them in separate villages (Köhler 1983:2). These small settlements were named after their countries of origin: Holland, Italy, Berea (made up of a small contingent of South Africans) and Hamburg (Germany) (Modderfontein Centenary 1996: 2; Cartwright 1964:10). Each village had its own water supply, stables and community centre. High Street, Main Street and Mixed Pickles Avenue (now Antwerp Avenue) were also provided with houses of various sizes to suit the status of the various levels of management (Köhler 1983:2). Of these, 'Italy' and 'Berea' survive. 'Hamburg' became' Antwerp' during the First World War and, in 1919, 'Holland' disappeared when a detonator factory was established on the site (Cartwright 1964:10). A magnificent mansion was built for the factory manager with all the necessary buildings and amenities that go with such an establishment (now Frans Hoenig Haus) (Köhler 1983:2).

By 1919 the factory had grown to such an extent, complete with infrastructure and housing, that Beveridge wrote on 18 Dec. 1919:

"This is a funny place. The workmen live in three villages in the grounds, miles apart, Italy, Holland and Antwerp. There is also a distant village, now dismantled, called Klondyke. The staff houses are lost in the woods in the central district known as Bellone. The compound is close to the main works. It will take me weeks to find my way about. I get lost going from digs to the lab or boarding house. I must try to get hold of a map of the place" (Beveridge 1919-1921: 3).

Although the personnel consisted of different nationalities, it was the German craftsmen who were responsible for much of the original construction on the property. From the neat pointed brickwork and elaborate wooden eaves of the older buildings to the many fir trees, Modderfontein resembles a country town in Germany or Austria (http://edenvale.tripod.com/history.modderfontein). As Cartwright noted:

"The charming Gothic clock tower, the neat pointing of the brickwork, the elaborate wooden scrolls and eaves...(the) houses ought to have had a background of snow and fir trees to

give them the authentic air of a German village. Instead they stood in the bare veld of the Transvaal" (Cartwright 1964:65).

Besides segregating the various nationalities in small settlements named after their countries of origin, Behrens notes a difference in the type of housing provided for British and European residents: "In the villages, back-to back dwellings of four or six per unit and dormitory-like structures were built following an ideal European model of small integrated communities (Power 1993:103). For the English [read British] residents, however, individual houses with street frontages and small enclosed gardens were provided" (Behrens, 1999:19-20).

As Behrens notes (by quoting Beveridge), British residents were not keen on the "back-to-back" dwellings (Behrens 1999: 19):

"The stoep is tiny and the kitchen about two feet square and water is not laid on and there is no sink so water must be carried out too. The public room has one of those big cupboards in it and looks hideous although the room is big. I could hit the German who designed it...there is no privacy about it and no through draft [his spelling] and no garden to speak of" (Beveridge 1919-1921:8).

Allen notes that "many of (the houses) were condemned by the medical officer [and later demolished] because they were built back-to-back and there was no through draught. None of them had baths, or any hot water facilities and although reasonably well built, they were in fact rather primitive" (Behrens 1999:68).

The layout shows a planned community with a mix of housing aesthetically laid-out, with large open areas taken up by trees, lanes, woods and some communal facilities. As Beveridge writes in his letter dated 9 Dec 1919:

"The whole works are lovely, with grass and trees everywhere. The main drain from the chemical works to the no. 1 dam is a pretty stream with deep grass and willows on the banks" (Beveridge 1919-1921: 3-4).

Today this historical village retains a residential function, but is greatly expanded and modernized with only one of the eight original blocks of housing remaining.



Figure 1. View of "Hamburg", with the factory manager's house in the foreground – 1895. (Photo: The Dynamite Co. Museum)



Figure 2. Antwerp Avenue during the 1950s or early 1960s. (Photo: The Dynamite Co. Museum)

6. IDENTIFICATION OF RISK SOURCES

Heritage sites are fixed features in the environment, occurring within specific spatial confines. Any impact upon them is permanent and non-reversible. Those resources that cannot be avoided and that are directly impacted by the development can be excavated/recorded and a management plan can be developed for future action. Those sites that are not impacted on can be written into the management plan, whence they can be avoided or cared for in the future.

The following project actions may impact negatively on heritage sites and other features of cultural importance. The actions are most likely to occur during the construction phase of a project.

Table 1

Construction phase:

Constituction phase:						
Possible Risks	Source of the risk					
Actually identified risks						
- damage to sites	Construction work					
Anticipated risks						
- looting of sites	Curious workers					

Operation phase:

Possible risks	Source of risk
Actually identified risks	
- damage to sites	Not keeping to development plans
Anticipated risks	
- damage to sites	Unscheduled construction/developments
- looting of sites	Curious workers/visitors

7. SURVEY RESULTS

The results of the survey are presented in Appendix 1 of this report. It does not claim to be a complete report, for the following reasons:

- Access could not be obtained to all areas
- The area is very complex and a full survey would last many weeks

In order to understand the complex, it was divided into different categories, based on a heritage approach

- Industrial area: This is the 'factory' area, where production of all products takes place. Some very interesting remains are found here, most of which is still in use.
- Private areas: These are the various houses. All of these are used for habitation, or as offices. As a result they are mostly well maintained
- Infrastructure/open space: The streets, parks, etc. are all well maintained
- Hidden features: These are essentially those sites identified by Hall (1997), which is currently either inaccessible due to them being in restricted areas or because they are covered by grass. As their locations are known, either from Hall's report or from this one, they can be managed

Based on the survey, the following can be said:

- The whole Modderfontein precinct is unique in the sense that it retains much of its original character, within the framework of its original purposes, i.e. the production of dynamite and other chemicals.
- As such it reflects not only technological development over more than a century, but also the people as related social fabric of the country as a whole
- The integrity of most identified features and structures are intact and speaks volumes for the management of the area and its conservation.

8. REFERENCES

The Dynamite Company Museum Archives, Modderfontein

Darling, G. 1988. Modderfontein building: A historic survey. Unpublished manuscript.

Kohler, K. 1987. Some aspects of the history of the Frankenwald area of Modderfontein factory. Unpublished paper.

Robert Beveridge's letters: typed copies of originals held by Beveridge'son.

Unreferenced Museum notes, 1971.

Behrens, J. 1999. *Ethnic identity and process: European Migrant Workers at Modderfontein Dynamite factory*. Unpublished MA thesis. Johannesburg: University of the Witwatersrand.

Cartwright, A.P., 1964. The Dynamite Company. Johannesburg: Hortors Press.

Davie, L. (2005, December) Peaceful park hides explosive past: 1-6 http://www.joburg.org.za. Accessed on July 06, 2006.

Fischer, R.C. 1992. Visual Lexicon of the South African dwelling./Visuele Leksikon van die Suid-Afrikaanse woning. Cape Town: Unibooks.

Hall, S. 1997. A Phase 1 archaeological assessment of Modderfontein. Department of Archaeology. Johannesburg: University of the Witwatersrand.

History of Edenvale (2003-2005): 1-3 http://edenvale.tripod.com Accessed on June 25, 2006.

Radford, D. 1998. The 'anarchy of iron' official attitudes to wood and iron construction in South Africa. S.A. Journal of cultural history 12:1:1-18

Van der Waal, G.M. 1987. From Mining Camp to metropolis: The buildings of Johannesburg 1886-1940. Pretoria: Chris van Rensburg Publications.

9. PROJECT TEAM

J van Schalkwyk: Principal investigator

C Meyer, cultural historian

APPENDIX 1. ILLUSTRATIONS.

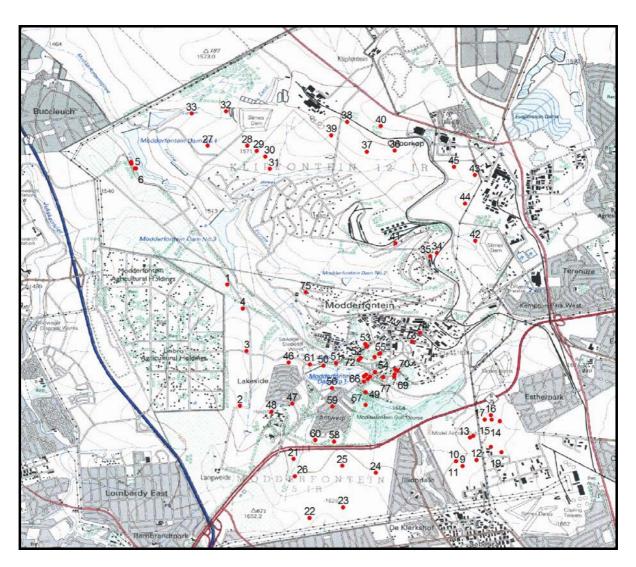


Figure 3. Map showing all the identified sites. (Map, courtesy of the Government Printer)



Figure 4. The main office building (Site no. 70).



Figure 5. Clock-tower building (Site no. 74).



Figure 6. Old chimney built from brick, probably early 20th century (Site no. 73).



Figure 7. Old cooling plant of concrete.



Figure 8. One of a large number of corrugated iron sheds.



Figure 9. A purpose developed building from concrete

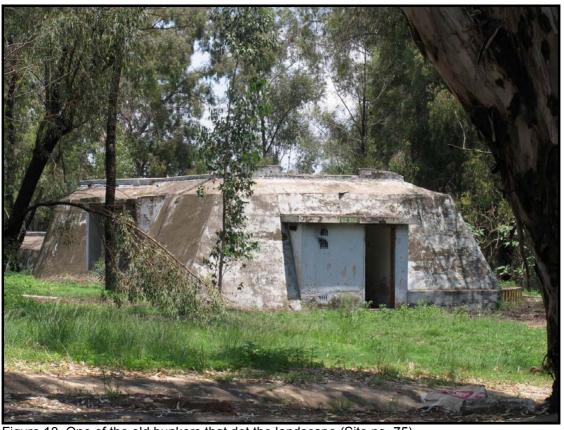


Figure 10. One of the old bunkers that dot the landscape (Site no. 75).



Figure 11. An even older bunker. Notice the trees growing through its walls.

Modderfontein



Figure 12. The mine manager's house, know known as Franz Hoenig Hauss (Site no. 62).



Figure 13. One of the old houses in Antwerp, dating to 1896 (Site no. 63).



Figure 14. A well-maintained house with Victorian and Edwardian elements in its design (Site no. 77).



Figure 15. House dating to the 1940s (Site no 64).



Figure 16. One of a series of semi-detached houses, dating to the 1940s and early 1950s (Site no 76).

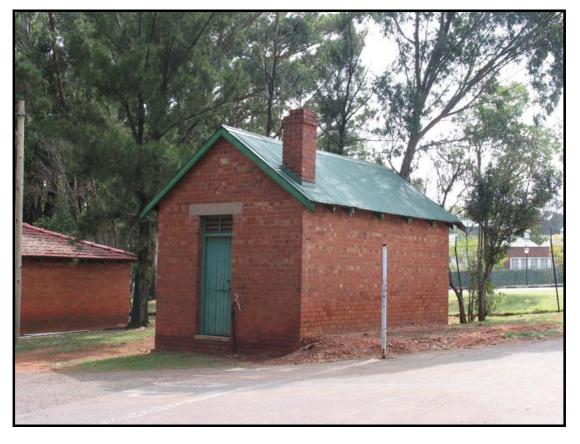


Figure 17. An outbuilding of unknown function.



Figure 18. An old water furrow/storm water channel (Site no 79).



Figure 19. Old bridge built from stone (Site no 61).



Figure 20. Monument honouring local men who died during the two World Wars (Site no. 71).

APPENDIX 2: LIST OF IDENTIFIED SITES

No Heritage Atlas	Hall's code	Period	Latitude	Longitude	Farm name	Description	Significance
1	HOA/01	Historic	26.08361	28.13850	Modderfontein 35IR	Accumulated in old stone quarry. Date to 1920s. Can be directly linked to Brickfield Dump	Low on a local level
2	HOA/02	Historic	26.10311	28.14050	Modderfontein 35IR	Ash dump	Low on a local level
3	HOA/03	Historic	26.09433	28.14158	Modderfontein 35IR	Remains of old farmstead	Low on a local level
4	HOA/04	Historic	26.08744	28.14094	Modderfontein 35IR	Rubble dump	Low on a local level
5	HOA/05	Historic	26.06492	28.12383	Klipfontein 12IR	Foundation of old structure. Possibly remains of Alfred Beit's huting lodge	High on a local level
6	HOA/06	Historic	26.06492	28.12361	Klipfontein 12IR	Might be continuation of previous site	Low on a local level
7	HOA/07	Historic	26.06414	28.12311	Klipfontein 12IR	Dump	Low on a local level
3	HOA/08	Historic	26.06389	28.12306	Klipfontein 12IR	Rubble dump	Low on a local level
9	IOA/01	Historic	26.11283	28.17622	Modderfontein 35IR	Farm labourer homestead	Low on a local level
10	IOA/02	Historic	26.11203	28.17519	Modderfontein 35IR	Sophie Geel's grave	High on a local level
11	IOA/03	Historic	26.11203	28.17519	Modderfontein 35IR	Farm labourer homestead	Low on a local level
12	IOA/04	Historic	26.11183	28.17847	Modderfontein 35IR	Trackway	Low on a local level
13	IOA/05	Iron Age	26.10825	28.17744	Modderfontein 35IR	A few pieces of pottery dating to the Late Iron Age	Low on a local level
14	IOA/06	Historic	26.10561	28.18222		Single roomed labourer dwelling	Low on a local level
15	IOA/07	Historic	26.10533	28.18089		Single roomed labourer dwelling	Low on a local level
16	IOA/08		26.10464	28.18078		Rhino rock: herbivore rubbiing rock	Low on a local level
17	IOA/09	Historic	26.10533	28.17981		Old road	Low on a local level
18	IOA/10	Historic	26.10794	28.17794	Modderfontein 35IR	Old road	Low on a local level
19	IOA/11	Historic	26.11056	28.18247		Ash dump with domestic debris, dating to early 20th century	Low on a local level
20	IOA/12	Historic	26.10972	28.18078		Ash dump with domestic debris, dating to early 20th century	Low on a local level
21	IOA/14	Historic	26.11167	28.14910	Modderfontein 35IR	Rifle range	Low on a local level
22	IOA/15		26.12114	28.15169	Modderfontein 35IR	Cattle kraal	Low on a local level
23	IOA/16		26.11944	28.15708	Modderfontein 35IR	Cattle kraal	Low on a local level
24	IOA/17		26.11389	28.16231	Modderfontein 35IR	Farmstead	Low on a local level
25	IOA/18	Stone Age	26.11278	28.15694	Modderfontein 35IR	Stone Age	Low on a local level
26	IOA/19		26.11444	28.14931	Modderfontein 35IR	Cattle kraal	Low on a local level
27	KOA/01		26.06128	28.13533	Klipfontein 12IR	Cattle kraal	Low on a local level
28	KOA/02		26.06128	28.14169	Klipfontein 12IR	Outcrop	Low on a local level
29	KOA/03		26.06211	28.14319	Klipfontein 12IR	Cattle kraal	Low on a local level
30	KOA/04		26.06303	28.14456	Klipfontein 12IR	Cattle kraal	Low on a local level
31	KOA/05		26.06503	28.14528	Klipfontein 12IR	Outcrop	Low on a local level
32	KOA/06		26.05575	28.13825	Klipfontein 12IR	Outcrop	Low on a local level

33		KOA/07	Ì	26.05608	28.13275	Klipfontein 12IR	Outcrop	Low on a local level
34		KOA/08	Historic	26.07853	28.17214	Klipfontein 12IR	Building foundations	Low on a local level
35		KOA/09	Historic	26.07903	28.17108	Klipfontein 12IR	Dump	Low on a local level
36		KOA/10	Historic	26.06206	28.16536	Klipfontein 12IR	Farmstead	Low on a local level
37		KOA/11	Historic	26.06222	28.16089	Klipfontein 12IR	Farmstead	Low on a local level
38		KOA/12		26.05744	28.15772	Klipfontein 12IR	Outcrop	Low on a local level
39		KOA/13		26.05961	28.15519	Klipfontein 12IR	Outcrop	Low on a local level
40		KOA/14	Historic	26.05811	28.16314	Klipfontein 12IR	Farmstead	Low on a local level
41		KOA/15		26.07694	28.16547	Klipfontein 12IR	Outcrop	Low on a local level
42		KOA/16	Historic	26.07658	28.17828	Klipfontein 12IR	Farmstead	Low on a local level
43		KOA/17	Historic	26.06600	28.17819	Klipfontein 12IR	Farm labourer homestead	Low on a local level
44		KOA/18	Historic	26.07058	28.17667	Klipfontein 12IR	ABW lookout	Low on a local level
45		KOA/19	Historic	26.06469	28.17486	Klipfontein 12IR	Farmstead	Low on a local level
46		LRA/01	Historic	26.09617	28.14831	Modderfontein 35IR	Italy Village	High on a local level
47		LRA/02	Historic	26.10278	28.14889	Modderfontein 35IR	Dump	Low on a local level
48		LRA/04	Historic	26.10408	28.14556	Modderfontein 35IR	Building	Low on a local level
49		NFA/01	Historic	26.10092	28.16067	Modderfontein 35IR	Dump dating to late 19th century. Already excavated (Antwerp excavation)	Low on a local level
50		ORA/01	Historic	26.09667	28.15389	Modderfontein 35IR	The so-called Brickfields dump	Low on a local level
51		ORA/02	Historic	26.09625	28.15592	Modderfontein 35IR	Building foundations - Skittle Ally and pump house. Nothing remains.	Low on a local level
52		ORA/03	Historic	26.09539	28.15986	Modderfontein 35IR	Mound	Low on a local level
53		ORA/04	Historic	26.09319	28.16064	Modderfontein 35IR	Building foundations behind Franz Hoenig House	Low on a local level
54		ORA/05	Historic	26.09478	28.16286	Modderfontein 35IR	Mounds	Low on a local level
55		ORA/06	Historic	26.09472	28.16306	Modderfontein 35IR	Dump	Low on a local level
56		TRA/02	Historic	26.10028	28.15528	Modderfontein 35IR	Dump	Low on a local level
57		TRA/03	Historic	26.10294	28.16067	Modderfontein 35IR	Dump	Low on a local level
58		TRA/04	Historic	26.10886	28.15564	Modderfontein 35IR	Dump	Low on a local level
59		TRA/05	Historic	26.10325	28.15536	Modderfontein 35IR	Old refuse dump. As it is located in the middle of an urban area, it is unlikely to be impacted on	Low on a local level
60		TRA/07	Historic	26.10864	28.15261	Modderfontein 35IR	Dump	Low on a local level
61	2628AA154		Historic	26.09644	28.15175	Modderfontein 35IR	Old bridge, built with dressed stone.	Medium on a local level
62	2628AA155		Historic	26.09528	28.16210	Modderfontein 35IR	House of the former manager of the explosives factory - date to 1896	High on a regional level
63	2628AA164		Historic	26.09842	28.16139	Modderfontein 35IR	House dating to 1896	High on a local level
64	2628AA165		Historic	26.09811	28.16072	Modderfontein 35IR	House dating to 1940s	High on a local level
65	2628AA166		Historic	26.09881	28.16100	Modderfontein 35IR	House dating to 1896	High on a local level
66	2628AA167		Historic	26.09839	28.16039	Modderfontein 35IR	House dating to 1940s	High on a local level
67	2628AA168		Historic	26.09922	28.16044	Modderfontein 35IR	House dating to 1896	High on a local level
68	2628AA169		Historic	26.09769	28.16222	Modderfontein 35IR	House dating to 1896	High on a local level

Modderfontein

69	2628AA170	Historic	26.09847	28.16525	Modderfontein 35IR	Hospital dating to turn of 20th century	High on a regional level
70	2628AA171	Historic	26.09742	28.16581	Modderfontein 35IR	Office of Heartland, mother company of AECI	High on a regional level
71	2628AA178	Historic	26.09734	28.16545	Modderfontein 35IR	Monument commemorating local men who died during WWI and WWII	Medium on a regional level
72	2628AA179	Historic	26.09573	28.15959	Modderfontein 35IR	Old house now serving as museum	Medium on a regional level
73	2628AA180	Historic	26.09280	28.16824	Modderfontein 35IR	Old chimney built with bricks	High on a regional level
74	2628AA181	Historic	26.09131	28.16940	Modderfontein 35IR	Factory/office block with clock tower	High on a regional level
75	2628AA182	Historic	26.08486	28.15107	Modderfontein 35IR	Old bunker	High on a local level
76	2628AA183	Historic	26.09358	28.16094	Modderfontein 35IR	Semi-detached houses	High on a local level
77	2628AA184	Historic	26.09853	28.16350	Modderfontein 35IR	House	High on a local level
78	2628AA186	Historic	26.09476	28.15945	Modderfontein 35IR	Water furrow	Low on a local level