

**A SURVEY OF CULTURAL RESOURCES FOR THE
CDT - IDZ STUDY AREA, CITY DEEP,
JOHANNESBURG**

For:

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SUMMARY

A survey of cultural resources for the CDT - IDZ study area, in the City Deep suburb, Johannesburg

A survey to establish the nature, extent and significance of cultural resources was made on the Rosherville Dam; the Johannesburg Abattoir; the surrounding Mine dumps and Wetlands; and the impact of development on the “Heritage Village” adjacent to the proposed development site.

In this area a number of historical sites were found, dating to 60 years and older. These sites need to be preserved, but if this is not possible, mitigation will have to take place.

The following recommendations are made:

- We recommend that the Rosherville dam wall and the Rosherville corrugated structure be preserved as it formed part of the Rosherville Power Station, built between 1909 - 1911. According to legislation, any structure older than 60 years is protected and can not be demolished unless mitigation takes place. This would imply the full documentation of these structures, after which a permit has to be obtained from the South African Heritage Resources Agency (SAHRA).
- It is also recommended that the houses at the Jupiter railway siding be preserved, as they are older than 60 years. As this is part of the development area, similar mitigation measures as above will have to be instituted if they are going to be demolished.
- The Forbes Metal Founders do not fall in the area of development. It is difficult to determine what impact the new development will have on the foundry, so therefore we recommend that if at any stage this site is threatened, mitigation

must take place.

- The new development should not have a direct impact on the Rosherville Heritage Village, which is situated next to Area J. If there is any impact then it will have a positive effect on the commercial viability of the Heritage Village and associated Center (Personal comments, Mr E. Miller).
- If at any time during the development process any archaeological and/or historical sites or objects are found, specialists should be informed to come and conduct detailed investigations.

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A SURVEY OF CULTURAL RESOURCES FOR THE CDT - IDZ STUDY AREA, JOHANNESBURG

1. AIMS OF THE SURVEY

The National Cultural History Museum was requested by Strategic Environmental Focus to conduct a survey on the Rosherville Dam; the Johannesburg Abattoir; the surrounding Mine dumps and wetlands; and the impact of development on the “Heritage Village” adjacent to the proposed development site. The aim of the survey was to locate, and identify the sites, objects and structures of cultural importance found within the boundaries of the proposed development.

2. TERMS OF REFERENCE

The **Terms of Reference** for the study were to:

- 2.1 Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural resources) located in the area of the proposed development.
- 2.2 Assess the significance of the cultural resources in terms of their historical, social, religious, aesthetic and scientific value.
- 2.3 Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.
- 2.4 Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources.

We were informed by the client about the extent of the area that will be affected by the proposed development. The survey was to be confined to this area.

3. CONDITIONS AND ASSUMPTIONS

The following aspects have a direct bearing on the survey and the resulting report:

- Cultural resources are all nonphysical and physical human-made occurrences, as well as natural occurrences that are associated with human activity. These include

all sites, structures and artifacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development.

- The significance of the sites and artifacts is 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.
- Significance is site-specific and relates to the content and context of the site. 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.
- The latitude and longitude of an archaeological site is to be treated as sensitive information by the developer, and should not be disclosed to members of the public.
- All recommendations are made with full cognisance of the relevant legislation, in this case the South African Heritage Resources Act (Act 25 of 1999).

4. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are mainly dealt within two acts. These are the South African Heritage Resources Act (Act 25 of 1999) and the Environmental Conservation Act (Act 73 of 1989).

4.1 South African Heritage Resources Act

Archaeology, palaeontology and meteorites

Section 35(4) of this act states that no person may, without a permit issued by the responsible heritage resources authority:

- (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 which 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.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency.

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 or 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 is 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 (ie where the graves are located and where they are to be relocated) 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)**.

4.2 Environmental Conservation Act

This act states that a survey and an evaluation of cultural resources should be undertaken in areas where development, which will change the face of the environment, is to be made. The impact of the development on the cultural resources should also be determined and proposals to mitigate this impact is to be formulated.

5. METHODOLOGY

Field survey

The survey was conducted according to generally accepted archaeological practices, and was aimed at locating all possible sites, objects and structures. The survey was done on foot and areas with potential for human use were investigated. Special attention was given to structures as well as natural areas, while stream beds and unnatural topographical occurrences such as trenches, holes and clusters of trees were investigated.

Documentation

All sites, objects and structures 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) and plotted on a map. The information is added to the description in order to facilitate the identification of each locality.

Presentation of the information

In discussing the results of the survey, a chronological rather than a geographical approach is followed in the presentation of an overview of human occupation and land use in certain areas. This helps the reader to better understand and facilitate the potential impact of development.

6. DESCRIPTION OF THE AREA SURVEYED

The site investigated is approximately 9,5km² in size. The investigation was conducted in the total area indicated on the map, with special attention given to areas N, K, and J (found on map given by Strategic Environmental Focus - see Appendix 3)

The topography of the area is basically flat open veld with areas of wetlands. The area has been disturbed extensively and is a major Industrial zone. Mine dumps can also be seen in this area.

The geology of the survey area is varied and include, quartzite, felsite, sandstone, and the gold bearing reef. The soils are very poor and acidic, being either stony or sandy.

The vegetation found is a particularly sour, wiry grass veld, virtually ungrazable in winter. Rocky hills and ridges carry a Bushveld vegetation and in sheltered valleys and sinkholes there are traces of temperate or transitional forest (Acocks 1975: 113 & 114). This area has been greatly disturbed by industrial development and only small portions of the original vegetation remain.

7. DISCUSSION

A fair amount of disturbance has taken place in this area, due to it being an industrial zone. No evidence of Stone or Iron Age tools or structures could be found. This area does on the other hand have a historical importance as the Rosherville Power Station (built in 1909 - 1911) was situated in this area.

7.1 Site N

Site N consisted of the Johannesburg Abattoir. The abattoir was built in the 1970s. It has no historical value and is not older than 60 years.

7.2 Site J

Site J consists of the Rosherville dam and dam wall. The dam wall is made from sandstone and was probably built around the same time as the Rosherville Power Station in 1909 - 1911. The dam wall is therefore considered to be of historical value, as well as being older than 60 years and as result is protected by the law.

Not much is left of the Rosherville Power Station, except the corrugated structure that housed the turbines. This is used today as a storage facility and is very unstable. This corrugated structure is also older than 60 years.

7.3 Site K

Site K did not yield anything of historical or cultural importance as it forms part of the Rosherville dam and wetlands.

7.4 Other Historical Sites within the Development Area

At the Jupiter railway siding a number of empty houses can be seen, these houses could be of historical value.

7.5 Historical Sites Outside the Development Area

In the suburb of Heriotdale, an old metal foundry can be found - Forbes Metal Founders. This metal foundry is still in operation and is of historical importance, and it is older than 60 years.

The suburb of Rosherville has been renovated into a Heritage Park. These houses that have been renovated in Rosherville belonged to the employees of the Rosherville Power Station.

8. CONCLUSIONS AND RECOMMENDATIONS

- We recommend that the Rosherville dam wall and the Rosherville corrugated structure be preserved as it formed part of the Rosherville Power Station, built between 1909 - 1911. According to legislation, any structure older than 60 years is protected and can not be demolished unless mitigation takes place. This would imply the full documentation of these structures, after which a permit has to be obtained from the South African Heritage Resources Agency (SAHRA).
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9. REFERENCES

9.1 Unpublished sources

9.1.1 Data base

Archaeological Data Recording Centre, National Cultural History Museum, Pretoria.

9.1.2 Interviews

Director of Rotek at Rosherville Heritage Village. Mr E. Miller.

9.2 Published sources

9.2.1 Books and journals

Acocks, J.P.H. 1975. **Veld Types of South Africa**. Memoirs of the Botanical Survey of South Africa, No. 40. Pretoria: Botanical Research Institute.

Mountain, E. D. 1968. **Geology of Southern Africa**. Cape Town: Books of Africa (Pty) Limited.

9.2.2 Maps

1: 50 000 Topocadastral maps - 2628AA Johannesburg

10. PROJECT TEAM

Dr J. Van Schalkwyk - Principle Investigator
F. E. Teichert - Field Investigator
A. Pelser - Field Assistant

APPENDIX 1: STANDARDIZED SET OF CONVENTIONS USED TO ASSESS THE IMPACT OF PROJECTS ON CULTURAL RESOURCES

Significance of impact:

- low where the impact will not have an influence on or require to be significantly accommodated in the project design
- medium where the impact could have an influence which will require modification of the project design or alternative mitigation
- high where it would have a "no-go" implication on the project regardless of any mitigation

Certainty of prediction:

- Definite: More than 90% sure of a particular fact. Substantial supportive data to verify assessment
- Probable: Over 70% sure of a particular fact, or of the likelihood of that impact occurring
- Possible: Only over 40% sure of a particular fact, or of the likelihood of an impact occurring
- Unsure: Less than 40% sure of a particular fact, or the likelihood of an impact occurring

Status of the impact:

With mitigation and the resultant recovery of material, a negative impact can be turned positive. Describe whether the impact is positive (a benefit), negative (a cost) or neutral

Recommended management action:

For each impact, the recommended practically attainable mitigation actions which would result in a measurable reduction of the impact, must be identified. This is expressed according to the following:

- 1 = no further investigation/action necessary
- 2 = controlled sampling and/or mapping of the site necessary
- 3 = preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary
- 4 = preserve site at all costs

Legal requirements:

Identify and list the specific legislation and permit requirements which potentially could be infringed upon by the proposed project, if mitigation is necessary

APPENDIX 2: SURVEY RESULTS

[See Appendix 1 for explanation of the conventions used in assessing of the cultural remains]

1. Site number: 2628AA/77

Description: A retaining wall for a dam

Location: The site is located at 26° 15' 04.6" S; 28° 07' 09.1" E

Discussion: Dam wall built as part of the Rosherville Power Station

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Negative

Recommended management action: (3) - preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary.

Legal requirements: SAHRA

2. Site number: 2628AA/78

Description: The Turbine Building

Discussion: The corrugated building that housed the turbines used in the Power Station

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Negative

Recommended management action: (3) - preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary.

Legal requirements: SAHRA

3. Site number: 2628AA/79

Description: The Jupiter railway houses

Discussion: The houses that form part of the Jupiter Railway Siding

Significance of impact: Medium

Certainty of prediction: Definite

Status of impact: Negative

Recommended management action: (3) - preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary.

Legal requirements: SAHRA

4. Site number: 2628AA/80

Description: The Forbes Metal Foundries

Discussion: A metal foundry just outside the development area

Significance of impact: Low

Certainty of prediction: Definite

Status of impact: Negative

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

APPENDIX 3: MAP OF AREA SURVEYED