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**CULTURAL AND ARCHAEOLOGICAL HERITAGE ASSESSMENT SPECIALIST STUDY
FOR THE CONSTRUCTION OF POWER-LINE TO MUKOMAWABANI PRIMARY SCHOOL,
VHEMBE DISTRICT OF LIMPOPO PROVINCE**

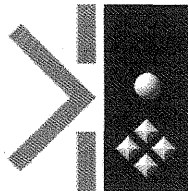
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PREPARED FOR

Eskom Distribution Northern Region, Land Development
Private Bag X3499
Polokwane, 0700
Tel: +27 (0) 15 299 0000

PREPARED BY

Nzumbululo Heritage Solutions
Suite#345, Postnet Library Gardens;
P/Bag X9307, Polokwane; 0700;
Tel: +27 15 297 8066; Fax: +27 15 297 0059
E-mail: hessa5@telkomsa.net



Nzumbululo
heritage solutions south africa

REG. No. 2003/104596/23 VAT No. 4580215095 ITAX No. 9333/585/15/7P

www.hessa.co.za

REPORT DETAILS

PROJECT NAME: PROPOSED CONSTRUCTION OF THE POWER-LINE TO MUKOMA PRIMARY SCHOOL

REPORT TITLE: ARCHAEOLOGICAL AND CULTURAL HERITAGE ASSESSMENT SPECIALIST STUDY

AUTHOR: Dr. McEdward Murimbika

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STUDY LEADER **Dr. McEdward Murimbika**

Qualifications: (PhD. [Archaeology] 2006, Univ. of Witwatersrand; M.Phil. [Archaeology] 1999, Univ. Of Bergen, Norway; Graduate International Certificate in African Archaeology, 1998, Univ. of Brussels, Belgium; BA Hons. & BA Gen. [Archaeology] 1995 & 1994, UZ).

Contacts: Mobile Phone: 083 6136530

FIELD STUDY TEAM **Principal Investigator:** McEdward Murimbika

Assistant Archaeologist: Mr. Mabuda M. Moses (BA Hons, 2003, Univ. of Venda)

PROFESSIONAL SERVICE PROVIDER (PSP) Nzumbululo Heritage Solutions (South Africa) cc.

MANAGEMENT SUMMARY

BACKGROUND

Nzumbululo Heritage Solutions (South Africa) (HeSSA) has been appointed by Eskom Northern Region to conduct an Archaeological and Cultural Heritage Impact Assessment study for the proposed power-line to Mukomawabani Primary School in Mutale Local Municipality, Vhembe District of Limpopo Province. This Heritage Impact Assessment (HIA) study focus on potential impacts on archaeological, cultural, and historical heritage resources associated with the proposed power-line.

SUMMARY RESULTS

The field survey was conducted on the 29th of October 2008. The survey covered the proposed power line servitude route. By nature, the proposed power line development's potential impact footprint is limited to individual power line pole positions. No archaeological site was identified on the power line route. There were no other physical cultural properties of any significance threshold that were identified along the power line route.

SUMMARY RECOMMENDATIONS

There are no archaeological or cultural heritage resources barriers to the proposed construction of a power-line. We recommend that a heritage-monitoring program be designed to deal with potential chance finds should archaeological or historical finds be found accidentally during digging of a pole foundations. We concluded that the proposed development may proceed subject to the following recommendations:

- There being no significant archaeological material of significance on power line route, the development may proceed as planned.
- A monitoring programme is essential during the excavation of pole foundation as we can not rule out the possibilities of encountering subsurface chance archaeological remains. Should archaeological materials be identified in during power line development, particular in association with pole footprints, heritage authorities should be informed.
- Communities living close to the proposed power line route should be consulted and kept informed about the development. The local communities may come forward with relevant information on heritage resources such as previously unidentified graves, as well as sites that do not show any structures, but have emotional significance, such as battlefields, etc.

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ABBREVIATIONS

CHA	Cultural Heritage Assessment
EIA	Environmental Impact Assessment
HeSSA	Nzumbululo Heritage Solutions (South Africa)
SAHRA	South African Heritage Resources Agency

DEFINITIONS

Archaeological material remains resulting from human activities, which are in a state of disuse and are in, or on, land and which are older than 100 years, including artefacts, human and hominid remains, and artificial features and structures.

Chance Finds archaeological artefacts, features, structures or historical cultural remains such as human burials that are found accidentally in context previously not identified during cultural heritage scoping, screening and assessment studies. Such finds are usually found during earth moving activities such as water pipeline trench excavations.

Cultural Heritage Resources same as Heritage Resources as defined and used in the South African Heritage Resources Act (Act No. 25 of 1999). Refer to physical cultural properties such as archaeological and palaeontological sites; historic and prehistoric places, buildings, structures and material remains; cultural sites such as places of ritual or religious importance and their associated materials; burial sites or *graves* and their associated materials; geological or natural features of cultural importance or scientific significance. Cultural Heritage Resources also include intangible resources such as religion practices, ritual ceremonies, oral histories, memories and indigenous knowledge.

Cultural Significance the complexities of what makes a place, materials or intangible resources of value to society or part of, customarily assessed in terms of aesthetic, historical, scientific/research and social values.

Excavation principal method of extracting data in archaeology, involving systematic recovery of archaeological remains and their context by removing soil and any other material covering them.

Grave a place of interment (variably referred to as burial), including the contents, headstone or other marker of such a place, and any other structure on or associated with such place. A grave may occur in isolation or in association with others where upon it is referred to as being situated in a cemetery.

Historic material remains resulting from human activities, which are younger than 100 years, but no longer in use, including artefacts, human remains and artificial features and structures.

In Situ material, material culture and surrounding deposits in their original location and context, for example an archaeological site that has not been disturbed by farming.

Material culture buildings, structure, features, tools and other artefacts that constitute the remains from past societies.

Site a distinct spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity.

**ARCHAEOLOGICAL AND CULTURAL HERITAGE ASSESSMENT STUDY FOR
THE PROPOSED 2.547KM POWER-LINE TO MUKOMAWABANI PRIMARY
SCHOOL IN MUTALE LOCAL MUNICIPALITY, VHEMBE DISTRICT**

1 INTRODUCTION

Eskom Distribution, (Northern Region) proposes to develop a power-line to supply the Electricity to Mukomawabani Primary School, Mutale Municipality. In order to obtain heritage clearance from the South African Heritage Resources Agency for the proposed power-line, Nzumbululo Heritage Solutions was appointed to undertake the Cultural Heritage Assessment specialist study for the proposed development. This Heritage Impact Assessment (HIA) study was conducted to fulfil the requirements of the National Heritage Resources Act, Act 25 of 1999 Section 36 and 38. The HIA study focus on identifying and assessing archaeological, cultural, and historical heritage resources associated with the proposed power-line construction project’s receiving environment. Aims and terms of reference of the HIA study are summarised in Table 1 below.

Table 1: Terms of Reference for the HIA Study associated with the construction of 2.547km power-line to Mukomawabani Primary School in, Limpopo Province.

PURPOSE	ACTIVITIES
<ul style="list-style-type: none"> <input type="checkbox"/> Fulfil the statutory requirements of the National Heritage Resources Act, Act 25 of 1999, Section 38. <input type="checkbox"/> To identify and describe (in terms of their conservation and / or preservation importance) sites of cultural and archaeological importance that may be affected by the proposed power-line and substation construction. This study should include the identification of gravesites. <input type="checkbox"/> Identify and describe impacts to archaeological and cultural resources. <input type="checkbox"/> Make recommendations on mitigation measures. <input type="checkbox"/> Identify and describe management measures. 	<ul style="list-style-type: none"> <input type="checkbox"/> Identify, describe and map sites of archaeological, historical or cultural interest affected by the proposed development. <input type="checkbox"/> Identify, where possible, the gravesites affected by the development. <input type="checkbox"/> Liaise with the local communities (if applicable) with regards to the impact of the development on the heritage resources. <input type="checkbox"/> Describe the importance or significance of these sites and whether these sites need to be conserved, protected or relocated. <input type="checkbox"/> Describe the procedures for mitigation or relocation of sites and provide an indication of time required for these management measures to be implemented. <input type="checkbox"/> Document findings and recommendations.

This HIA study primarily seeks to:

- Identifying heritage resources affected by the proposed power-line and the associated infrastructural development.
- Assess the significance of the resources.
- Evaluate the impact thereon with respect to the socio-economic opportunities and benefits that would be derived from the proposed power-line.

- Consult with the affected and other interested parties in regard to the impact on the heritage resources in the project's receiving environment.
- Make recommendations on mitigation measures with the view to reduce specific adverse impacts and enhance specific positive impacts on the heritage resources.
- Identify and discuss with local communities (where applicable) on potential impacts of the proposed power line construction on graves and burials sites within the affected area and make the necessary recommendations on how to handle the matter.
- Take responsibility for communicating with the Limpopo Heritage, SAHRA and other related authorities in order to obtain the heritage relevant permits and authorization.
-

In terms of Section 35 (4) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999)

...no person may, without a permit issued by the relevant heritage resources authority, destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or material or any meteorite; or 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.

Clearly, archaeological and palaeontological sites, materials, and meteorites are seen in the NHRA as "the source of our understanding of the evolution of the earth, life on earth and the history of people." In this context, the law emphasize that the management of heritage resources is integrated with environmental resources and this means that heritage resources should be assessed and, if necessary, rescued before development is allowed to take place.

In areas where there has not yet been systematic survey to identify conservation-worthy places, a permit is required to alter or demolish any historic structure older than 60 years or military installation of over 75 years old. This will apply until a survey is done and identified heritage resources are formally protected.

2 BRIEF BACKGROUND

The proposed power line will be developed in Mukomawabani Village in Mutale Local Municipality, Vhembe District of Limpopo Province. The proposed line will be constructed along the tarred road from Mutele to Tshikondeni Mine.

2.1 ROUTE DESCRIPTION

The proposed line will start at the southern side of the tarred road and run along Mukomawabani Village until it connects the School. GPS S22° 48'39.8" E30°89'94.7"

3 METHODS

The study consisted of standard field survey covering the proposed power-line route. In practice, most archaeological and historical sites are found through systematic survey of the target landscapes. The survey therefore, sought to identify cultural heritage sites including graves, burial grounds and contemporary religious or sacred ceremonial sites associated with power line route.

Hessa specialist conducted an impact assessment by transecting the affected landscape on foot and slow moving car looking for indicators of archaeological and any other cultural materials in the affected areas. In part the field officer also inspected soil profiles for potential archaeological materials that may still be trapped *in situ* in an area already disturbed by previous earthmoving activities such as agricultural practices.

Identification of archaeological or historical sites during surveying depends on visibility and accessibility. The proposed power-line route was accessible.

4. RESULTS

LOCATION DETAILS

Province: Limpopo

Magisterial District: Mutale

Name of Properties affected: State Land

Proposed development: Construction of 2.547km power-line at Mukomawabani.

The location details and the field survey findings are presented in Table 2 below.

Table 2: Results of CHA study for power-line route.



Location and Description	Cultural Heritage Site Type Found	Cultural Heritage Significance	Recommendations
<p>This proposed power-line will start at the southern side of the tar road to Tshikondeni Mine next to Sanari foot and mouth control gate GPS S22°47'82.1" E30°88'05.2".</p>	<p>No Cultural Heritage sites were identified in the affected area</p>  <p>Plate 2: View of the proposed Power-line starting point.</p>	<p>None</p>	<p>Place site under heritage monitoring program covering the period of use.</p>

Table 3

Location and Description	Cultural Heritage Site Type Found	Cultural Heritage Significance	Recommendations
<p>The proposed power-line will end at Mukomawabani Primary School.</p>	 <p>Plate 3: View of Mukomawabani Primary School.</p>		<p>Place site under heritage monitoring program covering the period of use.</p>

Archaeological and Cultural Sites

No archaeological site was identified along the power line route. The proposed power-line at some sections runs through already disturbed areas and through agricultural fields. The nature and extent of the ground surface disturbance in some sections made it unlikely for archaeological site to have survived *in situ*. Furthermore, the grass cover was low and it allows us to have effective ground surface inspection.

Historic Monuments

Historical and Recent sites - these sites are associated with white settlers, colonial wars, industrialization, African population settlements, contemporary ritual sites and settler farming communities are the most common and visible. The more common functions of places of cultural historical significance include:

- Domestic
- Recreation & culture
- Commerce & trade
- Agriculture & subsistence
- Social
- Health care
- Religion
- Designed landscape
- Funeral (cemeteries, graves and burial grounds)
- Civil and Structural Engineering
- Education
- Defence /Military

There is no listed monument in the area affected by the proposed power-line route. No historical sites of significance were identified on route of power line. However, it should be noted that the general area has a long history of human occupation, making the entire landscape a cultural landscape.

Burial grounds and graves

In terms of the Section 36 (3) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) 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 equipment, or any equipment, which assists in the detection or recovery of metals.

Therefore, in addition to the formal protection of culturally significance graves, all graves which are older than 60 years and which are not already located in a cemetery (such as

ancestral graves in rural areas), are protected. Communities, which have an interest in the graves, must be consulted before any disturbance can take place. The graves of victims of conflict and those associated with the liberation struggle will have to be included, cared for, protected and memorials erected in their honour where practical. Regarding graves and burial grounds, the NHRA distinguishes between the following:

- Ancestral graves
- Royal graves and graves of traditional leaders
- Graves of victims of conflict
- Graves of individuals designated by the Minister by notice in the Gazette
- Historical graves and cemeteries
- Other human remains, which are not covered in terms of the Human Tissue Act, 1983 (Act No.65 of 1983).

Significance valuation Burial Ground, Historic Cemeteries and Graves

The significance of burial grounds and gravesites is closely tied to their age and historical, cultural and social context. Nonetheless, every burial should be considered as of high significance. Should any grave previously unknown be identified during construction, every effort should be made not disturb them. Pole position should be shifted to ensure the grave or burial ground is not disturbed.

Grave yards

No grave sites were identified along the route of the power line.

Previously unidentified burial sites/graves –

Although the possibilities of this occurring are very limited along the power line route, during the proposed development, should burial sites outside the NHRA be accidentally found, they must be reported to the nearest police station to ascertain whether or not a crime has been committed. If there is no evidence for a crime having been committed, and if the person cannot be identified so that their relatives can be contacted, the remains may be kept in an institution where certain conditions are fulfilled. These conditions are laid down in the Human Tissue Act (Act No. 65 of 1983). In contexts where the local traditional authorities give their consent to the unknown remains to be re-buried in their area, such re-interment may be conducted under the same regulations as would apply for known human remains.

5. STATEMENT OF OVERALL IMPACTS

From a cultural heritage point of view, any development that alters the ground surface status quo will potentially destroy any archaeological resources in its direct path, and the impact will be permanent in nature, extent and duration. Archaeological resources are fixed in space. Any activities that threatens to alter the status quo is, therefore an immediate and direct threat to the heritage resources (Bickford and Sullivan, 1977).

6. OVERALL RECOMMENDATIONS

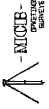
- No further predevelopment study or mitigation is necessary for the archaeological and cultural heritage resources with regards to the proposed amendment of a power-line development project. However, there is always a probability of discovering archaeological sites during sub-surface earth moving activities such as digging the pole foundations or any other trenches. The preferred power line route site is acceptable. Nonetheless, it would not make a difference for the affected cultural landscape should the alternative site be selected for the final development.
- The foot print impact of each pole should be kept to minimal to limit the possibility of encountering chance finds.
- This study recommends that a heritage monitoring plan (as part of the EMP) be put in place during construction period to ensure that no chance finds are encountered.
- Furthermore, the construction team should be informed about the value of the cultural heritage resources in general so as to ensure that they do not destroy the chance archaeological sites they may encounter during working on the power-line route.

7. CONCLUDING REMARKS

From a heritage perspective, in the absence of any known heritage resources and taking into consideration the socio-economic and other values of the proposed distribution power line development, there are no barriers to the proposed development. The cultural landscape affected by the power line does not have significance threshold to call for total protection of the landscape. Nonetheless, detailed monitoring procedures should be scheduled into the project EMP in order to adequately respond to chance finds that may be found accidentally during the power-line development. The proposed project may proceed as planned subject to a heritage monitoring programme. With the constraints herein discussed and appropriate monitoring measures adopted, there are no objections to the proposed development project and we recommend to the heritage authorities to approve the project accordingly.

8. REFERENCES

- Bickford, A and Sullivan, S. 1977. "Assessing the research significance of historic sites" in S Sullivan and s. Bowdler (eds), *Site Surveys and Significance assessment in Australian Archaeology*. Canberra: ANU.
- BURKE, H. And SMITH, C. 2004. *The archaeologist's field handbook*. Allen and Unwin. Australia.
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- National Heritage Resources Act (Act No 25 of 1999)



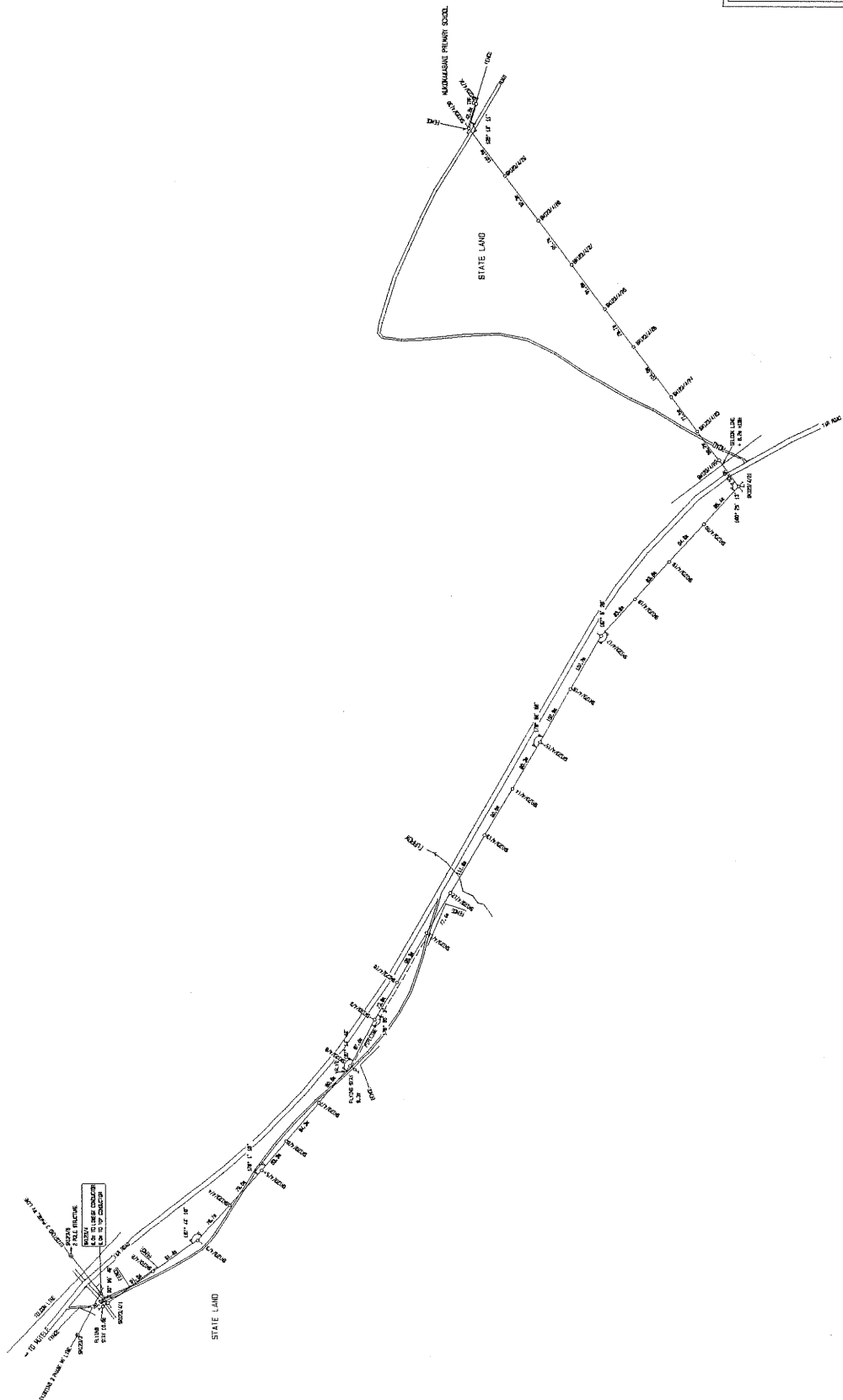
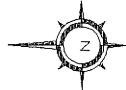
NUCCB
NORTHWEST
UTILITY CONSTRUCTION
CORPORATION

P.O. BOX 4444
LOS ANGELES, CALIF. 90008

TEL: (818) 516 1148
FAX: (818) 516 3745

OWNER:	STATE LAND
PROPERTY:	STATE LAND
FEEDER:	WASLEY
PROJECT NO:	56303106-7
COMPLATION:	
LENGTH OF LINE:	2.547 MI.
SCALE:	1:2500
DESIGNER:	M. C. BETHINA
INCHARGE ENGINEER:	S. BETHA
DATE:	08/07/2008

- * PERCENTAGE BURDGLADING NEEDED - 10%
- * USE THE BURDGLADING REQUIRED - NO
- * USE THE POLES AND TOWER
- * INSTALL TRANSFORMER AT POLE 563223/4/31



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11008.067	2487771.683	369.446	2008/09/07	22 29 14.5011	30 53 34.8992
10945.160	2487829.383	371.669	2008/09/07	22 29 16.3784	30 53 37.0985
10902.108	2487796.880	368.839	2008/09/07	22 29 15.3227	30 53 38.6054
10854.063	2487760.610	366.698	2008/09/07	22 29 14.1447	30 53 40.2871
10797.037	2487717.496	365.231	2008/09/07	22 29 12.7444	30 53 42.2831
10714.040	2487654.859	361.012	2008/09/07	22 29 10.7100	30 53 45.1881
10651.180	2487607.413	353.769	2008/09/07	22 29 09.1689	30 53 47.3883
10577.879	2487552.097	347.783	2008/09/07	22 29 07.3723	30 53 49.9540
10504.712	2487496.821	346.982	2008/09/07	22 29 05.5769	30 53 52.5149
10431.002	2487441.184	350.054	2008/09/07	22 29 03.7698	30 53 55.0948
10351.022	2487380.794	353.071	2008/09/07	22 29 01.8083	30 53 57.8941
10310.664	2487393.002	355.496	2008/09/07	22 29 02.2061	30 53 59.3057