CULTURAL HERITAGE IMPACT ASSESSMENT OF THE PROPOSED UPGRADE OF THE N2 ISIPINGO INTERCHANGE, ETHEKWENI MUNICIPALITY, KWAZULU-NATAL.



ACTIVE HERITAGE cc.

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Frans received his MA (Archaeology) from the University of Stellenbosch and is presently a PhD candidate on social anthropology at Rhodes University. His PhD research topic deals with indigenous San perceptions and interactions with the rock art heritage of the Drakensberg.

Frans was employed as a junior research associate at the then University of Transkei, Botany Department in 1988-1990. Although attached to a Botany Department he conducted a palaeoecological study on the Iron Age of northern Transkei - this study formed the basis for his MA thesis in Archaeology. Frans left the University of Transkei to accept a junior lecturing position at the University of Stellenbosch in 1990. He taught mostly undergraduate courses on World Archaeology and research methodology during this period.

From 1991 – 2001 Frans was appointed as the head of the department of Historical Anthropology at the Natal Museum, Pietermaritzburg. His tasks included academic research and publication, display conceptualization, and curating the African ethnology collections of the Museum. He developed various displays at the Natal Museum on topics ranging from Zulu material culture, traditional healing, and indigenous classificatory systems. During this period Frans also developed a close association with the Departments of Fine Art, Psychology, and Cultural and Media Studies at the then University of Natal. He assisted many post-graduate students with projects relating to the cultural heritage of South Africa. He also taught post-graduate courses on

qualitative research methodology to honours students at the Psychology Department, University of Natal. During this period he served on the editorial boards of the *South African Journal of Field Archaeology* and *Natalia*.

Frans left the Natal Museum in 2001 when approached by a Swiss funding agency to assist an international NGO (Working Group for Indigenous Minorities) with the conceptualization of a San or Bushman museum near Cape Town. During this period he consulted extensively with various San groupings in South Africa, Namibia and Botswana. He also made major research and conceptual contributions to the Kamberg and Didima Rock Art Centres in the Ukhahlamba Drakensberg World Heritage Site.

Between 2003 and 2007 Frans was employed as the Cultural Resource Specialist for the Maloti Drakensberg Transfrontier Project – a bilateral conservation project funded through the World Bank. This project involved the facilitation with various stakeholders in order to produce a cultural heritage conservation and development strategy for the adjacent parts of Lesotho and South Africa. Frans was the facilitator for numerous heritage surveys and assessments during this project. This vast area included more than 2000 heritage sites. Many of these sites had to be assessed and heritage management plans designed for them. He had a major input in the drafting of the new Cultural Resource Management Plan for the Ukahlamba Drakensberg World Heritage site in 2007/2008. A highpoint of his career was the inclusion of Drakensberg San indigenous knowledge systems, with San collaboration, into the management plans of various rock art sites in this world heritage site. He also liaised with the tourism specialist with the drafting of a tourism business plan for the area.

During April 2008 Frans accepted employment at the environmental agency called Strategic Environmental Focus (SEF). His main task was to set-up and run the cultural heritage unit of this national company. During this period he also became an accredited heritage impact assessor and he is rated by both Amafa and the South African Heritage Resources Agency (SAHRA). He completed almost 50 heritage impact assessment reports nation-wide during an 18th month period.

Frans left SEF and started his own heritage consultancy called "Active Heritage cc" in July 2009. Although mostly active along the eastern seaboard his clients also include international companies such as Royal Dutch Shell through Golder Associates, and UNESCO. He has now completed almost 600 heritage conservation and management reports for various clients since the inception of "Active Heritage cc". Amongst these was a heritage study of the controversial fracking gas exploration of the Karoo Basin and various proposed mining developments in South Africa and proposed developments adjacent to various World Heritage sites. Apart from heritage impact assessments (HIA's) Frans also assist the National Heritage Council (NHC) through Haley Sharpe Southern Africa', with heritage site data capturing and analysis for the proposed National Liberation Route World Heritage Site and the national intangible heritage audit. In addition, he is has done background research and conceptualization of the proposed Dinosaur Interpretative Centre at Golden Gate National Park and the proposed Khoi and

San Interpretive Centre at Camdeboo, Eastern Cape Province. During 2009 he also produced the first draft dossier for the nomination of the Sehlabathebe National Park, Lesotho as a UNESCO inscribed world heritage site.

Frans was appointed as temporary lecturer in the department of Heritage and Tourism, UKZN in 2011. He is also a research affiliate at the School of Cultural and Media Studies in the same institution.

Frans's research interests include African Iron Age, paleoecology, rock art research, San ethnography, traditional healers in South Africa, and heritage conservation. Frans has produced more than fourty publications on these topics in both popular and academic publications. He is frequently approached by local and international video and film productions in order to assist with research and conceptualization for programmes on African heritage and culture. He has also acted as presenter and specialist for local and international film productions on the rock art of southern Africa. Frans has a wide experience in the fields of museum and interpretive centre display and made a significant contribution to the conceptual planning of displays at the Natal Museum, Golden Horse Casino, Didima Rock Art Centre and !Khwa tu San Heritage Centre. Frans is also the co-founder and active member of "African Antiqua" a small tour company who conducts archaeological and cultural tours world-wide. He is a Thetha accredited cultural tour guide and he has conducted more than 50 tours to heritage sites since 1992.

Declaration of Consultants independence

Frans Prins is an independent consultant to CCA Environmental and has no business, financial, personal or other interest in the activity, application or appeal in respect of which he was appointed other than fair renumeration for work performed in connection with the activity, application or appeal. There are no circumstances whatsoever that compromise the objectivity of this specialist performing such work.

Frans Prins

EXECUTIVE SUMMARY

A heritage survey of the proposed upgrade of the existing N2 Isipingo Interchange, eThekweni Municipality, KwaZulu-Natal identified no heritage sites or features on the footprint. The area is also not part of any known cultural landscape. There is no archaeological reason why the proposed development may not proceed as planned. Attention is drawn to the National Heritage Resources Act, 1999 (Act No. 25 of 1999) which, requires that operations that expose archaeological or historical remains should cease immediately, pending evaluation by the provincial heritage resources authority.

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LIST OF ABBREVIATIONS AND ACRONYMS

ESA	Early Stone Age		
HISTORIC PERIOD	Since the arrival of the white settlers - c. AD 1820 in this part of the country		
IRON AGE	Early Iron Age AD 200 - AD 1000 Late Iron Age AD 1000 - AD 1830		
EIA	Early Iron Age		
LIA	Late Iron Age		
LSA	Late Stone Age		
MSA	Middle Stone Age		
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998) and associated regulations (2010).		
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999) and associated regulations (2000)		
SAHRA	South African Heritage Resources Agency		
STONE AGE	Early Stone Age 2 000 000 - 250 000 BP Middle Stone Age 250 000 - 25 000 BP Late Stone Age 30 000 - until c. AD 200		

1 INTRODUCTION

1.1 Background and Brief

The South African National Roads Agency Limited (SANRAL) proposes to upgrade the existing N2 Isipingo Interchange, eThekweni Municipality, KwaZulu-Natal. CCA Environmental has been appointed by SANRAL as the independent environmental consultants to assess the environmental impacts and requirements in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA). Active Heritage cc was subsequently appointed by CCA Environmental to a) complete the heritage impact assessment (HIA) as well as the b) heritage application for the proposed project. A brief synopsis of the background to this Basic Assessment is provided in Table 1.

Table 1. Background information

Type of development:	 Replacement of the existing Prospecton Road bridge with a wider bridge, together with retaining walls where required (Fig 3)
	 Widening of the four interchange ramps, with retaining walls where required (Figs 2 & 3)
	 Lengthening of the existing Isipingo canal culverts (Fig 3)
Rezoning or subdivision:	na
Terms of	To carry out a Heritage Impact Assessment (HIA) of the existing N2 Isipingo
reference	Interchange, eThekweni Municipality, KwaZulu-Natal
Legislative	The Heritage Impact Assessment was carried out in terms of the National
requirements:	Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and following
	the requirements of the National Heritage Resources Act, 1999 (Act No. 25 of 1999)
	and the KwaZulu-Natal Heritage Act, 1997 (Act No. 4 of 2008)

1.2. The Study Area

The N2 Isipingo Interchange is located approximately 20km to the south of Durban and 13km to the north of Amanzimtoti (Fig 1). This section of the N2 runs through a heavily built-up industrial area. The GPS coordinates for the centre of the footprint are: S 29° 58' 45.23" E 30° 56' 10.16" (Fig 2).

1.3. Cultural Heritage legislation

According to Section 3 (2) of the NHRA, the heritage resources of South Africa include:

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

In terms of section 3 (3) of the NHRA, a place or object is to be considered part of the

national estate if it has cultural significance or other special value because of:

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

The NHRA regulations of 2000 refer for the most part to the processes allowing for permits to be issued for the alteration, destruction or modification of heritage sites and features. These include the following:

- Protected areas
- Burial grounds and graves
- Wrecks
- Exportation of heritage objects
- Reproduction of national heritage sites
- Archaeological and palaeontological sites
- National heritage sites, provincial heritage sites, provisionally protected place, structures older than 60 years

2 BACKGROUND TO ARCHAEOLOGICAL HISTORY OF THE AREA

The greater Durban area, including the area between Amanzimtoti and southern Durban, has been relatively well surveyed for archaeological heritage sites by the KwaZulu-Natal Museum and subsequently by private heritage consultants in the last few years. Prior to 1950, the archaeological site distribution of the area was poorly known.

The available evidence, as captured in the Amafa and KwaZulu-Natal Museum heritage site inventories, indicates that the area contains a wide spectrum of archaeological sites covering different time-periods and cultural traditions. These range from Early Stone Age, Middle Stone Age, and Later Stone Age to Early Iron Age, Middle Iron Age, and Later Iron Age sites. Two notable Middle Stone Age sites, i.e. Umlatuzana near Marianhill and Segubudu near Stanger have been excavated in the last two decades and yielded impressive archaeological stratigraphies relating to the period associated with the origins of anatomically modern people. The Umhlatuzana shelter is situated approximately 25 km to the north of the study area. Apart from an impressive stone tool assemblage covering both Later and Middle Stone Age periods it has also yielded faunal remains of large mammals that became extinct during the early Holocene such as the giant buffalo (Pelarovis sp). Also notable is the Shongweni Later Stone Age shelter which was excavated in the 1970's by Dr Oliver Davies. Shongweni is situated approximately 12 km to the north of the study area in the Umlazi River Valley. This shelter yielded some of the earliest remains of domesticated cereals in South Africa. The same site also yielded some of the only San rock art in the greater Durban area (Mazel 1989; Mitchell 2002).

Around 1 700 years ago an initial wave of Early Iron Age People settled along the inland foot of the sand dunes on sandy but humus rich soils which would have ensured good crops for the first year or two after they had been cleared. These early agro-pastoralists produced a characteristic pottery style known as Matola. The Matola people also exploited the wild plant and animal resources of the forest and adjacent sea-shore. The communities seems to been small groups of perhaps a few dozen slash-and burn cultivators, moving into a landscape sparsely inhabited by Later Stone Age San huntergatherers.

By 1500 years ago another wave of Iron Age migrants entered the area. Their distinct ceramic pottery is classified to styles known as "Msuluzi" (AD 500-700), Ndondondwane

(AD 700-800) and Ntshekane (AD 800-900). The majority of these sites occur inland along the major river valleys of KwaZulu-Natal below the 1000m contour (Maggs 1989:31; Huffman 2007:325-462). Various sites of this period have been recorded along the Umgeni River to the north of the study area, especially in the area close to Inanda Dam.

Some of the shell middens recorded along the coastline of KwaZulu-Natal belongs to the very first Nguni-speaking agropastoralists who settled in the province. These sites have been dated to approximately 1200 years ago. In addition, sites belonging to the immediate ancestors of the present Zulu-speaking communities in the area have been located in various locations in the greater Durban area. A large percentage of more recently recorded sites occur along the dune cordon and slightly inland in the form of shell middens which were mostly created by Iron Age shellfish gatherers although some of the stratigraphic layers may extend back to Later Stone Age periods (Anderson pers.com). Shell middens with both later Stone Age and Iron Age cultural material occur near the mouth of the Umlazi River approximately 10km from the study area.

.Colonial Period

The Portuguese seafarer Vasco da Gama arrived at the bay of the Durban of today on Christmas Eve in the year 1497, and called it "Terra do Natal", Christmas Country. Because the Portuguese had already established a good port at Maputo, they were not interested in settling in a bay surrounded by mangrove swamps and dense coastal forests. Only sporadically some pirates and ivory or slave dealers laid anchor, and it was much later, in the year 1824, that a proper settlement started, initially named "Port Natal". It was founded by merchants from the Cape Colony under the leadership of Henry Francis Fynn, who had reached a contractual agreement with the mighty Zulu King Shaka authorising them to establish a trading station. In 1835 the town was named Durban after the Cape Governor of the time, Sir Benjamin D'Urban.

In the beginning the settlement developed very slowly. There was no support or protection by the British government. The life in the little harbour town was characterised by uncertainty. Time and again there were assaults and skirmishes by the Zulus, who obviously - saw Natal as their territory and only tolerated the white settlers, because the town was of use to them as a trading station. In 1837 the Voortrekkers arrived in Natal. A delegation led by Piet Retief negotiated a contract with Zulu King Dingane granting them the land between Durban and the Tugela River to found a Boer Republic in Natal.

Then, shortly afterwards, Dingane had the entire delegation killed. After several more bloody assaults and attacks, the Voortrekkers defeated the Zulus in the dramatic Battle at the Bloodriver. Subsequently the settlers founded their Republic "Natalia" and laid claim on Durban, which, however, met with strong resistance from the British. They sent troops to Durban, who were defeated in the Battle of Congella in 1842. Noteworthy, during this engagement was the epic ride of Dick King on horseback to Grahamstown in order to request British reinforcements. As a result the British managed to secure their dominance in Natal. The Voortrekkers resorted to trekking further north and found a new home in the Orange Free State and the Transvaal. In 1844, Natal - with Durban - was incorporated into the British Cape Colony. Durban was set to become one of the most important seaports of the British Empire. Particularly significant was the settling of Indian indent labourers in the area in the 1880's and the subsequent boom of the sugarcane industry in Natal towards the end of the 19th century. Durban's seaport became the largest sugar terminal in the world.

Various colonial era and historical period sites occur in the greater Durban and Amanzimtoti areas. These date from about 1840 and are usually associated with the European as well as Indian settlers in the area. These are older than 60 years and are therefore also protected by heritage legislation (Derwent 2006).

3 STUDY APPROACH

3.1 Methodology

A desktop study was conducted of the heritage databases housed in the KwaZulu-Natal Museum. The SAHRIS website was consulted to obtain information from previous heritage and archaeological surveys in the region. In addition, the available archaeological and historical literature covering the project area was also consulted.

Prior to the ground survey aerial photographs of the study area were studied to indicate any potential heritage hot spots. A ground survey, following standard and accepted archaeological procedures, was conducted during the site visit on 28 September 2015. The footprint was surveyed by foot.

3.2 Restrictions encountered during the survey

3.2.1 Visibility

Visibility was good.

3.2.2 Disturbance

No disturbance of any heritage features was noted.

3.3 Details of equipment used in the survey

GPS: Garmin Etrek

Digital cameras: Canon Powershot A460

All readings were taken using the GPS. Accuracy was to a level of 5 m.

4 DESCRIPTION OF SITES AND MATERIAL OBSERVED

4.1 Locational data

Province: KwaZulu-Natal

City: Durban

Municipality: eThekweni Municipality

5 HERITAGE SITES AND THEIR SIGNIFICANCE (HERITAGE VALUE)

The desktop survey indicated the presence of a historical grave and a Later Iron Age Site in the greater area. The historical grave site belongs to Dick King and is a declared provincial heritage site. Both sites are recoded on the provincial heritage data bases as housed at the KwaZulu-Natal Museum and at Amafa. However, both sites are located more than 1.5km from the footprint (Fig 1). As such there is no need to consider mitigation as the proposed development will have no impact on them.

The ground survey located no heritage sites or features on the footprint. The existing structures on or adjacent to the footprint are all younger than 60 years. As such they have no heritage value. The area is also not part of any known cultural landscape (Table 2).

Table 2. Evaluation of heritage sites

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

5.1 Field Rating

A rating method developed by SAHRA was applied to evaluate the significance of each heritage site (Table 3). However, no archaeological sites or features occur on the footprint or in close association with it.

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

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

6 CONCLUSIONS AND RECOMMENDATIONS

A heritage survey of the proposed upgrade of the existing N2 Isipingo Interchange, eThekweni Municipality, KwaZulu-Natal identified no heritage sites or features on the footprint. The area is also not part of any known cultural landscape. There is no archaeological reason why the proposed development may not proceed as planned. However, attention is drawn to the National Heritage Resources Act, 1999 (Act No. 25 of 1999) which, requires that operations that expose archaeological or historical remains should cease immediately, pending evaluation by the provincial heritage resources authority.

7 RISK PREVENTATIVE MEASURES ASSOCIATED WITH CONSTRUCTION

Not applicable.

8 MAPS AND FIGURES



Figure 1. Google aerial photograph showing the locality of the N2 Isipingo Interchange to the south of Durban. Known heritage sites in the area are indicated by a yellow markers.



Figure 2. Google aerial photograph showing the extent of the footprint (Source: CCA Environmental).

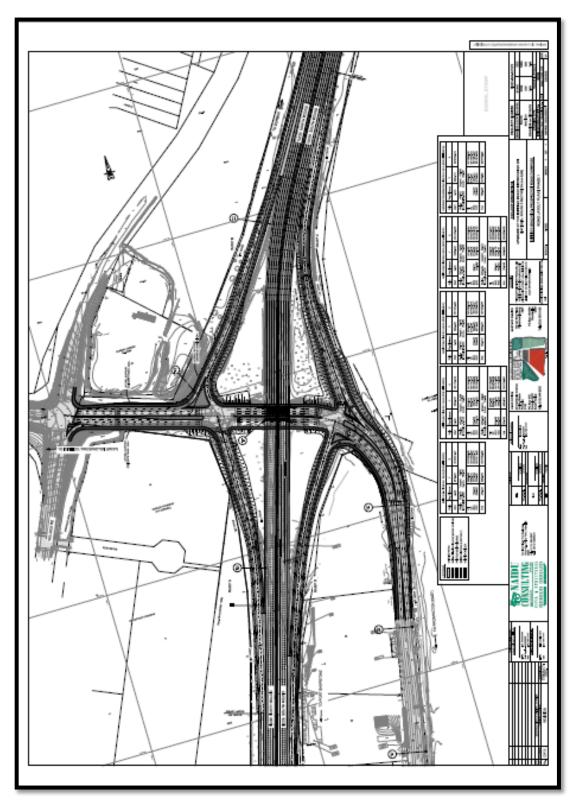


Figure 3. Map of the proposed upgrade of the N2 Isipingo Interchange (Source: CCA Environmental).



Figure 4. N2 Isipingo Interchange: south leading up to Prospection Road off-r



Figure 5. N2 Isipingo Interchange: southern aspect of Prospection Road Bridge over the N2.



Figure 6. Light industry adjacent to the N2 at the Isipingo Interchange – southern aspect.



Figure 7. Light industry adjacent to the N2 at the Isipingo Interchange – central section.



Figure 8. N2 Isipingo Interchange: northern section. No heritage sites or features occur on the footprint.



Figure 9. N2 Isipingo Interchange: northern section: No heritage sites or features occur on the footprint.

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10 APPENDIX 1



DETAILS OF SPECIALIST AND DECLARATION OF INTEREST

	(For official use only)
File Reference Number:	12/12/20/ or 12/9/11/L
NEAS Reference Number:	DEA/EIA
Date Received:	

Application for integrated environmental authorisation and waste management licence in terms

- National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014; and
 National Environmental Management Act: Waste Act, 2008 (Act No. 59 of 2008) and
- Government Notice 921, 2013

PROJECT TITLE

UPGRADE OF THE N2 ISIPINGO INTERCHANGE, ETHEKWENI MUNICIPALITY, KWAZULU-NATAL.

Specialist:	Frans Prins (Active Heritag	(e cc)		
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Professional	ASAPA			
affiliation(s) (if any)				
Project Consultant:				
Contact person:				
Postal address:			···	
Postal code:		Cell:		
Telephone:		Fax:		
E-mail:				

4.2	The specialist appointed in terms of the Regulations_
l,	FRANS PRINS , declare that
Ger	neral declaration:
	l act as the independent specialist in this application; l will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant; l declare that there are no circumstances that may compromise my objectivity in performing such work; l have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity; l will comply with the Act, Regulations and all other applicable legislation; l have no, and will not engage in, conflicting interests in the undertaking of the activity; l undertake to disclose to the applicant and the competent authority all material information in m possession that reasonably has or may have the potential of influencing - any decision to be take with respect to the application by the competent authority; and - the objectivity of any report, pla or document to be prepared by myself for submission to the competent authority; all the particulars furnished by me in this form are true and correct; and I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.
C	J
Sig	nature of the specialist:
	e Heritage cc
	me of company (if applicable):
28 De	ecember 2015