

Appendix G: Other information

Appendix G1: Title deed(s)

HEROLD GIE WINK
8 DARLING ST.
CAPE TOWN
8001

Prepared by me,
[Signature]
CONCERNER
D.W. SCHADY

OR ENDOSSEMENTE KYK BLADSY
FOR ENDORSEMENTS SEE PAGE

6

904
T 29178 1986

CERTIFICATE OF CONSOLIDATED TITLE

Issued under the provisions of Section 40 of the Deeds
Registries Act 1937 (Act 47 of 1937).

WHEREAS the EAST CAPE DEVELOPMENT BOARD has applied for
the issue to it of a CERTIFICATE OF CONSOLIDATED TITLE
under the provisions of Section 40 of the Deeds Registries
Act 1937;

AND WHEREAS the Board is the registered owner of:-

1. REMAINDER OF PORTION 3 (KAMP) of the farm
BRAK FONTEIN No. 241, in the Division of
Alexandria;
2. REMAINDER OF PORTION 19 (Appendix) (a portion
of Portion 6) of the farm BRAK FONTEIN No. 241,
in the Division of Alexandria;
BOTH HELD by EAST CAPE DEVELOPMENT BOARD under
Deed of Transfer No. T.563/1945;

3. PORTION/.....

- 2 -

3. PORTION 25 (a Portion of Portion 3) of the farm BRAKFORTEIN No. 241, in the Division of Alexandria;
4. PORTION 26 (a Portion of Portion 19) of the farm BRAKFORTEIN No. 241, in the Division of Alexandria;
- BOTH HELD by the EAST CAPE DEVELOPMENT BOARD under Deed of Transfer No. T.16253/1957;
5. PORTION 1 of the farm BRAKFORTEIN No. 215, in the Division of Alexandria;
- HELD BY the EAST CAPE DEVELOPMENT BOARD under Deed of Transfer No. T.18806/1953;

which properties have been consolidated into the land hereinafter described;

NOW THEREFORE, in pursuance of the provisions of the said Act, 1, the REGISTRAR OF DEEDS at CAPE TOWN do hereby certify that the

EAST CAPE DEVELOPMENT BOARD

Constituted in terms of Section 3 of Act 4 of 1984

its Successors-in-Title or Assigns is the registered owner of:-

FARM NO. 366, partly in the Municipality of Alexandria, Division of Alexandria;

IN EXTENT: 111,2533 (One Hundred and Eleven comma Two Five Three Three) Hectares;

AS depicted on Diagram S.G. No. 358/86.

The following portions thereof all depicted on said Diagram S.G. No. 358/86 are :-

SUBJECT/ENTITLED/.....

- 3 -

SUBJECT/ENTITLED:

1. As to the portion lettered ABCDEJKLc'N'e'a'
zyRST;
- 1.1 To the conditions referred to in Deed of
Transfer No. 461 dated 30 May 1857 ;
- 1.2 To the terms of an endorsement dated 6 January
1986 on Deed of Transfer No. T.663/1945, reading
as follows:-

"By Notarial Deed of Servitude No. K.3/1986
dated 2nd October 1985, the within properties
are entitled to a praedial Servitude of right
of way over The Remainder of Portion 6 (Kamp)
of the farm Brakfontein No. 241, Division
of Alexandria, Measuring 4,7332 Hectares, held
by Jacobus Frederik Van Staden, Identity No.
391022 5039 00 4 and Mercia Van Staden, Identity
No. 520519 0052 00 1, married in community of
property to each other, by Deed of Transfer
No. T.52478/84, being a road 15 metres wide,
the north western boundary of which is repre-
sented by the figure ABC on Servitude Diagram
S.G. 2115-85, annexed thereto, subject to the
terms and conditions as will more fully appear
from said Notarial Deed."
- 1.3 To the terms of the following endorsement dated
14 November 1967 on Deed of Transfer No. T.663/1945,
reading as follows:-

"Endorsement in terms of Section 31(6) of Act
47/1937 (as amended)
Two portions of the herein mentioned property
meas. + 5465 Square Metres and + 5228 Square
Metres have been expropriated by the Admini-
strator of the Cape Province in terms of Sect.
130 of Ord. 15/1952, read with Sect. 7 of Ord.
28/1960 Vide Notice of expropriation No.
R/D/17/623 d.d. 3/10/1967 filed as exprop.
caveat 741/1967 plans in duplicate filed herewith."
- 1.4 To the terms of the following endorsement dated
18 September 1969 on Deed of Transfer No. T.663/1945,
reading as follows:-

"Endorsement /.....

- 4 -

"Endorsement in terms of Section 31(6) of Act 47 of 1937 (as amended).

Two portions of the herein mentioned property meas. + 588 Square Metres have been expropriated by Administrator of the Cape Province in terms of Sec. 130 Ord. 15/1952 read with Sec. 7 Ord. 28/1960 Vide Notice of expropriation caveat Expt. 1222/69 plans in duplicate filed herewith."

2. As to the portion lettered PGNJ :-
 - 2.1 To the conditions referred to in Deed of Transfer No. 461, dated 30 May 1857;
 - 2.2 To the following condition mentioned in Deed of Transfer No. 11301/1926, viz:-
 "That the owner of Good Hope (this day transferred to Stefanus Adrian Oosthuysen Junr. No. 11297) shall in perpetuity for himself, his servants and tenants, be entitled to a right of way over the farm Brakfontein, hereby transferred to the said Cornelius Krong, along the road marked on the diagram of the farm Brakfontein hereto annexed and leading from Beacon A to Beacon B."
 - 2.3 To the terms of an endorsement dated 6 January 1986 on Deed of Transfer No. T.11806/1953, as set out in paragraph 1.2 above;
3. As to the portion lettered a'e'N'c' :-
 - 3.1 To the conditions referred to in Deed of Transfer No. 461 dated 30 May 1857;
 - 3.2 To the terms of an endorsement dated 6 January 1986 of Deed of Transfer No. T.16253/1957, as set out in paragraph 1.2 above;
4. As to the portion lettered QyzLMP excluding the figure a'c'd'Mb' :-
 - 4.1 To the conditions referred to in Deed of Transfer No. 461 dated 30th May 1857 ;
 - 4.2 to the terms of an endorsement dated 6 January 1986 on Deed of Transfer No. T.663/1945, as set out in paragraph 1.2 above.

5. As /.....

- 5 -

5. As to the portion lettered a'c'd'Mb' :-
- 5.1 To the conditions referred to in Deed of Transfer No. T.16253/1957 ;
- 5.2 to the terms of an endorsement dated 6 January 1986 on Deed of Transfer No. T.16253/1957 as set out in paragraph 1.2 above;

AND that by virtue of these presents the said
EAST CAPE DEVELOPMENT BOARD
it's Successors in title or assigns, now is and henceforth
shall be entitled thereto conformably to local custom, the
State, however, reserving its rights.

IN WITNESS whereof I, the said Registrar, together with
the Appearer q.q. have subscribed to these presents, and
have caused the Seal of Office to be affixed thereto.

THUS DONE AND EXECUTED at the Office of the Registrar of
Deeds, CAPE TOWN on 29th July
One Thousand Nine Hundred and Eighty Six (1986).


REGISTRAR OF DEEDS

E 204 187

Certificate of Registered Title No. 4204 Issued in terms of
 Eertifikaat van Geregtigde Titel No. uitgevaardig konings

Sect. 43 Act No. 47/1937 In respect of the
 Act No. 47/1937 ten opsigte van

Part of Farm No 366 11605

Reminder 104, 834644 1987-04-03

REKING

OFFICE OF THE REGISTRAR
 CAPE TOWN/KAAPSTAD

[Signature]
 REGISTRAR

VA 1053/1989

Certified a true copy of the original registered
 Goewettig in waarheid en oorspronklike

place of the original to be deposited at the
 stasiekantoor, Kaapstad

of Cape Town in accordance with the provisions
 of the Act No. 47 of 1937

1989-07-25

[Signature]
 REGISTRAR OF CAPES
 Afs. Registrasie van Afs.

COPY ISSUED IN ACCORDANCE WITH THE EXEMPTIONS TO
 VAN DIE WET 47 VAN 1937

DIE GROOT HEDER KANTOOR IS HERNOMMEN EN
 DIE LANS BESCHREVEN HIERIN HANDELSREKORD
 MOET IN DIE TOEKOMME BESCHREVEN WORD AS:
 RESTAURANT 623 ALEXANDRIA

ANTERKANTOOR
 DEEDS REGISTREY
 KAAPSTAD
 CAPE TOWN

1989-08-25

[Signature]
 REGISTRAR VAN ANTIS
 CENTRAL OF DEEDS

1.

ENDORSEMENT IN TERMS OF SECTION
3 (4) (a) ACT 75/1986.

ENDOSSEMENT KRAGTENS ARTIKEL
3 (4) (a) WET 75/1986.

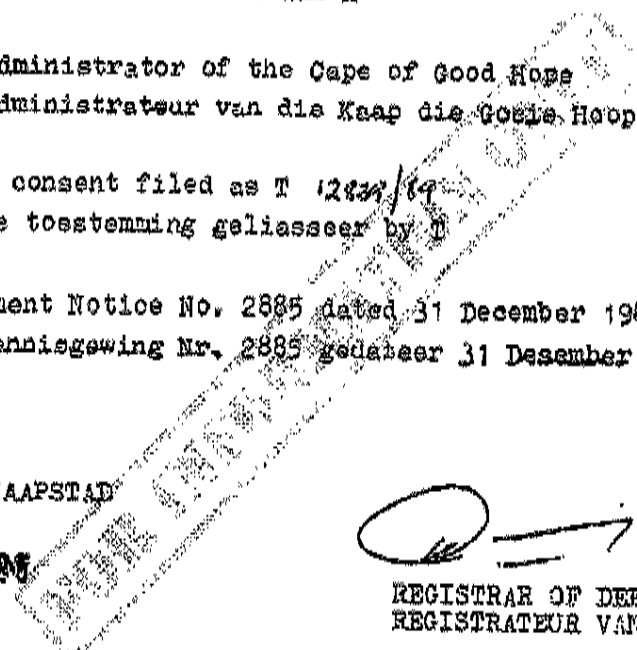
The withinmentioned property is now transferred to *
Binnegemelde eiendom is nou aan *

* the Administrator of the Cape of Good Hope
* die Administrateur van die Kaap die Goeie Hoop oorgedra,

Minister's consent filed as T 12839/89
Minister se toestemming geliasseer by D

and Government Notice No. 2885 dated 31 December 1987.
en Staatskennigewing Nr. 2885 gedateer 31 Desember 1987.

CAPE TOWN/KAAPSTAD
21/02/1989
1989-88-26



REGISTRAR OF DEEDS
REGISTRATEUR VAN AKTES

RECEIVED BY THE REGISTRAR OF DEEDS
VRIJ VERKOPENDE ...
b/s

BLADSY *2*
PAGE *2*

ENDOSSEMENT KRAGTENS ARTIKEL *34(7)(b)* WET *4 VAN 1984*
ENDORSEMENT IN TERMS OF SECTION *34(7)(b)* ACT *4 OF 1984*


Kragtens bogemelde Wetgewing berus alle bates, regte,
laste
In terms of the above Act all assets, rights, liabilities
en verpligtinge van Transportnemer/Verpandhouer nou in die
and obligations of within Transferee/Mortgagee now vest
in the

Town Council / Kwanganubela
(daargestel kragtens *Art. 34(7)(b) Act 4/84*)
(constituted by *Act 34(7)(b) Act 4/84*)


Aansoek met *DT 11038.91*
Application with *11038.91*

AKTEKANTOOR *25 02.91*
DEEDS OFFICE
KAAPSTAD
CAPE TOWN


[Signature]
REGISTRAR VAN AKTES
REGISTRAR OF DEEDS

SERTIFIKAAT VAN GEREISTREERDE TITEL UITGEREIK CERTIFICATE OF REGISTERED TITLE ISSUED	
TEN OPSIGTE VAN IN RESPECT OF <i>ERF 625 MEAS. 45, 6596 HA.</i>	
PESTANT KRAANSTRAAT <i>59, 1750 HA.</i>	
T 2233 73	
1993-01-15	

ENDORS
 ENDORS

ARTIKEL 16 VAN WET NO 45 GETRANSKORDEERD AAN	STAT. NO. OF ORDER OF 1997 REGISTERED TO
DIE REPUBLIEK VAN SUID-AFRIKA DIE REPUBLIC OF SOUTH AFRICA	THE REPUBLIC OF SOUTH AFRICA
ALEXANDRIA TRANSITIONALE RAAD (RUC 2) (1994)	
T 82250 197	1997-08-26


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SERTIFIKAAT VAN GEREISTREERDE TITEL UITGEREIK CERTIFICATE OF REGISTERED TITLE ISSUED	
TEN OPSIGTE VAN IN RESPECT OF <i>Erf 1932 = 13,0677 HA</i>	
PESTANT 46,1073 HA	
T 82251 197	
1997-08-26	

Aanso
 Appl:
 AKTEK
 DEED.
 KAAF
 CAPE

FOR FURTHER ENDORSEMENTS SEE
 VIR VERDERE ENDORSEMENTE SIE
 10

10

SERTIFKAAT VAN GEREISTREERDE TITEL UITGEREIK CERTIFICATE OF REGISTERED TITLE ISSUED	
TEN OPSIGTE VAN ERF 2175 ALEXANDRIA IN RESPECT OF	
extent: 4 499 ha RESTANT 41 6079 ha REMAINDER	
T 116132/97 4 12 97	 REGISTRAR/REGISTRAR

THE REGISTRAR OF DEEDS AND MORTGAGES
 DEPARTMENT OF LAND AND SURVEY
 100 WATERLOO STREET, JOHANNESBURG 2009
 TEL: 011 481 1111 FAX: 011 481 1112
 WWW.DRDS.GOV.ZA

- 4.
- 2.1
- 2.2
- 2.3
- 3.
- 3.1
- 3.2
- 4.
- 4.1
- 4.

Land Survey - Part B (cont.)

358-86

CO-ORDINATES

System La 27

X

STAKES NUMBER	ANGLES OF DEFLECTION	Y	EQ. NO.	ADJUSTED CO.
AB	78 39 40	A		
BC	161 14 10	B		
CD	180 26 10	C		
DE	176 19 00	D		
EF	86 10 40	E		
FG	256 09 20	F		
GE	89 43 08	G		
HJ	91 12 10	H		
JK	106 42 50	J		
KL	166 11 40	K		
LM	187 07 30	L		
LN	175 13 40	M		
NO	109 33 20	N		
OP	208 18 30	O		
PQ	39 10 30	P		
QR	197 29 40	Q		
RS	272 21 40	R		
ST	171 21 00	S		
		T		

Comments

- The figure ABCDEFGHJKLMNOPQRST represents the remainder of Portion 3 of the Farm Brakfontein No. 261. Vide Dps. No. A1261/1926 and D/T No. 11292-293-1926
- The figure EFGH represents Portion 1 of the Farm Sprietfontein No. 235. Vide Dps. No. 4663/52 and D/T No. 18896-377-1953
- The figure a'e'f'g' represent Portion 25 of the Farm Brakfontein No. 261. Vide Dps. No. 4900/46 and C.R. No. 662-14-1945
- The figure OPQRST excluding the figure a'e'f'g' represent the remainder of Portion 19 of the Farm Brakfontein No. 261. Vide Dps. No. 45222/1928 and D/T No. 622-43-1929
- The figure a'e'f'g'h' represents Portion 26 of the Farm Brakfontein No. 261. Vide Dps. No. 4761/46 and C.R. No. 662-14-1945

The figure ABCDEFGHJKLMNOPQRST represents 111,2335 Reclamas of land being situated partly in the Municipality of Alexandria and Administrative District of Alexandria January 1986

Form No. 366 comprising 1 - 5 above.

By me: *[Signature]*
Land Surveyor

This diagram is prepared for the purpose of the original documents as quoted above.

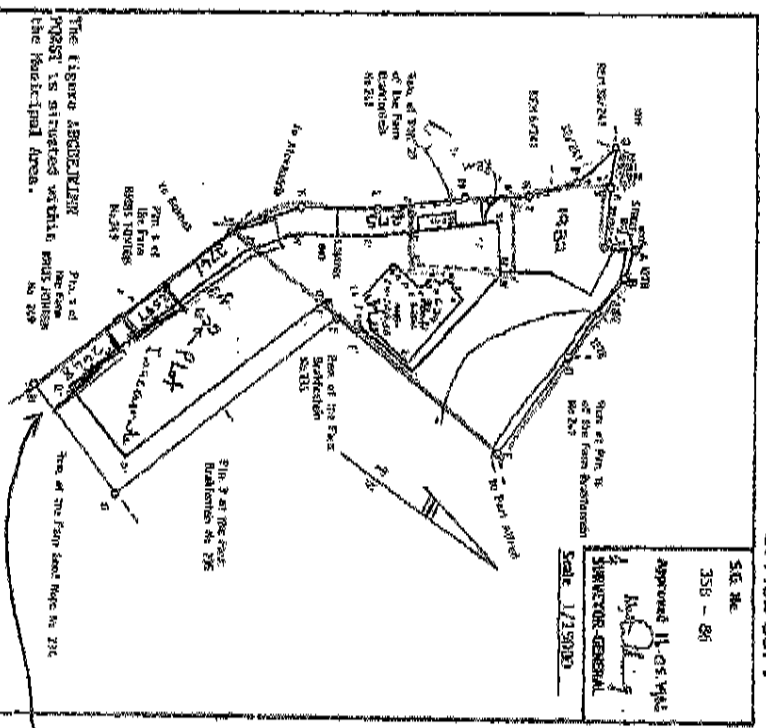
File No. Alex. 366
SR No. Completed
Completion No. 5082/4411
No. 5082/222 (21427)

OFFICE COPY

S.E. No. 358 - 86

Approved: *[Signature]*
SURVEYOR-GENERAL

Scale 1:15000



1. 5/261 denotes Portion 6 of the Farm Brakfontein No. 261
2. 21/261 denotes Portion 21 of the Farm Brakfontein No. 261
3. 39/261 denotes Portion 39 of the Farm Brakfontein No. 261
4. 19/261 denotes Portion 19 of the Farm Brakfontein No. 261
5. See attached affidavits for details of the position of the boundaries of the farm Brakfontein No. 261
6. The boundary affecting the portion lettered 'a'e'f'g'p'q'r's't' vide General Plan No. 242/1983

Beacons Specifications

- a. Concrete Block 150mm x 150mm with 12mm centre pegs
- b. Plastered Stone
- c. 30mm iron gung halter road surface
- d. Iron bar 25mm x 50mm x 75mm 0/80
- e. Median rail sections
- f. S.T. Zone x 750mm pegs under cairns

B.S.C

LISA
OLD BOTTLE
ZONE

Appendix G2: Impact Assessment Methodology

Identification of Impacts

The assessment of potential environmental impacts will be undertaken, where appropriate, in accordance with the "Environmental Checklist for Structure Plans 1991" compiled by the Department of Environmental Affairs. This checklist provides a comprehensive list of environmental factors, which could be considered during the planning of a development. Assessments also followed the guidelines given in the "Environmental Impact Management - Guideline Document: EIA Regulations: Implementation of Section 21, 22 and 26 of the Environment Conservation Act", compiled by the Department of Environmental Affairs and Tourism, April 1998, as well as the "Impact Significance, Integrated Environmental Management, Information Series 5", 2002, issued by the Department of Environmental Affairs. The impacts assessed by the specialists were also rated using the information provided in their reports.

Assessing of Impacts

It is normal practice when assessing the potential impacts associated with a proposed development to use a set of criteria for the description and assessment of environmental impacts. The criteria suggested by the Department of Environmental Affairs, in their draft document on Guidelines for Comprehensive Environmental Impact Reports (Department of Environmental Affairs and Tourism 1997) and "Environmental Impact Management - Guideline Document: EIA Regulations: Implementation of Section 21, 22 and 26 of the Environment Conservation Act", April 1998, as well as the "Impact Significance, Integrated Environmental Management, Information Series 5", 2002, issued by the Department of Environmental Affairs, include the following:

Extent:

Whether the impact will occur on a scale limited to the immediate areas, footprint or site of the development activity or will the impact occur on a sub-regional (local), regional and/or national scale.

Description	Explanation	Scoring
Footprint / Site	The impact could affect the whole, or a significant portion of the site.	1
Local	Impact could affect the adjacent landowners and areas surrounding the site.	2
Regional	Impact could affect the wider area around the site, that is, from a few kilometres, up to the wider region.	3
National	Impact could have an effect that expands throughout a significant portion of South Africa – that is, as a minimum has an impact across provincial borders.	4

Duration

Whether the lifetime of the impact will be of a short duration (0-5 years); medium term (5-15 years); long-term (>15 years, with the impact ceasing after the operational life of the development); or considered permanent where mitigation either by natural process or by human intervention will not occur in such a way or in such a time span that the impact can be considered transient.

Description	Explanation	Scoring
Short term	The impact will either disappear with mitigation or will be mitigated through a natural process, and will be relevant for 0 to 5 years.	1
Medium term	The impact will be relevant for 5 to 15 years.	2
Long term	The impact will continue or last for the entire operational lifetime of the development, but will be mitigated by direct human action or by natural processes	3

Description	Explanation	Scoring
	thereafter (i.e. more than 15 years).	
Permanent	This is the only class of impact that will be non-transitory. Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient (i.e. impact will remain after the operational lifetime of the project).	4

Intensity/Magnitude:

Whether the intensity (magnitude / size) of the impact is high medium, low or negligible (very low / no impact). Where possible the intensity of impacts are quantified.

Description	Explanation	Scoring
Very Low	The impact alters the affected environment in such a way that the natural processes or functions are not affected.	2
Low	The impact alters the affected environment in such a way that the natural processes or functions are slightly affected.	4
Medium	The affected environment is altered, but functions and processes continue, albeit in a modified way.	6
High	Function or process of the affected environment is disturbed to the extent where the function or process temporarily or permanently ceases.	8

Probability:

The probability of the impact actually occurring as either improbable (low likelihood); probable (distinct possibility); highly probable (most likely) or definite (impact will occur regardless of preventative measures)

Description	Explanation	Scoring
Improbable	The possibility of the impact occurring is none, due either to the circumstances, design or experience.	1
Probable	There is a possibility that the impact will occur to the extent that provisions must therefore be made.	2
Highly Probable	It is most likely that the impacts will occur at some stage of the Development. Plans must be drawn up before carrying out the activity.	3
Definite	The impact will take place regardless of any prevention plans, and only mitigation actions or contingency plans to contain the effect can be relied upon.	4

Significance

The significance of impacts of the proposed project are assessed with the mitigation measures which will be included in the contractors specifications as well as with the additional mitigation measures recommended in this report being implemented. The significance of the identified impacts on the components of the affected environment (and where relevant, with respect to potential legal infringement) are described as:

No Impact :Where the project action will not cause any adverse or beneficial changes to the natural (biophysical), and/or social environment.

Impact of Low Significance: Where the project actions will result in minor short-term changes to the biophysical and/or socio-economic environment. The impacts will usually be restricted to the immediate area of the project action. The affected system should return to its natural or almost natural state in a short period of time (0 - 5

years). The impacts on human populations will be of a short duration and will not have any lasting consequences.

Impact of Moderate Significance: Where the project actions will result in moderate short-term or medium term changes to the biophysical and/or socio-economic environment. The effects of the impact could be experienced outside of the project action area and may be evident at a sub-regional or even a regional level. Minor indirect impacts may arise from the project action. The system should recover but it is unlikely that it will return to its natural state. Recovery would only take place in the medium term (5-15 years). Impacts on the human population will be felt after the project action is completed but are not severe and/or disruptive to their quality of life or economic well being.

Impacts of High Significance: Where the project actions will result in major long-term changes to the biophysical and/or socio-economic environment. The effects of the impact will be experienced outside of the project action area and may be evident at a regional, national and even at the international level. Secondary or indirect impacts may arise from the project action. The system may recover over the long-term (>15 years) but will not revert to its natural state. Impacts on human populations will be felt after the project action is completed. The impacts are of a long-term nature and are disruptive to the previous life style of the affected population.

Determination of significance will be made on the assumption that any mitigation and / or management measure, which is recommended, will be implemented by the developer.

The level of significance is expressed as the sum of the area exposed to the risk (extent), the length of time that exposure may occur over in total (duration), the severity of the exposure (intensity) and the likelihood of the event occurring (probability).

Significance value = (Extent + Duration + Intensity) x Probability.

A distinction will be made for the significance rating without the implementation of mitigation measures and with the implementation of mitigation measures. The purpose of mitigation measures is to reduce the significance level of the anticipated impact. Therefore, the reduction in the significance level after mitigation is directly related to the scores used in the impact assessment criteria. The effect of potential mitigation measures to reduce the overall significance level is also to be considered in each issues table (i.e. values with or without mitigation are presented).

Description	Explanation	Scoring
No / Very Low Impact	There is no impact or a very low impact.	1-9
Low	The impacts are less important, but some mitigation is required to reduce the negative impacts.	10-27
Moderate	The impacts are important and require attention; mitigation is required to reduce the negative impacts.	28-45
High	The impacts are of high importance and mitigation is essential to reduce the negative impacts	46-64

Mitigating Environmental Effects

Mitigation measures are technically and economically feasible measures that will mitigate a project's likely environmental effects. Mitigation is the elimination, reduction, or control of a project's adverse environmental effects, including restitution for any damage to the environment caused by such effects through replacement, restoration, compensation, or any other means.

Mitigation is used to address all adverse environmental effects, whether or not subsequent analysis determines that the effects are significant. The development of the mitigation measures commenced during the scoping

assessment and many have become part of the project design. Relevant mitigation measures should form part of any contract for the project.

Status of the Impact:

This describes whether the impact is positive (a benefit) or negative (a cost), or neutral.

Degree of Confidence in Predictions:

The degree of confidence in the predictions, based on the availability of information and/or specialist knowledge

Reversibility

Examining whether the impacted environment can be returned to its pre-impacted state once the cause of the impact has been removed

Replaceability

Examining if an irreplaceable resource is impacted upon. Replaceability is an indication of the scarcity of the specific set of parameters that make up the affected environment. That is, if lost can the affected environment be (a) recreated, or (b) is it a common set of characteristics and thus if lost is not considered a significant loss.

Appendix G3: Assumptions, Uncertainties, Gaps in Knowledge

The following assumptions, uncertainties and gaps in knowledge were identified for this process:

1. EIA Process

The EIA process is multi-disciplinary, which was informed by the project team. It is thus necessary to presume that the information as provided to the project team to date by external sources is accurate, appropriate and correct.

Data shown in the maps was supplied by various sources and was used after it was reviewed and verified where considered necessary. Verification was, however, restricted to available sources of information only.

No engineering design information was available with regards to the bulk services.

No 1:100 floodline is available for the stream / drainage line located to the north east of the proposed site.

2. Public Participation Process

Every effort was made to contact and provide written notification to all stakeholders and adjacent landowners within the study area. Information presented by the stakeholders is presumed to be accurate and presented timeously with respect to the process at hand.

Appendix G4: EAP Details and Experience

Details of Environmental Assessment Practitioner (EAP)

CEN Integrated Environmental Management Unit (CEN IEM Unit) was appointed to undertake the necessary environmental assessment. CEN IEM Unit meets the requirements for an independent EAP in terms of the Environmental Impact Assessment (EIA) Regulations of 2010 and 2014. Details of the EAP are presented in the table below.

Environmental Consultant	CEN Integrated Environmental Management Unit
EAP	Lucille Behrens
Contact Person	Dr Mike Cohen
Postal Address	36 River Road, Walmer, Port Elizabeth, 6070
Telephone	041 581 2983
Fax	086 504 2549
Email Address	steenbok@aerosat.co.za

The report was prepared by Merika Louw. Merika has a M.Sc. in Botany: Rehabilitation Ecology and has 2 years' experience in undertaking EIAs. Merika is a specialist in the botanical field.

Mrs Lucille Behrens reviewed the reports. Lucille has 10 years of experience in the environmental management field, has a B.Sc. Honours in Environmental Monitoring and Modelling, and is a member of IAIAAsa. Her area of expertise is EIAs and related processes, and as project manager.

All reports are reviewed and approved by Dr Michael Cohen, Director at CEN IEM Unit. Mike has over 30 years of experience, has a D.Sc. in Wildlife Management, is a registered Professional Natural Scientist (PrSciNat), a member of IAIAAsa and Institute of Ecologists and Environmental Scientists.

Please find following *Curriculum Vitae*.

CEN
Integrated Environmental Management Unit
36 River Road
Walmer
Port Elizabeth
6070
South Africa



Telephone: 041 - 581-2983 / 581-7811 Fax: 0865042549
Email: steenbok@aerosat.co.za

Reg No: 1996/032402/23

Curriculum Vitae:

Merika Louw

CEN Integrated Environmental Management Unit
36 River Road
Walmer, Port Elizabeth, 6070

Telephone: (+27) 041 581 2983
Cellular phone: (+27) 072 232 9397
Facsimile: 086 504 2549
E-mail: merika@aerosat.co.za

Date of Birth: 22 October 1985

Nationality: South African

Language capabilities: Afrikaans (mother tongue); English (good)

Qualifications

- BSc (Botany, Geology, Geography)
- BSc Honours *cum laude* (Botany – Ecology)
- MSc (Botany – Rehabilitation Ecology)

Awards

- Student Merit awards (UPE 2004; NMMU 2005, 2006, 2007, 2008, 2009); NRF (2007, 2008, 2009); NMMU-Vodacom (2008, 2009); Dormehl-Cunningham award (2008, 2009)

Fields of research:

- Third year project: "Post-fire succession in the Nelson Mandela Metropolitan University Nature Reserve"
- BSc Honours
 - Research Project 1: "The success of twelve years of rehabilitation of strip-mined Bontveld"
 - Research Project 2: "What controls the distribution of the critically endangered honeybush species, *Cyclopia pubescens* Eckl. & Zeyh.?"

- MSc
- Title of Dissertation: “Propagation and stress physiology of selected Subtropical Thicket species: towards increasing biodiversity at rehabilitation sites”

Other studies and workshops:

- Society for Conservation Biology Conference, Port Elizabeth – 2007
- Presented a poster at Thicket Forum Conference, Thomas Baines Nature Reserve – 2008
- Short presentation at ACE (Centre for African Conservation Ecology) AGM, Port Elizabeth – 2008 and 2010
- C.R.E.W. Workshop and AGM – 2009, 2011 and 2012
- Thicket Forum Conference – 2009 and 2011
- EIA Practitioners’ Workshop: Use and Integration of the NM-MOSS, Port Elizabeth –2010
- Expert Workshop: Mapping Important Plant Conservation Areas in the Nelson Mandela Bay Metropole – November 2011
- Plant Identification Short Course, Cape St. Francis: ‘Identifying Fynbos Plants: an introduction’ presented by Environmental Educator, Wendy Hitchcock – July 2012
- Grass Identification Short Course: ‘Grass Identification and Veld Management’, Pretoria NBG, conducted by Frits van Oudtshoorn of Africa Land-Use Services / Training – February 2013

Seminars delivered:
None.

Career Biography

Recent experience (CEN IEM Unit: January 2013 to present)

- **Basic Assessment Reports**

Completed Projects:

1. Final BAR for the construction of a 1.2 ML reinforced concrete reservoir on a portion of Erf 1721 in Aberdeen, Camdeboo Municipality, Eastern Cape.
2. Final BAR for the construction of a cemetery on a portion of the Remainder of Erf 1756 in Aberdeen, Camdeboo Municipality, Eastern Cape.
3. Final BAR for the agricultural development of Panzi Sitrus Plase Bpk, Farm Gouwermentsbeloning, portions of Erf 521/38, 521/50 and 570, in the Sundays River Valley, Sundays River Municipality, Eastern Cape.

Current Projects:

1. Draft BAR for the proposed establishment of an Eco-Estate on Portion 75 of the farm Lakefarm No 23, Kragga Kamma in Port Elizabeth, Eastern Cape.
2. Draft BAR for the proposed subdivision for residential development of a Portion of Erf 1226 (Rem) in Fairview, Nelson Mandela Bay Municipality.

- **Environmental Impact Reports**

Completed Projects:
None.

Current Projects:

1. Environmental Impact Assessment for the upgrade of the St. Francis Bay Waste Water Treatment Works.
2. Environmental Impact Assessment for the proposed establishment of a low density leisure estate and redesign of the existing Skuitbaai Golf Course on Portions 12, 13 and 70 of the Farm Eerste Rivier 626.

- **Environmental Auditing**

Completed Projects:
None.

Current Projects:

1. Environmental Audit for the construction of a social housing project and associated infrastructure on Erf 3937, Fairview, Port Elizabeth.

- **Waste License Applications**

Completed Projects:
None.

Current Projects:

1. Waste Licence Application for the upgrade of St. Francis Bay Waste Water Treatment Works.

Past experience (Private specialist consulting work)

- **Botanical Specialist Input**

1. Vegetation Assessment for the EIR for the Redhouse-Chelsea Arterial and Walker Drive Extension, Nelson Mandela Bay Municipality.

Past experience (Dr Brian Colloty of Scherman Colloty & Associates: April 2012 to January 2013)

- **Botanical Specialist Input**

1. Environmental Assessment: San Miguel Fruits SA Pty (Ltd) citrus orchard expansion, River Bend Farm, Sundays River Valley, Sundays River Municipality.
2. Environmental Assessment: Malabar Housing Development, Nelson Mandela Bay Municipality.
3. Environmental Assessment: Walmer Stormwater Detention Ponds, Nelson Mandela Bay Municipality.
4. Environmental Assessment: Transnet Tank Farm in the Coega IDZ, Nelson Mandela Bay Municipality.

Past employment (Mr I.L. Rademeyer of Penny-farthing Engineering (Pty) Ltd.)

- The purchase, identification and propagation of plants i.e. Cycads, Aloes, trees and other South African succulent species, for a private collector (February 2011 to January 2013)

Past employment (Department of Botany at the Nelson Mandela Metropolitan University)

- Student demonstrator (February 2006 to November 2011)
- Research assistant (2007 to 2009)
- Glasshouse manager (July 2008 to December 2009)

CEN
Integrated Environmental Management Unit
36 River Road
Walmer
Port Elizabeth
6070
South Africa



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Email: steenbok@aerosat.co.za

Reg No: 1996/032402/23

CURRICULUM VITAE

LUCILLE BEHRENS

Name of Firm	CEN Integrated Environmental Management Unit
Date of birth	20 August 1976
Position in Firm	Senior Environmental Scientist
Specialisation	Environmental Management
Nationality	South African
Years of experience	11
HDI Status	White female, no disabilities

KEY QUALIFICATIONS

Lucille has 11 years' experience in the Environmental Management field. Lucille has undertaken a number of Environmental Impact Assessments (i.e. Basic Assessments; Scoping and EIA) under the EIA Regulations of 2006 and 2010. Her roles have included being the Assistant Environmental Assessment Practitioner (EAP), Project Manager and Environmental Scientist for EIA related projects. Her responsibilities have included undertaking environmental assessments, compilation of regulated EIA's (i.e. scoping reports, EIA reports, Basic assessments and EMPs) and incorporating specialists into the EIA team for any required specialist studies. Lucille has also undertaken and been involved with the regulated public participation process required for EIAs.

Her experience in compiling environmental management plans relate to construction, maintenance operations and wildlife management. Lucille has been involved in environmental compliance monitoring and auditing (environmental control officer) on a number of construction sites and borrow pits. She has also gained experience in GIS mapping.

Lucille has also been involved in waste studies and sustainable development projects, for example green procurement, elimination of illegal dumping strategies and water conservation and demand management plan.

EDUCATION

Qualification	Institution	Year
BSc (Environmental Management)	UNISA	2005
BSc (Hons) (Environmental Monitoring and Modelling)	UNISA	2008

COURSES & CONFERENCES

Course / Conference	Date
Management Training Session – Nelson Mandela Metropolitan University: Business School	2006
The Environment And the Project Cycle	March 2008
Technical and Business Report Writing	March 2009
Institute of Waste Management South Africa – Eastern Cape Mini Conference	August 2009
Project Management, Incl. MS Projects	March 2010
Legal Workshop on the Key Implications of the National Environmental Management: Integrated Coastal Management Act	April 2010
Environmental Awareness and Legal Liability for Management	May 2010
Green Star SA Accredited Professional Course	September 2011
WASTECON	October 2012
Contaminated Land Workshop	February 2013
Water Law in South Africa Workshop	August 2013
Institute of Waste Management of Southern Africa – Eastern Cape Conference: The Green Revolution	September 2013
National Wetlands Indaba	October 2013
IWRM, the NWA, and Water Use Authorisations, focusing on Water Use License Applications – Procedures, Guidelines, IWWMP's and Monitoring, Carin Bosman Sustainable Solutions	September 2014

PROFESSIONAL MEMBERSHIP

Institution Name	Membership	Year Joined
International Association of Impact Assessments (South Africa)	Member (No. 2668)	2010

EMPLOYMENT RECORD
August 2013 – Present: CEN IEM Unit

On 1 August 2013, Lucille joined the CEN Integrated Environmental Management Unit as **Senior Environmental Scientist**. Her responsibilities include project management, environmental impact assessments, public participation, environmental management plans and environmental compliance monitoring.

July 2007 – July 2013: BKS (Pty) Ltd / AECOM SA (Pty) Ltd

On 1 October 2012 Lucille was appointed as a **Senior Environmental Scientist** for the Infrastructure and Management Sector of BKS in Port Elizabeth after BKS and its subsidiaries rebranded on 1 November 2012 to become AECOM SA (Pty) Ltd. Her responsibilities included:

- Project management, including financial management on projects,
- Environmental Impact Assessments (basic assessment, scoping and EIA and associated public participation),
- Co-ordinating and assessing specialist studies,
- Environmental Management Plans/Programmes,
- Environmental Compliance Monitoring,
- Waste and Sustainability Strategies,
- Business development focusing within the Eastern Cape, KwaZulu Natal.
- GIS mapping.
- Liaison with clients.

In 2009, Lucille was promoted to **Senior Environmental Scientist** and was responsible for project management, environmental impact assessments (basic assessment, scoping and EIA and associated public participation), environmental management plans, environmental compliance monitoring, waste and sustainability strategies within the Eastern Cape.

In 2007, Lucille joined BKS (Pty) Ltd as an **Environmental Scientist**. Her responsibilities included undertaking environmental impact assessments (basic assessment, scoping and EIA

and associated public participation), compiling environmental management plans and undertaking environmental compliance monitoring.

August 2000 – June 2007: Shamwari Game Reserve (Mantis Collection)

Lucille was the **Wildlife / Environmental Co-Ordinator** for Shamwari Game Reserve (Mantis Collection) from November 2003 – June 2007. During this time, her responsibilities included the following:

Compiling environmental management plans for construction operations and wildlife management for reserves in South Africa, United Arab Emirates and Morocco. Undertaking environmental compliance monitoring of construction sites within game reserves. Monitoring environmental aspects (e.g. water usage) within Mantis game reserves and organising related wildlife permits.

In November 2001, Lucille transferred to the Wildlife Department as the PA to the Wildlife Director.

In 2000, Lucille joined Shamwari Game Reserve and during this time her roles included Personal Assistant to the General Manager, Switchboard Operator and Reservationist.

June 1999 – July 2000: Formax

Computer room supervisor, Data Capturer

1997: University of Pretoria

Practical Tutor, Information Science Department

EXPERIENCE RECORD

ENVIRONMENTAL IMPACT ASSESSMENTS:

- Basic Assessment for the Proposed Alexandria Community Health Centre - *Archworxs*
- Scoping & Environmental Impact Assessment for the Kei Road Water Conveyance (pipeline and water treatment works) - *Aurecon*
- Basic Assessment for the St Francis Stormwater Upgrade - *Aurecon*
- Basic Assessment for the Patensie Prison WasteWater Treatment Works - *Aurecon*
- Basic Assessment for the Proposed SACE Ranger PV Plant, Uitenhage – *SACE*.
- Basic Assessment for the Proposed Expansion of Storage of Dangerous Goods at Rehau Polymer, Uitenhage – *Rehau Polymer*
- Basic Assessment of the Proposed Clearing of Vegetation for Fence Construction at SAPS Training Institute, Addo, Sundays River Valley Municipality – *Engineering Advice & Services*.
- Basic Assessment for Construction and Operation of a Filling Station with Rest and Retail Facilities, an Agri-Business Retail / Wholesale Facility adjacent to the Nanaga Farm Stall on the Remainder of Portion 8 Nanaga Hoogte No 229, Sundays River Valley Municipality – *Pantheon Trust*
- Basic Assessment for Proposed Upgrading of Stormwater Infrastructure in Valencia, Addo, Sundays River Valley Municipality – *LA Consulting Engineers*
- Basic Assessment for Proposed Walmer Storm Water Detention Ponds - *Nelson Mandela Bay Municipality*.
- Basic Assessment and Water Use Licence Applications for Proposed Gqunu Village Bridge Crossing and Road Upgrades - *Department of Land Reform and Rural Development*.
- Scoping and Environmental Impact Assessment for Proposed Malabar Phase 2 Extension 6 Housing Development - *Nelson Mandela Bay Municipality*.
- Scoping and Environmental Impact Assessment (Environmental Authorisation and Waste Management Licence) for a proposed private GLB+ Waste Disposal Facilities in Springs– *Vereeniging Refractories*

- Scoping and Environmental Impact Assessment for the proposed NMBM Reclaimed Effluent Scheme - *Nelson Mandela Bay Municipality*
- Scoping and Environmental Impact Assessment for a proposed demilitarization plant in De Aar, Northern Cape - *SANABO*
- Scoping and Environmental Impact Assessment for the proposed Residential Development on Farm Grants Valley, Kenton-on-Sea - *ACME Capital*
- Basic Assessment: Upgrading of gravel roads and stormwater infrastructure in Cluster E, Nelson Mandela Bay Municipality - *Izizwe Consulting Engineers*

ENVIRONMENTAL COMPLIANCE MONITORING:

- Environmental Control Officer: Remediation of Missionvale Bulk Sewer Main - *Nelson Mandela Bay Municipality*
- Environmental Control Officer: Rehabilitation of the Churchill Pipeline at the Van Stadens River Mouth, Phase 2 - *Nelson Mandela Bay Municipality*
- Environmental Control Officer: Construction of Recreational Facilities for Van Der Kemp's Kloof Nature Reserve - *Nelson Mandela Bay Municipality*
- Environmental Control Officer: Upgrading of Gravel Roads and Stormwater in Cluster E – *Letsunyane Associates*
- Performance Assessment of 9 Borrow Pits in the Kouga Local Municipality - *Cacadu District Municipality*
- Environmental Control Officer: Nelson Mandela Bay Multi-Purpose Stadium – *Nelson Mandela Bay Municipality*
- Environmental Control Officer: Construction of Infrastructure within Zone 2 Coega Industrial Development Zone

SUSTAINABILITY PROJECTS:

- Environmental Screening Assessment for Portion 62 of Ongegunde Vryheid No 746, St Francis – *Aurecon*
- Water Conservation and Demand Management Plan for the Dube TradePort, including King Shaka International Airport – *Dube TradePort*
- Environmental Management System for the Nelson Mandela Bay Municipality 2010 Multi-Purpose Stadium – *Nelson Mandela Bay Municipality*
- Strategy for the Elimination of Illegal Dumping and Maintenance of Municipal Land - *Nelson Mandela Bay Municipality*
- Green Procurement Plan for the Nelson Mandela Bay Municipality - *Nelson Mandela Bay Municipality*
- Helenvale Waste Study - *Cabitech Project Managers*

ENVIRONMENTAL MANAGEMENT PROGRAMMES:

- Coastal Management Programme for the Nelson Mandela Bay Municipality
- Environmental Management Programme for Existing Gravel Borrow Pits for Routine Road Maintenance - *EC Department of Roads & Public Works*
- Environmental Management Plan: Port Elizabeth Airport Storm Water – *ACSA*
- Borrow Pit / Quarry Authorisation Application: Elandsdrift Dam - *Department of Water Affairs*

LANGUAGES

	Speak	Read	Write
English	Excellent	Excellent	Excellent
Afrikaans	Good	Good	Good

Michael Cohen

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E-mail: steenbok@aerosat.co.za

Date of Birth:

18 January 1945

Nationality:

South African

Languages:

English (mother tongue), Afrikaans (good)

Qualifications:

B.Sc. (Zoology, Psychology. Wits. RSA).
B.Sc. (Hons) (Wildlife Management. U Pretoria).
M.Ag. (Wildlife and Fisheries Ecology: Texas A&M). (1973)
D.Sc. (Wildlife Management. U Pretoria). (1988)

Institutions:

South African Council of Natural Scientists (SACNAS)
Professional Member - Institute of Ecologists and Environmental Scientists

Member - International Association for Impact Assessment - South African Chapter

Member of IUCN Commission on National Parks and Protected Areas. (CNPPA) (1994 -1996)

Member of IUCN World Commission on Protected Areas (1997 – current)

Honorary Member of the Institute of Environment and Recreation Management of Africa 1995

Appointed to the Board of the Institute of Ecologists and Environmental Scientists - April 1997-May 2000

Referee to environmental assessment practitioners applying to the Interim Certification Board for Environmental Assessment Practitioners (ICB) for professional certification (2001 - present)

Appointed to the Council of the Provincial Heritage Resource Authority. Ministry of Sport, Arts and Culture. Province of the Eastern Cape 2003 (Resigned)

Professional History:

May 1996 – Present

Environmental Consultant: CEN Integrated Environmental Management Unit

July 1995 - May 1996

Director: Eastern Cape Nature Conservation. Ministry of Economic Affairs, Environment and Tourism. Left to start own consultancy business

January 1993 - June 1995

Regional Director: Cape Nature Conservation. Eastern Cape Region

October 1985 - December 1992

Deputy Director: Environment. Chief Directorate: Environmental Conservation
Directorate: Environmental Management Department of Environment Affairs

July 1983 - September 1985

Assistant Director: Environment Chief Directorate: Environmental Conservation
Department of Environment Affairs

March 1981 - July 1983

Chief Professional Officer Chief Directorate: Environmental Conservation Department of
Environment Affairs

June 1978 - February 1981

Regional Ecologist: Transvaal Nature Conservation Division: Eastern Region (TPA)

August 1976 - May 1978

Officer-in-Charge. Suikerbosrand Nature Reserve Transvaal Nature Conservation
Division (TPA)

1972 - July 1976

Research Assistant Eugene Marais Chair of Wildlife Management University of Pretoria

Specialist Courses:

- ✿ 1993 Completed the certificate course in Public Management at the University of Pretoria. The certificate was awarded Cum Laude
- ✿ 1989 Completed course in Practical Techniques in Environmental Impact Assessment conducted by the Environmental Evaluation Unit at the Graduate School of Business, University of Cape Town
- ✿ 1973 Completed the International Seminar on the Administration of National Parks and Equivalent Reserves held in the United States, Canada and Mexico
- ✿ 1973 Completed short course in Tropical Ecology while at Texas A & M University

International Experience:

- ✿ Nominated as a member of an international team to evaluate the professional

activities of the Nature and National Parks Protection Authority of Israel
(Evaluation was to be conducted during November 2000)

- ✿ 1994 - Represent South Africa as Scientific Councillor on the Convention on Migratory Species - Nairobi, Kenya
- ✿ 1994 - Alternate delegate for South Africa at the Conference of the Parties of the Convention on Migratory Species - Nairobi, Kenya
- ✿ 1994 -Member of the negotiations team for the African Eurasian Waterfowl Agreement - Nairobi, Kenya
- ✿ 1993 -Represent South Africa as Scientific Councillor on the Convention on Migratory Species - Bonn, Germany
- ✿ 1992 -Visit to Israel to hold preliminary discussions on a bilateral agreement on Nature and Environmental Conservation
- ✿ 1992 -Participate in the IV World Congress on National Parks and Protected Areas - Caracas - Venezuela - Present two papers at the Congress and participate in numerous working groups on a wide range of protected area issues
- ✿ 1991 - 1995 South African Representative on the Scientific Council for the Convention on Migratory Species
- ✿ 1990 -Visit to England and Israel (met with a variety of nature and environmental conservation organisations) for discussion on joint projects and for discussions on national and regional protected area systems plans
- ✿ 1989 -Member of South African delegation to the XV Antarctic Treaty meeting, Paris
- ✿ 1988 -Delegate to the 17th IUCN General Assembly - Costa Rica
- ✿ 1986 -Seminar on Environmental Education - Israel

Specialisation in Firm:

Integrated Environmental Management, Environmental Impact Assessment, Rural Development, Natural Resource Planning and Management

Recent Experience:

Environmental Impact Assessment:

2006 – To Present - Selected Projects

- ✿ Scoping Exercise for a Proposed Pilot Aquaculture Operation for the Grow-Out of *Penaeus vannamei* Prawn Larvae For Commercial Purposes Within the Coega Industrial Development Zone at Port Elizabeth Eastern Cape Province Ballastrada Trade and Investments (Pty) Ltd, Trading as SeaArk Africa
- ✿ Environmental Management Plan for a Pilot Aquaculture Operation for the Grow-Out of *Litopenaeus vannamei* Prawn Larvae For Commercial Purposes, Coega Industrial Development Zone at Port Elizabeth, Eastern Cape Province
- ✿ Environmental Assessment for a Proposed Interpretive Centre, Day Visitor Site and Boardwalk Trail in the, Baviaanskloof Mega-Reserve Wilderness Foundation
- ✿ Environmental Assessment for a Proposed Residential Development, Remainder of Erf 328 Kabeljous River Jeffrey's Bay
- ✿ Environmental Assessment for the Augmentation of the Jeffrey's Bay Bulk Water Supply System (Pump Station, Supply Mains from Churchill Supply Mains and 5 MI Reservoir)
- ✿ Environmental Assessment for the Proposed Augmentation of the Jeffrey's Bay Main Electrical Substation
- ✿ Environmental Assessment for a Proposed Residential Development, Remainder of Farm Noorsekloof 327, Jeffrey's Bay
- ✿ Environmental Assessment for the Proposed Rezoning and Subdivision of Portion of Portion 8 of the Farm Kabeljous River No. 321, Jeffrey's Bay

- ✿ Sensitivity Assessment for the Subdivision of Portion 1 (Remaining Extent) of the Farm Klein Buffelsfontein No 477/1
- ✿ Environmental Assessment for a Proposed Resort Development, Portion 84 of the Farm De Stades No. 485, Beachview
- ✿ Environmental Assessment for the Rezoning and Subdivision of the Remainder of the Farm Boschklouf No. 896, Division of Humansdorp
- ✿ Environmental Assessment for the Rezoning of Portion B of the Remainder of Farm 428 to “Special Zone Nursery”
- ✿ Environmental Management Programme Report for a Proposed Sand, Clay and Calcrete Mining Operation in the Coega Valley on Portions 1 and 4 of the Farm Welbedachtsfontein, 300, Port Elizabeth
- ✿ Environmental Assessment for Subdivision and Rezoning of Erf 483 Bushman’s River for Residential Development
- ✿ Environmental Assessment for the Rezoning of Farms 328/1, 328/2 and Farm 779, Jeffrey’s Bay, Kabeljous-on-Sea

2001 – 2004 Selected Projects

- ✿ Environmental Assessment for the Extension of the Tsitsikamma Golf Estate.
- ✿ Environmental Assessment for a Residential Development in Jeffrey’s Bay.
- ✿ Environmental Assessment for a Township Development in Jeffrey’s Bay
- ✿ Environmental Assessment for Luxury Lodges and a Tent camp on the Mkambati Nature Reserve
- ✿ Environmental Assessment for a Boat Launch Facility at Gwe-Gwe, Mkambati Nature Reserve
- ✿ Environmental Assessment for a Boat Launch Facility at Kings Beach Port Elizabeth
- ✿ Environmental Assessment for the Port Elizabeth Golf Course Estate

- ✿ Environmental Assessment for a Resort Development on the Kromme River
- ✿ Environmental Assessment for the Establishment of a Presidential Suite at the Eagles Cragg Lodge, Shamwari Game Reserve
- ✿ Environmental Assessment for the Establishment of a Golfing Estate at the Port Elizabeth Golf Club
- ✿ Environmental Assessment for the Eskom Tsitsikamma 66kV powerline
- ✿ Environmental Assessment for three resorts in the Zuurrberg Area
- ✿ Environmental Assessment for a Satellite Resort on the Gorah Concession Area, Addo Elephant National Park
- ✿ Environmental Assessment for the Alicedale Golf Resort Development
- ✿ Environmental Assessment for three lodges on the Lalibella Game Reserve
- ✿ Environmental Assessment for the closure of the Marina Martinique Small Boat Harbour
- ✿ Environmental Assessments for two caravan parks on the Gamtoos River
- ✿ Environmental Assessment for the upgrading of the Road from Flagstaff to Holy Cross
- ✿ Biophysical Environmental Assessment on the proposed ESKOM Power line to feed the Aluminium Smelter at Coega
- ✿ Environmental Assessment of the Bayethe Game Reserve
- ✿ Environmental Assessment of Eagles Cragg Game Lodge – Shamwari Game Reserve
- ✿ Environmental Impact Assessment on the Sanderlings Coastal Wetland Resort
- ✿ Scoping Report for boat mooring facilities on the Kromme River to serve a residential resort

- ✿ Class Environmental Assessment for Working for Water projects in terms of the new DWAF Environmental Evaluation System
- ✿ Environmental Scoping for a Housing Development on a Portion of Land in the Van Stadens Wildflower Nature Reserve
- ✿ Environmental Impact Assessment on two Leather Tanneries in Middelburg, Eastern Cape Province
- ✿ Compilation of an Environmental Evaluation System for the Department of Water Affairs and Forestry (DWAF) (Eastern Cape) This environmental evaluation system is currently being incorporated into the national DWAF's Environmental Management System
- ✿ Compilation of an Environmental Evaluation Administration System and Manual for the Department of Water Affairs and Forestry

Natural Resource Management

- ✿ Environmental Management Plan for the King Williamstown - East London National Road
- ✿ Investigation into the Protected Area Estate in the Province of the Eastern Cape: A Review of Goals and Objectives, Strengths and Weaknesses and an Analysis of Various Institutional Structures Suitable for Achieving the Goals and Objectives.
- ✿ Design and run RSA's premier stewardship programme (The South African Natural Heritage Programme and Sites of Conservation Significance Programme)
- ✿ Co-ordinate South African Plan for Nature Conservation
- ✿ Management Plan for the Suikerbosrand Nature Reserve
- ✿ Management Plan for the Marion and Prince Edward Islands (Draft).
- ✿ Protected Area Systems Plan
- ✿ Management Plans for game farmers

- ✿ Bioregional Planning

Policy

- ✿ Arrange and run two DWAF regional information sessions for the DWAF Regional Offices and Provincial Government Departments of the Western and Eastern Cape on the Implementation of the DWAF's (Eastern Cape) Environmental Evaluation System (2001). A further seven provincial workshops will follow.
- ✿ Run five Eastern Cape Information Sessions for District Municipalities in the Eastern Cape Province on the Implementation of the DWAF Environmental Evaluation System (2001)
- ✿ Member DANCED Review Mission on the National Waste Management Strategy
- ✿ Compile South African National Report to the Convention on Biological Diversity
- ✿ Sub-consultant to the Drafting team for the National White Paper on Integrated Pollution Control and Waste Management.
- ✿ Member of a six person drafting team for the National Green Paper on an Environmental Management Policy for South Africa where I represented the nine provinces.
- ✿ Appointed as one of the Reference Group for the National White Paper on an Environmental Management Policy for South Africa.

Papers and Publications:

- ✿ Author and co-author of some 27 papers, reports and conference presentations as well as a number of popular papers on environmental conservation.

Selected Clients

South African

- ✿ Aurecon

- ✿ BKS
- ✿ Camdeboo Local Municipality
- ✿ Blue Crane Development Agency
- ✿ Crown Chickens
- ✿ Department of Environmental Affairs and Tourism
- ✿ Department of Water Affairs and Forestry
- ✿ Lalibela Private Game Reserve
- ✿ Mandela Bay Development Agency
- ✿ Municipality of Port Elizabeth (Nelson Mandela Metropole)
- ✿ Ninham Shand (Eastern Cape)
- ✿ Portnet
- ✿ Shamwari Game Reserve (Mantis Collection)
- ✿ South African National Roads Agency Ltd
- ✿ Stewart Scott (Eastern Cape)
- ✿ Telkom South Africa
- ✿ Vodacom South Africa
- ✿ Wilderness Safaris

International

- ✿ DANCED (Denmark)
- ✿ IDRC (Canada)