Gauteng Department of Agriculture and Rural Development (GDARD)

Basic Assessment Report in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2010 (Version 1)

List of all organs of state and State Departments where the draft report has been submitted, their full contact details and contact person

Kindly note that:

1. This **Basic Assessment Report** is the standard report required by GDARD in terms of the EIA Regulations, 2010.

2. This application form is current as of 2 August 2010. It is the responsibility of the EAP to ascertain whether subsequent versions of the form have been published or produced by the competent authority.

3. **A draft Basic Assessment Report must be submitted to all State Departments administering a law relating to a matter likely to be affected by the activity to be undertaken. The draft reports must be submitted to the relevant State Departments and on the same day, two CD's of draft reports must also be submitted to the Competent Authority (GDARD) with a signed proof of such submission of draft report to the relevant State Departments.**

4. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.

5. Selected boxes must be indicated by a cross and, when the form is completed electronically, must also be highlighted.

6. An incomplete report shall be rejected.

7. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.

8. Five (5) copies (3 hard copies and 2 CDs-PDF) of the final report and attachments must be handed in at offices of the relevant competent authority, as detailed below.

9. No faxed or e-mailed reports will be accepted. Only hand delivered or posted applications will be accepted.

10. Unless protected by law, and clearly indicated as such, all information filled in on this application will become public information on receipt by the competent authority. The applicant/EAP must provide any interested and affected party with the information contained in this application on request, during any stage of the application process.

DEPARTMENTAL DETAILS

Gauteng Department of Agriculture and Rural Development
Attention: Administrative Unit of the Sustainable Utilisation of the Environment (SUE) Branch
P.O. Box 8769
Johannesburg
2000

Administrative Unit of the Sustainable Utilisation of the Environment (SUE) Branch
18th floor Glen Cairn Building
73 Market Street, Johannesburg

Admin Unit telephone number: (011) 355 1345
Department central telephone number: (011) 355 1900

(For official use only)

File Reference Number:						
Application Number:						
Date Received:						

* Submission to State Departments (Number 3 above)

Has a draft report for this application been submitted to all State Departments administering a law relating to a matter likely to be affected as a result of this activity? Yes **X**

Is a list of State Departments referred to above been attached to this report? Yes **X**

if no, state reasons for not attaching the list.

SECTION A: ACTIVITY INFORMATION

1. ACTIVITY DESCRIPTION

Project title (must be the same name as per application form):

Lakeview Floodline Confinement and Building Expansion

Select the appropriate box

The application is for an upgrade of an existing development [ ] The application is for a new development [**X**] Other, specify [ ]

Does the activity also require any authorisation other than NEMA EIA authorisation?

YES **X**

If yes, describe the legislation and the Competent Authority administering such legislation

National Water Act No. 36 of 1998 administered by the Department of Water Affairs

If yes, have you applied for the authorisation(s)? YES **X**

If yes, have you received approval(s)? (attach in appropriate appendix) NO **X**

2. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations:

Title of legislation, policy or guideline:	Administering authority:	Promulgation Date:
National Environmental Management Act No. 107 of 1998 as amended.	National & Provincial	27 November 1998
Environmental Impact Assessment Regulations, GN 544 of 10 December 2010 (Listing Activities 11, 18, 37 and 48, Listing Notice 1)	Gauteng Department of Agriculture and Rural Development (GDARD)	10 December 2010
National Water Act No. 36 of 1998	National Department of Water Affairs	20 August 1998
National Heritage Resource Act, 1999 (Act No. 25 of 1999)	Provincial Heritage Resource Agency – Gauteng (PHRAG)	28 April 1999
Integrated Environmental Management	National and Provincial	1992

3. ALTERNATIVES

Describe the proposal and alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished.

The determination of whether the site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment.

The no-go option must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. **Do not** include the no go option into the alternative table below.

Note: After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.
Provide a description of the alternatives considered

No.	**Alternative type**, either alternative: site on property, properties, activity, design, technology, operational or other(provide details of "other")	**Description**
1	Proposal	Abland (Pty) Ltd aim to confine the 1:100 year floodline associated with the man-made dam at Constantia Boulevard, in order to utilise the adjacent property as office space (known as Lakeview). The physical construction will include increasing the height of the existing dam wall to ensure that the adjacent property does not flood during periods of heavy rainfall. Currently the 1:100 year floodline runs slightly outside the boundaries of the dam to the east. This area adjacent to the dam wall will be developed into a parking area for the Nedbank Lakeview Data Centre (of which phase 1 is already being constructed). The proposal also includes the expansion of the Nedbank Lakeview Data Centre (phase 2) to within 32 metres of the watercourse (namely the Constantia Dam). In addition, an attenuation facility/ies will be constructed on the periphery of the dam for the attenuation of stormwater to be generated on site. This will contribute to responsible reuse of excess water, which, with other measures, will form part of the motivation submitted by Abland to the Green Building Council of South Africa (GBSA) for a Green Star rating of 4 for the inclusive development.
2	Alternative 1 (Scheduling Alternative)	The construction phase of the proposed confinement of the floodline is conducted in winter months/mid – year (May-July). Construction during the winter season will reduce the risk of flooding during construction and wet conditions on site.

In the event that no alternative(s) has/have been provided, a motivation must be included in the table below.

NOTE: The numbering in the above table must be consistently applied throughout the application report and process

4. PHYSICAL SIZE OF THE ACTIVITY

Indicate the total physical size (footprint) of the proposal as well as alternatives. Footprints are to include all new infrastructure (roads, services etc), impermeable surfaces and landscaped areas:

	Size of the activity:
Proposed activity	0,63ha
Alternatives:	
Alternative 1 (if any)	0,63ha
Alternative 2 (if any)	
	Ha/ m^2

or, for linear activities:

	Length of the activity: N/A
Proposed activity	
Alternatives:	
Alternative 1 (if any)	
Alternative 2 (if any)	
	k/km

Indicate the size of the site(s) or servitudes (within which the above footprints will occur):

	Size of the site/servitude:
Proposed activity	0,63ha

Alternatives:

Alternative 1 (if any)	0,63ha
Alternative 2 (if any)	
	Ha/m^2

5. SITE ACCESS

Proposal

Does ready access to the site exist, or is access directly from an existing road?	YES X	
If NO, what is the distance over which a new access road will be built		m

Describe the type of access road planned:

Access to the site will be from Constantia Boulevard

Include the position of the access road on the site plan.

Alternative 1

Does ready access to the site exist, or is access directly from an existing road?	YES X	
If NO, what is the distance over which a new access road will be built		m

Describe the type of access road planned:

Access to the site will be from Constantia Boulevard

Include the position of the access road on the site plan.

Alternative 2

Does ready access to the site exist, or is access directly from an existing road?	YES	NO
If NO, what is the distance over which a new access road will be built		m

Describe the type of access road planned:

Include the position of the access road on the site plan.

PLEASE NOTE: Points 6 to 8 of Section A must be duplicated where relevant for alternatives

Section A 6-8 has been duplicated **0** Number of times

(only complete when applicable)

6. SITE OR ROUTE PLAN

A detailed site or route (for linear activities) plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document. The site or route plans must indicate the following:

- the scale of the plan, which must be at least a scale of 1:2000 (scale can not be larger than 1:2000 i.e. scale can not be 1:2500 but could where applicable be 1:1500)
- the property boundaries and numbers of all the properties within 50m of the site;
- the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- the exact position of each element of the application as well as any other structures on the site;
- the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, septic tanks, storm water infrastructure and telecommunication infrastructure;
- walls and fencing including details of the height and construction material;
- servitudes indicating the purpose of the servitude;
- sensitive environmental elements on and within 100m of the site or sites including (but not limited thereto):
  - Rivers and wetlands;
  - the 1:100 and 1:50 year flood line;
  - ridges;
  - cultural and historical features;
  - areas with indigenous vegetation (even if it is degraded or infested with alien species);
- for gentle slopes the 1m contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- the positions from where photographs of the site were taken.
- Where a watercourse is located on the site at least one cross section of the water course must be included (to allow the 32m position from the bank to be clearly indicated)

7. SITE PHOTOGRAPHS (PLEASE REFER TO APPENDIX B)

Colour photographs from the center of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under the appropriate Appendix**.** It should be supplemented with additional photographs of relevant features on the site, where applicable.

8. FACILITY ILLUSTRATION (PLEASE REFER TO APPENDIX C)

A detailed illustration of the activity must be provided at a scale of 1:200 for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity. To be attached in the appropriate Appendix.

SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT

Note: Complete Section B for the proposal and alternative(s) (if necessary)

Further:

Instructions for completion of Section B for linear activities

1) For linear activities (pipelines etc) it may be necessary to complete Section B for each section of the site that has a significantly different environment.
2) Indicate on a plan(s) the different environments identified
3) Complete Section B for each of the above areas identified
4) Attach to this form in a chronological order
5) Each copy of Section B must clearly indicate the corresponding sections of the route at the top of the next page.

Section B has been duplicated for sections of the route | **0** | times

Instructions for completion of Section B for location/route alternatives

1) For each location/route alternative identified the entire Section B needs to be completed
2) Each alterative location/route needs to be clearly indicated at the top of the next page
3) Attach the above documents in a chronological order

Section B has been duplicated for location/route alternatives | **"insert No. of duplicates"** | times
(complete only when appropriate)

Instructions for completion of Section B when both location/route alternatives and linear activities are applicable for the application

Section B is to be completed and attachments order in the following way

- All significantly different environments identified for Alternative 1 is to be completed and attached in a chronological order; then
- All significantly different environments identified for Alternative 2 is to be completed and attached chronological order, etc.

Section B - Section of Route ☐ (complete only when appropriate for above)

Section B – Location/route Alternative No. ☐ (complete only when appropriate for above)

1. PROPERTY DESCRIPTION

Property description: (Farm name, portion etc.) Remaining extent of Erf 984 in Constantia Kloof Extension 25

2. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in decimal degrees. The degrees should have at least six decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

Alternative:	**Latitude (S):**	**Longitude (E):**
	-26.153577°	27.923855°

In the case of linear activities:

Alternative:	**Latitude (S):**	**Longitude (E):**
• Starting point of the activity	°	°
• Middle point of the activity	°	°
• End point of the activity	°	°

For route alternatives that are longer than 500m, please provide co-ordinates taken every 250 meters along the route and attached in the appropriate Appendix

Addendum of route alternatives attached ☐

3. GRADIENT OF THE SITE

Indicate the general gradient of the site.

[redacted]	[redacted]	1:20 – 1:15 **X**	[redacted]	[redacted]	[redacted]	[redacted]

4. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site.

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	River front

5. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

a) Is the site located on any of the following?

Shallow water table (less than 1.5m deep)	[redacted]	NO **X**
Dolomite, sinkhole or doline areas	[redacted]	NO **X**
Seasonally wet soils (often close to water bodies)	YES **X**	[redacted]
Unstable rocky slopes or steep slopes with loose soil	[redacted]	NO **X**
Dispersive soils (soils that dissolve in water)	YES **X**	[redacted]
Soils with high clay content (clay fraction more than 40%)	[redacted]	NO **X**
Any other unstable soil or geological feature	[redacted]	NO **X**
An area sensitive to erosion	YES **X**	[redacted]

(Information in respect of the above will often be available at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

b) are any caves located on the site(s) [redacted] NO **X**

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	**Longitude (E):**
°	°

c) are any caves located within a 300m radius of the site(s) [redacted] NO **X**

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	**Longitude (E):**
°	°

d) are any sinkholes located within a 300m radius of the site(s) [redacted] NO **X**

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):	**Longitude (E):**
°	°

If any of the answers to the above are "YES" or "unsure", specialist input may be requested by the Department

6. AGRICULTURE

Does the site have high potential agriculture as contemplated in the Gauteng Agricultural Potential Atlas (GAPA 3)? [redacted] NO **X**

Please note: The Department may request specialist input/studies in respect of the above.

7. GROUNDCOVER

To be noted that the location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Indicate the types of groundcover present on the site and include the estimated percentage found on site

[redacted]	Natural veld with scattered aliens % = 70	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	Building or other structure % = 10	Bare soil % = 20

Please note: The Department may request specialist input/studies depending on the nature of the groundcover and potential impact(s) of the proposed activity/ies.

Are there any rare or endangered flora or fauna species (including red list species) present on the site [redacted] NO **X**

If YES, specify and explain:

Are there any rare or endangered flora or fauna species (including red list species) present within a 200m (if within urban area as defined in the Regulations) or within 600m (if outside the urban area as defined in the Regulations) radius of the site. [redacted] NO **X**

If YES, specify and explain:

Are there any special or sensitive habitats or other natural features present on the site? YES **X** [redacted]

If YES, specify and explain:

The Constantia Dam is situated immediately to the west of the site. The Constantia Dam is fed by a tributary of the Jukskei River

Was a specialist consulted to assist with completing this section YES **X** NO

If yes complete specialist details

Name of the specialist:	Karin van der Walt		
Qualification(s) of the specialist:	B.Tech (Nature Conservation) Tshwane University of Technology MSc Ecology – University of Witwaterstrand - Current		
Postal address:	P O Box 74785, Lynnwood Ridge		
Postal code:	0040		
Telephone:	012- 349 1307	Cell:	072 607 8613

E-mail:	karin@sefsa.co.za	Fax:	012- 349 1229

Are any further specialist studies recommended by the specialist?		NO **X**
If YES, specify:		
If YES, is such a report(s) attached?	YES	NO
If YES list the specialist reports attached below		

Signature of specialist: _____ Date:

Please note; If more than one specialist was consulted to assist with the filling in of this section then this table must be appropriately duplicated

8. LAND USE CHARACTER OF SURROUNDING AREA

Using the associated number of the relevant current land use or prominent feature from the table below, fill in the position of these land-uses in the vacant blocks below which represent a 500m radius around the site

1. Vacant land	2. River, stream, wetland	3. Nature conservation area	4. Public open space	5. Koppie or ridge
6. Dam or reservoir	7. Agriculture	8. Low density residential	9. Medium to high density residential	10. Informal residential
11. Old age home	12. Retail	13. Offices	14. Commercial & warehousing	15. Light industrial
16. Heavy industrial[AN]	17. Hospitality facility	18. Church	19. Education facilities	20. Sport facilities
21. Golf course/polo fields	22. Airport[N]	23. Train station or shunting yard[N]	24. Railway line[N]	25. Major road (4 lanes or more)[N]
26. Sewage treatment plant[A]	27. Landfill or waste treatment site[A]	28. Historical building	29. Graveyard	30. Archeological site
31. Open cast mine	32. Underground mine	33.Spoil heap or slimes dam[A]	34. Small Holdings	
Other land uses (describe):				

NOTE: Each block represents an area of 250m X250m

NORTH

14	**14**	**12, 14, 25**	**14, 25**	**14**
14	**1, 13, 14**	**6, 13, 14**	**17, 25**	**1, 8**
8	**8, 13**		**25**	**8**
8	**5, 8**	**2, 5, 8, 14**	**25**	**8**
8	**8**	**8**	**1, 25**	**8, 25**

WEST EAST

SOUTH

= Site

Note: More than one (1) Land-use may be indicated in a block

Please note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed activity/ies. Specialist reports that look at health & air quality and noise impacts may be required for any feature above and in particular those features marked with an "A" and with an "N" respectively.

Have specialist reports been attached	YES **X**
If yes indicate the type of reports below	

- Updated Floodline Evaluation September 2012 AND Floodline report 2004 – prepared by ARQ (Pty) Ltd;
- Eco-Conditional Requirement in terms of land use and ecology – prepared by SEF;
- Hydrogeological report – prepared by Aurecon;
- Wetland assessment – prepared by Enviroguard Ecological Services cc; and
- Stormwater management plan – prepared by WSP SA Civil and Structural Engineers (Pty) Ltd.

9. SOCIO-ECONOMIC CONTEXT

Describe the existing social and economic characteristics of the area and the community condition as baseline information to assess the potential social, economic and community impacts.

The Roodepoort area falls under the jurisdiction of the City of Johannesburg Municipality and into Region C of this Municipality. "The region consists of Roodepoort, Florida Park, Ruimsig, Cosmo City, Northriding, Bram Fischerville and Thulani, and is divided up into 12 wards. There are 350 000 residents living in an area covering 200 square kilometres"

Roodepoort is considered one of the fastest growing areas within the municipality, with a reported growth rate of two percent per annum. However, this growth is uneven and occurs in certain areas of Roodepoort. Sixty five percent (65%) of the residents of Region C, in which Roodepoort falls, are classified as economically active – meaning that they are over the age of 16, either employed or unemployed but searching for work (StatsSA). While the rest of the community are under 16 years. It is estimated that only 32 % of the population has a post-matric qualification. There are, however, low levels of employment in the region, as a result of limited economic activity.

There has been an attempt to revive the central business district of the area in order to encourage business to return to the centre and lead to increased growth, yet this is still to produce meaningful results. The provision of services to the area is currently uneven, but there is a shift to an integrated, mixed-use development which will provide a higher quality standard of housing, partly in an attempt to provide housing to those who reside in informal settlements.

The Roodepoort area has experienced growth in that it provides an opportunity for those who have previously been excluded from the housing market to purchase property. This is due to large availability of land in certain areas of Roodepoort and its location outside of the main centres of Johannesburg allowing for reasonable property prices.

10. CULTURAL/HISTORICAL FEATURES

Please be advised that if section 38 of the National Heritage Resources Act 25 of 1999 is applicable to your proposal or alterantives, then you are requested to furnish this Department with written comment from the South African Heritage Resource Agency (SAHRA) – Attach comment in appropriate annexure

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;

(b) the construction of a bridge or similar structure exceeding 50m in length;

(c) any development or other activity which will change the character of a site-

(i) exceeding 5 000 m2 in extent; or

(ii) involving three or more existing erven or subdivisions thereof; or

(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or

(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;

(d) the re-zoning of a site exceeding 10 000 m2 in extent; or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Are there any signs of culturally (aesthetic, social, spiritual, environmental) or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?		NO **X**

If YES, explain:

If uncertain, the Department may request that specialist input be provided to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist if one was already appointed:

A desktop survey was undertaken of the study area which revealed no culturally significant elements. This was further verified by a site visit.

Will any building or structure older than 60 years be affected in any way?	[redacted]	NO X
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)? If yes, please attached the comments from SAHRA in the appropriate Appendix	[redacted]	NO X

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The Environmental Assessment Practitioner must follow any relevant guidelines adopted by the competent authority in respect of public participation and must at least –

1(a) Fix a site notice at a conspicuous place, on the boundary of a property where it is intended to undertake the activity which states that an application will be submitted to the competent authority in terms of these regulations and which provides information on the proposed nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations on the application may be made;

1(b) inform landowners and occupiers of adjacent land of the applicant's intention to submit an application to the competent authority;

1(c) inform landowners and occupiers of land within 100 metres of the boundary of the property where it is proposed to undertake the activity and whom may be directly affected by the proposed activity of the applicant's intention to submit an application to the competent authority;

1(d) inform the ward councillor and any organisation that represents the community in the area of the applicant's intention to submit an application to the competent authority;

1(e) inform the municipality which has jurisdiction over the area in which the proposed activity will be undertaken of the applicant's intention to submit an application to the competent authority; and

1(f) inform any organ of state that may have jurisdiction over any aspect of the activity of the applicant's intention to submit an application to the competent authority; and

1(g) place an advertisement in one local newspaper and any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of these regulations.

2. LOCAL AUTHORITY PARTICIPATION

Local authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least thirty (30) calendar days before the submission of the application to the competent authority (GDARD).

Has any comment been received from the local authority?	YES **X**	[redacted]

If "YES", briefly describe the comment below (also attach any correspondence to and from the local authority to this application):

Comment was received from the City of Joburg (CoJ) Environmental Regulatory Services directorate as part of the townplanning process. The CoJ has no objection to the application made for rezoning. In addition, the CoJ supports the application made for the increase in floor area ratio of 0.7 to 1.7ha for the development of offices, provided the following conditions are met:

- that the 1:50 and the 1:100 year floodline are adequately determined in line with the CoJ Catchment Management Policy.
- No structures of development is allowed within the demarcated floodlines
- An adequate stormwater management plan is developed.

If "NO" briefly explain why no comments have been received

This project will be announced on the **30 November 2012** and the Basic Assessment Report and draft Water Use License Forms will be available for public comment from **Friday, 30 November 2012 to Tuesday, 22 January 2013**.

3. CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the activity, site or property, such as servitude holders and service providers, should be informed of the application at least thirty (30) calendar days before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?	[redacted]	NO **X**

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

If "NO" briefly explain why no comments have been received

This project will be announced on **30 November 2012** and the Basic Assessment Report and draft Water Use License Forms will be available for public comment from **Friday, 30 November 2012 to Tuesday, 22 January 2013**.

4. GENERAL PUBLIC PARTICIPATION REQUIREMENTS

The Environmental Assessment Practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees and ratepayers associations. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

The practitioner must record all comments and respond to each comment of the public / interested and affected party before the application is submitted. The comments and responses must be captured in a Comments and Responses Report as prescribed in the regulations and be attached to this application.

5. APPENDICES FOR PUBLIC PARTICIPATION

All public participation information is to be attached in the appropriate Appendix. The information in this Appendix is to be ordered as detailed below

Appendix 1 – Proof of site notice

Appendix 2 – Written notices issued to those persons detailed in 1(b) to 1(f) above

Appendix 3 – Proof of newspaper advertisements

Appendix 4 –Communications to and from persons detailed in Point 2 and 3 above

Appendix 5 – Minutes of any public and/or stakeholder meetings

Appendix 6 - Comments and Responses Report

Appendix 7 –Comments from I&APs on Basic Assessment (BA) Report

Appendix 8 –Comments from I&APs on amendments to the BA Report

Appendix 9 – Copy of the register of I&APs

Appendix 10 – Comments from I&APs on the application

Appendix 11 - Other

SECTION D: RESOURCE USE AND PROCESS DETAILS

Note: Section D is to be completed for the proposal and alternative(s) (if necessary)

Instructions for completion of Section D for alternatives

1) For each alternative under investigation, where such alternatives will have different resource and process details (e.g. technology alternative), the entire Section D needs to be completed
4) Each alterative needs to be clearly indicated in the box below
5) Attach the above documents in a chronological order

Section D has been duplicated for alternatives (complete only when appropriate) **0** times

Section D Alternative No. "insert alternative number" (complete only when appropriate for above)

1. WASTE, EFFLUENT, AND EMISSION MANAGEMENT

Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase? YES **X** / NO

If yes, what estimated quantity will be produced per month? 41.6m^3

How will the construction solid waste be disposed of (describe)?

All construction waste will be collected in skips on site and disposed of at a registered landfill site

Where will the construction solid waste be disposed of (describe)?

At the nearest registered municipal landfill site

Will the activity produce solid waste during its operational phase? YES / NO **X**

If yes, what estimated quantity will be produced per month? m^3

How will the solid waste be disposed of (describe)?

Has the municipality or relevant service provider confirmed that sufficient air space exists for treating/disposing of the solid waste to be generated by this activity? YES / NO

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

Note: If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation? YES / NO **X**

If yes, inform the competent authority and request a change to an application for scoping and EIA.

Is the activity that is being applied for a solid waste handling or treatment facility? YES / NO **X**

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Describe the measures, if any, that will be taken to ensure the optimal reuse or recycling of materials:

All waste generated on site will be sorted and disposed of at the nearest applicable recycling facility.

Liquid effluent (other than domestic sewage)

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system? YES / NO **X**

If yes, what estimated quantity will be produced per month? m^3

If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the liquid effluent to be generated by this activity(ies)? YES / NO

Will the activity produce any effluent that will be treated and/or disposed of on site? YES / NO **X**

If yes, what estimated quantity will be produced per month? m^3

If yes describe the nature of the effluent and how it will be disposed.

Note that if effluent is to be treated or disposed on site the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA

Will the activity produce effluent that will be treated and/or disposed of at another facility? YES / NO **X**

If yes, provide the particulars of the facility:

Facility name:

Contact person:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

Liquid effluent (domestic sewage)

Will the activity produce domestic effluent that will be disposed of in a municipal sewage system?	[redacted]	NO **X**
If yes, what estimated quantity will be produced per month?	m^3	
If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the domestic effluent to be generated by this activity(ies)?	YES	NO
Will the activity produce any effluent that will be treated and/or disposed of on site?	[redacted]	NO **X**

If yes describe how it will be treated and disposed off.

Emissions into the atmosphere

Will the activity release emissions into the atmosphere?	YES	NO **X**
If yes, is it controlled by any legislation of any sphere of government?	YES	NO

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

Emissions into the atmosphere will only be generated during the construction phase. This will likely be dust and emissions created by construction vehicles traversing the site.

2. WATER USE

Indicate the source(s) of water that will be used for the activity

Municipal **X**	[redacted]	Groundwater **X**	[redacted]	[redacted]	[redacted]

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month: 9,0000 liters

If Yes, please attach proof of assurance of water supply, e.g. yield of borehole, in the appropriate Appendix

Does the activity require a water use permit from the Department of Water Affairs?	YES **X**	[redacted]

If yes, list the permits required

An on-site borehole will be used to extract water for irrigation purposes during the operational phase of the project. A Section 21 (a) water use will be applied for together with the Section 21(c) and (i) application for the confinement of the floodine. However, water supply for the Lakeview Office Buildings will be provided by the municipality for which no Water Use License Application is required.

If yes, have you applied for the water use permit(s)?	YES **X**	[redacted]
If yes, have you received approval(s)? (attached in appropriate appendix)	[redacted]	NO **X**

3. POWER SUPPLY

Please indicate the source of power supply eg. Municipality / Eskom / Renewable energy source

Municipality (refer to attached letter from City Power)

If power supply is not available, where will power be sourced from?

4. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

The confinement of the current 1:100 year floodline will not take into account any energy efficiency measures, However the expansion of the building (namely the parking area) will take into account Greenstar 4 energy efficiency principles in order to comply with the Greenstar rating.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2006, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summarise the issues raised by interested and affected parties.

N/A

Summary of response from the practitioner to the issues raised by the interested and affected parties
(A full response must be provided in the Comments and Response Report that must be attached to this report):

N/A

2. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION AND OPERATIONAL PHASE

Briefly describe the methodology utilised in the rating of significance of impacts

The criteria for the description and assessment of environmental impacts were drawn from the EIA Regulations. Activities within the framework of the proposed development and their respective construction and operational phases, give rise to certain impacts. For the purpose of assessing these impacts, the project has been divided into three phases from which impacting activities can be identified, namely:

a) Construction phase: All the construction related activities on site, until the contractor leaves the site.
b) Operational phase: All activities, including the operation and maintenance of the proposed development.
c) Decommissioning phase: All decommissioning activities on site, until the contractor leaves the site.

The activities arising from each of these phases have been included in the impact tables. This is to identify activities that require certain environmental management actions to mitigate the impacts arising from them. The criteria against which the activities were assessed are given in the next section.

Assessment Criteria

The assessment of the impacts has been conducted according to a synthesis of criteria required by the integrated environmental management procedure.

Extent
The physical and spatial scale of the impact is classified as:
a) Footprint: The impacted area extends only as far as the activity, such as footprint occurring within the total site area.
b) Site: The impact could affect the whole, or a significant portion of the site.
c) Regional: The impact could affect the area including the neighbouring farms, the transport routes and the adjoining towns.
d) National: The impact could have an effect that expands throughout the country (South Africa).
e) International: Where the impact has international ramifications that extend beyond the boundaries of South Africa.

Duration
The lifetime of the impact, that is measured in relation to the lifetime of the proposed development.
a) Short term: The impact will either disappear with mitigation or will be mitigated through a natural process in a period shorter than that of the construction phase.
b) Short to Medium term: The impact will be relevant through to the end of a construction phase.
c) Medium term: The impact will last up to the end of the development phases, where after it will be entirely negated.
d) 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 thereafter.
e) Permanent: This is the only class of impact, which 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.

Intensity
The intensity of the impact is considered by examining whether the impact is destructive or benign, whether it destroys the impacted environment, alters its functioning, or slightly alters the environment itself. The intensity is rated as:
a) Low: The impact alters the affected environment in such a way that the natural processes or functions are not affected.
b) Medium: The affected environment is altered, but functions and processes continue, albeit in a modified way.
c) High: Function or process of the affected environment is disturbed to the extent where it temporarily or permanently ceases.

Probability
This describes the likelihood of the impacts actually occurring. The impact may occur for any length of time during the life cycle of the activity, and not at any given time. The classes are rated as follows:
a) Improbable: The possibility of the impact occurring is none, due either to the circumstances, design or experience.

The chance of this impact occurring is zero (0%).

b) Possible: The possibility of the impact occurring is very low, due either to the circumstances, design or experience. The chances of this impact occurring is defined as 25%.
c) Likely: There is a possibility that the impact will occur to the extent that provisions must therefore be made. The chances of this impact occurring is defined as 50%.
d) Highly Likely: 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. The chances of this impact occurring is defined as 75%.
e) 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 on. The chance of this impact occurring is defined as 100%.

Mitigation

The impacts that are generated by the development can be minimised if measures are implemented in order to reduce the impacts. The mitigation measures ensure that the development considers the environment and the predicted impacts in order to minimise impacts and achieve sustainable development.

Determination of Significance – Without Mitigation

Significance is determined through a synthesis of impact characteristics as described in the above paragraphs. It provides an indication of the importance of the impact in terms of both tangible and intangible characteristics. The significance of the impact "without mitigation" is the prime determinant of the nature and degree of mitigation required. Where the impact is positive, significance is noted as "positive". Significance is rated on the following scale:

a) No significance: The impact is not substantial and does not require any mitigation action.
b) Low: The impact is of little importance, but may require limited mitigation.
c) Medium: The impact is of importance and is therefore considered to have a negative impact. Mitigation is required to reduce the negative impacts to acceptable levels.
d) High: The impact is of major importance. Failure to mitigate, with the objective of reducing the impact to acceptable levels, could render the entire development option or entire project proposal unacceptable. Mitigation is therefore essential.

Determination of Significance – With Mitigation

Determination of significance refers to the foreseeable significance of the impact after the successful implementation of the necessary mitigation measures. Significance with mitigation is rated on the following scale:

a) No significance: The impact will be mitigated to the point where it is regarded as insubstantial.
b) Low: The impact will be mitigated to the point where it is of limited importance.
c) Low to medium: The impact is of importance, however, through the implementation of the correct mitigation measures such potential impacts can be reduced to acceptable levels.
d) Medium: The impact is of major importance but through the implementation of the correct mitigation measures, the negative impacts will be reduced to acceptable levels.
e) Medium to high: Notwithstanding the successful implementation of the mitigation measures, to reduce the negative impacts to acceptable levels, the negative impact will remain of significance. However, taken within the overall context of the project, the persistent impact does not constitute a fatal flaw.
f) High: The impact is of major importance. Mitigation of the impact is not possible on a cost-effective basis. The impact is regarded as high importance and taken within the overall context of the project, is regarded as a fatal flaw. An impact regarded as high significance, after mitigation could render the entire development option or entire project proposal unacceptable.

Assessment Weighting

Each aspect within an impact description was assigned a series of quantitative criteria. Such criteria are likely to differ during the different stages of the project's life cycle. In order to establish a defined base upon which it becomes feasible to make an informed decision, it was necessary to weigh and rank all the criteria.

Ranking, Weighting and Scaling

For each impact under scrutiny, a scaled weighting factor is attached to each respective impact (Figure 1). The purpose of assigning such weights serve to highlight those aspects considered the most critical to the various stakeholders and ensure that each specialist's element of bias is taken into account. The weighting factor also provides a means whereby the impact assessor can successfully deal with the complexities that exist between the different impacts and associated aspect criteria.

Simply, such a weighting factor is indicative of the importance of the impact in terms of the potential effect that it could have on the surrounding environment. Therefore, the aspects considered to have a relatively high value will score a relatively higher weighting than that which is of lower importance.

Identifying the Potential Impacts Without Mitigation Measures (WOM)

Following the assignment of the necessary weights to the respective aspects, criteria are summed and multiplied by their assigned weightings, resulting in a value for each impact (prior to the implementation of mitigation measures).

Extent	Duration	Intensity	Probability	Weighting Factor (WF)	Significance Rating (SR)	Mitigation Efficiency (ME)	Significance Following Mitigation (SFM)
Footprint 1	Short term 1	Low 1	Probable 1	Low 1	Low 0-19	High 0,2	Low 0-19
Site 2	Short to medium 2		Possible 2	Low to medium 2	Low to medium 20-39	Medium to high 0,4	Low to medium 20-39
Regional 3	Medium term 3	Medium 3	Likely 3	Medium 3	Medium 40-59	Medium 0,6	Medium 40-59
National 4	Long term 4		Highly Likely 4	Medium to high 4	Medium to high 60-79	Low to medium 0,8	Medium to high 60-79
International 5	Permanent 5	High 5	Definite 5	High 5	High 80-100	Low 1,0	High 80-100

Figure 1: Description of biophysical assessment parameters with its respective weighting

Equation 1:
Significance Rating (WOM) = (Extent + Intensity + Duration + Probability) x Weighting Factor

Identifying the Potential Impacts With Mitigation Measures (WM)
In order to gain a comprehensive understanding of the overall significance of the impact, after implementation of the mitigation measures, it was necessary to re-evaluate the impact.

Mitigation Efficiency (ME)
The most effective means of deriving a quantitative value of mitigated impacts is to assign each significance rating value (WOM) a mitigation effectiveness rating. The allocation of such a rating is a measure of the efficiency and effectiveness, as identified through professional experience and empirical evidence of how effectively the proposed mitigation measures will manage the impact. Thus, the lower the assigned value the greater the effectiveness of the proposed mitigation measures and subsequently, the lower the impacts with mitigation.

Equation 2:
Significance Rating (WM) = Significance Rating (WOM) x Mitigation Efficiency
or WM = WOM x ME

Significance Following Mitigation (SFM)
The significance of the impact after the mitigation measures are taken into consideration. The efficiency of the mitigation measure determines the significance of the impact. The level of impact is therefore seen in its entirety with all considerations taken into account.

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the construction phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

Proposal

Potential impacts:	**Significance rating of impacts:**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**
Construction Phase			
Soil disturbance and erosion	Low to Medium	• There should be no storage or stockpiling of any soil or construction debris that could wash into the adjacent watercourse; • Implementation of anti-erosion measures such as the construction of berms to reduce the water velocity is essential; • Vegetation should only be cleared in areas necessary for the progression of the development and open spaces should be re-vegetated following construction; • By maintaining the maximum amount of vegetated area on site, the extent of erosion and ecosystem loss can be contained; • Topsoil and subsoil must be kept totally separate during excavation and must be stored in separate stockpile; • It is also imperative that the topsoil	Low

		layer be retained and used in facilitating the reinstatement of indigenous vegetation; • When soil is replaced, excavation and installations should be carried out when the soil is at its driest, where possible; • All contaminated soils should be immediately removed and placed within a hazardous waste skip located on site, for end disposal at an appropriately licensed hazardous waste disposal site by a reputable waste disposal contractor.	
Increased sedimentation	Medium to High	• Construction of attenuation facilities for the collection of excess water that can be re-used; • To prevent erosion of material that is stockpiled for long periods, the material must be retained in a bermed area • The temporary storage of topsoil, inert spoil, fill etc. should be above the 20 year floodline or at least 20 m from the top of the bank as agreed with the ECO; • Construct an earth bank around the upslope portion of any stockpiles in order to redirect runoff and prevent scouring of stockpiles; • Erect a silt fence around any stockpiles in order to trap sediment and prevent stockpile sediment loss	Low to medium
Increase in stormwater runoff	Medium to High	• Physical expansion (in height) of the existing dam wall to prevent additional runoff entering the dam and contributing to seasonal flooding. • Construction of attenuation facilities to attenuate post-development flows.	Low to medium
Increase in noise pollution	Low to medium	• Construction must be restricted at all times to working hours (7:00 to 17:00); • Surrounding Residents must be notified in advance of construction schedules, especially should construction need to be extended to beyond 17h00 • All construction equipment must be switched off when not in use; • All construction equipment must be kept in good working order; • The developers must contribute towards maintenance of the main access roads during the construction phase and ensure that the construction phase will inflict minimal damage to the road surface	Low
Increased security risk	Low to medium	• Enclose the construction site including all works area with a temporary construction fence; • Ensure appropriate signage is visible to all adjacent areas indicating the construction activities; • Barricades and danger tape must be used to show areas of restriction within the construction site; • Employ a security company to manage the security issues on the site; • Contractors working on site must wear visible identification cards/uniforms.	Low
Increased traffic volumes	Medium	• Traffic management principles should	Low to

		be put into place; • It must be ensured that a backlog of traffic does not develop at the access points during peak hours, through the implementation of an efficient and effective access control system	medium
Operational Phase			
Increased sedimentation	Medium to High	• Construction of attenuation facilities for the collection of excess water that can be re-used; • To prevent erosion of material that is stockpiled for long periods, the material must be retained in a bermed area • The temporary storage of topsoil, inert spoil, fill etc. should be above the 20 year floodline or at least 20 m from the top of the bank as agreed with the ECO • Construct an earth bank around the upslope portion of any stockpiles in order to redirect runoff and prevent scouring of stockpiles; • Erect a silt fence around any stockpiles in order to trap sediment and prevent stockpile sediment loss	Low to medium
Increase in stormwater runoff	Medium to High	• Physical expansion (in height) of the existing dam wall to prevent additional runoff entering the dam and contributing to seasonal flooding. • Construction of attenuation facilities to attenuate post-development flows. Only clear areas that are earmarked for construction.	Low to medium
Increased traffic volumes	Medium	• Traffic management principles should be put into place; • It must be ensured that a backlog of traffic does not develop at the access points during peak hours, through the implementation of an efficient and effective access control system	Low to medium
Reduced potential for flooding	Medium to High	N/A	Medium to High
Positive economic growth	Low to Medium	N/A	Low to Medium
Constructive land use within a commercial zone	Low to Medium	N/A	Low to Medium

Alternative 1 (AS ABOVE)

Potential impacts:	**Significance rating of impacts:**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**

Alternative 2

Potential impacts:	**Significance rating of impacts:**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.

- Appendix F1: Updated Floodline Evaluation September 2012 AND Floodline report 2004 – prepared by ARQ (Pty) Ltd;
- Appendix F2: Eco-Conditional Requirement in terms of land use and ecology – prepared by SEF;
- Appendix F3: Hydrogeological report – prepared by Aurecon;
- Appendix F4: Wetland assessment – prepared by Enviroguard Ecological Services cc; and
- Appendix F5: Stormwater management plan – prepared by WSP SA Civil and Structural Engineers (Pty) Ltd.

3. IMPACTS THAT MAY RESULT FROM THE DECOMISSIONING AND CLOSURE PHASE

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

Proposal

Potential impacts:	**Significance rating of impacts:**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**
Decommissioning and closure not envisioned at this point			

Alternative 1

Potential impacts:	**Significance rating of impacts:**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**

Alternative 2

Potential impacts:	**Significance rating of impacts:**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.

4. CUMULATIVE IMPACTS

Describe potential impacts that, on their own may not be significant, but is significant when added to the impact of other activities or existing impacts in the environment. Substantiate response:

Increased employment due to the new development, combined with the current volume of traffic in the area due to existing businesses, will result in increased traffic volumes in the area and on Constantia Boulevard in particular. This opens up the possibility of increased traffic congestion during morning and afternoon peak traffic hours. The increase in traffic volumes can be viewed as a by-product of economic growth.

In addition, the development of an office park in an area that is already predominantly developed reduces the amount of open spaces in the urban landscape.

The clearing of more land (in addition to land already cleared for existing developments) will increase the cumulative impact of stormwater runoff into the Constantia Kloof man-made dam.

Local retail outlets in the vicinity will also benefit from an increase in patrons which will make a positive contribution to the economy of the region.

The utilisation of available land within a commercial node will be a taxable land portion for the municipality.

5. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that sums up the impact that the proposal and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Proposal

5.1 Increase in soil erosion

Source and description of the impact:

Clearing of vegetation to make way for the proposed parking facilities and phase 2 of the development of the Lakeview office park which will result in an increase in exposed soil

Table 1: Increase in soil disturbance and erosion

Activity	**Clearing of vegetation**			
Nature of the impact	**Increase in soil disturbance and erosion**		Status	**-**
Receiving environment	**Land adjacent to the dam that occurs at a lower elevation than the rest of the site**			
Magnitude	*Extent*	**Site (2)**		
	Intensity	**Medium (3)**		
	Duration	**Short – Medium term (2)**		
	Probability	**Likely (3)**		
Significance	*Without mitigation (WOM)*	*(Extent + Intensity + Duration + Probability) x Weighting Factor* *(2 + 3 + 2 + 3) x 3 = 30* ***Low to Medium***		
	With mitigation (WM)	*WOM x ME = WM* *30 x 0.6 = 18* ***Low***		
Significance With Mitigation (WM)	**LOW**			

Mitigation Measures

- There should be no storage or stockpiling of any soil or construction debris that could wash into the adjacent watercourse;
- Implementation of anti-erosion measures such as the construction of berms to reduce the water velocity is essential;
- Vegetation should only be cleared in areas necessary for the progression of the development and open spaces should be re-vegetated following construction;
- By maintaining the maximum amount of vegetated area on site, the extent of erosion and ecosystem loss can be contained;
- Topsoil and subsoil must be kept totally separate during excavation and must be stored in separate stockpile;
- It is also imperative that the topsoil layer be retained and used in facilitating the reinstatement of indigenous vegetation;
- When soil is replaced, excavation and installations should be carried out when the soil is at its driest, where

possible;
- All contaminated soils should be immediately removed and placed within a hazardous waste skip located on site, for end disposal at an appropriately licensed hazardous waste disposal site by a reputable waste disposal contractor.

Significance of the impact:

The significance of this impact is regarded as low to medium without mitigation and low with mitigation. The development of this study site and the adjacent site (on which Phase 1 of the Lakeview Office Park is currently underway) will be conducted following the guidelines of the GBSA. As such, any open spaces within the site subsequent to development will be rehabilitated and will consist of indigenous vegetation.

5.2. Increase in sedimentation due to clearance of vegetation and construction activities

Source and description of the impact:

Clearance of vegetation for parking facilities and phase two of the development of Lakeview Office Park may increase runoff from higher elevations and thereby increase sedimentation and siltation in the Constantia Kloof man-made dam.

Table 2: Increase in sedimentation

Activity	**Clearing of vegetation during construction phase**			
Nature of the impact	**Increase in sedimentation and siltation**		Status	**-**
Receiving environment	**Constantia Kloof man-made dam**			
Magnitude	*Extent*	**Site (2)**		
	Intensity	**Medium to High (4)**		
	Duration	**Long term (4)**		
	Probability	**Highly Likely (4)**		
Significance	*Without mitigation (WOM)*	*(Extent + Intensity + Duration + Probability) x Weighting Factor* *(2 + 4 + 4 + 4) x 4 = 56* ***Medium***		
	With mitigation (WM)	*WOM x ME = WM* *56 x 0.4 = 22.4* ***Low to medium***		
Significance With Mitigation (WM)	**LOW TO MEDIUM**			

Mitigation Measures:

- Construction of attenuation facilities for the collection of excess water that can be re-used;
- To prevent erosion of material that is stockpiled for long periods, the material must be retained in a bermed area
- The temporary storage of topsoil, inert spoil, fill etc. should be above the 20 year floodline or at least 20 m from the top of the bank agreed with the ECO;
- Construct an earth bank around the upslope portion of any stockpiles in order to redirect runoff and prevent scouring of stockpiles;
- Erect a silt fence around any stockpiles in order to trap sediment and prevent stockpile sediment loss.

Significance of the impact:

Increased sedimentation or siltation into the Constantia Kloof dam could aggravate the current flooding of the dam during periods of high rainfall. The proposal set forth in this assessment report addresses this directly by proposing the physical expansion of the current dam wall to prevent flooding and the construction of attenuation facilities that will collect excess water and allows a lower velocity rate of water entering the dam.

5.3. Increase in stormwater runoff

Source and description of the impact:

Clearance of vegetation for parking facilities and phase two of the development of Lakeview Office Park that is located at a higher elevation than the periphery of the floodline may increase stormwater runoff during periods of heavy rain.

Table3: Increase in stormwater runoff

Activity	**Clearing of vegetation during construction phase**			
Nature of the impact	**Increase in stormwater runoff from higher elevations**		Status	**-**
Receiving environment	**Constantia Kloof man-made dam**			
Magnitude	*Extent*	**Site (2)**		
	Intensity	**High (5)**		
	Duration	**Long term (4)**		
	Probability	**Highly Likely (4)**		
Significance	*Without mitigation (WOM)*	*(Extent + Intensity + Duration + Probability) x Weighting Factor* *(2 + 4 + 5 + 4) x 4 = 60* ***Medium to High***		
	With mitigation (WM)	*WOM x ME = WM* *60 x 0.4 = 24* ***Low to medium***		
Significance With Mitigation (WM)	**LOW TO MEDIUM**			

Mitigation Measures:

- Physical expansion (in height) of the existing dam wall to prevent additional runoff entering the dam and contributing to seasonal flooding.
- Construction of attenuation facilities to attenuate post-development flows.

Significance of the impact:
An increase in stormwater runoff could exacerbate current seasonal flooding in the area and would be detrimental to the development of the Lakeview Nedbank Data Centre during the summer months. The mitigation measures proposed would significantly decrease the flood risk to the surrounding buildings as well as the adjacent site.

5.4. Increase in noise pollution during construction

Source and description of the impact:

Table 4: Increase in noise pollution

Activity	**Construction activities**			
Nature of the impact	**Increase in noise level during construction**		Status	**-**
Receiving environment	**The surrounding offices and residential environment**			
Magnitude	*Extent*	**Region (3)**		
	Intensity	**Low to medium (2)**		
	Duration	**Short Term (1)**		
	Probability	**Likely (3)**		
Significance	*Without mitigation (WOM)*	*(Extent + Intensity + Duration + Probability) x Weighting Factor* *(3 +2 + 1 + 3) x 2 = 18* *Low*		
	With mitigation (WM)	*WOM x ME = WM* *18 x 0.6 = 10.8* *Low*		
Significance With Mitigation (WM)	**LOW**			

Mitigation Measures:

- Construction must be restricted at all times to working hours (7:00 to 17:00);
- Surrounding Residents must be notified in advance of construction schedules, especially should construction need to be extended to beyond 17h00;
- All construction equipment must be switched off when not in use;
- All construction equipment must be kept in good working order;
- The developers must contribute towards maintenance of the main access roads during the construction phase and ensure that the construction phase will inflict minimal damage to the road surface.

Significance of the impact:
The impact of the increased noise levels should be short-lived. The impact can only be limited to a point and cannot be controlled further. The implementation of the above-mentioned mitigation measures should restrict the significance of the impact to a low significance.

5.5. Increased security risk during construction phase

Source and description of the impact:
Increased levels of crime are a concern to the surrounding residents and people working in the surrounding businesses.

Table 5: Increased security risk

Activity	**Construction activities**			
Nature of the impact	**Safety risk**		Status	**-**
Receiving environment	**Area surrounding the development**			
Magnitude	*Extent*	**Region (3)**		
	Intensity	**Medium (3)**		
	Duration	**Short term (1)**		
	Probability	**Possible (2)**		
Significance	*Without mitigation (WOM)*	*(Extent + Intensity + Duration + Probability) x Weighting Factor* *(3 + 3 + 1 + 2) x 3 = 27* *Low to medium*		
	With mitigation (WM)	*WOM x ME = WM* *27 x 0.6 = 16.2* *Low*		
Significance With Mitigation (WM)	**LOW**			

Mitigation Measures:

- Enclose the construction site including all works area with a temporary construction fence;
- Ensure appropriate signage is visible to all adjacent areas indicating the construction activities;

- Barricades and danger tape must be used to show areas of restriction within the construction site;
- Employ a security company to manage the security issues on the site;
- Contractors working on site must wear visible identification cards/uniforms.

Significance of the impact:
Without mitigation this impact would have a low - medium significance. It would extend further than the site itself, in that residents and businesses in the surrounding area could be put at risk. With the appropriate mitigation measure implemented the significance of this impact can be reduced and adequately managed.

5.6. Increased traffic volumes

Source and description of the impact:
There will be an increase in the number of vehicles using the road during both the construction and operational phases. This could lead to an increase in the levels of traffic congestion, particularly during morning and afternoon peak traffic hours.

Table 6: Increased traffic volumes

Activity	**Construction vehicles during construction phase and increased number of road users during operational phase**			
Nature of the impact	**Increase in traffic congestion in the vicinity of the site**		Status	-
Receiving environment	**The surrounding area including access points from the national road network**			
Magnitude	*Extent*	**Region (3)**		
	Intensity	**Medium to High (4)**		
	Duration	**Long Term (4)**		
	Probability	**Likely (3)**		
Significance	*Without mitigation (WOM)*	*(Extent + Intensity + Duration + Probability) x Weighting Factor* *(3 + 4+ 4 + 3) x 3 = 42* ***Medium***		
	With mitigation (WM)	*WOM x ME = WM* *42 x 0.8 = 33.6* ***Low to medium***		
Significance With Mitigation (WM)	**LOW TO MEDIUM**			

Mitigation Measures:

- A traffic management study should be put into place;
- Construction should take place during the school holidays when there is an expected decrease in traffic volumes;
- It must be ensured that a backlog of traffic does not develop at the access points during peak hours, through the implementation of an efficient and effective access control system

Significance of the impact:
This impact is perceived as being of medium significance without mitigation. With appropriate mitigation measures in place, the significance can be reduced to low to medium, but it not foreseen that the impact can be reduced entirely.

5.7. Flood Control

Source and description of the impact:
Physical increase in the size of the Constantia Kloof dam wall which will allow for the banks of the dam to withstand higher water levels without flooding of the adjacent properties.

Table 7: Flood Control

Activity	**Confinement of floodline by physical increase in the height of the dam wall**			
Nature of the impact	**Reduces the possibility of flooding of adjacent properties during period of heavy rainfall**		Status	**-**
Receiving environment	**Adjacent Lakeview building site and other properties bordering the floodline**			
Magnitude	*Extent*	**Region (3)**		
	Intensity	**Medium to High (4)**		
	Duration	**Long Term (4)**		
	Probability	**Definite (5)**		
Significance	*Without mitigation (WOM)*	*(Extent + Intensity + Duration + Probability) x Weighting Factor* *(3 + 4+ 4 + 5) x 4 = 64* ***Medium to High***		
	With mitigation (WM)	***N/A***		
Significance With Mitigation (WM)	**MEDIUM TO HIGH**			

Mitigation Measures:
N/A

Significance of the impact:
This impact, which forms the basis of this assessment, will have a significant positive impact for the adjacent property and other properties in close proximity of the Constantia Kloof man-made dam. The construction of a dam wall that can withstand significant water pressure will ensure that properties along the periphery of the dam do not flood during periods of heavy rainfall. Thus ensuring the safety of patrons utilising the property and allowing for business to operate at normal capacity during periods of inclement weather. In addition, the creation of attenuation facilities will collect excess stormwater which will be saved and utilised for greening of open spaces.

5.8. Positive economic growth

Source and description of the impact:
Phase 2 of the Lakeview Office Park which will provide an influx of new patrons to the area**.**

Table 8: Positive economic growth

Activity	**Operational phase (phase 2) of the Lakeview Office Park**			
Nature of the impact	**Increase in economic growth potential in the vicinity of the development**		Status	**-**
Receiving environment	**The Constantia Kloof region**			
Magnitude	*Extent*	**Region (3)**		
	Intensity	**Medium (3)**		
	Duration	**Long Term (4)**		
	Probability	**Likely (3)**		
Significance	*Without mitigation (WOM)*	*(Extent + Intensity + Duration + Probability) x Weighting Factor* *(3 + 3+ 4 + 3) x 2 = 26* ***Low to Medium***		
	With mitigation (WM)	***N/A***		
Significance With Mitigation (WM)	**LOW TO MEDIUM**			

Mitigation Measures:
N/A

Significance of the impact:
The positioning of the Nedbank data centre within the suburb of Roodepoort will elevate the current economy of the region. This would potentially lead to an increase in residents who would want to live in closer proximity to their place of work and potentially provide jobs for local residents during the construction phase and later, for skilled labour during the operational phase (phase 2 of the Lakeview Office Park). An increase in commuters and workers in the area would also provide an increase in patrons for the surrounding retail businesses.

5.9. Constructive land use within a commercial zone

Source and description of the impact:
Positive utilisation of land (of no agricultural value) within a business area in a suburb with economic growth potential.

Table 9:

Activity	**Operational phase (phase 2) of the Lakeview Office Park (Green Star Rating 4)**			
Nature of the impact	**Constructive use of vacant land**		Status	**-**
Receiving environment	**Area surrounding the proposed development**			
Magnitude	*Extent*	**Region (3)**		
	Intensity	**Medium (3)**		
	Duration	**Long Term (4)**		
	Probability	**Likely (3)**		
Significance	*Without mitigation (WOM)*	*(Extent + Intensity + Duration + Probability) x Weighting Factor* *(3 + 3+ 4 + 3) x 2 = 26* ***Low to Medium***		
	With mitigation (WM)	***N/A***		
Significance With Mitigation (WM)	**LOW TO MEDIUM**			

Mitigation Measures:
N/A

Significance of the impact:
The constructive use of vacant land of no agricultural potential within a commercial would provide positive benefit to all of the surrounding landowners and businesses. It reduces the potential for squatters in the area and improves the aesthetics of a growing business district. A green star rated development also provides an excellent example for other businesses in the area to 'go green'.

Alternative 1 (AS ABOVE)

Alternative 2

No-go (compulsory)

6. IMPACT SUMMARY OF THE PROPOSAL OR PREFERRED ALTERNATIVE

For proposal:

With the appropriate mitigation measures implemented during both the construction and operational phases, the potential impacts of the proposed development can be reduced to within acceptable levels for the continuation of the development.

It should also be kept in mind that the development as a whole (which includes the office park and land adjacent to the floodline) has been designed with the intention of being a 4 star rated green building and the office buildings and the surrounding landscape will adhere to the requirements set forth by the GBSA in terms of energy and water efficiency.

For alternative:

The scheduling alternative proposed will allow for the confinement of the current floodline to continue without the risk of flooding during the construction period.

For the alternative, as for the proposal, all the mitigation measures outlined in this report should be adhered to reduce the potential impacts to within acceptable levels.

Having assessed the significance of impacts of the proposal and alternative(s), please provide an overall summary and reasons for selecting the proposal or preferred alternative.

Given that phase one of the Lakeview Office Park has already commenced and the potential for flooding of the Constantia Kloof dam is high in the current summer rainfall season, it is recommended that the proposal be approved. This will allow for the confinement of the floodline to begin as soon as possible, which will reduce (or possibly eliminate) flooding of the Constantia Kloof dam during periods of heavy rainfall. Reducing the potential of flooding will also have a significant positive impact on the surrounding properties.

7. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the Environmental Assessment Practitioner).	YES **X**	

If "NO", indicate the aspects that require further assessment before a decision can be made (list the aspects that require further assessment):

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

- All appropriate mitigation measures outlined in the attached EMPr are to be adhered to, as the EMPr is a legally binding document.
- An independent Environmental Control Officer (ECO) must be appointed to manage the implementation of the EMPr during phase. Environmental Audit reports must be compiles and be available for inspection.

8. ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr)

If the EAP answers yes to Point 7 above then an EMP is to be attached to this report as an Appendix

EMPr attached	Yes **X**

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

It is required that if more than one item is enclosed that a table of contents is included in the appendix

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Route position information

Appendix E: Public participation information

Appendix F: Water use license(s) authorisation, SAHRA information, service letters from municipalities, water supply information

Appendix G: Specialist reports

Appendix H: EMPr

Appendix I: Other information

CHECKLIST

To ensure that all information that the Department needs to be able to process this application, please check that:

- Where requested, supporting documentation has been attached;
- All relevant sections of the form have been completed; and