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AMENDED DRAFT BASIC ASSESSMENT REPORT FOR THE ESTABLISHMENT OF A LIGHT INDUSTRIAL 3 TOWNSHIP ON HOLDINGS 5 & 6 SUNRELLA AGRICULTURAL HOLDINGS, LANSERIA X79, GAUTENG

APPLICANT:
GROWTHPOINT PROPERTIES PTY LTD

GAUT REF NUMBER: TO BE RECEIVED

JULY 2025

GAUTENG PROVINCE
ENVIRONMENT
REPUBLIC OF SOUTH AFRICA

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, 2014 (2025 VERSION 1)

Kindly note that:

1. This Basic Assessment Report is the standard report required by the Gauteng Department of Environment in terms of the EIA Regulations, 2014.

2. This application form is current as of April 2025. It is the applicant's responsibility to check for any updated versions published by the competent authority.

3. A draft Basic Assessment Report must be submitted, for purposes of comments within a period of thirty (30) days, to all State Departments administering a law relating to a matter likely to be affected by the activity to be undertaken.

4. A draft Basic Assessment Report must be submitted, for purposes of comments within thirty (30) days, to a Competent Authority (uploaded to the EIA online system) empowered in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended to consider and decide on the application. The EIA online system can be accessed at https://eia.gauteng.gov.za.

5. A copy (PDF) of the final report and attachments must be uploaded to the EIA online system. The EIA online system can be accessed at https://eia.gauteng.gov.za.

6. Draft and final reports submitted in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) must be emailed to environmentsue@gauteng.gov.za.

7. 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.

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

9. An incomplete report may lead to an application for environmental authorisation, or a Waste Management License being refused.

10. Any report that does not contain a titled and dated full-colour large-scale layout plan of the proposed activities including a coherent legend, overlain with the sensitivities found on site may lead to an application for environmental authorisation or a Waste Management License being refused.

11. The use of "not applicable" in the report must be done with circumspection because if it is used for material information that is required by the competent authority for assessing the application, it may result in the application for environmental authorisation or Waste Management License being refused.

12. The applicant must fill in all relevant sections of this form. Incomplete applications will not be processed. The applicant will be notified of the missing information in the acknowledgement letter that will be sent within 10 days of receipt of the application.

13. Unless protected by law, and 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.

14. Although pre-application meetings with the Competent Authority is optional, applicants are advised to have these meetings before submission of the application to seek guidance from the Competent Authority.

15. Please note that your submission will be acknowledged within 10 days of receipt. If you do not receive an acknowledgement from the Department within this period, kindly follow up using our central email address: environmentenquiries@gauteng.gov.za

DEPARTMENTAL DETAILS

Gauteng Department of Environment
Attention: Environmental Support Services of the Environmental Branch
P.O. Box 8769
Johannesburg
2000
Ground floor, Umnotho House, 56 Eloff Street, Johannesburg
Administrative Unit telephone number: (011) 240 3052
Department central telephone number: (011) 240 2500

(For official use only)

NEAS Reference Number:						
File Reference Number:						
Application Number:						
Date Received:						

If this BAR has not been submitted within 90 days of receipt of the application by the competent authority and permission was not requested to submit within 140 days, please indicate the reasons for not submitting within time frame.

N/A

Is a closure plan applicable for this application and has it been included in this report? If not, state reasons for not including the closure plan.

N/A

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

YES

Is a list of the State Departments referred to above attached to this report including their full contact details and contact person?

YES

If no, state reasons for not attaching the list.

Have State Departments including the competent authority commented?

If no, why?

This amended draft report is presently submitted to the public and authorities for comment. Comments are to be received by 21 August 2025. Comments received on the Draft BAR will be included in the BAR submitted to the GDE.

SECTION A: ACTIVITY INFORMATION

1. PROPOSAL OR DEVELOPMENT DESCRIPTION

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

AMENDED DRAFT BASIC ASSESSMENT APPLICATION FOR A PROPOSED INDUSTRIAL 3 TOWNSHIP ON HOLDINGS 5 & 6 SUNRELLA AGRICULTURAL HOLDINGS, LANSERIA X 79, GAUTENG

Figure 1: Project Locality

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	NO

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

A Water Use License (WUL) in terms of Section 21 of the National Water Act, 1998 (Act No. 36 of 1998), to be submitted to the Department of Water and Sanitation (DWS) for Lanseria X 79. The following water uses, as contemplated in Section 21 of the NWA, are associated with the proposed development: Section 21(c):Impeding or diverting the flow of water in a watercourse, Section 21(i): Altering the bed, banks, course or characteristics of a watercourse, Section 21(g) Disposing of waste in a manner that may impact the water resource (package plant), and Section 21(f) Discharging of waste water into a water resource.

INDEX (Pty) Ltd have been appointed to conduct the WULA for this application.		
If yes, have you applied for the authorisation(s)?	**YES**	NO
If yes, have you received approval(s)?	YES	**NO. WUL Application is underway**

Project proposal and associated infrastructure

Growthpoint Properties PTY LTD (the applicant) proposes the establishment of an **Industrial 3 township**, to develop **warehouses / cargo holding areas**, that will be utilized to support the Lanseria International Airport. The project is located on **Holdings 5 and 6, Sunrella Agricultural Holdings, City of Johannesburg, (to be known as Lanseria X 79).** See Appendix A for the proposed township layout. The land use rights being applied for are for Industrial 3 purposes, commercial and business purposes.

Holdings 5 and 6, Sunrella Agricultural Holdings have **historically been used for agricultural purposes** (piggery). The holdings were developed in the past; however, these buildings have been demolished, with only rubble and litter remaining on site. The study area is presently used for grazing by cattle.

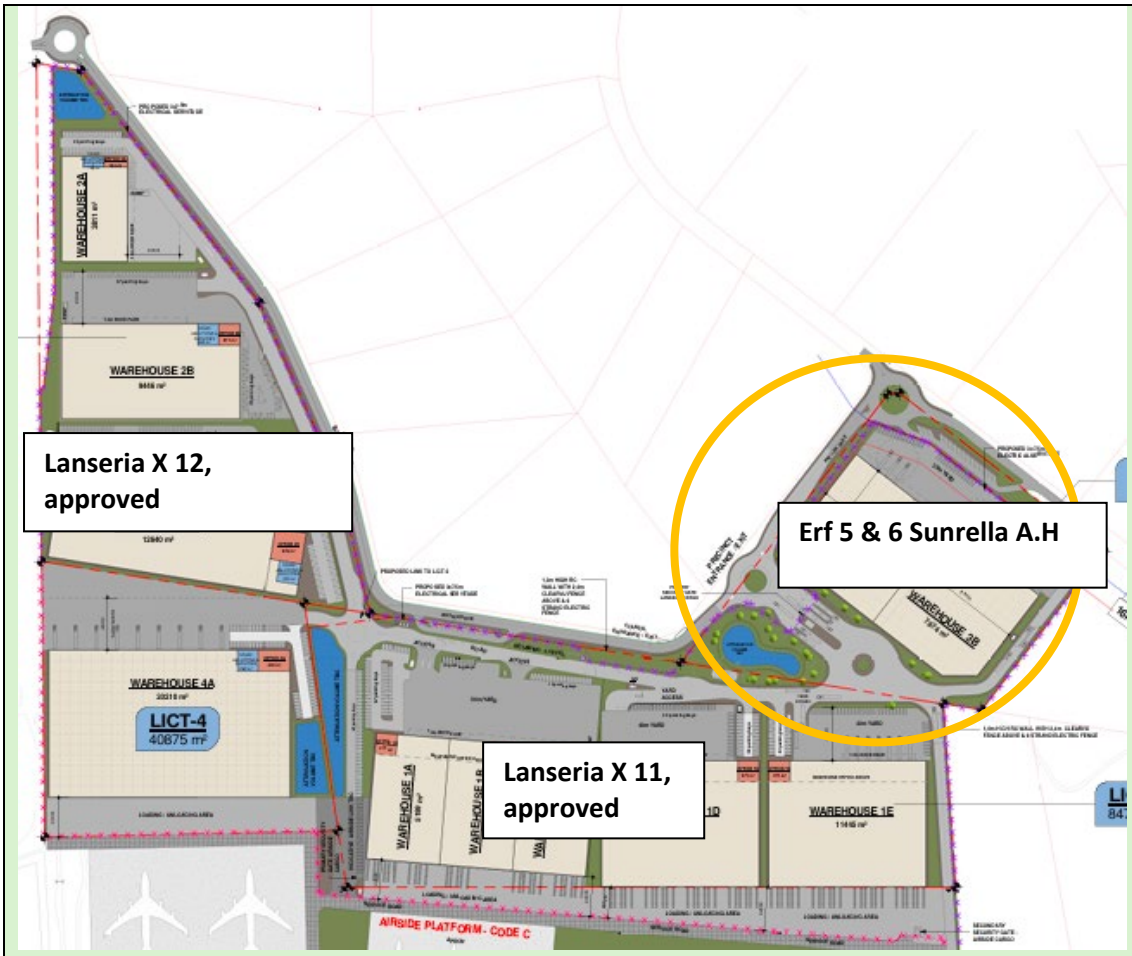
The properties are situated at **51 and 49 Main Avenue, Sunrella AH**, east of the Lanseria International Airport. Holdings 5 and 6 measure 2.1ha each. The application site is situated within an area that has been classified as an **Industrial node, and Peri Urban** in terms of the Nodal Review 2019/20 Policy document.

(https://joburggis.maps.arcgis.com/apps/View)

The application sites and the immediate surrounding area, forms part of the **Smart City Initiative/Precinct vision of the President** and is led by the Investment and Infrastructure Office. The study area is located within the primary development zone of the Greater Lanseria Smart City Development Proposal.

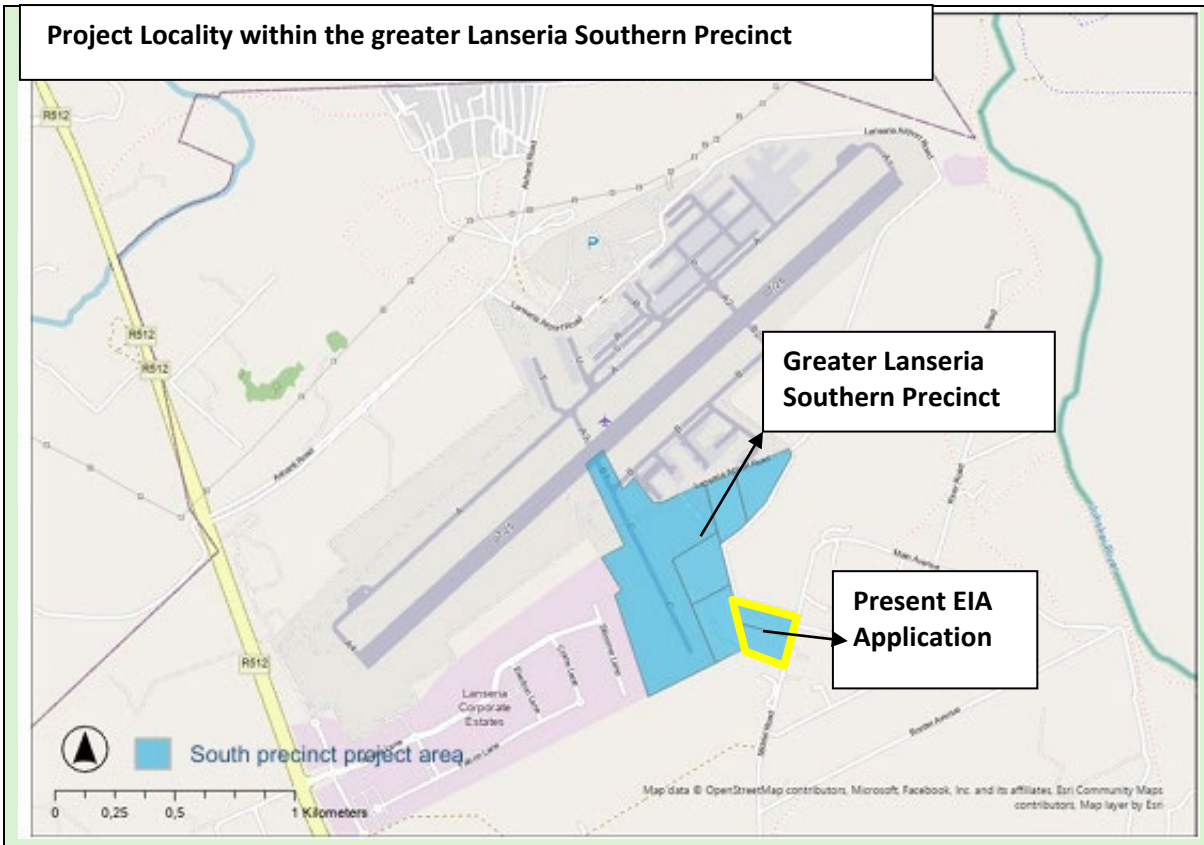
Growthpoint Properties PTY LTD proposes the development of the “Lanseria Cargo Park”, consisting of logistics and cargo facilities, with related office components, aviation related hangers, workshops, offices, and non-aviation related warehouses, that will be utilized to support the Lanseria International Airport. The development proposal is poised to catalyse / unlock the construction commencement of the Lanseria Smart City Initiative/Precinct.

The **Lanseria X 79 township will serve as the Secure access entry point into the approved Lanseria X 11 and Lanseria X 12 townships:**



Lanseria X 79 (this application), the approved Lanseria X 11 and Lanseria X 12, are all part **of the Greater Lanseria Southern Precinct.** The Lanseria Southern Precinct forms part of the Lanseria Airport and Logistics Hub, which is part of a broader vision to transform the airport into a significant aviation and business center.

Project Locality within the greater Lanseria Southern Precinct



The study area was investigated by Enviroguard Ecological Services cc, see Appendix G for the specialist **terrestrial biodiversity assessment** report. Holdings 5 & 6 have been completely transformed by historical activities on site, to such a degree, that no natural species remain. The natural vegetation that used to occur on site has been destroyed due to development, agriculture and the demolition of the area. As a result, the sites have a low species richness and are dominated by pioneer weedy and alien invasive species. The vegetation unit on Erf 5 & 6 Sunrella A.H, has a **Low (none) ecological sensitivity.**

Although the development will result in the loss of floral and faunal species, development within already degraded and urbanised areas is considered preferable to development in more natural areas beyond the urban footprint. This, combined with the already impacted state of the study area, makes development herein more favourable.

A **Wetland Assessment and Hydropedological study** was conducted by **Dr Andries Gouws, Index PTY LTD,** for the site. See Appendix G. The soil conditions at the time of Dr Gouws's assessment, did not identify wetlands on the property. Dr Gouws concluded that there were no wetlands on the property.

Galago Environmental was appointed by SEC to align the Index PTY LTD Wetland and Hydroped report with the "protocol for the specialist assessment and minimum report content requirements for environmental impacts on aquatic biodiversity" as set out in Government Notice No 320 (Government gazette 43110) March 2020. See Appendix G. During the field assessment conducted by **Mr Bertus Fourie of Galago Environmental, a fragmented and degraded unchannelled valley**

bottom wetland was observed on site. The study site is part of a larger project (Lanseria X 11 & X12), and various other studies and environmental authorisations have been sought and compiled within the larger study area. These have been included for the extended study area (ESA) with the on-site delineation compiled by Galago Environmental. See the below figure for the delineation of the aquatic ecosystem on site and within the 500m ESA.

The wetland is clearly impacted by anthropogenic activities including housing, alteration of flow paths and historical use of the site for intensive livestock rearing. The Lanseria Airport has also altered the hydrology of the aquatic ecosystems within the ESA. Infilling and buildings were (possibly) constructed over the wetland areas but has recently been demolished. The infilling of the wetland has made the delineation of the expected wetland impossible. **The function of the identified wetland is purely hydrological with other ecosystem services lacking.**

The results of the Present Ecological State (PES) assessment conducted by Galago Environmental, indicates that the affected system is currently in an **Ecological Category E**, representing a seriously modified state. This classification reflects a high level of disturbance, with substantial alteration of natural ecosystem processes, and a significant loss of indigenous biota and habitat integrity across most components assessed — particularly in vegetation, hydrology, and water quality. Despite this degradation, the system retains some recognizable natural habitat features, especially within its geomorphological structure, which remains in Ecological Category D and exhibits a stable trajectory of change. Given the combined PES score of 38%, and the presence of residual ecological structure and function, the system maintains limited ecological resilience. The **ecological importance and sensitivity of the system was determined to be LOW:** Aquatic ecosystems that are not ecologically important and sensitive at any scale. Based on the hydrology of the system, the functionality of the wetland is expected to be limited to the expression of water at surface level into the regional

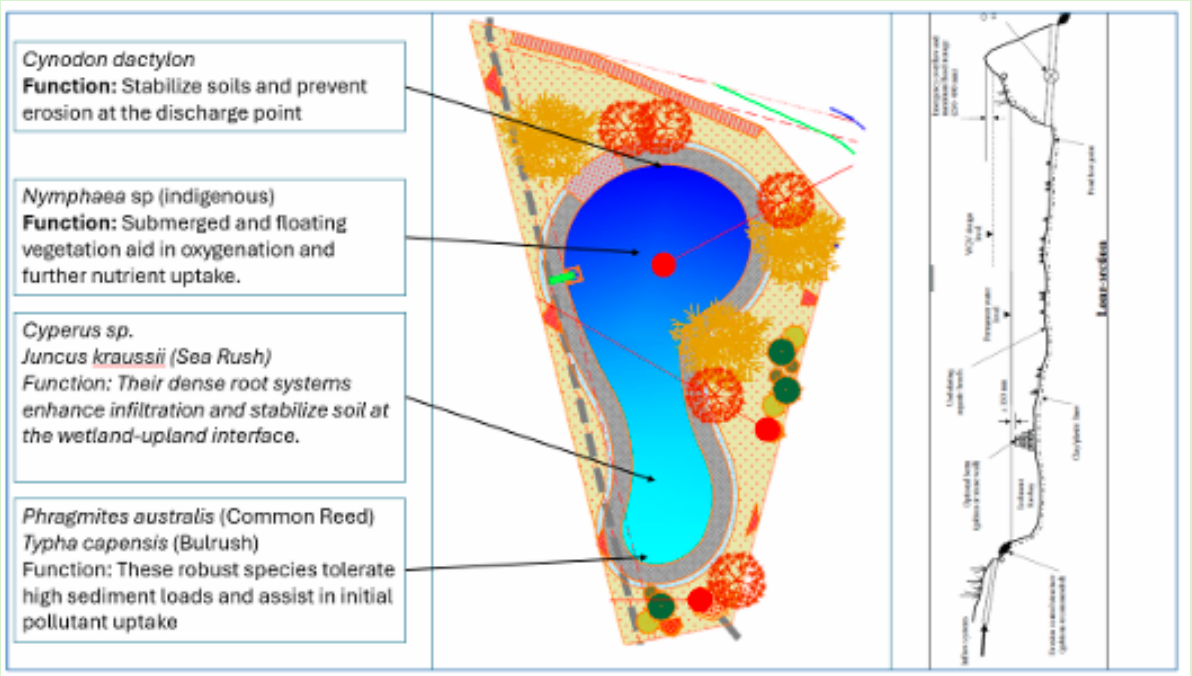
hydrological regime.

EDS Engineers and Galago Environmental worked together to encompass sections of the unchannelled valley bottom wetland, with a single attenuation pond in the northern corner of the site. **The mitigative aspect of the loss of the wetlands, due to the proposed development, will be the *improvement of the wetland ecological services in the attenuation/artificial wetland area*.** Galago Environmental recommends that the principles of emulating current wetland ecological goods and services are incorporated into the core design (flood attenuation, stream flow, sediment trapping, erosion control, etc) to ensure *functionality remains and is improved.*

Dr Gouws's report requires that the lateral soil water that occurs in the soil horizons above the saprolite (or ferricrete) on site, must be managed from an ecology perspective, and presents specific engineering challenges for the site. Geotechnical engineering recommendations need to be respected and incorporated in any planning methodology for the development. The wetlands downstream must be sustained by maintaining the inflow of water into the soil (recharge) and by limiting or mitigating sealing of the soil surface. Water flow down slope (interflow) must be maintained by preserving the flow paths, and discharge into the wetland must be preserved. These measures will help ensure that development structures will not be affected by excess water in the rainy season.

Mr Bertus Fourie of Galago Environmental addresses the above requirement through subsoil drains hydrologically linking the groundwater to the artificial wetland. Lateral hydropedological movement will be intercepted and diverted to the artificial wetland system created on site. Due to the slope of the property, infilling of the site is expected, and in-situ soil conditions are not expected to be cut or disrupted. This will ensure that the hydropedology of the wetland remains and additional subsoils will be placed to ensure the hydropedology remains intact.

Stormwater from the site is collected into the artificial wetland and phytoremediation is applied to manage the throughflow of water. The artificial wetland was designed to be 0.3 ha in size to specifically manage sediment ingress and hydrocarbons expected from the study site. The artificial wetland will follow the sustainable urban drainage principles by utilizing hydrophytes to reduce possible pollutants from the catchment into the receiving aquatic environment.



PROPOSED LAYOUT OF THE ARTIFICIAL WETLAND WITH PLANTING RECOMMENDATIONS

The treated stormwater exiting the artificial wetland will be discharged to an external stormwater system running along Preller Drive, where the water will ultimately be discharged into the natural downstream watercourse through outlet-controlled structures. The attenuation pond outlet will include an erosion and energy dissipation structure as approved by the JRA. See Appendix G for the engineering reports, and diagrams illustrating the location of the service infrastructure.

Geoid Geotechnical Engineers (GGE) have conducted a detailed **geotechnical investigation** for the proposed Southern Precinct of the Lanseria International Airport expansion project, of which Holdings 5 & 6 Sunrella A.H, form a part of. See Appendix G for this report. Based on the Geotechnical field profiling, Geoid has characterised Holdings 5 & 6 Sunrella A.H by two geotechnical zones, Zone 1 and Zone 3.

Zone 1 is uncontrolled fill. The soil profile on this zone is characterised by highly compressible / potentially highly collapsible hillwash soils and localised loose fill deposits of variable thickness, blanketing compressible residual granite, which tend towards being slightly expansive near the diabase. Given the historic agricultural nature of much of the site, localised deposits of uncontrolled fill will be present which would negatively influence founding of structures and support of pavements if not appropriately mitigated.

Zone 3 exhibits shallow groundwater. This zone is typically characterized by bands of gully wash which range from loose, compressible, cohesionless sands to moderately expansive clays. This zone largely appears to be underlain by residual diabase, which is similarly potentially moderately active in the reworked zone, although this is frequently capped by competent hardpan ferricrete which masks the nature of the residual soils. Appropriate geotechnical recommendations have been provided in the report.

EDS Engineers propose that **bulk water** will be obtained from the water tower south-west of the proposed development. A link pipeline will be required to service the proposed development. No connection to the municipal sewer is available and therefore a package plant is proposed.

Preller Drive will be used to obtain **access** to the proposed. The Traffic Impact Assessment requires the following upgrades to the surrounding road network:

1. Pelindaba Road (R512) / 6th Road (R552) intersection: The intersection will be converted to a traffic signal that can accommodate the 2024 background traffic demand. If the intersection is converted to a traffic signal-controlled intersection, the intersection will be able to accommodate the development traffic. No additional road upgrades are required as a result of the development traffic
2. 6th Road (R552) / Middel Road intersection: With the addition of the latent development traffic, road upgrades are required at this intersection to accommodate the latent development traffic demand. By making changes to the intersection layout, signal settings as well as signal layout, the development traffic can be accommodated.
3. The applicant must provide lay-by's (drop-off facilities) along 6th Road (R552) where required, and walkways along the boundary of the proposed development on Preller Drive (up to the development access).

The existing **Eskom** MV network in the selected area does not have sufficient spare capacity to cater for the new development. A new Eskom MV feeder must be constructed from the existing 88/11KV Lanseria substation to the development site. Lanseria Ext 11 and Ext 79 are adjacent to each other and will be notarially tied. Eskom proposed that a formal application to be submitted to Eskom for Lanseria Ext 11, Erven 932-933 and to be based on Eskom Self-Built contract. An application for a Self-Built project was submitted to Eskom by Claassen Auret Electrical Engineers and is currently in the concept phase. The total electrical demand for the development site (Ext 11 and Ext79) will be 2'500KVA/11KV and a new MV feeder must be erected from the existing Eskom Lanseria substation to the development site. Eskom is also presently planning to upgrade the capacity of the Lanseria

substation networks which will assist in providing the required capacity to the development. The first phase of the development will require an electrical connection of 2'500KVA/11KV.

Activity (s) Applied For:

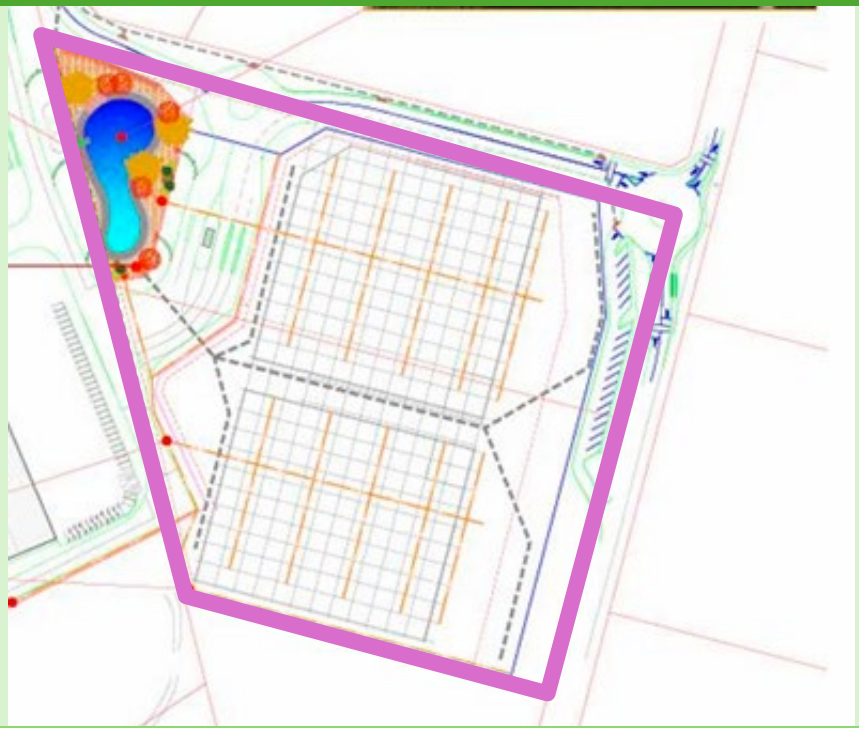
An application may be made for more than one listed or specified activity that, together, make up one development proposal. All the listed activities that make up this application must be listed below:

Indicate the number of the relevant Government Notice	Activity No. (s) (relevant notice):	Describe each listed activity as per the wording in the listing notices:	Activity description
GNR 983: Listing Notice 1:	**12**	The development of (i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs—; a) within a watercourse; b) in front of a development setback; or c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such development occurs within an urban area.	Sections of the unchannelled valley bottom wetland (UVBW) on site, will be replaced with a single attenuation pond in the northern corner of the site. The WUL presently underway with Index PTY LTD, has applied for this activity.
	27	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation	The establishment of the Industrial 3 township will permanently transform 4.2ha on site.
	19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from (i) a watercourse.	Sections of the unchannelled valley bottom wetland (UVBW) will be replaced with a single attenuation pond in the northern corner of the site. A portion if the UVBW will be lost due to the proposed development. The mitigative aspect of the loss of the wetlands, will be the improvement of the wetland

Indicate the number of the relevant Government Notice	Activity No. (s) (relevant notice):	Describe each listed activity as per the wording in the listing notices:	Activity description
			ecological services in the attenuation/artificial wetland area.
GNR 985: Listing Notice 3:	**Activity 4**	The development of a road wider than 4 metres with a reserve less than 13,5 metres, in Gauteng, where Sites are identified as Critical Biodiversity Areas (CBAs) or Ecological Support Areas (ESAs) in the Gauteng Conservation Plan or in bioregional plans;	According to the DFFE screening tool, the study area has a very high terrestrial biodiversity sensitivity. This is based on the area being regarded as a CBA, belonging to the Critically Endangered Egoli Granite Grassland, and lastly forming part of the National Protected Area Expansion Strategy (NPAES). Sections of the unchannelled valley bottom wetland (UVBW) on site, will be replaced with a single attenuation pond in the northern corner of the site. The WUL presently underway with Index PTY LTD, has applied for this activity.
	Activity 12 c (ii):	The clearance of an area of 300 square metres or more of indigenous vegetation in Gauteng Within Critical Biodiversity Areas or Ecological Support Areas identified in the Gauteng Conservation Plan or bioregional plans;	
	Activity 14 c (ii) (iv)	The development of (i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or (ii) infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs— (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback has been adopted, within 32 metres of a watercourse, c. Gauteng iv. Sites identified as Critical Biodiversity Areas (CBAs) or Ecological Support Areas (ESAs) in the Gauteng Conservation Plan or in bioregional plans	

These activities may not commence until Environmental Authorisation has been received from the approving authority - GDE. **The application will follow a Basic Assessment approach in terms of Section 19 of Government Notice R982 (as amended in March 2017) of NEMA.**

PROPOSED CHANGES TO THE UN-CHANNELLED VALLEY BOTTOM WETLAND ON SITE

UVBW ON SITE WITH 21M SCIENTIFIC BUFFER ZONE APPLIED	PROPOSED ARTIFICIAL WETLAND TO REDUCE THE SIZE OF THE WETLAND IMPACTING THE SITE AND IMPROVE THE WETLAND ECOLOGICAL SERVICES
	

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:
Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996): Chapter 2 Section 24	Department of Forestry, Fisheries and the Environment (DFFE)	8 May 1996
National Environmental Management Act No. 107 of 1998 as amended	Department of Environment (GDE)	27 November 1998
NEMA Environmental Impact Assessment Regulations as amended, GNR 326	Department of Forestry, Fisheries and the Environment (DFFE)	7 April 2017
Assessment for Reporting on Identified Environmental Themes	Department of Forestry, Fisheries and the Environment (DFFE)	20 March 2020
National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) • GN number 1002: National List of Ecosystems that are Threatened and Need Protection dated 9 December 2011, as it relates to the NEMBA; • GN number R.1020: Alien and Invasive Species Regulations, 2020, in Government Gazette 43735 dated September 2020 as it relates to the NEMBA; • GN number 1003: Alien and Invasive Species Lists, 2020, in Government Gazette 43726 dated 18 September 2020, as it relates to the NEMBA; and • GN number 30568: Threatened or Protected Species (TOPS) list dated 14 December 2007, as it relates to the NEMBA.	Department of Forestry, Fisheries and the Environment (DFFE) Gauteng Department of Environment (GDE)	2004
Government Gazette 45421 dated 10 May 2019 as it relates to the	Department of Environment, Forestry and Fisheries (DFFE) and Gauteng Department	2019

Title of legislation, policy or guideline:	Administering authority:	Promulgation Date:
Department of Forestry, Fisheries, and the Environment (DFFE's) national environmental screening report required with an application for EA as identified in regulation 16(1)(v) of EIA Regulations: o For the Terrestrial Biodiversity Theme: GN 320 Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Biodiversity as published in Government Gazette 43110 dated 20 March 2020; and • For Animal and Plant Species Themes: GN 1150 Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental • Impacts on Terrestrial Plant and Animal Species as published in Government Gazette 43855 dated 30 October 2020	of Environment (GDE)	
Government Notice 598 Alien and Invasive Species Regulations (2014), including the Government Notice 864 Alien Invasive Species List as published in the Government Gazette 40166 of 2016, as it relates to the National Environmental Management Biodiversity Act, 2004 (Act No 10 of 2004)	Department of Environmental Affairs	2004 2017
National Environmental Management Waste Act GNR 921	Department of Environment, Forestry and Fisheries (DFFE) and Gauteng Department of Agriculture and Rural Development (GDARD)	29 November 2013
National Water Act, 1998, Act 36 of 1998	National Department of Water and Sanitation (DWS)	1998
Water Services Act, 1997, Act 108 of		1997

Title of legislation, policy or guideline:	Administering authority:	Promulgation Date:
1997		
Government Notice 509 as published in the Government Gazette 40229 of 2016 as it relates to the National Water Act, 1998 (Act No. 36 of 1998)		2016
National Environmental Management: Air Quality Act, Act 39 of 2004 and the Atmospheric Pollution Prevention Act, Act 45 of 1965	Department of Environment, Forestry and Fisheries (DFFE)	2004
National Heritage Resources, Act, 1999, Act 25 of 1999	South Africa Heritage Resources Agency (SAHRA)	1999
Gauteng Conservation-Plan 3.3 (2011)	Provincial, Gauteng Department of Agriculture and Rural Development (GDARD)	2011
Conservation of Agricultural Resources (Act 43 of 1983) National Department of Agriculture 21 April 1983	National Department of Agriculture	21 April 1983
The Gauteng Agriculture Potential Atlas Version 4.4 Gauteng Department of Agriculture and Rural Development (GDE)	The Gauteng Agriculture Potential Atlas Version 4.4 Gauteng Department of Environment	
Sustainable Development Criteria for Built Environment Projects requiring Environmental Impact Assessments in Gauteng, 2009	Gauteng Province	2009
Gauteng Environmental Management Framework Gauteng Province 2015	Gauteng Province	2015
Gauteng Spatial Development Framework, 2030	Gauteng Province	2016
Gauteng Urban Edge 2008 / 2009	Gauteng Province	2009
Joburg 2040 – Growth and Development Strategy	Johannesburg Metropolitan Municipality	
Johannesburg Spatial Development Framework, 2040		
Nodal Review, 2020		2018
The Draft Greater Lanseria Master Plan		2021

Title of legislation, policy or guideline:	Administering authority:	Promulgation Date:
(GLMP)		
Lanseria Regional Spatial Development Policy (LRSDF)		2017
Lanseria Integrated Open Space Plan (LIOSP) 2018		

DESCRIPTION OF COMPLIANCE WITH THE RELEVANT LEGISLATION, POLICY OR GUIDELINE:	
Legislation, policy of guideline	**Description of compliance**
National Environmental Management Act (Act 107 of 1998), as amended (NEMA)	The National Environmental Management Act (Act 107 of 1998) (NEMA), as amended, makes provision for the identification and assessment of activities that are potentially detrimental to the environment, and which require authorisation from the relevant authorities based on the findings of an environmental assessment. NEMA is a national act, which is enforced by the Department of Environmental Affairs (DEA). These powers are delegated in Gauteng, to the Department of Environment (GDE).
National Environmental Management Act (NEMA) Environmental Impact Assessment (EIA) Regulations 2014 (as amended)	In terms of Section 24(2) of NEMA, the Minister and or any MEC in concurrence with the Minister may identify activities which require authorisation as these activities may negatively affect the environment. The Act requires that in such cases the impacts must be considered, investigated and assessed prior to their implementation and reported to the organ of state charged by law with authorising, permitting, or otherwise allowing the implementation of an activity. The NEMA EIA Regulations guide the processes required for the assessment of impacts of Listed Activities. Three Listing Notices have been published under Government Gazette No 40772 on 07 April 2017; and are an amendment of the 2014 Regulations that were published under Government Gazette No. 38282 on 04 December 2014. The levels of environmental assessment required under each of these Listing Notices are as follows: ▪ Listing Notice 1 (GNR 983 in Government Gazette No 40772 of 07 April 2017): This Notice identifies listed activities that require a Basic Assessment. ▪ Listing Notice 2 (GNR 984 in Government Gazette No 40772 of 07 April 2017): This Notice identifies listed activities that require Scoping and Environmental Impact Assessment. ▪ Listing Notice 3 (GNR 985 in Government Gazette No

DESCRIPTION OF COMPLIANCE WITH THE RELEVANT LEGISLATION, POLICY OR GUIDELINE:	
	40772 of 07 April 2017): This Notice identifies listed activities that require Basic Assessment in specifically identified geographical areas An Environmental Authorisation must be obtained for any activity that is listed in any of the above notices. Such an authorisation may only be granted once the required assessment has been compiled by an independent environmental assessment practitioner, and submitted to the competent authority. See the activities applied for in Section 1A of this report.
Assessment for Reporting on Identified Environmental Themes	The Department of Forestry, Fisheries and the Environment (DFFE) has published requirements in terms of site sensitivity verification, GN 320 of 20 March 2020, Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in terms of Section 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation. In terms of this notice, prior to commencing with a specialist assessment, the current use of the land and the environmental sensitivity of the site under consideration identified by the national web based environmental screening tool (screening tool), where determined, must be confirmed by undertaking a site sensitivity verification. In terms of this notice, the following is applicable: • The site sensitivity verification must be undertaken by an environmental practitioner or a specialist. • The site sensitivity verification must be undertaken using: A desktop analysis, using satellite imagery, A preliminary on-site inspection, and any other available and relevant information. The outcome of the site sensitivity verification must be recorded in the form of a report that confirms or disputes the current land and the environmental sensitivity as identified by the screening tool, such as new development or infrastructure, the change in vegetation cover or status etc., contains motivation and evidence (e.g., photographs) of either the verified or different use of the land and environmental sensitivities, and is submitted together with the relevant assessment report prepared in accordance with the requirements of the EIA Regulations.

DESCRIPTION OF COMPLIANCE WITH THE RELEVANT LEGISLATION, POLICY OR GUIDELINE:	
	To address the environmental themes identified for the site, please see Appendix G for the **Terrestrial biodiversity Assessment** conducted by **Enviroguard Ecological Services CC**, the **Wetland Assessment and Hydropedological study** conducted by **Dr Andries Gouws, Index PTY LTD,** and the **Aquatic Ecosystem Delineation** conducted by Mr Bertus Fourie from **Galago Environmental.**
National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)	The objectives of this act are (within the framework of NEMA) to provide for: • The management and conservation of biological diversity within the Republic of South Africa and of the components of such diversity; • The use of indigenous biological resources in a sustainable manner; • The fair and equitable sharing among stakeholders of the benefits arising from bio prospecting involving indigenous biological resources; • To give effect to ratify international agreements relating to biodiversity which are binding to the Republic; • To provide for cooperative governance in biodiversity management and conservation; and • To provide for a South African National Biodiversity Institute to assist in achieving the objectives of this Act. This act alludes to the fact that management of biodiversity must take place to ensure that the biodiversity of the surrounding areas is not negatively impacted upon, by any activity being undertaken, to ensure the fair and equitable sharing among stakeholders of the benefits arising from indigenous biological resources. Furthermore, a person may not carry out a restricted activity involving either: a) A specimen of a listed threatened or protected species; b) Specimens of an alien species; or c) A specimen of a listed invasive species without a permit. Chapter 7 of the NEMBA regulations govern the 'permit system for listed threatened or protected species. To remove or relocate any Threatened or Protected Species (TOPS) should they be identified on the site and relevant permits must be applied for. According to the 2022 Red List Ecosystems (RLE) database, the study area is located within the remaining extent of the Critically Endangered (CR) Egoli Granite

DESCRIPTION OF COMPLIANCE WITH THE RELEVANT LEGISLATION, POLICY OR GUIDELINE:	
	Grassland. From a provincial biodiversity management perspective, the Gauteng Conservation Plan (C-Plan) V 3.3 indicates that majority of the study area is located within an area considered to be of biodiversity importance, most notably an Important Critical Biodiversity Area (CBA) (also referred to as CBA 2). Triggering features of the Important CBA include the presence of Red and Orange Listed (OL) plant species and primary vegetation. CBAs are areas of high biodiversity value and need to be maintained in a natural state. CBA Important Areas are areas considered important for the survival of threatened species and includes valuable ecosystems such as wetlands, untransformed vegetation, and ridges. A small section in the north of the study area is also located within an Ecological Support Area (ESA). Enviroguard Ecological Services cc were appointed to conduct a terrestrial biodiversity assessment as part of the Environmental Authorisation (EA) application process for the study area. See Section F and Appendix G of this report, for the detail of this specialist study. The specialist study is aligned to the requirements of this act. The study area is a transformed area where no natural species remain. The study area has been completely developed in the past, and all the buildings have been demolished with only rubble and litter remaining. The western section of the site was used as a piggery in the past, and an old dam excavated to provide water to the animals. The dam area is completely dry due to no more water being pumped into the system. The study area is dominated by alien invasive species and is used for grazing by cattle. Rubble and litter are present throughout the site. The vegetation of this area has no natural species remaining and is not representative of any natural ecosystem. As a result, this unit achieved a Very Low Biodiversity Importance score and has no conservation value.
Government Notice 598 Alien and Invasive Species Regulations (2014), including the Government Notice 864 Alien Invasive Species List as published in the Government Gazette 40166 of 2016, as it relates to the National Environmental Management Biodiversity Act, 2004 (Act No 10 of 2004)	NEMBA is administered by the Department of Environmental Affairs and aims to provide for the management and conservation of South Africa's biodiversity within the framework of the NEMA. In terms of alien and invasive species. This act in terms of alien and invasive species aims to: - Prevent the unauthorized introduction and spread of alien and invasive species to ecosystems and habitats where they do not naturally occur, - Manage and control alien and invasive species, to prevent or minimize harm to the environment and biodiversity; and - Eradicate alien species and invasive species from

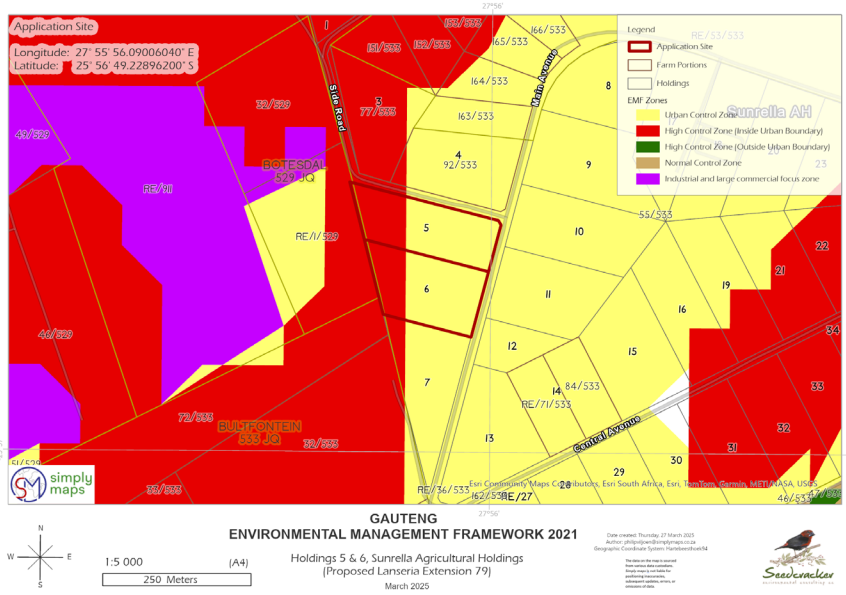
DESCRIPTION OF COMPLIANCE WITH THE RELEVANT LEGISLATION, POLICY OR GUIDELINE:	
	ecosystems and habitats where they may harm such ecosystems or habitats. Alien species are defined, in terms of the National Environmental Management: Biodiversity Act, 2004 (Act no 10 of 2004) as: (a) A species that is not an indigenous species; or (b) An indigenous species translocated or intended to be translocated to a place outside its natural distribution range in nature, but not an indigenous species that has extended its natural distribution range by natural means of migration or dispersal without human intervention. Categories according to NEMBA (Alien and Invasive Species Regulations, 2017): - Category 1a: Invasive species that require compulsory control; - Category 1b: Invasive species that require control by means of an invasive species management programme; - Category 2: Commercially used plants that may be grown in demarcated areas, provided that there is a permit and that steps are taken to prevent their spread; and - Category 3: Ornamentally used plants that may no longer be planted. Alien plants present on site must be controlled as a high priority, since they pose a huge risk to ecosystems further away. All Category 1 Declared Weeds and other alien invaders must be removed from the site.
The National Water Act, 1998, Act 36	The National Water Act (Act 36 of 1998) "NWA" provides a framework to protect, develop, conserve, and manage the nation's water resources. Water use is defined broadly in terms of the NWA, and includes taking and storing water, activities which reduce stream flow, waste discharges and disposals, controlled activities (activities which impact detrimentally on a water resource), altering a watercourse, removing water found underground for certain purposes, and recreation. A Wetland Assessment and Hydropedological study was conducted by Dr Andries Gouws, Index PTY LTD, in March 2024. See Appendix G. The soil conditions on site - at the time of Dr Gouws's assessment - did not identify wetlands on the property. Dr Gouws concluded that there were no wetlands on the property. The field assessment conducted by Mr Bertus Fourie of Galago Environmental in May 2025 however, found a fragmented and degraded unchannelled valley bottom wetland on site. The study site is part of a

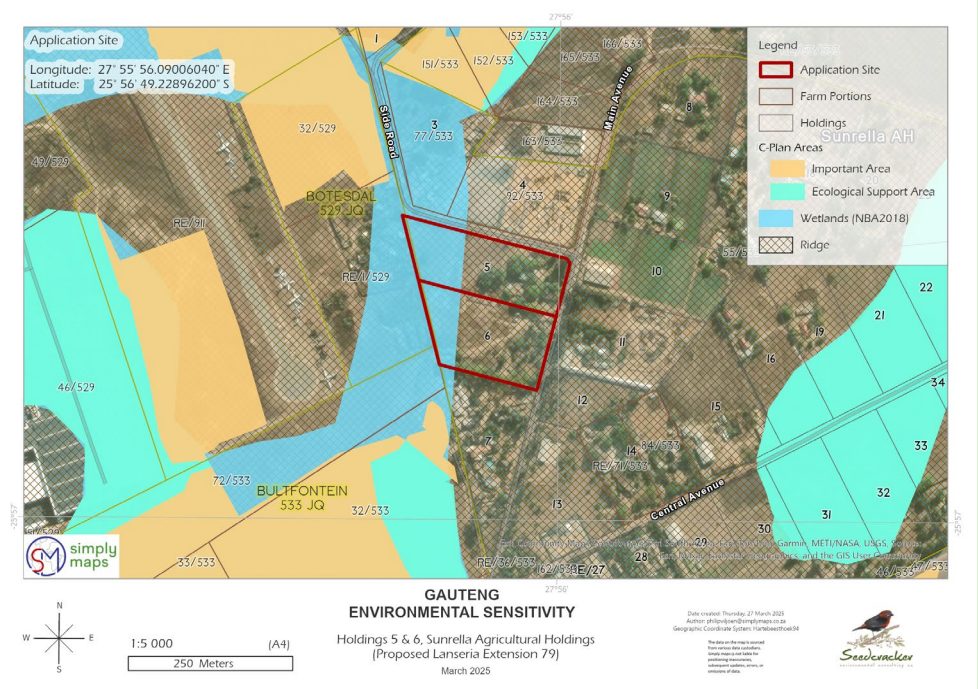
DESCRIPTION OF COMPLIANCE WITH THE RELEVANT LEGISLATION, POLICY OR GUIDELINE:	
	larger project (Lanseria X 11 & X12). The wetland is impacted by anthropogenic activities. The function of the identified wetland is purely hydrological with other ecosystem services lacking. The results of the Present Ecological State (PES) assessment conducted by Galago Environmental, indicates that the affected system is currently in an Ecological Category E, representing a seriously modified state. The ecological importance and sensitivity of the system was determined to be Low. The NWA provides for pollution prevention measures, with particular emphasis on water resource pollution. In accordance, the licensee shall ensure that activities impacting upon water resources and effluent releases are monitored for compliance with the applicable Regulations. Emergency incidents involving water resources are included in the Act, requiring the polluter to remediate and mitigate the impacts of such an emergency incident. In terms of Section 19 of the NWA, "an owner of land, a person in control of land or a person who occupies or uses the land on which any activity or process is or was performed or undertaken; or any other situation exists, which causes, has caused or is likely to cause pollution of a water resource must take all reasonable measures to prevent any such pollution from occurring, continuing or recurring". A water use must be licensed (in terms of Section 21) unless it is listed in Schedule 1 as an existing lawful water use; is permissible under a general authorisation; or if a responsible authority waives the need for a licence. INDEX (Pty) Ltd has been appointed to conduct the Water Use Authorisation Application (WUA) process for the proposed development, and the impact it may have on freshwater resources within a 500m radius of the site.
Government Notice 509 as published in the Government Gazette 40229 of 2016 as it relates to the National Water Act, 1998 (Act No. 36 of 1998)	In accordance with GN509 of 2016 as it relates to the National Water Act, 1998 (Act 36 of 1998), a regulated area of a watercourse in terms of water uses as listed in Section 21c and 21i is defined as: • the outer edge of the 1 in 100 year flood line and/or delineated riparian habitat, whichever is the greatest distance, measured from the middle of the watercourse of a river, spring, natural channel, lake or dam; • in the absence of a determined 1 in 100 year flood line or riparian area, the area within 100 m from the edge of a watercourse where the edge of the watercourse is the first identifiable annual bank fill flood bench; or

DESCRIPTION OF COMPLIANCE WITH THE RELEVANT LEGISLATION, POLICY OR GUIDELINE:	
	• a 500m radius from the delineated boundary (extent) of any wetland or pan in terms of this regulation. Any development on the study site has the potential to impact the aquatic ecosystems and must be authorised in terms of Section 21 of the National Water Act (1998). Sections of the unchannelled valley bottom wetland (UVBW) on site, will be replaced with a single attenuation pond in the northern corner of the site. The WUL presently underway with Index PTY LTD, has applied for this activity.
National Environmental Management Act: Protected Areas Amendment Act 21 of 2014	The National Environmental Management: Protected Areas Amendment Act 21 of 2014 aims to amend the National Environmental Management: Protected Areas Act, 2003, so as to amend or insert certain definitions; to authorise the declaration of marine protected areas; to provide for the management of marine protected areas; to provide for transitional measures; to effect certain textual alterations; and to provide for matters connected therewith. The National Environmental Management: Protected Areas Act 57 of 2003 intends to provide for the protection and conservation of ecologically viable areas representative of South Africa's biological diversity and its natural landscapes and seascapes; for the establishment of a national register of all national, provincial and local protected areas; for the management of those areas in accordance with national norms and standards; for intergovernmental co-operation and public consultation in matters concerning protected areas; and for matters in connection therewith. The study area does not occur in a Protected Area. Enviroguard Ecological Services cc confirmed in their terrestrial biodiversity assessment of the site, that the vegetation of the study area is transformed due to the various anthropogenic influences and has little resemblance to the natural vegetation that originally occurred in the area. See Section F and Appendix G of this report, for the detail of this study.

National Environment Management Waste Act, 2008 (Act No. 59 of 2008)	The NEM: Waste Act (NEMWA) was accented to on 10 March 2009 and came into effect on 01 July 2009. This Act repeals the sections in the Environment Conservation Act, Act 73 of 1989 that previously dealt with the licensing of general and hazardous waste storage facilities. The Act was established to regulate waste management for the protection of human health and the environment. Section 19 of the NEMWA authorises the Minister to publish a list of waste management activities which would require an environmental assessment and waste management licence. On 3 July 2009 the Minister published a schedule of waste management activities in respect of which a waste management licence is required in accordance with section 20(b) of NEMWA (GN R718, GG 32368). Activities listed under Category A of GN R 718 for which a waste management licence is required, are equivalent to those that require a Basic Assessment process as stipulated in GN R 544 of June 2010. Category B activities are equivalent to those that require a full EIA process as stipulated GN R 545 of June 2010. None of the activities relating to the construction and operation of the proposed Light Industrial township development, will require a waste management license.
National Heritage Resource Act 25 of 1999	The National Heritage Resource Act 25 of 1999 introduce an integrated and interactive system for the management of the national heritage resources; promote good government at all levels, and empower civil society to nurture and conserve their heritage resources so that they may be bequeathed to future generations and Chapter 2 section 35 subsection 3 states that any person who discovers archaeological or paleontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources and subsection 4 says that no person may, without a permit issued by the responsible heritage resources authority— a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite; b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological material or object or any meteorite; and section 36 subsection 3 states that no person may, without a permit issued by SAHRA or a provincial heritage resources authority— c) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves; d) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or

	e) bring onto or to use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals In accordance with Section 38 of the NHRA, an independent heritage consultant was appointed by *Seedcracker Environmental Consulting* to conduct a cultural heritage assessment to determine if the development activities would have an impact on any sites, features or objects of cultural heritage significance. During the site visit, it was determined that all the structures that occurred on the site have been demolished, some even down to ground level. All re-usable fittings and material were removed and at present people are even busy salvaging the bricks. Due to their relatively recent age and the current state of preservation, the ruins of the buildings are viewed to have no significance and is judged not to have any conservation value. No sites, features or objects of cultural significance were identified, therefore, the impact of the proposed develop is determined to be very low and no mitigation measures are proposed. The Palaeontological Sensitivity Map indicate that sections of the project area have an insignificant to zero sensitivity of fossil remains to be found and therefore a palaeontological assessment is not required. See Section F and Appendix G of this report, for the detail of this study.
The Gauteng Provincial Environmental Management Framework, 2015	The Gauteng Provincial Environmental Management Framework is a legal instrument in terms of the Environmental Management Framework Regulations. The regulations are designed to assist environmental impact management including EIA processes, spatial planning and sustainable development. The objectives of the policy are: • To ensure efficient urban development (including associated service infrastructure) in defined selected areas with lower environmental concerns and high development demand in order to help facilitate the implementation of Gauteng Growth and Management Perspective, 2014. • To facilitate the optimal use of current industrial, mining land and other suitable derelict land for the development of non-polluting industrial and large commercial developments. • To protect Critical Biodiversity Areas (CBAs) within urban and rural environments. To ensure the proper integration Ecological Support Areas (ESAs) into rural land use change and development. • To use ESAs as defined in municipal bioregional plans in spatial planning of urban open space corridors and links within urban areas. • To focus on the sustainability of development through the implementation of initiatives such as Energy efficiency programmes, plans and designs, Waste minimisation, reuse and recycling, Green infrastructure in urban areas, and Sustainable Urban Drainage Systems (SUDS)

	According to the GDE Environmental Management Framework, the study and investigation areas fall within the following EMF Zones: EMF Zone 1: (Urban development zone): The eastern portion of the investigation area is located within Zone 1. The intention with this zone is to streamline urban development activities in it and to promote development infill, densification, and concentration of urban development, to establish a more effective and efficient city region that will minimise urban sprawl into rural areas. EMF Zone 2: (High control area inside Zone 1): Linear bands associated with drainage in the study and investigation areas are classified as being in Zone 2. This zone is sensitive to development activities. Only conservation should be allowed in this zone. Related tourism and recreation activities must be accommodated in areas surrounding this zone. The figure below shows the location of the site within the GPEMF 2021 mapping. 
Gauteng C-Plan v4	The Gauteng Conservation Plan (Version 4) classified areas within the province based on its contribution to reach the conservation targets within the province. These areas are grouped as Critical Biodiversity Areas (CBAs) or Ecological Support Corridors (ESAs). The CBAs comprise 'Irreplaceable' areas that must be conserved and areas classified as 'Important' to reach the conservation targets of the Province. ESAs are areas that are not essential for meeting biodiversity representation targets/thresholds but which nevertheless play an important role in supporting the ecological functioning of CBAs and/or in delivering ecosystem services that support socio-economic development, such as water provision, flood mitigation or carbon sequestration to ensure sustainability in the long term.

	From a provincial biodiversity management perspective, according to GDARD's C-Plan 4, the study area is characterised by a wetland system on the western portion of the site. 
Joburg 2040 – Growth and Development Strategy	The policy envisions a World Class African City of the Future – a vibrant, equitable African city, strengthened through its diversity; a city that provides real quality of life; a city that provides sustainability for all its citizens; a resilient and adaptive society, with Improved quality of life and development-driven resilience for all, to provide a resilient, liveable, sustainable urban environment, underpinned by infrastructure supportive of a low-carbon economy, an inclusive, job-intensive, resilient and competitive economy that harnesses the potential of citizens, and a high performing metropolitan government that pro-actively contributes to and builds a sustainable, socially inclusive, locally integrated and globally competitive Gauteng City Region." The Town Planning hub (appointed town planners for the Lanseria X 79 township) submits that by way of approval of this application, the City of Johannesburg will be adhering to the outcomes that are proposed within the document. The proposed development will contribute to a sustainable environment, create jobs and overall be an incentive for the Municipality. The document specifically refers to the fact that strategic land parcel development for industrial use will assist in the generation of economic income to the city. This application is in line with the economic growth opportunities as listed in the policy document.
Johannesburg Spatial Development Framework,	The core objective of the SDF 2040 is to create a spatially just world class African city. The SDF 2040 is premised on spatial transformation, defined through the

2040	principles of equity, justice, resilience, sustainability, and urban efficiency which it seeks to translate into a development policy. The future "polycentric Johannesburg" will bring jobs to residential areas and housing opportunities to job centres rather than merely transporting people between the two. It will create complete nodes where people can live work and socialise, which are efficiently connected by public transport. It will bridge spatial and social barriers and build a framework for a spatially just city. The application site falls within a Peri-Urban Zone and is further identified as an Industrial Node within the Nodal Review. An important goal for the City is to promote the successful development of Johannesburg's economic base in part by ensuring that industrial land is maximised for its highest and best use. Ultimately, it is in the City's interests to direct manufacturing, warehousing, or other industrial activities to the most competitive new or existing locations for such activity, so that these sectors may flourish and create jobs and income for local residents. From the above, The Town Planning hub submits that this application is in line with the goals set for 2040, as it will be maximising the industrial value of the application site. The required upgrades will assist the further development in the area in the near future.
Nodal Review, 2020	The Nodal Review is a comprehensive Policy with the intention to ensure development that "occurs in a way that is holistically sustainable: having positive environmental, social and economic effects". The application site is earmarked as an Industrial Node. By way of approval of this application, the Municipality will be supporting and implementing the aforementioned guidelines, ie: Creating distinctive environments as well as land use intensification. Great care was applied during the planning phases by the professional team in order to have the best possible land use on site taking into account that it is east of the Lanseria International Airport, with new townships being established on the surrounding holdings. The Lanseria international airport, facilitates ancillary and supporting services to be provided within the immediate vicinity of its operations. The application is thus not deviating from the future development envisaged for the specific area.
The Draft Greater Lanseria Master Plan (GLMP) 2021	The vision of a new 'Smart City' within the Greater Lanseria Growth Node emanates from a joint initiative of the Presidency, the Office of the Gauteng Premier, the City of Tshwane, the City of Johannesburg and Mogale City. The Development Bank of SA and the adjacent North-West Province municipality of Madibeng are also represented. The State President introduced the initiative in

	his State of the Nation address in February 2020, and the Office of the Premier has led extensive studies and engagements in putting the planning of the smart city in place." The initiative of a Smart City will be guided by the draft Greater Lanseria Smart City Framework Policy Document. In terms of 'Land Use and Activity', the policy document allocates the application site within a Major Node, with land uses supported being Business, Commercial and Industrial uses. The application site falls within the primary zone and is identified as a Specialist Node within the GLMP (Greater Lanseria Master Plan). The location of the proposal is ideal as it will cater for the greater good / economic stability of not only the Lanseria International Airport, but the City of Johannesburg and the Province as a whole. The location lends itself to accessibility to major road linkages. The application site also falls within the 800m radius Lanseria Airport / Logistics Hub Specialist Node. The Lanseria Airport and Logistics Hub is a specialist node, forming the northern anchor of Malibongwe major arterial activity spine. The application site is ideally located; not only in terms of access and proximity to the Lanseria International Airport, but also to the greater region for logistical purposes and employees to travel to work.
Lanseria Regional Spatial Development Policy (LRSDF) 2017	The Lanseria Regional Spatial Development Policy (LRSDF), established in 2017, plays a pivotal role in shaping the future of the Greater Lanseria area in Gauteng Province, South Africa. The LRSDF aims to create a smart city within the Lanseria region, as envisioned by President Cyril Ramaphosa. This transformative initiative seeks to address the spatial legacy of apartheid by developing a modern, sustainable urban environment. The Greater Lanseria Master Plan (GLMP) serves as the first phase of this smart city development. Key stakeholders include: · Gauteng Growth and Development Agency (GGDA) · Department of Water and Sanitation · Gauteng Dept of Environment (GDE) · City of Johannesburg The smart city project initially aimed to accommodate 350,000 to 500,000 people by 2030. The focus was to be on building essential infrastructure, including Wastewater treatment facilities. The LRSDF represents a progressive step toward realizing a modern, interconnected, and forward-thinking urban landscape in the Lanseria area. The project site falls within an area identified for development in the LRSDF 2017.
Lanseria Integrated Open Space Plan (LIOSP) 2018	The Lanseria Integrated Open Space Plan (LIOSP), developed in 2018, plays a crucial role in shaping the open spaces and green areas within the City of

	Johannesburg Metropolitan Municipality. The LIOSP aims to provide a comprehensive understanding of all open space resources within the study area. It covers existing conservation areas, key ecological spaces, and socio-economic open spaces. The plan serves as a decision-making tool for development, park planning, and conservation programs. The study area encompasses a diverse range of developments, including planned, incremental, and informal ones. It extends from Lanseria Airport in the north to Kya Sand / Bloubosrand in the south. The eastern boundary is Diepsloot, and the western boundary is formed by the R512. Notable small holdings, suburbs, and townships within the study area include: Northern Farm, Sunrella Agricultural Holdings, Diepsloot, Dainfern, Broadacres, Steyn City, Chartwell, Farmall, Nietgedacht, Lanseria. The study area strategically lies within a broader regional "opportunity" zone. Future development and growth are likely to be influenced by both internal pressures and external factors beyond the boundary. The LIOSP contributes to informed decision-making, ensuring effective management of the open space network in this dynamic region.
Lanseria Airport and Logistics Hub	The Lanseria Airport and Logistics Hub represents a strategic initiative to position the airport as a central node for aviation, business, and logistics in the region. The Lanseria Airport and Logistics Hub is part of a broader vision to transform the airport into a significant aviation and business center. This initiative forms part of the smart city around the airport.

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.

Please describe the process followed to reach (decide on) the list of alternatives below

One of the objectives of an EIA is to investigate alternatives to the proposed project. The IEM procedure stipulates that the environmental investigation needs to consider feasible alternatives for any proposed development. Therefore, possible proposals or alternatives for accomplishing the same objectives should be

identified and investigated. To ensure that the proposed development enables sustainable development, *feasible* alternatives must be explored. The identification, description, evaluation, and comparison of alternatives are important for ensuring a sound environmental process. Alternatives should be considered as a *norm* within the Environmental Process.
Since the site is earmarked as an Industrial zone, and the site has been specifically designed to provide secure access into the Lanseria Cargo Park, no alternative land uses have been considered. The Lanseria node adjacent to the Lanseria International Airport and the Lanseria Corporate Estate, is primarily light industrial and warehousing land use. This application proposal aligns with the surrounding land uses. The application site does not have any environmental sensitivities on it, and therefore no alternative layout has been investigated. Only alternative technologies to be used in the activity have been considered

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	**PREFERRED LAND USE: Industrial 3 Township**	Growthpoint Properties PTY LTD (the applicant and the landowner) proposes the establishment of an Industrial 3 township, to develop warehouses / cargo holding areas, that will be utilized to support the Lanseria International Airport. The project is located on Holdings 5 and 6, Sunrella Agricultural Holdings, City of Johannesburg, (to be known as Lanseria X 79). See below figure and Appendix A for the preferred township layout plan. Holdings 5 and 6 of the farm Sunrella A/H are currently zoned "Agriculture". The zoning of the application site will change to "Industrial 3". Growthpoint Properties PTY LTD proposes the development of the "Lanseria Cargo Park", consisting of logistics and cargo facilities, with related office components, aviation related hangers, workshops, offices, and non-aviation related warehouses, that will be utilized to support the Lanseria International Airport. The Lanseria X 79 township will serve as the Secure access entry point into the approved Lanseria X 11 and Lanseria X 12 townships.

		 The proposed development will encompass sections of the unchanneled valley bottom wetland with a single attenuation pond in the northern corner of the site.
2	**Previous Layout**	The previous site layout was based on the March 2024 Index PTY LTD Wetland Assessment, which reported that no wetlands occurred on site.  Subsequent assessments of the site by Galago Environmental in May 2025, found wetland indicators on site, indicative of an unchanneled valley bottom wetland. The township layout was therefore amended to encompass sections of the wetland with a single attenuation pond in the northern corner of the site.

3	**Alternative technologies**	Conventional methods of construction, energy provision, water management and waste management can be replaced with technology that, as an alternative to resource-intensive and wasteful industry, aims to utilize resources sparingly, with minimum damage to the environment, at affordable cost and with a possible degree of control over the processes. Alternative technologies are paving the way construction companies look at making new structures, whether that is a residential site, corporate or government building. As trends have evolved, there is also a need to incorporate greener practices into building methods. Smart technology is also taking shape in construction practices. These trends will be shaping the future of the construction industry for years to come. As such, the applicant has looked at some of the most prevalent changes that are coming into effect for a more efficient and sustainable building process. When constructing a large warehouse building, there are several alternative technologies and innovative approaches that can be considered to enhance the efficiency, sustainability, and functionality of the structure. P*re-engineered Steel Buildings (PEBs)* Pre-engineered buildings use factory-manufactured steel components that are assembled on-site. The structural steel framework is often customized based on the specific needs of the warehouse. PEBs result in faster construction, high strength, durability, and flexibility in design. Steel is highly recyclable, which also contributes to sustainability. *Green or sustainable buildings* Constructing green buildings is high on the agenda for many firms, and the applicant is no exception. The warehouse structures will incorporate renewable energy sources. Green Building Technologies focuses on creating energy-efficient and environmentally friendly warehouses using sustainable materials, solar panels, rainwater harvesting systems, and geothermal heating and cooling. Solar roofing, energy-efficient HVAC systems, advanced insulation (e.g., spray foam), and natural daylighting systems (skylights, light tubes) are being considered by the applicant for the development. The implementation of these technologies results in reduced energy consumption, lower operating costs, and a smaller carbon footprint. This can also lead to certifications such as LEED (Leadership in Energy and Environmental Design). *Alternative sewer treatment systems* There are no existing municipal sewer services in the vicinity of the development. The internal sewer treatment works operated by Lanseria are closed off to the surrounding sites. The COJ cannot confirm when any bulk sewer infrastructure will be built in the region. As such, any development to

		serve the Smart City, must be self-sufficient when it comes to the treatment of sewage on site. Therefore, sewer package plants will be implemented on each township site until Johannesburg Water municipal bulk sewer lines become available. The Sewer package plants will be maintained by the applicant according to Johannesburg Water and Water Affairs (Guideline Document: Package Plant for the treatment of Domestic Wastewater) guidelines. The discharge from the sewer treatment plant will be treated to General Standards as required and will comply with the requirements prescribed in the National Water Act and other relevant by-laws and legislation. The package plant will be decommissioned once a bulk municipal connection becomes available. These technologies, either individually or in combination, can drastically improve the efficiency, cost, and sustainability of large warehouse construction. Selecting the right approach depends on factors like location, budget, climate, and the specific needs of the warehouse. Conventional methods of construction, energy provision, water management and waste management are not in line with current day sustainable thinking. Alternative technologies must be employed for the new township wherever possible.

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	4.2 hectares
Alternatives:	
Alternative 1 (if any)	4.2 hectares
Alternative 2 (if any)	
	Ha/ m^2

or, for linear activities:

	Length of the activity:
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	

Alternatives:

Alternative 1 (if any)	
Alternative 2 (if any)	

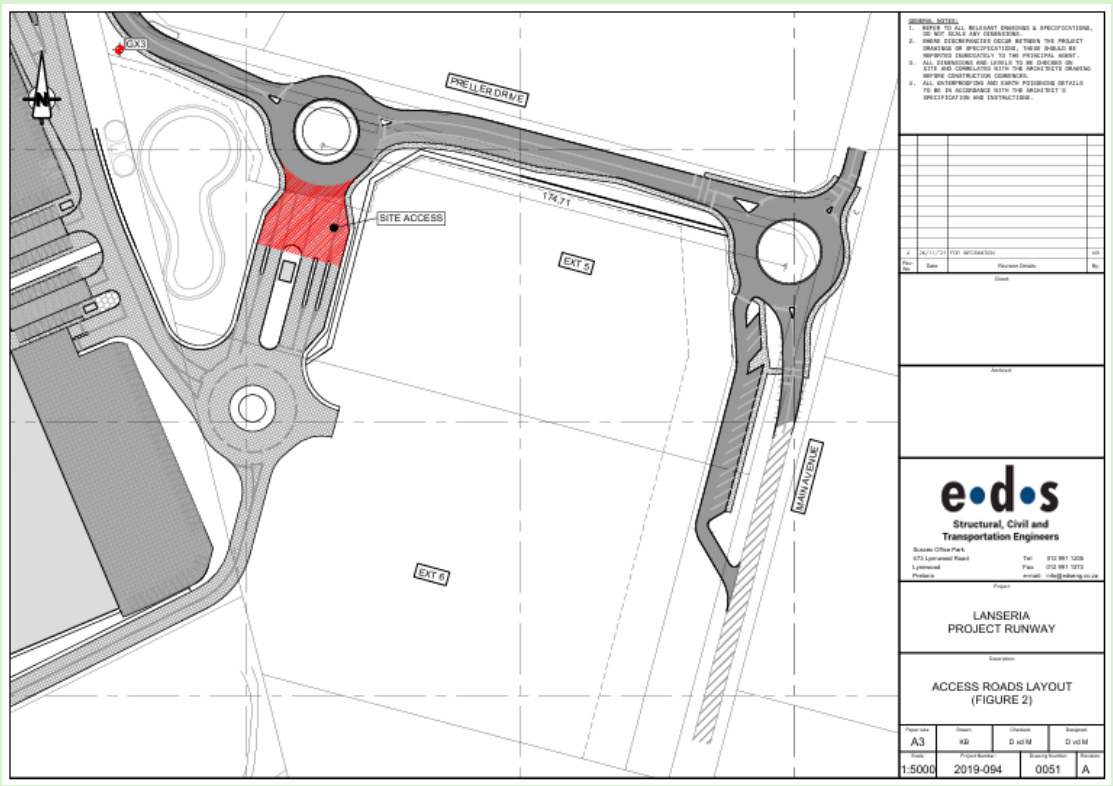
5. SITE ACCESS

Proposal

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

Describe the type of access road planned:

Lanseria X79 will obtain access from Preller Drive. The access will operate as a side-road stop-controlled intersection. Please see Appendix G for the Traffic Impact Study compiled by EDS Traffic Engineers for this application.



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	NO
	X	
If NO, what is the distance over which a new access road will be built		

Describe the type of access road planned:

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?	N/A
If NO, what is the distance over which a new access road will be built	

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. LAYOUT 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 to this document. The site or route plans must indicate the following:

- the layout plan is printed in colour and is overlaid with a sensitivity map (if applicable);
- layout plan is of acceptable paper size and scale, e.g.
  - A4 size for activities with development footprint of 10sqm to 5 hectares;
  - A3 size for activities with development footprint of > 5 hectares to 20 hectares;
  - A2 size for activities with development footprint of >20 hectares to 50 hectares);
  - A1 size for activities with development footprint of >50 hectares);
- The following should serve as a guide for scale issues on the layout plan:
  - A0 = 1: 500
  - A1 = 1: 1000
  - A2 = 1: 2000
  - A3 = 1: 4000
  - A4 = 1: 8000 (±10 000)
- shapefiles of the activity must be included in the electronic submission on the CD's;
- the property boundaries and Surveyor General numbers of all the properties within 50m of the site;
- the exact position of each element of the activity 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, sewage pipelines, septic tanks, storm water infrastructure;
- servitudes indicating the purpose of the servitude;
- sensitive environmental elements on and within 100m of the site or sites (including the relevant buffers as prescribed by the competent authority) 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);
- Where a watercourse is located on the site at least one cross section of the water course must be included (to allow the position of the relevant buffer from the bank to be clearly indicated)

FOR LOCALITY MAP (NOTE THIS IS ALSO INCLUDED IN THE APPLICATION FORM REQUIREMENTS)

- the scale of locality map must be at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map;

- the locality map and all other maps must be in colour;
- locality map must show property boundaries and numbers within 100m of the site, and for poultry and/or piggery, locality map must show properties within 500m and prevailing or predominant wind direction;
- for gentle slopes the 1m contour intervals must be indicated on the map and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the map;
- areas with indigenous vegetation (even if it is degraded or infested with alien species);
- locality map must show exact position of development site or sites;
- locality map showing and identifying (if possible) public and access roads; and
- the current land use as well as the land use zoning of each of the properties adjoining the site or sites.

See Appendix A

7. SITE PHOTOGRAPHS

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.

See Appendix D

8. FACILITY ILLUSTRATION

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.

See Appendix C

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 | 0 | 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:	Holding 5 Sunrella Agricultural Holdings Holding 6 Sunrella Agricultural Holdings

(Farm name, portion etc.)

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.

Proposed, preferred Alternative:	**Latitude (S):**	**Longitude (E):**
	25 56 49.40	27 55 56.25

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 | |

The 21 digit Surveyor General code of each cadastral land parcel

T0JQ00430000000500000
T0JQ00430000000600000

3. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Flat	1:50 – 1:20	1:20 –	**1:15 –**	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than

		1:15	**1:10**			1:5

The site slopes nort0h towards the Jukskei River.

4. LOCATION IN LANDSCAPE

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

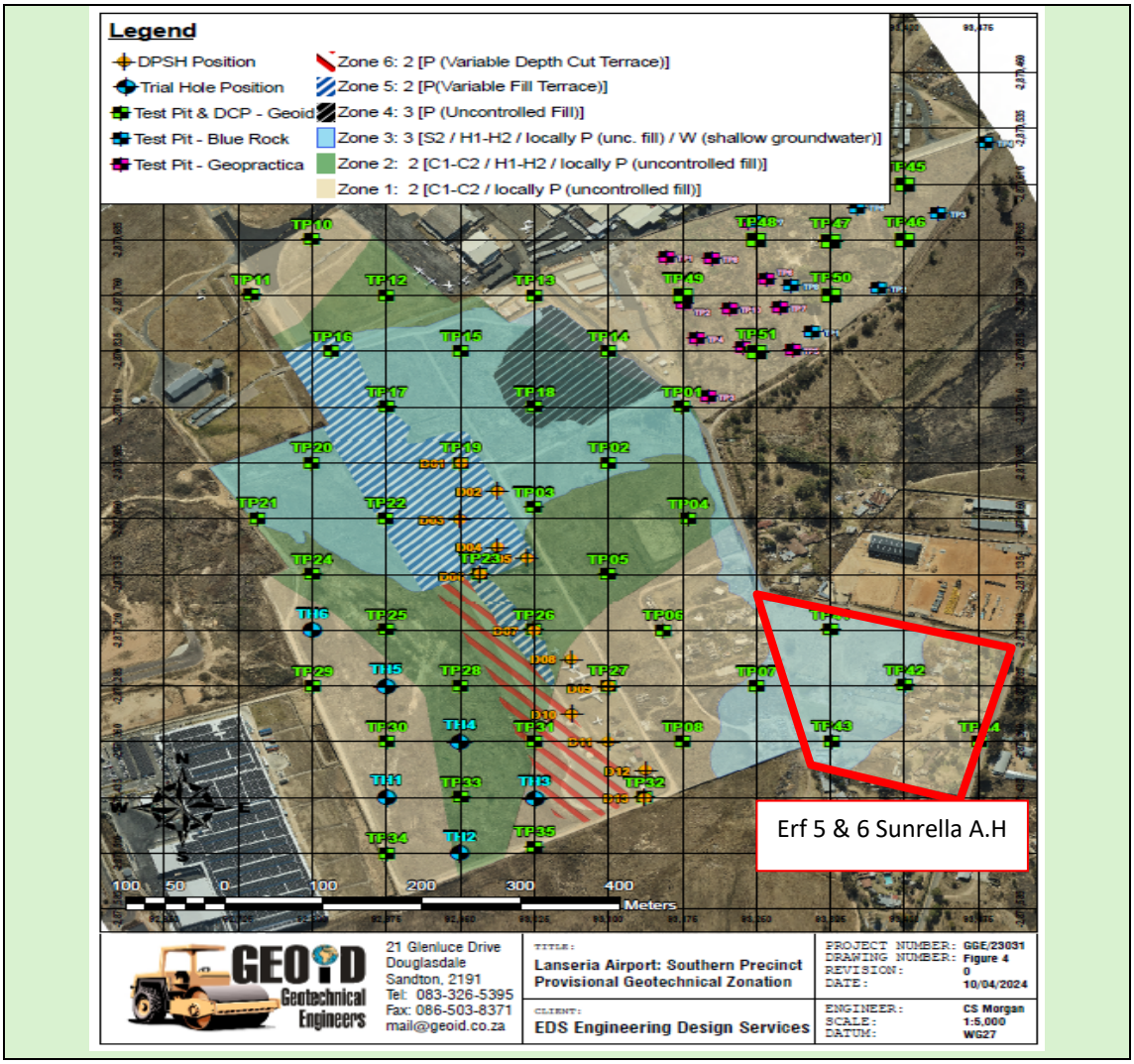
Ridgeline	Plateau	Side slope of hill/ridge	Valley	Plain	**Undulating plain/low hills**	River front

5. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Geoid Geotechnical Engineers (GGE) have conducted a detailed **geotechnical investigation** for the proposed Southern Precinct of the Lanseria International Airport expansion project, of which Holdings 5 & 6 Sunrella A.H, form a part of. See Appendix G for this report. Based on the Geotechnical field profiling, Geoid has characterised Holdings 5 & 6 Sunrella A.H by two geotechnical zones, Zone 1 and Zone 3.

Zone 1 is uncontrolled fill. The soil profile on this zone is characterised by highly compressible / potentially highly collapsible hillwash soils and localised loose fill deposits of variable thickness, blanketing compressible residual granite, which tend towards being slightly expansive near the diabase. Given the historic agricultural nature of much of the site, localised deposits of uncontrolled fill will be present which would negatively influence founding of structures and support of pavements if not appropriately mitigated.

Zone 3 exhibits shallow groundwater. This zone is typically characterized by bands of gully wash which range from loose, compressible, cohesionless sands to moderately expansive clays. This zone largely appears to be underlain by residual diabase, which is similarly potentially moderately active in the reworked zone, although this is frequently capped by competent hardpan ferricrete which masks the nature of the residual soils. Appropriate geotechnical recommendations have been provided in the report.



Is the site located on any of the following?

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

(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)	YES	NO

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)	YES	NO

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)	NO

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)?	**YES**	NO

The project area falls within the zone usually located on the front edge of (city) urban sprawl, where the land previously used for agricultural use (only) has become subdivided into small holdings. What used to be a large single agricultural unit, or farm, now consists of tens of small properties. These units do not have their economic base in traditional agriculture but are sustained by a variety of land uses and economic activities with strong urban associations.

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.

Natural veld - good condition % =	Natural veld with scattered aliens % =	Natural veld with heavy alien infestation / % =	**Veld dominated by alien species** **% =** 90	Landscaped (vegetation) % =
Sport field % =	Cultivated land % =	Paved surface (hard landscaping) % =	**Building or other structure** **% = 10**	Bare soil % =

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 If YES, specify and explain:	YES	NO
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. If YES, specify and explain:	Undetermined	
Are there any special or sensitive habitats or other natural features present on the site? If YES, specify and explain:	YES	**NO**
Was a specialist consulted to assist with completing this section	**YES**	NO

The study area was investigated by Enviroguard Ecological Services cc, see Appendix G for the specialist **terrestrial biodiversity assessment** report. Holdings 5 & 6 have been completely transformed by historical activities on site, to such a degree, that no natural species remain. The natural vegetation that used to occur on site has been destroyed due to development, agriculture and the demolition of the area. As a result, the sites have a low species richness and are dominated by pioneer weedy and alien invasive species. The vegetation unit on Erf 5 & 6 Sunrella A.H, has a **Low (none) ecological sensitivity.**

A **Wetland Assessment and Hydropedological study** was conducted by **Dr Andries Gouws, Index PTY LTD,** for the site. See Appendix G. The soil conditions at the time of Dr Gouws's assessment, did not identify wetlands on the property. Dr Gouws concluded that there were no wetlands on the property. Galago Environmental was appointed by SEC to align the Index PTY LTD Wetland and Hydroped report with the "protocol for the specialist assessment and minimum report content requirements for environmental impacts on aquatic biodiversity" as set out in Government Notice No 320 (Government gazette 43110) March 2020. See Appendix G. During the field assessment conducted by **Mr Bertus Fourie of Galago Environmental, a fragmented and degraded unchannelled valley bottom wetland was observed on site.** The study site is part of a larger project (Lanseria X 11 & X12), and various other studies and environmental authorisations have been sought and compiled within the larger study area. These have been included for the extended study area (ESA) with the on-site delineation compiled by Galago Environmental. See the below figure for the delineation of the aquatic ecosystem on site and within the 500m ESA.

The wetland is clearly impacted by anthropogenic activities including housing, alteration of flow paths and historical use of the site for intensive livestock rearing. The Lanseria Airport has also altered the hydrology of the aquatic ecosystems within the ESA. Infilling and buildings were (possibly) constructed over the wetland areas but has recently been demolished. The infilling of the wetland has made the delineation of the expected wetland impossible. **The function of the identified wetland is purely hydrological with other ecosystem services lacking.**

The results of the Present Ecological State (PES) assessment conducted by Galago Environmental, indicates that the affected system is currently in an **Ecological Category E**, representing a seriously modified state. The **ecological importance and sensitivity of the system was determined by Galago Environmental to be *Low*.**

If yes complete specialist details

Name of the specialist:	EnviroGuard Ecological Services CC

Qualification(s) of the specialist:	Professor Leslie Brown • SACNASP registration: 400075/98 (Ecological Science & Botanical Science) • PhD Terrestrial plant ecology • MSc. Water ecology • BSc Hons (Botany) BSc (Ed) (Botany, Zoology, Education) Wetland and Riparian Delineation (DWAF Accredited Course)
Postal address:	P O Box 703 Heidelberg
Postal code:	1438
Telephone:	082 464 1021
E-mail:	envguard@telkomsa.net

	YES	NO
Are any further specialist studies recommended by the specialist?		

Signature of specialist:  Date: July 2025

Name of the specialist:	Dr Andries Gouws Index PTY LTYD
Qualification(s) of the specialist:	Registered member of SACNASP in the category of Soils and Agriculture.
Postal address:	P.O. BOX 96023 WATERKLOOF VILLAGE PRETORIA
Postal code:	0145
Telephone:	082 807 6717
E-mail:	index@iafrica.com

	YES	NO
Are any further specialist studies recommended by the specialist?		

Signature of specialist:  Date: July 2025

If YES, specify:	

	YES	NO
If YES, is such a report(s) attached?		

Name of the specialist:	Galago Environmental Bertus Fourie
Qualification(s) of the specialist:	B Tech. Nature Conservation, 2009 specialization in Environmental Education & Freshwater management. M.Sc. Aquatic Health at University of Johannesburg, 2014 Registered as Professional Natural scientist in the field of Ecology and Aquatic (SACNASP Pr.Sci.Nat. Reg. No: 008394)
Postal address:	N/A
Postal code:	
Telephone:	082 921 5445

E-mail:	bertusfourie@gmail.com		
Are any further specialist studies recommended by the specialist?		YES	**NO**
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:	July 2025

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	35. Road
Other land uses (describe):				

NOTE: Each block represents an area of 250m X250m

NORTH

	10. Informal residential	14. Commercial & warehousing	14. Commercial & warehousing	14. Commercial & warehousing	14. Commercial & warehousing
W	35. Road	35. Road	35. Road	35. Road	35. Road
ES	1. Vacant land	1. Vacant land		35. Road	10. Informal residential
T	1. Vacant land	1. Vacant land	10. Informal residential	35. Road	10. Informal residential
	1. Vacant land	1. Vacant land	10. Informal residential	35. Road	10. Informal residential

E A S T

SOUTH

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	NO

If yes indicate the type of reports below

- Terrestrial Biodiversity Assessment
- Wetland Assessment and Hydropedological Study
- Aquatic Ecosystem Delineation
- Water, Sewer, Roads and Stormwater; Electrical Engineering Reports
- Traffic Impact Assessment
- Stormwater Management Plan
- Geotechnical Investigations
- Environmental Management Programme

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.

Demographics of a study area are important to ensure that new developments will complement/fit into the existing land uses.

The social and economic environment of the Lanseria area is influenced by various factors, including its proximity to multiple municipal jurisdictions, the area's natural resources, planned and proposed infrastructure development, and local demographics. Lanseria is located close to Johannesburg, which provides opportunities for economic interactions, including commuting, trade, and access to services and employment opportunities in these urban centers. The economic environment of Lanseria includes a mix of sectors such as

agriculture, light industry, tourism, and services. The presence of the Lanseria International Airport contributes to economic activities in the area, including aviation-related services and tourism.

The area provides employment opportunities across various sectors, including manufacturing, logistics, hospitality, and transportation. The development of industrial parks and warehouses in the study area will further contribute to job creation and economic growth. The social environment of Lanseria encompasses diverse communities with varying socio-economic backgrounds. These include rural communities engaged in agriculture, as well as urban residents and commuters working in nearby cities. The Lanseria area faces challenges such as unemployment, poverty, and infrastructure gaps, which directly impacts on economic development. However, there are also opportunities for investment, entrepreneurship, and community development initiatives to address these challenges and promote sustainable growth.

The social and economic environment of the Lanseria area is shaped by factors such as urbanization, infrastructure development, economic activities, and community dynamics. Developments which accommodate inclusive growth, infrastructure investment, and community development, can contribute to enhancing the social and economic environment of the Lanseria area.

The Lanseria Smart City is a development project aimed at creating a sustainable and technologically advanced urban centre in Lanseria, Johannesburg. A comprehensive planning process has earmarked specific areas in the Lanseria area for selected land uses. The development of the site with light industrial land uses is likely to positively impact directly on the socio-economic foundation in terms of job creation, during the construction phase and during the operational phase. In general, the development of the land will have a positive impact on the social and economic qualities of the surrounding communities and business activities.

Population

The area around Lanseria includes a mix of urban and semi-rural populations. It's not a densely populated urban area but has a growing residential and business community.

Age Distribution

The demographics include a range of age groups, from young professionals and families to retirees, reflecting the mixed-use nature of the area.

Economic Activity

Lanseria is home to various light industrial and commercial developments. The presence of the airport also contributes to local economic activity, including logistics, tourism, and business travel. There are residential neighbourhoods ranging from more affluent housing estates to more modest homes, reflecting a diverse socioeconomic landscape.

Infrastructure and Amenities

Lanseria is well-connected by road, with major highways linking it to Johannesburg and Pretoria. The airport serves as a significant transport hub, which influences the local economy and lifestyle. The area has access to essential services, including schools, healthcare facilities, and shopping centres. However, the extent and quality of these services can vary depending on proximity to major urban centres.

Community and Lifestyle

The lifestyle in Lanseria tends to blend suburban and rural characteristics, with larger properties and open spaces compared to more densely built urban areas. The area benefits from natural surroundings and open spaces, which can be attractive for outdoor activities and recreational pursuits.

Development and Growth

Lanseria is experiencing growth and development, with increasing interest in both residential and commercial projects. This growth brings changes to the social profile, as new developments attract different demographics and business interests.

This Lanseria x 79 Township application forms part of the Greater Lanseria Southern Precinct, which will serve as a pivotal economic and social asset within its region, characterized by the strategic location and accessibility of the LIA. Situated near Johannesburg's major business districts, including Sandton, Lanseria International Airport offers a convenient alternative to O.R. Tambo International Airport.

The Lanseria Airport and Logistics Hub is a cornerstone for regional economic development, with strategic investments and expansion plans poised to enhance its role as a gateway to Africa. Concurrently, its social initiatives and infrastructure projects are designed to foster community development and integration, contributing to a balanced and inclusive growth trajectory.

Lanseria represents a dynamic area where urban and rural characteristics intersect, influenced by its role as a transport hub and the ongoing development of both residential and commercial properties.

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 alternatives, 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? If YES, explain:	No

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:

In accordance with Section 38 of the NHRA, Dr Johnny Van Schalkwyk was appointed to conduct a cultural heritage assessment, to determine if the development activities would have an impact on any sites, features or objects of cultural heritage significance. See Appendix G for this specialist report.

During the site visit, it was determined that all the structures that occurred on the site have been demolished, some even down to ground level. All re-usable fittings and material were removed and at present people are even busy salvaging the bricks. Due to their relatively recent age and the current state of preservation, the ruins of the buildings are viewed to have no significance and was judged not to have any conservation value. For the current study, as no sites, features or objects of cultural significance were identified, the impact of the proposed development is determined to be very low, and no mitigation measures are proposed.

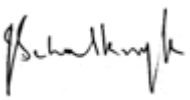
The assessment has determined that no sites, features or objects of heritage significance occur in the project area. Therefore, no permits would be required from SAHRA or the relevant PHRA. If heritage features are identified during construction, as stated in the management recommendation, these finds would have to be assessed by a specialist, after which a decision will be made regarding the application for relevant permits.

The Palaeontological Sensitivity Map indicates that sections of the project area have an insignificant to zero sensitivity of fossil remains to be found and therefore a palaeontological assessment is not required.

Will any building or structure older than 60 years be affected in any way?	**No**
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	**No**

Name of the specialist:	Dr Johnny Van Schalkwyk
Qualification(s) of the specialist:	DLitt et Phil (Anthropology), University of South Africa MA (Anthropology), University of Pretoria BA (Hons), Anthropology, University of Pretoria Post Graduate Diploma in Museology, University of Pretoria BA (Hons), Archaeology, University of Pretoria BA, University of Pretoria
Postal address:	62 Coetzer Avenue, Monument Park, 0181; Tel: E-mail:
Postal code:	0181
Telephone:	076 790 6777
E-mail:	jvschalkwyk@mweb.co.za

Are any further specialist studies recommended by the specialist?	YES	NO
If yes, please attached the comments from SAHRA in the appropriate Appendix		

Signature of specialist:		Date:	July 2025

SECTION C: PUBLIC PARTICIPATION

1. 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.

Was the draft report submitted to the local authority for comment?	**YES**	NO
If yes, has any comments been received from the local authority?	YES	NO

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

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

This amended Draft BAR has been submitted to the relevant local authorities. The comment period is 22 July 2025 till the 21 August 2025. Comments received after the review period closes, will be included in the draft BAR submitted to the GDE.

2. 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?	YES	**NO**

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 amended Draft BAR has been advertised and made publicly available. The comment period is 22 July 2025 till the 21 August 2025. Comments received from interested and affected parties, after the review period closes, will be included in the draft BAR submitted to the GDE.

3. GENERAL PUBLIC PARTICIPATION REQUIREMENTS

The Environmental Assessment Practitioner must ensure that the public participation process 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 flawed. The EAP must record all comments and respond to each comment of the public / interested and affected party before the application report 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 as required in terms of the regulations
Appendix 3 – Proof of newspaper advertisements
Appendix 4 –Communications to and from interested and affected parties
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

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 alternative 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.	Preferred Alternative	(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**	NO
If yes, what estimated quantity will be produced per month?	Undetermined	

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

During the construction phase, waste will comprise mainly of excess spoil material from ground excavations and trenching activities, vegetation removal, construction material, general waste from site personnel, paints and solvents and waste water and sewage to be disposed of at registered sites. A recycling programme should be implemented to ensure that the generation of waste that is being disposed of, is minimised from source. It is suggested that two areas on the site, be demarcated for waste disposal. One area will include all waste that *cannot* be recycled, while the other area will include all *recyclable* waste. The building rubble and solid waste (such as sand, gravel, concrete and over burden material) that cannot be used for filling and rehabilitation during the construction phase, must be removed from site and be disposed of safely and responsibly at a licensed landfill site. It is also suggested that the recyclable waste be sorted into different categories such as paper, plastic, glass & tin/ metal and that the appropriate independently appointed parties pick up the recyclable items. The solid waste produced during the construction phase, will be taken and collected from site by means of skip waste containers. This will be the responsibility of the applicant.

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

The construction solid waste will be disposed of at a registered Municipal landfill site, of the COJ.

Will the activity produce solid waste during its operational phase?	**YES**	NO
If yes, what estimated quantity will be produced per month?	This cannot be determined at this stage	

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

The waste collections under contract by the COJ Municipality will collect the domestic waste on a weekly basis. Recycling will be encouraged, and separate bins for recycling should be provided to the residents. Domestic waste will be disposed of at a registered landfill site.

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)?

To be disposed of at licensed landfill site.

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**

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**

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 there are any, that will be taken to ensure the optimal reuse or recycling of materials:
In accordance with international trends, the management of all waste streams that will be generated at the development should demonstrate support for the Hierarchy of Waste Management (HWM), which aims to promote the re-use and recycling of wastes, giving effect to the concept of 'cradle-to-cradle' waste management. The aim of the Waste Management Plan is to minimize the amount of waste disposed of, and as such, a waste hierarchy is followed: Prevent → Minimise → Reuse → Recycle → Recover, and only then, → Dispose. All materials that can be recycled must be separated from the general waste and disposed of at a recycling facility. Spoil material which could be used for landscaping purposes will be extracted and kept neatly intact in a controlled manner, to prevent wind and water erosion.

Recycling solid waste not only facilitates disposal, but conserves energy, cuts pollution, and preserves natural resources. Presently, the applicant has not considered the re-use or recycling of materials as part of the development proposal. During the construction phase, waste should be managed according to the following:

- Segregate different types of waste as they are generated using different skips where possible (General wastes, non-hazardous wastes and hazardous wastes). At a minimum there should be skips for wood, metals, inert and mixed materials,
- Collect maintenance and domestic refuse (scrap metal, packaging materials etc.) in appropriate bins for recycling or send to landfill for disposal in an approved manner.
- Recycle suitable spoil, demolition materials, all pruning, and surplus construction material arising from the works on site to avoid the need to transport materials.
- Metal waste has commercial value and is to be sold on to a scrap metal contractor for recycling purposes.
- Wood waste includes oversized cable reels, wooden packaging boxes, palettes and other wood materials. Palettes in good condition may be reused and are to be returned to materials suppliers on a return system – this will need to be negotiated with the relevant suppliers. Damaged wood waste is to be donated to local communities.

The following procedures should be adhered to, to control and manage *builder's* waste generated on the premises:

- Rubble material will be removed from the construction site frequently and disposed of at an approved dumping site.
- Sufficient containers will be on the construction site to handle the amount of litter, wastes, rubbish debris and builders wastes generated on the site.
- These containers will be emptied frequently to avoid rodents, insects or any other organisms accumulating on the site and becoming a health hazard to adjacent properties.
- No wastes will remain on the construction site for more than two (2) weeks.

Material to be used as backfill during a later building phase will be covered with a layer of soil to prevent litter from flying away and unhygienic conditions developing on the rubbish dumps. During the operational phase of the established township, waste will be collected by the Tshwane Municipal Services.

Liquid effluent (<u>other than domestic sewage</u>)

Will the activity produce effluent, *other than normal sewage*, that will be disposed of in a <u>municipal</u> sewage system?	YES	**NO**
If yes, what estimated quantity will be produced per month?		
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**
If yes, what estimated quantity will be produced per month?		
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**

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:

Water use and wastewater recycling are essential for Environmental Sustainability. The applicant must commit to reducing its water dependency and usage through efficient operations to minimise the developments impact on the region's scarce water resources, and to reduce operating costs. Water usage should be monitored at a company /facility/development level, to ensure consumption targets are achieved. A water conservation program should be developed to identify and manage water saving initiatives. All new facilities and buildings are required to implement water savings initiatives, as dictated by environmental sustainability initiatives, to ensure good practice water efficiency standards are met and exceeded where possible. All staff, contractors, suppliers and leased facilities are made aware of the need to conserve water and minimise consumption. Water conservation measures should include metering water use, installing water-efficient fixtures and technologies, growing drought-resistant landscaping, and making sure that leaks are quickly repaired. To achieve an even more significant impact, onsite alternative water sources and water re-use as cleaned or grey water should be considered.

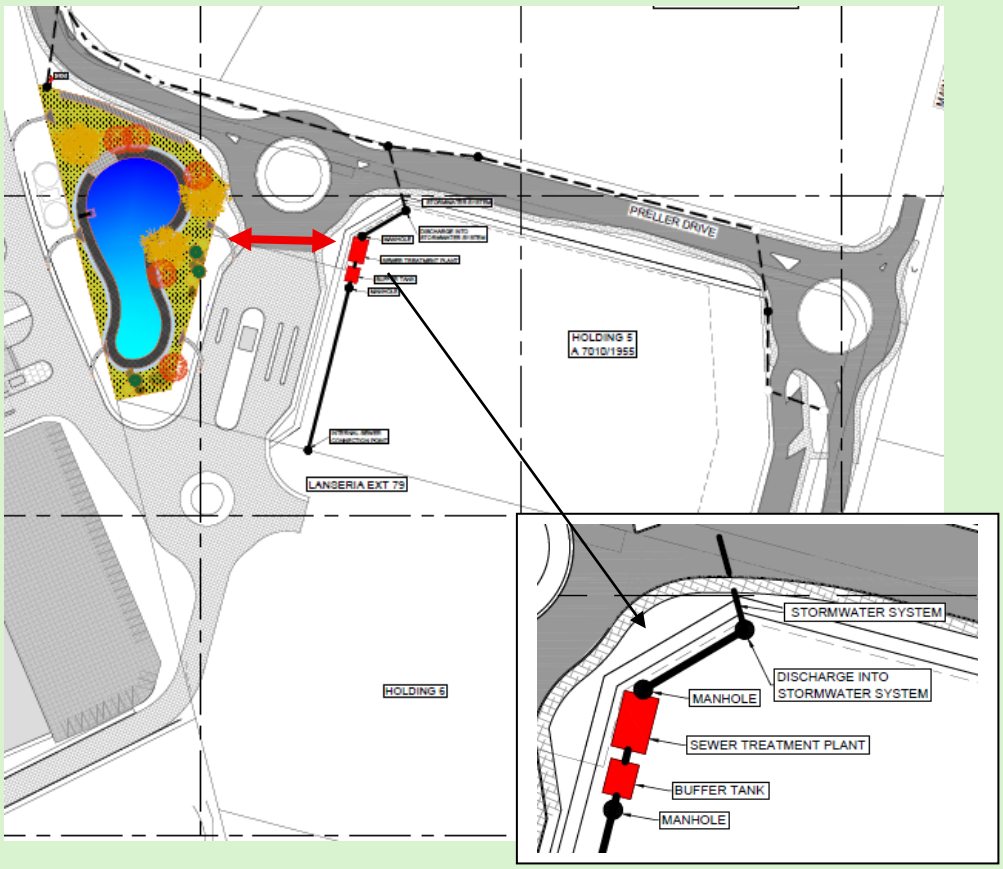
YES	**NO**

Liquid effluent (<u>domestic sewage</u>) Will the activity produce domestic effluent that will be disposed of in a municipal sewage system?		
If yes, what estimated quantity will be produced per month?	N/A	
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?	**YES**	NO

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

There are no existing municipal sewer services in the vicinity of the development. A Sewer package / treatment plant will be implemented on site until Johannesburg Water municipal bulk sewer lines are available. The sewer package plant will be maintained by the developer according to Johannesburg Water and Water Affairs (Guideline Document: Package Plant for the Treatment of Domestic Wastewater) guidelines. The package plant will be decommissioned once a bulk municipal connection becomes available.

The plant will be strategically located outside the footprint of the newly constructed wetland to prevent any ecological disturbance. The treated effluent will be discharged into the external stormwater network, and the treatment process will ensure that the effluent quality complies with the General Authorisations under the NWA and Johannesburg Water's discharge standards, particularly where discharge may indirectly affect sensitive downstream ecosystems.



The KaacKai L Series system will be used on site. The L series systems are typically installed underground. The design of the sewer treatment plant will include appropriate measures to ensure efficient operation of the plant, early detection of issues related to the functioning and quality of the treated effluent and containment of any pollution in the unlikely event that the treatment plant does not perform as required. The design will include the following elements:

- Septic tank / Conservancy tank to pre-treat the sewer prior to treatment in the package plant. This also allows for foreign objects to be collected in the septic tank prior to entering the package plant.
- Backup power to the package plants to ensure continuous operation during power outages and load shedding.
- Monitoring schedule to ensure that the treated effluent meets the required standard in accordance with the approvals. The frequency of monitoring will be done in accordance with Annexure 7 of the Joburg Water guideline document.
- The treated effluent will be discharged into a vertical reed bed system on site for post-treatment. The wetlands systems are effective for polishing treatment prior to discharging the effluent into the wetland system. Some of the treated effluent will be used for irrigation of the landscaping on site.
- The vertical reed bed as a post-treatment system will be contained in a bund area that will be used to contain sewer effluent in the event of the system not functioning as designed. This will provide a barrier against severe impacts on the receiving water.
- A series of containers arranged to form a vertical read bed purification system will be implemented as part of the system. This system requires virtually no maintenance apart from occasional thinning out of the plants. The system treats the effluent prior to discharge into the natural environment.

Index PTY LTD has been appointed to obtain the Water Use Authorisation required for this activity.

Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

YES	NO
Dust	

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:

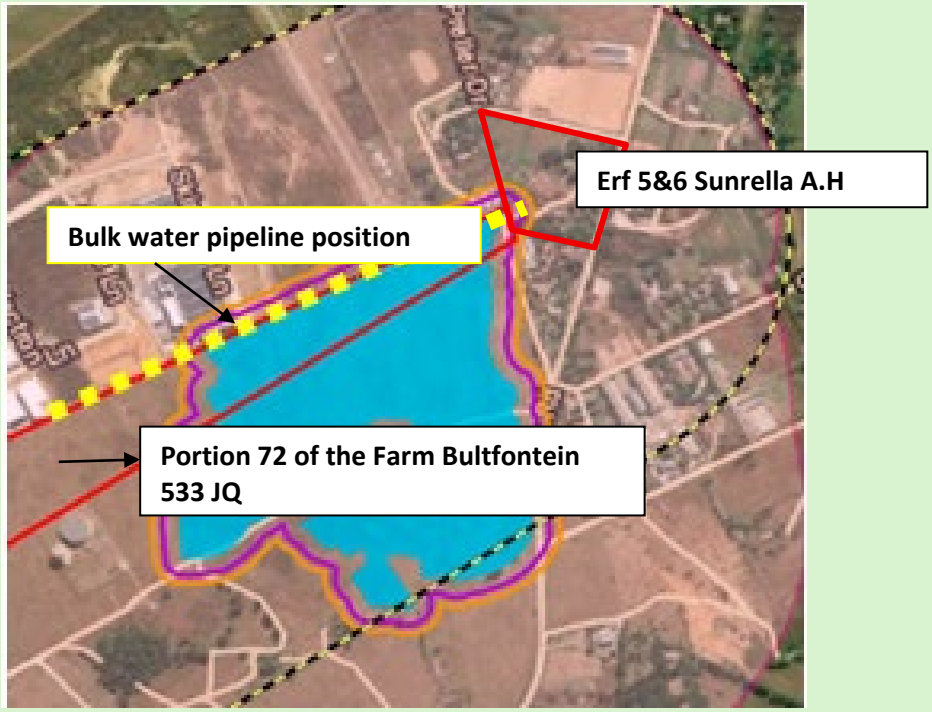
Limited dust will be generated during the construction phase of the project, due to the movement of construction vehicles and construction activities on site. The dust emissions will have a short term impact duration, and therefore a limited impact in terms of severity and extent. Appropriate dust suppression measures will be implemented to reduce the impacts as required and will be monitored by the appointed Environmental Control Officer.

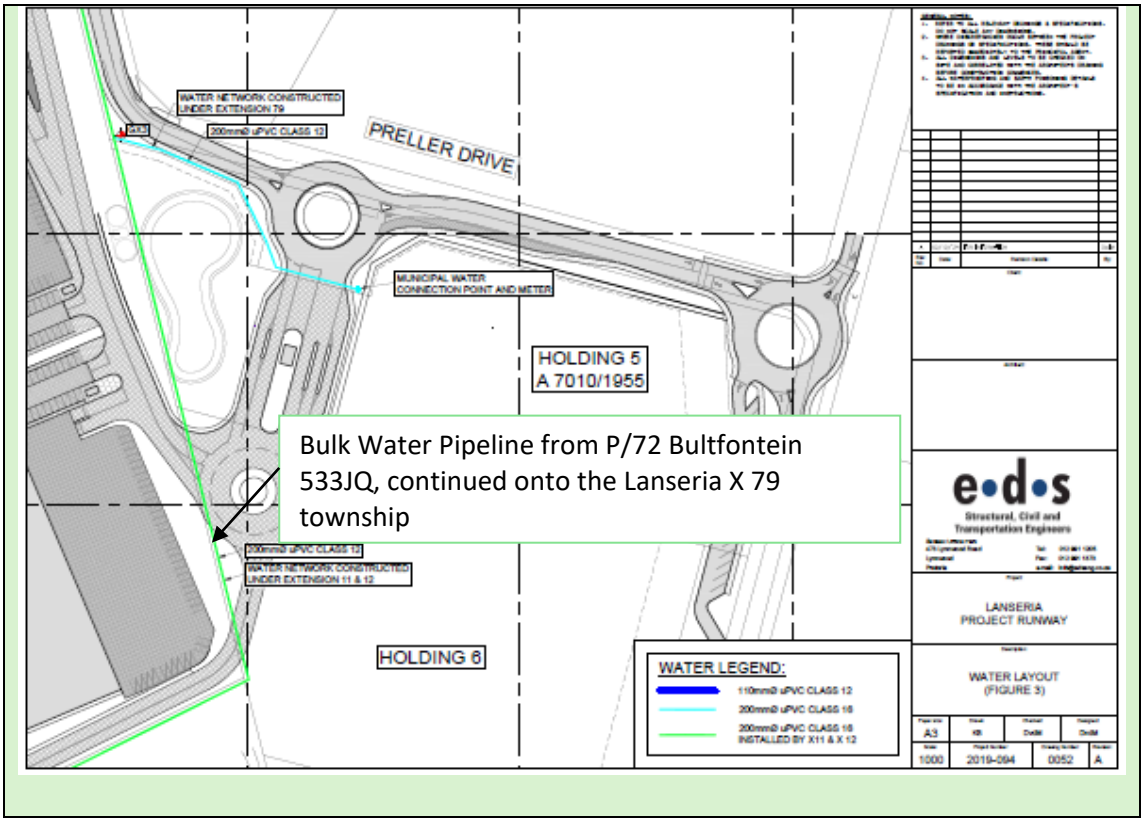
2. WATER USE

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

Municipal	Directly from water board	groundwater	river, stream, dam or lake	other	the activity will not use water

Bulk water services will be obtained from the existing water tower located west of the proposed development. The existing reservoir and water tower have sufficient capacity to accommodate the proposed new development. A new 200mmØ watermain link pipeline, measuring 1.2km, from this water tower, must be installed across Portion 72 of the Farm Bultfontein 533 JQ**,** to service the approved Lanseria Extension 11 and Extension 12 townships (Project Runway, GAUT 002/23-24/E3596), and the Lanseria X 79 township (this application). **Landowner consent, environmental authorization (GAUT 002/23-24/E3596) and the water use authorization (Licence no. 06/A21C/CI/15848, Feb 2025) have all been received for this route.**





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:	N/A

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**	NO

If yes, list the permits required

A Water Use Authorisation in terms of the National Water Act, 1998 (Act No. 36 of 1998) as amended, will be required for this activity, in compliance with Government Notice 4167 as published in the Government Gazette 49833 of 08 January 2024 as it relates to the National Water Act, 1998 (Act No.36 of 1998) as amended, in respect of a wetland, a 500 m radius around the delineated boundary (extent) of any wetland, including pans. This licence has been **received, Licence no. 06/A21C/CI/15848, Feb 2025.**

Other Water Use Authorisations required for the Lanseria X 79 township for water uses under Section 21 (c) and Section 21 (i), issued in terms of Section 39 the National Water Act (Act 36 of 1998) include the following activities:

- Section 21(c) and (i) – various activities within the 500m regulated area (stormwater attenuation, development as a whole etc.)
- Section 21(g) – disposing of waste in a manner that may impact the water resource (package plant)
- Section 21(f) – Discharging of waste water into a water resource.

Index PTY LTD has been appointed to obtain the Water Use Authorisations required for the development.

If yes, have you applied for the water use permit(s)?	**YES**	NO

If yes, have you received approval(s)? (attached in appropriate appendix):
Received, Licence no. 06/A21C/CI/15848, Feb 2025. See Appendix I

3. POWER SUPPLY

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

ESKOM

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

The existing **Eskom** MV network in the selected area does not have sufficient spare capacity to cater for the new development. A new Eskom MV feeder must be constructed from the existing 88/11KV Lanseria substation to the development site. The route for this feeder line will occur within existing road servitudes which do not require environmental authorization.

4. ENERGY EFFICIENCY

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

Designing an energy-efficient warehouse is essential to reduce operational costs and improve sustainability. Effective energy-efficient design measures for large warehouse buildings include the following strategies:

<u>Building Envelope and Insulation:</u>
Thermal Insulation: Proper insulation of walls, roofs, and floors can minimize heat gain/loss and improve HVAC efficiency.
Reflective Roofing: Use light-colored or reflective roofing materials to reduce heat absorption, decreasing cooling costs. Install roofing systems that reflect more sunlight and absorb less heat. This helps reduce the cooling load of the building, especially in hot climates.

<u>Natural Lighting</u>
Skylights and Roof Windows: Incorporate skylights or daylighting systems to maximize natural light and reduce the need for artificial lighting during the day.
Daylight Harvesting: Install sensors that adjust artificial lighting based on the amount of natural light entering the building.

<u>Energy-Efficient HVAC System</u>
Zoning and Variable Air Volume (VAV) Systems: Use a zoning approach with VAV systems that allow heating and cooling only in the areas that need it.

Smart Thermostats and Sensors: Implement smart thermostats and motion sensors to adjust heating and cooling based on occupancy.
Seal Gaps and Leaks: Use high-quality seals around doors, windows, and other penetrations to prevent air leakage and maintain thermal comfort.

LED Lighting
Energy-Efficient Lighting: Install LED fixtures with motion sensors to ensure lighting is only on when needed.
Lighting Controls: Use occupancy sensors and programmable lighting controls to minimize energy consumption during non-working hours or in less frequently used areas.

Renewable Energy Integration
Solar Panels: Install photovoltaic panels on the roof to generate electricity and offset the building's energy needs.
Battery Storage: Pair renewable energy systems with battery storage to store excess energy generated during peak sunlight hours for use during off-peak times.

Landscaping
Plant trees or shrubs around the building to reduce heat absorption and lower cooling needs.

Smart Logistics and Storage
Optimized Layouts: Design the warehouse layout for efficient space utilization, reducing the need for excessive heating, cooling, and lighting in unused areas.

Different energy saving strategies will be considered in the detailed design phase of the project. The measures will include combinations of a variety of appropriate energy saving and alternative energy generation initiatives, including renewable energy, as relevant to a particular facility/development structure. Specific focus will be placed on the management of new buildings, to ensure that their design is energy efficient. Conformance with the Green Buildings Policy is important in this respect. Energy efficiency in new buildings will take account not only of the building's design, but also of life-cycle impacts associated with the upstream activities (e.g. the carbon footprint of the materials used for building construction) and the downstream activities (e.g. waste and excess soil produced by construction).

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

Where possible, the use of alternative energy supply will be promoted and used. This will include:

- Solar lighting.
- Solar water heating.
- Rainwater harvesting
- LED Lighting
- Smart Landscaping

5. STORMWATER MANAGEMENT

EDS Engineering Design Services (Pty) Ltd (EDS Engineers) was appointed to compile a Stormwater Management Report for the township application on Portion 5 and Portion 6 of the farm Sunrella Agricultural Holdings Township. See Appendix G for this report.

1. There is no existing stormwater infrastructure network in the surrounding area of the application site.
2. There is a channel system starting on the north-western corner of the site, running along Preller Road northbound, discharging into a natural watercourse flowing overland.
3. There will be an increase in the stormwater runoff from the existing-development conditions to the post-development conditions for the application site, due to the increase in hard surfaces as part of the proposed development.
4. EDS Engineers and Galago Environmental worked together to encompass sections of the unchannelled valley bottom wetland on site, with a single attenuation pond in the form of an artificial wetland, in the northern corner of the site.
5. The artificial wetland attenuation pond proposed for the site, is larger in size than the recommended JRA 300 m^3/ha minimum requirements, hence the attenuation pond size is satisfactory.
6. The stormwater system is based on Sustainable Urban Drainage Systems (SUDS), focusing on reducing flow velocity, protecting against erosion, and promoting groundwater recharge.
7. Stormwater attenuation is provided in line with the Johannesburg Roads Agency (JRA) requirements. The design respects common law obligations to accommodate upstream runoff across lower-lying land.
8. The artificially created wetland system will support ecological function and downstream wetland connectivity.
9. The mitigative aspect of the loss of the wetlands, due to the proposed development, will be the improvement of the wetland ecological services in the artificial wetland (AW) and attenuation structure.
10. The internal stormwater infrastructure includes a combination of the artificial wetland attenuation to manage runoff and support infiltration. Surface drainage from parking areas and hardstands will be collected via a piped system. Subsurface drains will capture and direct groundwater and seepage to the wetland.
11. Runoff from Lanseria x 79 will be attenuated to pre-development levels using the proposed attenuation structure. Low-frequency storm discharges will be routed through the wetland to enhance infiltration before entering the downstream system.
12. As there are no current stormwater infrastructure networks in the surrounding area, all stormwater will be drained to a nearby watercourse to the north via pipe flow.
13. The estimated stormwater for the upstream catchment area of approximately 6.44 ha will be channeled using an underground culvert system, passing on the perimeter of Lanseria Extension 79. Thereafter the stormwater will be discharged into the external

stormwater network along Preller Drive, conveying the stormwater to the existing natural watercourse stream.

14. The Preller Drive culvert will be a 1,8m x 1,5m concrete box culvert, designed to accommodate the 1:50-year storm events under inlet control conditions. The Johannesburg Roads Agency (JRA) will take ownership of the culvert system, and a 5-meter servitude will be registered over the culvert in favor of the JRA.
15. A 1800mmΦ conduit pipe network is required to be installed running parallel to Preller Road and discharging to the natural watercourse through outlet-controlled structures. The road stormwater network will be installed next to Preller Road, as part of the NEMA and DWS approved Lanseria Extension 11 development.

6. TRAFFIC AND ROADS UPGRADE AND MANAGEMENT

EDS Engineering Design Services (Pty) Ltd was appointed by Growthpoint Properties (Pty) Ltd to undertake a Traffic Impact Assessment (TIA) as part of the township establishment application for the proposed Lanseria Extension 79 on Holdings 5 and 6 of Sunrella Agricultural Holdings. See Appendix X for this report.

The development site is adjacent to Preller Drive (northern boundary), Middel Road (eastern boundary) and the Lanseria International Airport (western boundary). Regional accessibility to the development is via the N14 freeway, R552 & R512. The Holdings 5 & 6 development will

obtain access from Preller Drive. The access will operate as side-road stop-controlled intersection. Preller Drive (Class 5 Road) is a very low volume road primarily serving the southern buildings and hangers at the Lanseria International Airport. Middel Road (Class 5 Road) is also a low volume road terminating at the Preller Drive / Middel Road / Main Avenue intersection. Main Road (Class 5 Road) is currently a gravel road. These roads are under the jurisdiction of the Johannesburg Roads Agency (JRA).

The Greater Lanseria Masterplan (GLMP) is currently only a framework that consists of a grid road network that will interconnect properties and create a link between the new Central Business District (CBD) south and the airport to the north. Significant commitment is still required from both provincial and local government authorities as well as the active involvement and input of the Real Estate Investment Trust (REIT). A detailed transport framework will need to be developed to safeguard the road reserves, ensuring that the secondary road network can be seamlessly integrated into the broader transport planning efforts. This collaborative approach underscores the need for coordinated efforts among various stakeholders to successfully implement the envisioned grid road network and its associated benefits for economic growth and accessibility.

The GLMP framework as it currently stands, indicates that the proposed Lanseria X79 will be able to obtain access from two separate locations in future: Via a new proposed road between Boeing Street and the extended Preller Road to the south-east connecting to the primary road network (Pelindaba Road R512) Via Preller Road and Middel Road north connecting to the secondary road network south of Lanseria Airport.

A total of 156 AM peak hour and 156 PM peak hour development trips will be added to the external road network as a result of the proposed developments on Lanseria Extension 79. 98 parking bays are provided for on the site layout plans for Lanseria Extension 79. 18 loading bays are proposed for the warehouse developments on Lanseria Extension 79.

The capacity analyses requires the following road upgrades:

Pelindaba Road (R512) / 6th Road (R552) intersection

- The intersection will be converted to a traffic signal that can accommodate the 2024 background traffic demand
- If the intersection is converted to a traffic signal-controlled intersection, the intersection will be able to accommodate the development traffic.
- No additional road upgrades are required as a result of the development traffic

6th Road (R552) / Middel Road intersection

- With the addition of the latent development traffic, road upgrades are required at this intersection to accommodate the latent development traffic demand.
- By making changes to the intersection layout, signal settings as well as signal layout, the development traffic can be accommodated.

The surrounding area has a lack of lay-by facilities for public transport modes. It is proposed that the applicant provides walkways along the site boundaries on Preller Drive, as well as a taxi lay-by where possible- where the service is required. It is also proposed that taxi lay-by's be provided along 6th Road (R552) at locations where the service is required.

SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014, 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 as well as the impacts of not implementing the activity (Section 24(4)(b)(i).

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summarise the issues raised by interested and affected parties.

This amended Draft BAR is presently out for public review. Comments received after the review period (22 July 2025 till the 21 August 2025), will be included and addressed in the final BAR.

Summary of response from the practitioner to the issues raised by the interested and affected parties (including the manner in which the public comments are incorporated or why they were not included)

(A full response must be provided in the Comments and Response Report (CRR) that must be attached to this report):

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

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

The potential impacts of the proposed activity were identified through a site visit, specialist and technical studies. Issues raised by IAP's and authority comments (to be received following the review of this draft report), will be used to further refine any identified impacts.

In this Basic Assessment Report, the potential impacts are broadly identified and outlined. An assessment of the potential impacts is provided, identifying the impacts that are potentially significant and recommending management and mitigation measures to reduce the impacts. In general, it is recognised that every development has the potential to pose various risks to the environment as well as to the residents or businesses in the surrounding area. Therefore, it is important that these possible risks are taken into account during the planning phase of the development. Risks and key issues were identified and addressed through an internal process based on similar developments, environmental and technical evaluations.

Previous experience has shown the rating and ranking of impacts is often a controversial aspect because of the subjectivity involved in attaching values to impacts. Please refer to tables below, for a detailed description on the assessment methodology used. Significance is determined through a synthesis of

impact characteristics. Significance is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required.

The potential impacts of the proposed development have been identified through a desktop study, a site visit, specialist and technical studies.

SIGNIFICANCE DESCRIPTION METHODOLOGY

The identification and assessment of environmental impacts is a multi-faceted process, which combines quantitative and qualitative descriptions and evaluations. It involves the application of scientific measurements and professional judgment to determine the significance of environmental impacts associated with the proposed project. The process involves consideration of *inter alia*: the purpose and need for the project; views and concerns of interested and affected parties, general public interest; and environmental legislation and guidelines.

The potential environmental impacts associated with the project have been evaluated according to the nature, extent, duration, intensity, probability, and significance rating of the impacts as explained below.

Significance of Impact

The significance of the impact has been determined through the following criteria:

(a) **Nature of Impact***:* This includes a brief description of how the proposed activity will impact on the environment. The nature of the impact is *described* as follows:

Positive: Impacts affect the environment in a positive manner, such that natural, cultural and/or social functions and processes are not affected or enhanced

Negative: Impacts affect the environment in a negative manner, such that natural, cultural and/or social functions and processes are altered, destroyed, lost, etc.

(b) **Extent***: The* physical and spatial size of the impact, which is classified as:

- Local: The impacted area extends only as far as the activity, e.g. a footprint of proposed activity.
- Site: The impact could affect the whole, or a measurable portion of the above mentioned property.
- Regional: The impact could affect the area including the neighbouring properties, the transport routes and the adjoining towns.

(c) **Duration***:* The lifetime of the impact; this is measured in the context of the life-time of the proposed project.

- Short term (0-5 years):
  The impact will either disappear with mitigation or will be mitigated through natural process

in a span shorter than any proposed phases.

- Medium term (5-15 years):
  The impact will last up to the end of the phases, where after it will be entirely negated.
- Long term (duration of operation):
  The impact will continue or last for the entire operational life of the development, but will be mitigated by direct human action or by natural processes thereafter.
- Permanent:
  The only class of impact, which is considered 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.

(d) **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:

- Improbable: The possibility of the impact occurring is very low, due to the circumstances, design or experience. Probable: There is a possibility that the impact will occur to the extent that provisions must be made to mitigate the impacts.
- Highly probable: It is most likely that the impacts will occur at some or other stage of the development. Plans must be drawn up before the undertaking of the activity.
- Definite: The impact will take place regardless of any prevention plans, and thus mitigatory actions or contingency plans must be relied on to contain the effect.

(e) **Intensity**

This will be a relative evaluation within the context of all the activities and the other impacts within the framework of the project. Does it destroy the impacted environment, alter its functioning, or render it slightly altered? These are rated as:

- None: No known impacts
- Low: The impact alters the affected environment in such a way that the natural processes or functions are not affected.
- Medium: The affected environment is altered, but function and process continue, albeit in a modified way.
- High: Function or process of the affected environment is disturbed to the extent that it temporarily or permanently ceases.

Determination of significance

Significance is determined through a synthesis of impact characteristics. Significance is an indication of the importance of the impact in terms of both physical extent and time scale and therefore indicates the level of mitigation required. The classes are rated as follows:

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

Status

Taking all the criteria into account, the status of the impact will either be classified as a positive or negative impact.

- **Reversibility Rating**
- **Irreversible** (the activity will lead to an impact that is permanent)
- **Partially reversible** (The impact is reversible to a degree e.g.
- acceptable revegetation measures can be implemented but the pre-impact species composition and/or diversity may never be attained. Impacts may be partially reversible within a short (during construction), medium (during operation) or long term (following decommissioning) timeframe
- **Fully reversible** (The impact is fully reversible, within a short, medium or long-term timeframe).

Management Actions:

- Where negative impacts are identified, mitigatory measures will be identified to avoid or reduce negative
- impacts. Where no mitigatory measures are possible this will be stated.
- Where positive impacts are identified, augmentation measures will be identified to potentially enhance these.
- Quantifiable standards for measuring and monitoring mitigatory measures and enhancements will be set.
- This will include a programme for monitoring and reviewing the recommendations to ensure their ongoing effectiveness.

Mitigation:

- The objective of mitigation is to firstly avoid and minimise impacts where possible and where these cannot be completely avoided, to compensate for the negative impacts of the development on the receiving environment and to maximise re-vegetation and rehabilitation of disturbed areas.

For each impact identified, appropriate mitigation measures to reduce or otherwise avoid the potentially negative impacts are suggested.

- All impacts are assessed without mitigation and with the mitigation measures as suggested.

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POTENTIAL IMPACTS:	**Significance rating of impacts (positive or negative):**	**PROPOSED MITIGATION:**	**Significance rating of impacts after mitigation:**	**Risk of the impact and mitigation not being implemented**
PRE-CONSTRUCTION PHASE				
General mitigation to be incorporated into the design and planning phase of the development, include the following: • An unchannelled valley bottom wetland occurs on site. The system is degraded with a PES of E. The EIS of the wetland corresponds to the PES with a score of Low. • The removal and translocation of impacted hydrophytes must be done prior to construction commencing. • Due to the perennial nature of the system, construction should preferably commence during the dry months, to minimise the risk of increased and sediment-laden runoff reaching the wetland as a result of these activities • The area which will become the artificial wetland system must be fenced during the construction phase to prevent any human activity from encroaching into this area. Monitoring of the fences is of paramount importance to ensure no infringement of the fences occurs. • Conduct pre-clearing inspections to ensure no protected species occur on site. • Secure perimeter fencing, lighting, and signage must be installed before works begin. • Appropriate Engineering design foundations is required to avoid intercepting or redirecting groundwater away from the seep wetland. • Careful planning of the construction footprint must be undertaken. The laydown areas must remain outside of the artificial wetland proposed to serve as the attenuation pond on site. • The construction area must be clearly demarcated before any construction activity take place and signage must be displayed during construction phase to inform and prevent the contractors and construction workers from entering the artificial wetland area;			

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• Removed vegetation must be stockpiled outside of the delineated artificial wetland. • Ensure all licenses and authorizations (e.g., environmental authorisation, water use licence if applicable) are granted and conditions integrated into the final Environmental Management Program (EMPr).				
CONSTRUCTION PHASE				
Impacts associated with Geotechnical Suitability **Nature of Impact: Soil erosion, modification or original soil conditions, compaction of soil caused by construction vehicles and workers.**	Negative	• The soil profile of the site is characterised by highly compressible / potentially highly collapsible hillwash soils and localised loose fill deposits of variable thickness, blanketing compressible residual granite, which tend towards being slightly expansive near the diabase. Given the historic agricultural nature of much of the site, localised deposits of uncontrolled fill will be present which would negatively influence founding of structures and support of pavements, if no geotechnical mitigation measures are put in place. • The man-made waterlogged depressions on site are characterised by bands of gullywash which range from loose, compressible, cohesionless sands to moderately expansive clays. This zone appears to be underlain by residual diabase, which is similarly potentially moderately active in the reworked zone, although this is frequently capped by competent hardpan ferricrete which masks the nature of the residual soils. In the most severely waterlogged areas, drainage is largely impeded, rendering this zone untrafficable and unable to be developed without prior canalisation of the stormwater and the removal and replacement of the problematic gullywash soils which are unsuitable for founding / pavement layerworks or in situ improvement. • The essentially untrafficable and waterlogged gullywash soils are highly	Medium	Zone 1 Low Zone 3 Low

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		compressible under present moisture regime, but potentially moderately expansive in the event of desiccation and very poor quality materials overall. These materials are unsuitable for reuse and should be cut to spoil and disposed, or used in completely non-critical, non-loaded areas where excessive ground movement is non-problematic. • No surface or ground water should be allowed to saturate the foundation zone of the earth wall or terrace, to the extent that appropriate soil drains must be installed as a prerequisite to wall / earth terrace construction, particularly in areas close to the natural drainage lines of Zone 3, where there is a risk of underflow. These subsoil drains should be installed around the full perimeter and sufficiently offset from the footprint of any elevated earth terraces to preclude soil saturation, which could lead to excessive settlement or bearing capacity / slope stability problems. In order to render Zone 3 suitable for development, the attenuation structures upslope of the zone will need to be reinstated to capture and temporarily store the runoff, reduce its energy. Following this, the stormwater should ideally be channelled or piped through Zone 3, allowing for the problematic clays to be replaced - in their entirety through to the ferricrete / dense residual soil horizon - with imported fill of a similar quality and density used for the fill platforms, to render this zone suitable for development. • Residual granite from Zone 1, shows potential to meet subbase standards (G4-G6). Given the high compressibility and collapse potential of the transported soils and upper residual horizon, particularly in Zone 1 east of T/C, impact rolling and/or deep rapid impact compaction will be a prerequisite for either at grade developments or the construction of elevated fill terraces, to deal with the global		

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		stability and settlement risks of retained earth walls and terraces. • See Section 11 of the Geoid Geotechnical Engineers PTY LTD report (GGE/23021/2) for the Component Assessment and Recommendations for the site.		
Impacts on the UCVB Wetland on site	Negative	• If the proposed mitigation measures are implemented, the attenuation/artificial wetland will improve the ecological goods and services of the wetland and downstream aquatic ecosystems. • The mitigative aspect of the loss of the majority of the UCVB wetland on site, due to the proposed development, will be the improvement of the wetland ecological services in the attenuation/artificial wetland area to be constructed on site. • The artificial wetland will follow the sustainable urban drainage principles by utilizing hydrophytes to reduce possible pollutants from the catchment into the receiving aquatic environment. • Compilation of systematic adaptive rehabilitation plan is recommended by Galago environmental, • Compilation of a monitoring plan to ensure impacts are timeously observed and addressed as soon as possible, • Implementation of an early warning system to prevent incidences of flooding inundating machinery and decrease risk to human health, • Management on site must take cognizance of possible pollution arising from the site, with emphasis on hydrocarbon and sediment pollution, • Signage must also be included to increase awareness of the aquatic ecosystems found on site,	Low	Low

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		• Allowance must be made for overtopping of the banks of the system during flooding events, • The use of trench breakers in the trenches- especially in sloped areas is required • Concrete and cement-related mortars can be toxic to aquatic life and other biota. Proper handling and disposal should minimize or eliminate discharges into the seep wetland. High alkalinity associated with cement can dramatically affect and contaminate both soil and ground water. The following recommendations must be adhered to: • Fresh concrete and cement mortar should not be mixed near the proximity of the wetland • Mixing of cement should only be undertaken within the construction camp and may not be mixed on bare soils; • Mixing of concrete should also be strictly undertaken within a lined, bound or bunded portable mixer. Consideration must be taken to use ready mix concrete; • A batter board or other suitable platform/mixing tray is to be provided onto which any mixed concrete can be deposited whilst it awaits placing; • A washout area should be designated outside of the wetland and buffer area, and wash water should be treated on-site or discharged to a suitable sanitation system; • Cement bags must be disposed of in the demarcated hazardous waste receptacles; • Concrete spillage outside of the demarcated area must be promptly removed		

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		and taken to a suitably licensed waste disposal site. • Install silt fences, sediment traps, and temporary retention ponds to prevent sediment entering the artificial wetland • Stabilize exposed soils immediately after earthworks with mulch, grassing, or geo-fabric. • Use bunded, lined areas for machinery maintenance and hazardous materials. • Construct temporary swales or oil traps to filter runoff before it exits the site • Design energy dissipators at outlets to reduce flow velocity. • Maintain pre-development flow volumes and durations as part of Sustainable Drainage System (SuDS) designs. • Create vegetative buffer zones between the site and the wetland. • Train contractors on EMPr compliance and penalties for transgressions.		
Bulk Earthworks: Removal of vegetation causing soil erosion **With the removal of vegetation during construction, soils will be exposed to wind and rain and topsoil may be lost. This may result in erosion and sedimentation, following rainfall and subsequent sheet**	Negative	• Clearing of vegetation to only be undertaken immediately preceding commencement of construction; • Care must be taken to ensure that runoff is well dispersed to limit erosion; • The careful position of soil piles, and runoff control, during all phases of development, and planting of some vegetative cover after completion (indigenous groundcover, grasses etc.) will limit the extent of erosion occurring on the site. • Appropriate erosion control measures must be implemented to ensure that no erosion is taking place. At the first sign of erosion the necessary remedial action must be taken;	Medium	Low

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wash. In addition, the soils will be traversed by a number of vehicles during the construction phase which is likely to result in soil compaction. This may result in the degradation of the soil over time.		• Temporary stabilisation measures (e.g., silt traps) should be implemented at the first signs of any erosion; and • Any additional impacted areas must be rehabilitated with indigenous vegetation should construction affect areas outside of the approved footprint • All soils compacted because of construction activities falling outside of development footprint areas should be ripped and profiled. Special attention should be paid to alien and invasive control within these areas. • Once earthworks are complete, disturbed areas are to be stabilised with mulch, straw or other methods approved by the ECO this purpose.		
<u>Bulk Earthworks: Site Clearance and Removal of vegetation</u> ▪ **Vegetation clearance/habitat destruction** ▪ **Spread and establishment of alien invasive plant species** ▪ **Negative effect of human activities on fauna and road**	Negative	▪ Any faunal species encountered during the construction phase should be allowed to move freely away from the construction areas or alternatively re-located by a suitably qualified person (especially pertinent to any snakes). ▪ All temporary stockpile areas, litter and dumped material and rubble must be removed and disposed of at a licensed land fill facility. Proof of safe disposal must be obtained and kept on record for monitoring purposes. ▪ Undeveloped areas that were degraded due to human activities must be rehabilitated using indigenous to the area vegetation. ▪ Hazardous chemicals must be stored on an impervious surface accompanied by Safety Data Sheets (SDS) and protected from the elements. These chemicals must be strictly controlled, and records kept of when it was used and by whom. ▪ Limit human activity in the no-development areas to the minimum required for ongoing operation.	Medium	Low

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mortalities ▪ **Loss of biodiversity**		▪ Any alien plant observed should be reported to the environmental manager and should be removed as soon as possible. ▪ Regular monitoring (monthly) for damage to the environment as well as establishment of alien plant species must be conducted. ▪ Care must be taken to avoid the introduction of alien plant species to the site and surrounding areas. (Particular attention must be paid to imported material). ▪ Only indigenous plant species, preferably species that are indigenous to the natural vegetation of the area, should be used for landscaping in communal areas. As far as possible, plants naturally growing on the development site, but would otherwise be destroyed during clearing for development purposes, should be incorporated into landscaped areas. ▪ Where soil disturbance is required for the laying of service infrastructure, the topsoil should be put aside and replaced after the infrastructure has been installed.		
<u>Invasion of alien vegetation:</u> Clearing for the construction phase of the project, as well as for maintenance during the operation phase, will result in soil disturbance and reduced cover of indigenous vegetation, greatly increasing	Negative	• On-going removal and disposal of alien vegetation species. • Alien plant regrowth must be monitored, and any such species must be removed at regular intervals throughout the construction phase; • Only local topsoil maybe used and if any is imported, this should be certified alien plant free; and • Where soils are slow to revegetate, these areas should be grubbed and planted with species suited to the region.	Medium	Low

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the chance of the establishment of alien invasive plants. However, if mitigation measures are implemented, there will be less alien vegetation, and less change of spread of alien vegetation				
Top Structure construction (brick work, steel work, cement mixing, plastering, thatching, paving etc.) – Hydrocarbon spills and leaks from machinery **Impacted environment: Soil, ie. Soil pollution** ▪ **Pollution Incidents** ▪ **Storage of hydrocarbons**	Negative	• All construction materials, including fuels and oil, must be stored in demarcated areas that are contained within berms / bunds to avoid spread of any contamination into storm water systems. Washing and cleaning of equipment should also be done in berms or bunds, in order to trap any cement and prevent excessive soil erosion. These sites must be re-vegetated after construction has been completed. • The Contractor must ensure that all liquid fuels and oils are stored in tanks with lids, which are kept firmly shut and under lock and key at all times. The capacity of the tank must be clearly displayed and the product contained within the tank clearly identified using the emergency information system detailed in SABS 0232 part 1. Fuel storage tanks must have a capacity not exceeding 80 000 liters and must be kept on site only for as long as fuel is needed for construction activities, on completion of which they shall be removed. • In the event of a hydrocarbon spill, the source of the spillage must be isolated	Med	Low

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		and the spillage contained. The area must be cordoned off and secured. The Contractor must ensure that there is always a supply of absorbent material readily available to absorb/ breakdown or where possible, be designed to encapsulate minor hydrocarbon spillages. The quantities of such materials must be able to handle a minimum of 200 ℓ of hydrocarbon liquid spill.		
<u>Hydrological Impacts:</u> • **Pollution of surface water resources –Spills and leaks from any plant during the construction phase of the development could potentially impact the downstream water quality via chemical pollution.** • **Altered runoff patterns, leading to increased erosion and sedimentation of the seep wetland.**	Negative	• Chemicals used for construction must be stored safely on site and surrounded by bunds. Chemical storage containers must be regularly inspected so that any leaks are detected early; • No re-fuelling of construction vehicles or maintenance activities to occur outside of the site boundaries. • All fuel storage areas, wash bays and vehicle servicing areas must be located within bunded areas with a separate dirty water handling system and oil/grease trap. General sediment traps should also be included where suitable; • The ablution facilities meant for construction workers must be located on the north western side of the property (i.e., as far as possible from the adjacent vacant property); • Toilets must be emptied regularly and before any extended site shutdown or builder's break; • Domestic waste bins/skips to be made weather proof; • Littering and contamination of water sources during construction must be prevented by effective on-site management; • Stockpiles to be located on the western side of the property; • All stockpiles must be protected from erosion, stored on flat areas where run-	Med	Low

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		off will be minimised, and be surrounded by bunds; and • Once construction has been completed the disturbed areas must be grubbed and levelled, i.e., no raised areas should occur that would divert or impound any surface water flows • Spill kits to be made available at areas of possible spillages of hazardous substances; • Remediation of spillages must be conducted on a continual basis; • Drip trays will be placed underneath vehicles and machinery waiting for maintenance, repair or standing for long periods of time; • No waste water or hazardous substances will be disposed of into the surrounding environment; • Sediment depositions should be regularly removed from the swale, to prevent pollution of the runoff from contaminants contained therein. • Cover any wastes that are likely to wash away or contaminate storm water.		
<u>Hydrological Impacts: Ground Water Quality</u> **Accidental spillages of diesel, oil or other hazardous substances could contaminate soil, leach into the groundwater or reach downstream water bodies**	Negative	▪ Spill kits to be made available at areas of possible spillages of hazardous substances; ▪ Remediation of spillages must be conducted on a continual basis and within 24h of spillage; ▪ Maintenance of vehicles may not be conducted on site; ▪ Drip trays will be placed underneath vehicles and machinery waiting for maintenance, repair or standing for long periods of time; ▪ No waste (hazardous or general) will be disposed of in excavated trenches; ▪ No waste water or hazardous substances will be disposed of into the	Med	Low

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through run-off.		surrounding environment; ▪ Hazardous substances will be stored in bunded areas with a capacity of 110 % of the contents volume ▪ The stormwater management plan compiled for the development must be correctly implemented		
<u>Solid Waste Pollution</u> **The construction phase of the activity will produce construction waste in the form of discarded construction material (e.g., packaging material etc.), excess soil/spoil (from levelling) and a large volume of cleared bush vegetation (alien vegetation). The incorrect management of these wastes may result in pollution of the surrounding natural areas.**	Negative	• Construction material must be reused or recycled where possible (e.g. mulching of cleared vegetation); • Vegetation that is cleared from the site (and is not replanted or relocated as per the recommendations of the specialist) must be removed to a registered garden refuse site; • Staff must be trained to implement waste control and to identify hazardous waste; • Other waste to be removed to a licenced landfill site; • General good house-keeping must be implemented. No litter to remain on site; • Spills must be avoided during transportation of material; • Disposal certificates must be obtained for all waste disposals; and • Sufficient and appropriate weather- and scavenger-proof bins must be made available on-site during construction and removed/emptied on a daily basis • Provision of adequate numbers of litter bins throughout the development; and • Promoting the recycling of waste, with specialist service providers appointed to remove the waste from site.	Med	Low

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		• Records of all waste taken off site and disposed of must be kept as evidence. • Burning of waste material will not be permitted.		
Impact Resulting from Material Stockpiling **During the construction phase, stockpiling of construction materials on a property could result in erosion and mobilisation of the materials towards the downstream freshwater resource, resulting in sedimentation and other impacts. Furthermore, the incorrect stockpiling of material outside of the approved development area will result in further loss of indigenous vegetation and negatively impact on the open space areas adjacent to the site**	Negative	• The Contractor must implement a suitable plan for stockpile management as storage outside of the property boundaries will not be permitted; • Where possible, any excavated material must be reused in construction and/or an investigation into a third party who could use the material beneficially must be undertaken to minimise waste to landfill. All unused/excess fill material must be removed from the site to a registered waste disposal site.	Low	Low
Increased Noise and	Negative	• Construction vehicles to be in sound working order and fitted with mufflers if	Med	Low

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Disturbance **It can be expected that there will be an increase in noise levels during the site preparation and construction phase of the development. The increase in noise will be associated with the operation of construction equipment, labourers and vehicles, especially the bulldozer used to clear vegetation, build platforms, dig trenches, etc.**		necessary; • The Contractor must adhere to the relevant noise regulations and limit noise to within standard working hours; • As construction workers operate in a noisy environment, it must be ensured that their working conditions comply with the requirements of the Occupational Health and Safety Act (Act No 85 of 1993). Where necessary, ear protection gear must be worn; • Should the vehicles or equipment not be in good working order, the Contractor may be instructed to remove the offending vehicle or machinery; • Limit construction to daylight hours; and • Restrict unnecessary noise (e.g., portable radios, vehicle radios, whistles etc.).		
Visual Impacts **Construction activities will result in the commissioning of bulk earthwork machinery and vehicles. Unkept site due to littering and illegal dumping on site and surrounding areas. Unsightly construction waste pile may**	Negative Subjectively perceived	• Good house-keeping to be implemented on site; • No visually intrusive practices are allowed on site or in the surrounding areas; • Any reflective construction material must be stored and placed in such a manner that it does not reflect sunlight towards the surrounding properties; • Construction materials to be stored neatly and waste to be collected on a regular basis; • Erosion, waste vegetation and dust to be mitigated as per the abovementioned mitigation measures; and • All disturbed areas surrounding the proposed development must be rehabilitated and all alien vegetation and weeds removed from these areas.	Medium	Low

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be visually intrusive.		▪ Light pollution should be minimised. Lighting is to be sufficient for safety and security purposes, but shall not be intrusive to neighbouring residents.		
<u>Employee Safety and Security</u>*:* **A construction site can be a dangerous place and thus could result in harm to people and property and by their nature act as a magnet to the unemployed, resulting in people gathering at the site.**	Negative	• A fence must be constructed around the site prior to commencement of construction • Signs should be erected on all entrance gates indicating that no temporary jobs are available, thereby limiting opportunistic labourers and crime. • The site and crew are to be managed in strict accordance with the Occupational Health and Safety Act (Act No. 85 of 1993) and the National Building Regulations • All structures that are vulnerable to high winds must be secured (including toilets). • Potentially hazardous areas such as trenches are to be cordoned off and clearly marked at all times. • The Contractor is to ensure traffic safety at all times, and shall implement road safety precautions for this purpose when works are undertaken on or near public roads. • Necessary Personal Protective Equipment (PPE) and safety gear appropriate to the task being undertaken is to be provided to all site personnel (e.g. hard hats, safety boots, masks etc.). • All vehicles and equipment used on site must be operated by appropriately trained and / or licensed individuals in compliance with all safety measures as laid out in the Occupational Health and Safety Act (Act No. 85 of 1993)	Medium	Low

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		(OHSA). • An environmental awareness training programme for all staff members shall be put in place by the Contractor. Before commencing with any work, all staff members shall be appropriately briefed about the EMPr and relevant occupational health and safety issues. • All construction workers must be issued with ID badges and clearly identifiable uniforms. • Access to fuel and other equipment stores is to be strictly controlled. • Emergency procedures must be produced and communicated to all the employees on site. This will ensure that accidents are responded to appropriately and the impacts thereof are minimised. This will also ensure that potential liabilities and damage to life and the environment are avoided. • Adequate emergency facilities must be provided for the treatment of any emergency on the site. • The nearest emergency service provider must be identified during all phases of the project as well as its capacity and the magnitude of accidents it will be able to handle. Emergency contact numbers are to be displayed conspicuously at prominent locations around the construction site and the construction crew camps at all times. • The Contractor must have a basic spill control kit available at each construction crew camp and around the construction site. The spill control kits must include absorptive material that can handle all forms of hydrocarbon as well as floating blankets / pillows that can be placed on water		

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		courses. • The Contractor shall make available safe drinking water fit for human consumption at the site offices and all other working areas. • Washing and toilet facilities shall be provided on site and in the Contractors camp. • Adequate numbers of chemical toilets must be maintained in the Contractors camp to service the staff using this area. At least 1 toilet must be available per 10 workers using the camp. Toilet paper must be provided. • The chemical toilets servicing the camp must be maintained in a good state, and any spills or overflows must be attended to immediately. • The chemical toilets must be emptied on a regular basis. • No loitering around the site for people seeking temporary employment is to be allowed.		
Impact on Archaeological and/or Paleontological Resources	Negative	• A Heritage Assessment has been completed by Dr J Van Schalkwyk Heritage Consultant. No sites or artefacts of heritage importance occur on site. • Although highly unlikely, it is possible that the discovery or exposure of archaeological artefacts may occur during the construction phase. Should this be the case, it is also possible that these heritage resources will be damaged or lost during the construction phase.	Low	
Impacts on Air Quality: Dust	Negative	• Ensure that exposed areas are dampened with non-potable water following	Medium	Low

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Creation **The construction activities will increase the potential for dust especially from the clearing of vegetation. During the construction phase of the activity, materials will be moved to and from the project site and this could result in dust pollution not only from the materials, but also from the construction vehicles which will be operating on site. The effects of dust will be exacerbated during high wind conditions.**		vegetation clearance; • Construction work to be halted during periods of strong wind; • The loading of materials must be done with the lowest drop height and those vehicles carrying dusty materials must be securely and properly covered before they leave the site; • Any complaints or claims emanating from the lack of dust control must be attended to immediately by the Contractor; and • Maintain vegetation as a windbreak in the area facing the prevailing wind direction until the completion of construction.		
Impacts on Health, Safety and Fire Risk **The use of construction machinery during the construction phase poses a potential risk to the health**	Negative	• All relevant Health and Safety legislation as required in South Africa should be strictly adhered to, including but not limited to the Occupational Health and Safety Act, 1993 (No. 85 of 1993); • Smoking should be restricted to a designated smoking area; • Ensure availability of fire extinguishers; and • All employees must be aware of emergency/ contingency plans to ensure an understanding of the hazards and procedures required during an emergency	Medium	Low

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and safety of people working at the construction site. The movement of construction vehicles also increases the risk of accidents along provincial roads. The risk of accidents, fires and potential injuries must be mitigated effectively.		situation		
<u>Construction Traffic and Road Impacts</u> **During construction, there will be an increase in the number of vehicles using the nearby roads, including heavy construction vehicles. This may result in damage to the roads. The construction vehicles could also impede other road users at certain sections of the roads to the site if not adequately**	Negative	• All drivers to have the necessary driving permits to operate the plant/vehicles; • All traffic laws must be obeyed at all times; • Avoid transportation of construction material during peak hours; • Any abnormal loads must be approved with the traffic authorities and must comply with any conditions imposed by the authorities; • Avoid transportation of construction material during peak hours; • The Contractor must employ flag staff in order to prevent on-site accidents; • Speed must be limited to 30 km/h on site; • Suitable temporary signage be erected, warning motorists of the presence of heavy construction vehicles; • Overloading of vehicles must not occur; and • Any damage to existing access roads as a result of the construction activities must be immediately repaired	Medium	Low

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managed and controlled.		• The movement of construction vehicles during the construction period is to be carried out in such a manner so as not to interfere unnecessarily or improperly with the public convenience. Traffic signage acknowledging the presence of a construction site must be provided. • Proper and adequate lanes to allow for ingress/egress to be provided. • Access to the construction area must be predetermined and used during constructions. • The working area and all exposed trenches must be fenced off with barrier netting, danger tape & droppers. • Excavated earth material should not be dumped/ stockpiled in the road in any way that will obstruct traffic flow.		
<u>Infrastructure and Services</u> **Additional pressure placed on existing municipal infrastructure to accommodate the new Industrial 3 township**	Negative	• Integrity of existing services to be ensured. • Adherence to Traffic Impact Study requirements. • It must be ensured that existing services infrastructure within the road reserve are not damaged. • Any damages to existing services infrastructure must be repaired immediately.	Low	Low
<u>Employment Creation and Local Business Development</u> **The construction phase of the**	Positive	• The project will create a number of job opportunities for the local population. Any available jobs will provide an immediate positive impact on the employment and income situation within the study area. This phase of the development will provide the most benefits in terms of sustained		

POTENTIAL IMPACTS, THEIR SIGNIFICANCE RATING, PROPOSED MITIGATION, AND SIGNIFICANCE RATING AFTER MITIGATION THAT ARE LIKELY TO OCCUR BECAUSE OF THE CONSTRUCTION PHASE OF THE LANSERIA X 79 INDUSTRIAL 3 TOWNSHIP.

proposed development will create temporary jobs for locals within the area. Where possible, materials must be sourced from local businesses and this will result in a boost of the local economy of the immediate vicinity and surrounding areas.		employment for the duration of the project and increase in income. Initially, the site preparation phase will employ large construction vehicles and equipment for landscaping, grading and levelling, the cutting of access roads for these vehicles and laborers to access the site. This means that many skilled workers will be necessary to operate front-end loaders, excavators, bulldozers and backhoes and other vehicles. In addition to this, unskilled labourers will still be necessary for other tasks. This phase of the development will therefore have a short-term major positive impact on the employment and income at the local level. • Employ local people wherever possible; • Purchase materials from local businesses wherever possible; and • Equal opportunities must be given to women where possible.		
OPERATIONAL PHASE				
<u>Impact on the artificial seep wetland</u>	Negative	• Install and maintain oil-water separators in drains, especially in loading/unloading zones. • Install and maintain permeable pavement throughout the site where possible to promote infiltration. • Clean stormwater inlets and discharge points and conduct regular inspections (quarterly or after major storms). • Route runoff through as much vegetation as possible before it reaches the adjacent wetland. • Implement a Spill Prevention, Control, and response plan for the operational	Medium	Low

POTENTIAL IMPACTS, THEIR SIGNIFICANCE RATING, PROPOSED MITIGATION, AND SIGNIFICANCE RATING AFTER MITIGATION THAT ARE LIKELY TO OCCUR BECAUSE OF THE CONSTRUCTION PHASE OF THE LANSERIA X 79 INDUSTRIAL 3 TOWNSHIP.

		development. Train staff on spill response. Use secondary containment for fuel tanks, drums, and chemical storage. • Prohibit vehicle washing or chemical disposal on-site unless proper treatment systems are in place. • The attenuated stormwater on site must slowly soak into the ground instead of flowing directly into the downstream wetlands, to mimic natural groundwater recharge. • Maintain as much vegetated areas as possible in the buffer zone area to encourage infiltration. • Regularly check that hardscape stormwater systems do not redirect flow away from groundwater recharge areas. • Develop Standard Operating Procedures (SOPs) for handling and transferring potentially polluting materials. • Establish a 5 year monitoring plan to track: i. Wetland hydrology and water quality (e.g., conductivity, pH, nutrients). ii. Invasive species presence. iii. Adapt management strategies based on monitoring results and wetland health indicators. • Establish waste management protocols with proper segregation and disposal. • Conduct regular inspections and clean-up operations along wetland edges. • Secure bins and waste areas from wind and rainfall.		
<u>Impact on Subsurface Water flow Patterns</u>	Negative	• No run-off should be allowed to leave the site directly; • Ensure stormwater channels do not cause erosion or other damage to open	Medium	Low

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		space areas; • Development footprints should be minimised, where possible, to reduce hardened surfaces which contribute to stormwater generation; • Stormwater management structures must be monitored and maintained throughout the operational phase		
<u>Potential Pollution of down stream freshwater resources</u> **Poor maintenance of the sewage infrastructure, poor waste disposal practices and/or any significant vehicle/machinery breakdown in or around the development could result in pollution of the downstream water course.**	Negative	• Appropriate waste management, as described herein and the EMPr, must be implemented for the operation of the development; • Onsite sewage infrastructure must be regularly serviced and maintained; • Any pollution from leaks or spills must be immediately cleaned and removed from the warehouse development.	Low	Low
<u>Utilisation of Water Resources</u> **The proposed development will rely entirely on water from the municipal supply to meet the daily consumption**	Negative	• Excessive use of water to be avoided wherever possible; • Ensure that all water reticulation infrastructure is maintained regularly to avoid leaks; • Rainwater harvesting must be implemented to collect rainwater from the warehouse drains and gutters; • Make use of water saving products such as water saving toilets with a dual-flush valve, water saving taps with spray cartridges, water-saver shower	Medium	Medium

POTENTIAL IMPACTS, THEIR SIGNIFICANCE RATING, PROPOSED MITIGATION, AND SIGNIFICANCE RATING AFTER MITIGATION THAT ARE LIKELY TO OCCUR BECAUSE OF THE CONSTRUCTION PHASE OF THE LANSERIA X 79 INDUSTRIAL 3 TOWNSHIP.

demands as estimated by the applicant. This will place additional pressure on the water resources for the area.		heads and timed turn-off taps; and • Monitor water consumption to ensure water is utilised within the volumes made available by any relevant municipal drought regulations.		
<u>Electricity Usage</u> **The proposed development will result in increased electricity usage.**	Negative	• Energy saving strategies must be practiced such as using renewable energy (solar energy) wherever possible; and • LED lighting must be implemented to reduce electricity consumption; and	Medium	Medium
<u>Impact on Service Availability</u> **The proposed development will add to the pressure on the municipal service availability for the Tshwane Municipality by increasing the amount of water use, effluent discharge and solid waste generation. This will put additional pressure on existing municipal infrastructure such as water supply pipelines, sewage**	Negative	• According to the EDS Civil Engineering Reports (Appendix G), there is sufficient bulk water services available to accommodate the proposed development. It is proposed that water will be obtained from the water tower south-west of the proposed development. A link pipeline will be required to service the proposed development. • No connection to the municipal sewer is available and therefore a package plant is proposed. • For stormwater, the applicable site will have onsite attenuation infrastructure as per the JRA guidelines, and will be discharged to an external stormwater system running along Preller Drive, where the water will ultimately be discharged into the natural watercourse stream through outlet controlled structures. • Renewable energy options and use of energy efficient lighting and measures will be implemented.	Medium	Low

POTENTIAL IMPACTS, THEIR SIGNIFICANCE RATING, PROPOSED MITIGATION, AND SIGNIFICANCE RATING AFTER MITIGATION THAT ARE LIKELY TO OCCUR BECAUSE OF THE CONSTRUCTION PHASE OF THE LANSERIA X 79 INDUSTRIAL 3 TOWNSHIP.

infrastructure (piping and treatment works) and contribute to filling of landfill sites.		• The development should use non-potable recycled water for washing and irrigation, install low-flow systems, and consider onsite water harvesting or reuse systems. • Implement traffic flow planning, dedicated service lanes, and consider electric ground support vehicles to reduce emissions.		
<u>Traffic Impacts</u> **The traffic associated with the operational development will impact on road users of the surrounding roads.**	Negative	• According to the EDS Traffic Engineers report, Lanseria X79 will obtain access from Preller Drive. The access will operate as a side-road stop-controlled intersection. • The GLMP framework as it currently stands, indicates that the proposed Lanseria X79 be able to obtain access from two separate locations in the future: i. Via a new proposed road between Boeing Street and the extended Preller Road to the south-east connecting to the primary road network (Pelindaba Road R512) ii. Via Preller Road and Middel Road north connecting to the secondary road network south of Lanseria AirportAll signage and road markings for the proposed sites should be in accordance with the South African Road Traffic Signs Manual". • Appropriate upgrades of the roads and traffic signals as per the EDS Traffic Engineers report (Feb 2025), of the identified intersections to minimise inconvenience and improve traffic flows • It is imperative that appropriate and sufficient pedestrian sidewalks be provided. Functional pedestrian linkages should also be created to and from the development and the existing sidewalks must provide continuous and safe pedestrian movement.	Medium	Low

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		• The surrounding area has a lack of lay-by facilities for public transport modes. A formalised road network should encourage the local authority to implement public transport services to the new township. Side walks will assist pedestrian commute. Formal roads will be safer for all road users, and cause less environmental degradation in the form of proper storm water management and soil erosion abatement. In order to control speeding, speed humps should be constructed at regular intervals.		
<u>Solid Waste Pollution</u> **During the operational phase, the proposed development will produce solid waste. The incorrect management of waste will have a negative impact on the surrounding environment as it can cause unnecessary pollution.**	Negative	• Waste recycling must be integral to the implementation and occupation of the Warehouses. • All waste must be disposed of at licensed landfill site. • General good house-keeping should be practiced on site; • Recycling and reusing of plastic and cardboard must be promoted to reduce the amount of waste being disposed of at the municipal transfer station. • Generation of Hazardous Industrial Waste from used oils and lubricants, oil and fuel filters, solvent-soaked rags, empty chemical containers, paints and sealants, if not properly stored and disposed of, can contaminate soil and water, and pose a risk of fire hazards and air pollution from volatile materials. • Establish clearly marked hazardous waste zones, • Use bunded storage for containers, • Implement a waste manifest system for traceability. • Non-Hazardous Industrial Waste from scrap metal (panels, wires, fasteners), packaging materials (cardboard, foam, plastics), worn-out tools and PPE, general	Low	Low

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		waste from offices and staff areas may accumulate on site if collection services are not frequent or properly separated. Waste segregation stations must be established onsite, • A contract with recyclers for scrap and packaging must be established for the MRO facility that schedules frequent waste pickups aligned with the MRO operational demand. • Storing waste in uncovered areas or without containment can result in leachate runoff, odour issues, and vermin attraction (which is a serious aviation safety risk). • Improper handling of oily rags or flammable wastes can cause spontaneous combustion. • Use covered, ventilated, and labelled containers, • Store flammables in fire-rated lockers, • Train staff on hazardous waste handling procedures. • Potential for illegal dumping, spills during transport, or reliance on unlicensed waste contractors must be mitigated through appointing licensed waste transporters and disposal facilities, and maintaining records of all disposal activities and weighbridge slips. • During peak maintenance seasons, hangars may generate surges in waste, leading to overfilled containers, delays in removal, or unsafe stockpiling. Waste generation trends must be monitored during these seasons. Waste service agreements must be scalable and contingency protocols for peak periods must be implemented.		

POTENTIAL IMPACTS, THEIR SIGNIFICANCE RATING, PROPOSED MITIGATION, AND SIGNIFICANCE RATING AFTER MITIGATION THAT ARE LIKELY TO OCCUR BECAUSE OF THE CONSTRUCTION PHASE OF THE LANSERIA X 79 INDUSTRIAL 3 TOWNSHIP.

		• Install waste containment netting and sediment traps, • Conduct regular wetland edge inspections. • The Lanseria Smart City context encourages green building practices and circular economy principles, meaning waste minimization and recycling targets should be embedded in the operational strategy. • Onsite waste management practices must align with the airport's overall Environmental Management System (EMS) and Civil Aviation Authority safety standards.		
Surface Water Pollution	Negative	• The stormwater management plan compiled by EDS civil Engineers PTY LTD (Appendix G) has ensured that the pre-development runoff does not exceed post-development runoff with specific mention of peak discharge and runoff volumes. • The road stormwater network will be installed next to Preller Road, as part of the approved Lanseria Extension 11 development. • The stormwater system has been designed to accommodate the 1:25 year storm event for the external road and surrounding areas flow, and including the flow discharged from the culvert system channeling the upstream catchment area. A 1500mmΦ conduit pipe network is required to be installed running parallel to Preller Road and discharging to the natural watercourse. • Stormwater structures must be equipped with dissipating structures which will remove silt and litter before stormwater entry into the downstream freshwater resource.	Medium	Low

POTENTIAL IMPACTS, THEIR SIGNIFICANCE RATING, PROPOSED MITIGATION, AND SIGNIFICANCE RATING AFTER MITIGATION THAT ARE LIKELY TO OCCUR BECAUSE OF THE CONSTRUCTION PHASE OF THE LANSERIA X 79 INDUSTRIAL 3 TOWNSHIP.

		• The onsite attenuation pond outlet will include an erosion and energy dissipation structure as approved by the JRA and designed in accordance with the NTC Road drainage Manual. Upstream catchment stormwater management will be channelled through a culvert that has been designed to accommodate the 1:50-year pre development conditions, which is considered sufficient, as all future upstream developments will be required to design attenuation ponds for the 1:5-year pre development runoff. • The use of Sustainable Drainage Systems (SuDS) to manage stormwater is considered important for the proposed development as there will be an increase in hardened surfaces within close proximity to the system. SuDS will assist in preventing significant impacts on the hydrological functioning of the system, reduce the risk of flooding during high flow periods and reduce the risk of increased erosion. • The operational development presents risks of surface water pollution, particularly due to the proximity of the artificially created wetland, and the Cargo Parks extensive impervious surfaces. • Leaks/spills ground service vehicles entering into stormwater channels leading to artificial wetlands or downstream water resources may cause water pollution, and disruption of natural biodegradation processes. Hydrocarbon interceptors in stormwater drains must be installed. • Use bunded and roofed areas for all fuel and oil storage. • Implement spill response protocols and ensure staff training. • Enforce covered bins and regular waste removal.		

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		• Conduct weekly site clean-ups around drains and perimeters. • Integrate Sustainable Urban Drainage Systems (SuDS) like Swales, attenuation ponds, permeable paving, and buffer vegetation zones to maintain natural flow paths where possible. • Cumulative loading of nutrients, hydrocarbons, and metals into downstream water bodies (e.g., Jukskei River) may require an Operational Water Quality Monitoring Plan where water sampling at key outfalls (pH, TSS, hydrocarbons, COD, metals) is recorded every 4 months. • The stormwater management plan compiled by EDS civil Engineers PTY LTD (Appendix G) has ensured that the pre-development runoff does not exceed post-development runoff with specific mention of peak discharge and runoff volumes. • Stormwater structures will be equipped with dissipating structures which will remove silt and litter before stormwater entry into the downstream freshwater resource. • The onsite attenuation pond outlet will include an erosion and energy dissipation structure as approved by the JRA and designed in accordance with the NTC Road drainage Manual. • The use of Sustainable Drainage Systems (SuDS) to manage stormwater is considered important for the proposed development as there will be an increase in hardened surfaces within close proximity to the system. SuDS will assist in preventing significant impacts on the hydrological functioning of the system, reduce the risk of flooding during high flow periods and reduce the		

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		risk of increased erosion.		
Visual Impacts	Negative	• Industrial Bulk and Massing from large warehouses and associated infrastructure with high roofs and wide façades, will dominate the visual skyline of the Lanseria area, which requires architectural articulation (façade detailing, colour variation, roof breaks). • Use directional, downward-facing LED lighting with timers or motion sensors. • Provide screened utility yards with visual shielding (walls, hedges, or fencing with greenery). • Align signage design with precinct signage guidelines or local signage bylaws. • Use uniform materials and palettes and integrate signage into architectural elements where possible. • Preserve view corridors by aligning building orientation with natural topography. • Use stepping in height, green roofs, or vertical greening systems to soften large surfaces. • Visual quality directly affects property values, investor confidence, and airport user experience.	Low	Low
Employment Creation and Local Business Development	Positive	*Alternatives 1 and 2: The Lanseria X 79 Industrial 3 Lanseria Cargo Park:* The operational phase of the proposed development will create permanent jobs for skilled, apprentices and locals within the area. The preferred land use alternative will stimulate economic growth and catalyse the Lanseria Smart City through private		

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		investment in the Lanseria area. *Alternative 3: Alternative building technologies* often require new or specialized skills, such as training in sustainable materials, energy-efficient design, or green building practices. This demand for skilled labor can: i. Create job training programs to teach local workers how to build using alternative methods like straw bale construction, earth bag building, or prefabricated modular homes. ii. Provide construction jobs for laborers, carpenters, masons, and electricians who need to adapt their skills to new materials and methods. iii. Foster apprenticeships and certification programs that allow local workers to gain credentials in sustainable construction practices, helping them enter the green construction sector. Material Sourcing and Production: **A**lternative building often involves locally sourced materials such as bamboo, recycled materials, or reclaimed wood. This can: i. Create local supply chains for materials, stimulating the economy by sourcing raw materials, processing them, and manufacturing building components locally. ii. Provide jobs in material extraction, processing, and distribution, reducing the reliance on imported building supplies and boosting local industries. iii. Encourage innovation in local material development, leading to new local	

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		businesses focused on producing sustainable building materials. Alternative building methods emphasize energy efficiency, requiring local workers for tasks such as: i. Installing renewable energy systems (solar panels, wind turbines, geothermal systems) or energy-efficient appliances and insulation techniques, which will create jobs for installers and technicians. ii. Energy auditors who assess energy use and make recommendations for efficiency upgrades. iii. Sustainable landscaping and site preparation to support green construction projects, providing additional employment in gardening, irrigation, and landscape design.		
No Go Alternative **The "no development" / construction alternative must be considered in keeping with the legal requirements (Section 24 (4) of NEMA). This implies that the site be left *as is* and that no development or alteration be done to the site. If this alternative is pursued, the existing conditions on the site will be retained.**				
Existing conditions and habitat on the site will be retained	Positive and negative	<u>Positive</u> The No-Development Alternative offers the following benefits: 1. By avoiding construction within the seep wetland zone, the site is afforded the opportunity for passive or active rehabilitation, allowing for gradual recovery of ecosystem services,. 2. In line with Section 2(4)(a)(vii) of NEMA, where there is uncertainty regarding		

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		the extent of long-term hydrological impacts, especially in the context of climate variability and urban expansion, the no-go alternative serves to prevent irreversible loss of wetland function, thereby upholding the precautionary approach. 3. The seep wetland, despite its degraded state, contributes to groundwater recharge and localised surface flow regulation, which supports the hydrological integrity of downstream systems, including neighbouring properties. 4. Retaining the site in a non-developed state enables integration with Gauteng's conservation planning objectives, including the provincial Conservation Plan (C-Plan) and wetland offset strategies, by preserving what remains of a protected ecosystem type in a rapidly urbanising node. <u>Negative</u> In line with Section 24(4)(b)(i)–(iii) of the National Environmental Management Act (NEMA), which requires that feasible and reasonable alternatives be considered to avoid, mitigate or manage environmental impacts, a technically feasible and ecologically beneficial alternative has been developed for the site The site is currently characterised by a severely degraded seep wetland, historically compromised by edge encroachment, altered hydrology, and sedimentation. Recognising the strategic importance of the property as *the* key entry point into the Lanseria Southern Precinct, and the need to manage surface water from future surrounding hard infrastructure, the proposed development includes the design and construction of a multi-functional artificial wetland which will serve as both:		

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		• a stormwater attenuation pond, and • a reinstated ecological system that mimics wetland structure and function. Although the delineated seep wetland will be significantly altered, the artificial wetland will retain the attenuating and filtration functions of the site. Wetland services such as flood peak attenuation, sediment trapping and pollutant filtering will be enhanced through engineered design. The Galago Environmental and EDS engineered wetland design serves as a form of in situ wetland offset, where functional capacity is restored in a more controlled and sustainable manner. As such, the engineered wetland attenuation system presents a technically feasible and environmentally responsible alternative to the No-Go option. It allows the project to proceed within a constrained urban node, while ensuring a net environmental gain, particularly through the restoration of essential wetland services in a previously degraded system. It allows for greater hydraulic performance, indigenous vegetation planting, and controlled baseflows, improving long-term ecosystem service delivery. The constructed system will be engineered to regulate the post-development stormwater flow regime, preventing downstream erosion, siltation, and flood risk; a significant improvement over current degraded conditions.		

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

1. Terrestrial Biodiversity Assessment
2. Wetland and Hydropedological Assessment
3. Aquatic Ecosystem Delineation
4. Water, Sewer, roads and Stormwater; Engineering Reports
5. Traffic Impact Assessment
6. Electrical Engineering Report
7. Geotechnical Investigations
8. Heritage Impact Assessment
9. Environmental Management Programme

Describe any gaps in knowledge or assumptions made in the assessment of the environment and the impacts associated with the proposed development.

This report has been compiled on the strength of the information available to Seedcracker Environmental Consulting (SEC) at the time of report preparation. The overall aim of ecologically sound urban development is to minimize the negative impact of development on the environment. The environmental issues listed in this report have been determined through relevant legislation; the professional understanding of the environmental assessment practitioner, Ecological and engineering specialist consultants. The Basic Assessment report serves to predict and determine the impact of the proposed development on the environment, and the likelihood (probability) of the impacts manifesting themselves. In undertaking this investigation and compiling the Basic Assessment Report, the following has been *assumed*:

- The information provided by the applicant and professional team is an unbiased and accurate reflection of the characteristics of the site and the development proposal;
- The scope of this investigation is limited to assessing the environmental impacts associated with the study area;
- It is also assumed that the applicant will comply with all legislation pertaining to the activities of this proposed project and that all permits and licenses that may be required will be identified and applied for *prior to commencement of construction activities (ie, WULA);*
- SEC assumes that the applicant will implement the measures contained in the EMPr, and will adhere to any monitoring procedures. The appointed ECO must adopt a process of continual improvement when managing and mitigating negative environmental impacts arising from the project. The EMPr will be used as the basis of environmental management and will regularly be improved and refined where applicable.
- Should the project be authorised, the applicant will effect any recommendations and mitigation measures outlined in the authorization, into the detailed design and construction contract specifications of the project.

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: Alternative 1

Potential impacts:	Significance rating of impacts(positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
No closure is envisioned.				

Alternative 2

Potential impacts:	Significance rating of impacts(positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
The decommissioning of the temporary on-site wastewater treatment plants will follow the process as prescribed in the regulations, if municipal sewer services become available. This will not be required for the foreseeable future.				

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

Not applicable.

Where applicable indicate the detailed financial provisions for rehabilitation, closure and ongoing post decommissioning management for the negative environmental impacts.

Not applicable. Decommissioning of the project is not envisaged, therefore, no provision for rehabilitation, closure or post decommissioning management has been made.

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:

The development of Holdings 5 & 6 Sunrella A.H, combined with the approved Lanseria x 11 and x 12 townships, will have a marked impact on the Lanseria area, in terms of land reclamation, site preparation for new infrastructure such as roads, water supply, sewage package systems, electrical network, and the construction of new mass warehouse buildings. The new developments will alter drainage systems and create impervious surfaces that will affect water flow patterns. The derelict sites are often an eyesore due to the disrepair and neglect of buildings and infrastructure. Development can transform the visual appearance of the area, bringing modern architecture, and improved streetscapes. This can dramatically

change the identity of the neighborhood. With the development of new buildings and infrastructure, property values in the area typically rise. A major change when developing a derelict site is the improvement or creation of transportation networks for the area. New roads or public transit facilities will be introduced, improving connectivity and making the site more accessible to people from other areas.

These aspects are considered positive in view of the significant economic investment and the social benefits to the communities in the area, as the development is *the key entry point* into the Lanseria Southern Precinct, which will provide *one of a kind* cargo services to the Lanseria Airport. The Lanseria Southern Precinct development has benefits in terms of the provision of job and work opportunities on both the formal and informal sector, as well as providing light industrial and warehousing erven for business to operate from.

The anticipated impacts resulting from the construction and implementation of the proposed development could potentially result in cumulative negative effects, when taking the following into consideration: (i) The proposed development will add to existing road users in the area and will have an impact on traffic, (ii) The proposed development will add additional pressure to services in the area and, should the Local municipality be unable to maintain infrastructure or other services such as waste removal, then it could have a negative impact on surrounding land users, (iii) stormwater (SW) pollution or improperly mitigated SW discharge points can cause environmental impacts to the downstream non perennial river and (iv) treated effluent management from the on-site sewage treatment plant on Lanseria X 79, and the surrounding Lanseria townships presently being approved.

These impacts can be mitigated to acceptable levels by (i) the upgrading of roads and intersections around the site as per the approved Traffic Impact assessment for the development, (ii) infrastructure investment through upgrading roads, water supply and electricity infrastructure to accommodate the increased demand, and the construction of Self-Sufficient onsite infrastructure (e.g., waste water treatment plants, solar energy systems) to reduce the strain on municipal systems, (iii) the implementation of the stormwater management plan developed by EDS Engineers, and (iv) strict and stringent management and monitoring of the sewage package plant infrastructure to ensure a high level of treated effluent quality is achieved, so that there is no environmental degradation on the site, down stream watercourses, and within a regional context.

Additional mitigation measures to manage potential groundwater contamination and wetland eutrophication downstream from effluent leaching into groundwater includes (i) the implementation of adequate buffer zones between WWTPs and downstream wetlands, and (ii) monitoring groundwater quality regularly to detect contamination early.

While the Lanseria Southern Precinct comprises multiple independently approved township developments, the co-ordinated vision for the area presents the opportunity to implement integrated and sustainable infrastructure at precinct scale. The use of decentralised sewer package plants, engineered artificial wetlands, and stormwater attenuation systems across the precinct can, if well designed and maintained, significantly improve the quality of discharged water, regulate flow, and contribute to functional ecological services within a rapidly urbanising landscape. By replacing severely degraded wetland remnants with purpose-built, ecologically-informed attenuation systems, there is potential for achieving a net environmental gain, particularly in areas where wetland functionality has historically been compromised.

The supportive ancillary aviation uses to the Lanseria International Airport, as proposed by the Lanseria X 11, X 12, and this application, will significantly enhance the region's socio-economic conditions by creating jobs, improving infrastructure, increasing trade, attracting investment, and boosting local businesses. These changes will not only benefit the immediate area around the airport but also contribute to the broader economic growth of Johannesburg and its neighboring regions. From a socio-economic perspective, these are high positive benefits.

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 / Preferred Alternative / Alternative 1: Industrial 3 Township, Lanseria X 79

This Basic Assessment Report for the proposed Lanseria X 79 Industrial 3 township, has been undertaken in accordance with the EIA Regulations published in GNR 982 of 4 December 2014 of the NEMA, and amended in 2017. This process includes the required Stakeholder Engagement Process as stipulated in GNR 982, which is presently underway. This study provides an assessment of the possible positive and negative impacts that may arise from the identified activities associated with the construction and operation of the different alternatives for development. The information contained in this report and the documentation attached hereto, is supportive for the approving authority to decide in respect of the activities applied for. Where potential biophysical or social impacts have been identified, mitigation and management measures have been proposed to control and monitor the magnitude of impacts associated with the various aspects of the activity.

Lanseria X 79 (this application), the approved Lanseria X 11 and Lanseria X 12, are all part of the Greater Lanseria Southern Precinct. The Lanseria Southern Precinct forms part of the Lanseria Airport and Logistics Hub, which is part of a broader vision to transform the airport into a significant aviation and business center. The Lanseria X 79 township will serve as the secure access entry point into the Lanseria Southern Precinct..

Holdings 5 and 6 Sunrella, have a low species richness and are dominated by pioneer weedy and alien invasive species. The vegetation unit on Erf 5 & 6 Sunrella A.H, has a Low to none ecological sensitivity. A fragmented and degraded unchannelled valley bottom wetland occurs on site. The wetland is impacted by anthropogenic activities. The function of the identified wetland is purely hydrological with other ecosystem services lacking. The system is degraded with a PES of E. The EIS of the wetland corresponds to the PES with a score of Low. EDS Engineers and Galago Environmental worked together to encompass sections of the unchannelled valley bottom wetland, with a single attenuation pond in the northern corner of the site. The mitigative aspect of the loss of a large portion of the wetland, due to the proposed development, will be the *improvement of the wetland ecological services in the attenuation/artificial wetland area.*

Stormwater from the site is collected into the artificial wetland and phytoremediation will be applied to manage the throughflow of water. The artificial wetland will follow the sustainable urban drainage principles by utilizing hydrophytes to reduce possible pollutants from the catchment into the receiving aquatic environment. The treated stormwater exiting the artificial wetland will be discharged to an existing external stormwater system running along Preller Drive, where the water will ultimately be discharged into the natural downstream watercourse through outlet-controlled structures.

EDS Engineers propose that bulk water will be obtained from the water tower south-west of the proposed development. A link pipeline will be required to service the proposed development. A portion of the water pipeline will run through a seep wetland system on Portion 32 and Portion 36, Bultfontein 533JQ. Sufficient mitigation measures have been provided for temporary trenching in this wetland system. No connection to the municipal sewer is available and therefore a package plant is proposed on site. Preller Drive will be used to obtain access to the township. The civil infrastructure that will impact any water resources, is presently subject to a Water Use License Application.

The impact rating of the identified environmental aspects, using the present specialist report outcomes and recommendations, revealed that most of the negative environmental impacts will be experienced during the *construction* phase. The significance of negative impacts reduces to *low* with the implementation of mitigation measures. It is envisaged that the identified impacts for the preferred alternative can be easily mitigated and satisfactorily managed.

CONTRUCTION PHASE		
IMPACT	**ALTERNATIVE**	**SIGNIFICANCE AFTER MITIGATION**
Geotechnical suitability	1 & 2	Low
Impacts on the UCVB wetland on site	1 & 2	1 Low 2 High
Soil erosion	1 & 2	Low
Loss of vegetation	1 & 2	Low
Invasion of alien vegetation	1 & 2	Low
Soil pollution	1 & 2	Low
Surface water quality	1 & 2	Low

Ground water quality	1 & 2	Low	
Waste Management	1 & 2	Low	
Material Stockpiling	1 & 2	Low	
Noise and disturbance	1 & 2	Low	
Visual impact	1 & 2	Low	
Employment, safety and security	1 & 2	Low	
Impact on Archaeological and/or Paleontological Resources	1 & 2	Low	
Air quality	1 & 2	Low	
Impacts on Health, Safety and Fire Risk	1 & 2	Low	
Traffic Impact	1 & 2	Low	
Infrastructure and services	1 & 2	Low	
Employment Creation and Local Business Development	1 & 2	High positive	
OPERATIONAL PHASE			
IMPACT	**ALTERNATIVE**	**SIGNIFICANCE AFTER MITIGATION**	
Impact on the artificial seep wetland	1 & 2	1 Low 2 High	
Impact on Subsurface Water flow Patterns	1 & 2	1 Low 2 High	
Potential Pollution of downstream freshwater resources	1 & 2	Low	
Utilisation of Water Resources	1 & 2	Low	
Electricity Usage	1 & 2	Low	
Impact on Service Availability	1 & 2	Low	
Traffic Impacts	1 & 2	Low	
Solid Waste Pollution	1 & 2	Low	
Surface Water Pollution	1 & 2	Low	
Visual impact	1 & 2	Low	
Employment Creation and Local Business Development	1 & 2	High positive	

The anticipated negative impacts resulting from the construction and operation of the proposed development can be mitigated to acceptable levels. The proposal demonstrates satisfactory application of the mitigation hierarchy, such that there is no environmental degradation on the site, downstream water resources, or the expanded study area, as follows:

i. Avoidance of further sensitive area disturbance,
ii. Minimisation of hydrological disruption through sensitive layout design,
iii. Rehabilitation of functional wetland conditions via engineered intervention, and
iv. Compensation through ecological enhancement and stormwater quality management.

The engineered wetland attenuation system presents a technically feasible and environmentally responsible alternative which can allow the project to proceed within a constrained urban node,

while ensuring a net environmental gain, particularly through the restoration of essential wetland services in a previously degraded system. The ongoing success of the engineered wetland attenuation system will depend on detailed ecological and hydrological input into the design, long-term maintenance plans, and monitoring commitments as part of environmental authorisation conditions.

The supportive ancillary aviation uses to the Lanseria International Airport, as proposed by the Lanseria X 11, X 12, and this Lanseria X 79 application (the key entry point into the Lanseria Southern Precinct), will significantly enhance the region's strategic economic value by creating jobs, improving infrastructure, increasing trade, attracting investment, and boosting local businesses. These changes will not only benefit the immediate area around the airport but also contribute to the broader economic growth of Johannesburg and its neighboring regions. From a socio-economic perspective, these are high positive benefits.

Development can therefore be authorised on site, provided the mitigation measures as presented in the specialist reports, this BAR and the EMPr are implemented.

Alternative 2: No wetlands are conserved on site

The previous site layout was based on the March 2024 Index PTY LTD Wetland Assessment, which reported that no wetlands occurred on site. The township layout did not cater for the conservation or inclusion of any wetland structures on site.

The proposed Lanseria x 79 light industrial township serving the Lanseria Southern Precinct as the key entry and exit point, has undergone a detailed environmental assessment, with a full suite of mitigation and management measures identified and integrated into the project planning and design. Upon implementation of these measures, all construction-phase impacts—including dust emissions, vegetation clearance, noise, temporary stormwater runoff, and sedimentation—are expected to be low in significance, short-term, and readily mitigated through standard construction environmental management protocols, including erosion control, phased site clearing, and strict compliance with approved site layout and buffer demarcations.

The site contains a severely degraded Unchannelled valley bottom wetland, which, while lacking substantial ecological functionality due to historical disturbance, still occupies a portion of the development footprint. In the Alternative 2 layout proposal, no technically feasible alternative has been developed to retain, rehabilitate, or replicate the ecological services that would be lost due to the transformation of this degraded wetland area. While the development avoids direct impact on high-integrity aquatic systems and applies runoff management controls such as stormwater attenuation infrastructure, the absence of a designed artificial wetland or ecological offset results in a permanent loss of latent wetland function—particularly in relation to water quality polishing, biodiversity support, and natural stormwater dispersion.

Although the broader Lanseria Southern Precinct includes other developments with engineered ecological infrastructure, the lack of such an intervention on the application site, limits the potential for achieving a net environmental gain. It also represents a missed opportunity to

contribute to the cumulative resilience of the precinct's ecological infrastructure network.

In conclusion, the proposed development—after all standard mitigation is applied—poses low residual environmental risk for most impact categories. However, the loss of even degraded wetland habitat without compensation or rehabilitation introduces a moderate, irreversible residual impact in terms of long-term ecosystem service provision at site scale.

Alternative 3: Alternative building technologies

Alternative construction methods generally have lower environmental impacts compared to traditional methods. However, the actual impact depends on material sourcing, energy use, and waste management. Sustainable practices, such as using renewable materials (engineered laminated wood, bamboo, Straw Bales, Adobe Bricks, Recycled Plastic Bricks, reclaimed Wood and Recycled Metal, green roofs (Living Roofs, covered with vegetation to improve insulation and biodiversity), energy-efficient designs (Optimal Site Orientation, Green Roofs, Energy-Efficient Lighting, Natural Ventilation, Solar Panels, Battery Storage Systems, Permeable Pavements) and closed-loop recycling, can mitigate negative effects.

No-go (compulsory)

Should the authorities decline the Industrial 3 proposal, the 'No-Go' option will be adopted, and the status quo of the site will remain. The No-Go Alternative offers the highest level of environmental protection, particularly in safeguarding the remaining ecosystem services provided by the degraded wetland on site. Although the duty of care would be imposed on the applicant, a vacant piece of land not managed properly, is vulnerable to illegal activities (waste dumping), and informal settlement, which if go unchecked, will cause more environmental ruin than responsible development would.

The site currently contains a degraded unchanneled valley-bottom wetland, which has been historically impacted by unmitigated anthropogenic activities. The no-go alternative avoids the permanent transformation of the UCVB wetland identified on site. While its ecological condition is poor, the wetland retains certain critical ecosystem functions, which, under the No-Go Alternative, these functions would not be further compromised, and the site's contribution to catchment-level ecological infrastructure could be preserved through active rehabilitation measures. The no-go alternative aligns with the precautionary principle of environmental management by preventing the further loss of wetland functionality and ensuring that irreversible impacts are not incurred without exploring rehabilitation options.

However, the No-Go Alternative must be weighed against land-use planning objectives, economic development priorities, and regional infrastructure integration. While it results in no negative environmental impacts, it may be viewed as a missed opportunity to actively improve the degraded wetland or integrate it into an improved functional green infrastructure system.

6. IMPACT SUMMARY OF THE PROPOSAL OR PREFERRED ALTERNATIVE

For proposal:

Following a comprehensive assessment of the proposed Lanseria x 79 township located within the Lanseria Southern Precinct, and after the integration of all relevant mitigation and management measures, the potential environmental impacts associated with the project are anticipated to be *low* across all construction-phase activities. These include site clearance, earthworks, infrastructure installation, and building development. Standard construction-related risks—such as dust generation, sedimentation, stormwater runoff, and disturbance to ecological features—will be effectively managed through best-practice environmental controls, including site demarcation, erosion protection, phased clearing, and the implementation of a construction environmental management plan (CEMP).

A key positive environmental intervention embedded in the project design is the creation of a technically feasible, engineered artificial wetland within the township layout. This system will serve the dual purpose of stormwater attenuation and ecological service enhancement, with the explicit objective of replacing the limited functionality of a severely degraded seep wetland historically located on the site. The artificial wetland will be designed to support hydrological regulation, improve water quality through natural filtration, and provide habitat value through the establishment of indigenous wetland vegetation. It also offers potential for long-term ecological rehabilitation within a precinct where natural systems have been progressively impacted by urban expansion.

Overall, the project demonstrates alignment with the principles of sustainable development as set out in Section 2 of the National Environmental Management Act (NEMA). The incorporation of mitigation hierarchy principles—avoidance of sensitive areas, minimisation of disturbance, and the creation of compensatory ecological infrastructure—ensures that no significant residual environmental impacts are expected. The development represents a low-impact industrial footprint that integrates essential ecosystem services into its design and contributes positively to the evolving landscape of the Lanseria Smart City initiative.

The construction related impacts identified and addressed in this report can be adequately managed, if the mitigation measures presented in this Basic Assessment report, the specialist reports, and the EMPr, are properly implemented, monitored, and enforced on site. The success of these measures also depends on the commitment to the best environmental practices by the applicant and appointed contractor. Best Practices included in this basic environmental assessment process are:

- Conducting regular environmental audits and site inspections.
- Involving environmental specialists and consultants in project planning.
- Engaging with local communities and stakeholders in decision-making.

Challenges that may reduce the effectiveness of the mitigation measures include:

- Poor implementation or non-compliance with environmental conditions.
- Lack of monitoring and enforcement by authorities.

- Insufficient budget or resources for proper mitigation measures.
- Unexpected environmental conditions (e.g., extreme weather events, unforeseen site contamination).

Well planned and enforced mitigation can reduce impacts significantly. If mitigation measures are properly planned, implemented, and enforced, most construction-related impacts can be minimized or eliminated.

With the implementation of the mitigation measures provided in this report and the EMPr, Seedcracker Environmental Consulting (SEC) is confident that the sum of the construction impacts to the environment will be of a Low negative significance in the short-term. The impacts will be limited in extent to the *study area* which has a low environmentally sensitive status. The net effect on the environment from the operational phase will be positive, as the proposed development results in bulk service and road upgrades, and socio-economic growth and investment in the area. SEC is confident that the sum of the operational impacts phase, will be of positive significance within the *regional area* due to the various employment opportunities the development will bring. The permanent nature of the Cargo Park development will result in a high positive long term impact.

If the recommended measures in his BAR and in the EMPr are implemented and monitored, then the proposed development as outlined will be in keeping, and beneficial to the area.

For alternatives:

Alternative 2:

Following the implementation of all recommended mitigation and environmental management measures, the proposed light industrial township within the Lanseria Southern Precinct is anticipated to result in low negative environmental impacts during the construction phase, including impacts related to vegetation clearance, temporary soil disturbance, dust generation, and localised stormwater runoff. These impacts are considered short-term, reversible, and effectively mitigated through best-practice construction management protocols.

However, a significant residual impact arises from the complete loss of a degraded unchanneled valley-bottom wetland located on-site, for which no technically feasible artificial wetland or ecological offset solution has been developed. While the wetland is in a degraded state, it still contributes to localized hydrological regulation, seasonal water retention, and limited biodiversity support. The permanent transformation of this wetland area without compensatory rehabilitation or functional replacement constitutes a moderate, irreversible impact on ecosystem service provision.

Although the development aligns with the strategic land use vision for the precinct, the absence of a wetland restoration or stormwater-integrated ecological solution represents a missed opportunity to enhance environmental resilience in a rapidly urbanising landscape. As such, while the overall environmental risk profile of the project remains low, the long-term loss of wetland

functionality without offset may reduce the ecological sustainability of the Lanseria Southern Precinct over time.

Alternative 3:

Alternative construction methods generally have lower environmental impacts compared to traditional methods. However, the actual impact depends on material sourcing, energy use, and waste management. Sustainable practices, such as using renewable materials (engineered laminated wood, bamboo, Straw Bales, Adobe Bricks, Recycled Plastic Bricks, reclaimed Wood and Recycled Metal, green roofs (Living Roofs, covered with vegetation to improve insulation and biodiversity), energy-efficient designs (Optimal Site Orientation, Green Roofs, Energy-Efficient Lighting, Natural Ventilation, Solar Panels, Battery Storage Systems, Permeable Pavements) and closed-loop recycling, can mitigate negative effects.

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.

Having assessed the potential environmental impacts associated with all proposed alternatives — including the No-Go alternative, the unmitigated development alternative, and the mitigated development alternative incorporating an artificial wetland — the preferred option is the *Mitigated Development Alternative*. This alternative includes a technically feasible, on-site artificial wetland system that is integrated with the stormwater attenuation design and aims to restore or enhance key ecological services.

This preferred alternative has been selected for the following key reasons:

1. The preferred alternative layout demonstrates a feasible and practical balance/compromise between the strategic economic and land-use objectives of the Lanseria Southern Precinct and the need to protect and restore ecological ecosystems on the development sites. By incorporating an on-site artificial wetland system, the proposed Lanseria X 79 development avoids the total loss of wetland-related functions, and instead, introduces a multi-functional ecological feature into the precinct.

2. The preferred alternative ensures that stormwater management and wetland rehabilitation goals are integrated. This directly addresses the environmental risks associated with loss of ecosystem services, including water quality regulation, seasonal storage, and limited habitat provision, which would otherwise result from the development footprint.

3. This alternative adheres to the mitigation hierarchy outlined in Section 2 of NEMA by:
    - Avoiding high-sensitivity wetland areas,
    - Minimising hydrological disruption through sensitive layout and drainage design,
    - Rehabilitating wetland function via engineered intervention, and
    - Compensating for residual loss of degraded wetland through long-term ecological gain.

4. The artificial wetland system is designed to deliver long-term functional benefits, including improved flood attenuation, sediment filtration, and ecological connectivity.

5. The inclusion of an ecological enhancement measure on-site aligns with the requirements of the regulatory authorities. It demonstrates the applicants continued proactive commitment to environmentally responsible development.

Conclusion:
The preferred alternative represents the most environmentally responsible and technically feasible development scenario on site. It ensures that the construction of the light industrial township proceeds with low residual impact, while actively contributing to ecological function recovery within the site. This approach supports both short-term infrastructure delivery and long-term environmental sustainability and is therefore recommended for authorisation.

Sufficient mitigation measures have been provided to ensure that impacts emanating from the new development are easily mitigated. It is the reasoned opinion of the EAP that the measures proposed in this report can easily be achieved by the applicant.

7. SPATIAL DEVELOPMENT TOOLS

Indicate the application of any spatial development tool protocols on the proposed development and the outcome thereof.

The following spatial planning tools were consulted:

- National Screening tool
- GDARD C-Plan V4
- Gauteng Provincial Environmental Management Framework

Spatial data was used to determine the agricultural potential, presence of rivers, wetlands and Ecological status of the study site. Together with the Gauteng Conservation Plan (V4) data, the presence of a wetland was identified and further investigated.

Gauteng Environmental Management Zones, GPEMF 2015
According to the Gauteng Environmental Management Framework (EMF) (2021), the study area falls within EMF Zone 1 (Urban development zone) and EMF Zone 2: (Normal control zone).

The development proposal is supported by the municipal planning policies as discussed in Section 2 of this report.

8. RECOMMENDATION OF THE 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 as bound by professional ethical standards and the code of conduct of EAPASA).

YES	■

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:

Based on the outcome of the impact study, it is recommended that the preferred Industrial 3 township alternative is implemented, subject to the implementation of all mitigation measures as set out in this Basic Assessment Report. All mitigation measures, which have been outlined in this report as well as in the EMPr and specialist reports, must be fully adhered to. The Environmental Management Programme (EMPr) will be binding on all managers and contractors operating/utilizing the site. All requirements from the COJ Municipality must be adhered to. All requirements of the Water Use License obtained for the township must be adhered to. Long term monitoring and maintenance of the sewer package plant must be drawn up once the preferred contractor/ supplier for the package plant is appointed, to ensure the high quality of the treated effluent.

The permanent loss of the existing degraded unchanneled valley-bottom wetland (PES: E; EIS: Low) must be offset by the construction and long-term maintenance of an engineered artificial wetland system located within the development site. The artificial wetland must be designed to mimic key hydrological and ecological functions of a natural system, provide water quality improvement, peak flow attenuation, habitat support, and biodiversity enhancement. The engineered artificial wetland must demonstrate functional equivalence or improvement over the existing system. A Wetland Maintenance Plan should be developed prior to construction and must include clear timeframes for the implementation and establishment monitoring (minimum 2 years post-construction), performance indicators (e.g., water retention, vegetation cover, biodiversity usage), Alien invasive species within and around the wetland must be monitored and removed regularly, and provisions for adaptive management and remedial measures if performance targets are not met. Topsoil from the degraded wetland (if suitable) should be stockpiled and reused in wetland planting zones to support microbial and seedbank recovery.

An Aquatic Environmental Control Officer (AECO) must monitor the construction of the artificial wetland and submit quarterly reports to the competent authority.

All development stormwater must be routed through the artificial wetland system before release into the downstream environment. Stormwater management must follow SUDS principles and align with Gauteng Department of Environment and the City of Johannesburg stormwater guidelines. The post-development runoff quantity and quality must match or improve upon pre-development conditions.

It is the opinion of the EAP that no fatal flaws are associated with the proposed development and that all impacts can be adequately mitigated to reduce the risk or significance of the impacts to an acceptable level. Due to the type of project proposed, the negative aspects will be low, following the correct implementation of mitigation measures, and do not warrant any significant restrictions

regarding the development proposal. It is the opinion of the EAP that this Basic Assessment Report contains sufficient information to allow the approving authorities to make an informed decision. It is therefore recommended that the application for Environmental Authorisation should be approved on condition that the recommendations stated herein are effectively implemented.

9. THE NEEDS AND DESIRABILITY OF THE PROPOSED DEVELOPMENT (as per notice 792 of 2012, or the updated version of this guideline)

Growthpoint Properties PTY LTD proposes the development of the "Lanseria Cargo Park", consisting of logistics and cargo facilities, with related office components, aircraft hangars and offices with parking areas, and yards for truck movements and aprons and taxiways for large aircraft up to ICAO Code E aircraft (typically B777 or similar), workshops, offices, and non-aviation related warehouses, that will be utilized to support the Lanseria International Airport. The development will also include civil engineering services such as water, sewer and stormwater reticulation.

The establishment of an Aviation Cargo Park in the Lanseria area, City of Johannesburg, presents several compelling benefits:

1. Strategic Location and Airport Expansion

Lanseria International Airport has significant expansion plans aimed at increasing passenger capacity. These developments include upgrading infrastructure to accommodate larger aircraft, such as the Boeing 777 and Airbus A330, which could enhance the airport's cargo handling capabilities. Establishing a cargo park in proximity to the airport would capitalize on these enhancements, facilitating efficient cargo operations by providing specialized facilities for handling and storing goods.

2. Economic Development and Job Creation

The development of a cargo park aligns with broader economic initiatives in the region, such as the Lanseria Business Gateway—a 130-hectare smart city project aimed at fostering business and retail activities. Integrating a cargo park within this framework would stimulate local economic growth, create employment opportunities, and attract investment to the area.

3. Enhanced Logistics and Trade Efficiency

Currently, South Africa lacks a dedicated cargo airport. Developing a cargo park at Lanseria would address this gap by offering a centralized hub for cargo operations, reducing congestion at other airports, and improving the efficiency of logistics and trade within the region.

Given Lanseria International Airport's expansion plans, increasing passenger and cargo traffic, and regional economic development initiatives, establishing a cargo park in the Lanseria area is both a necessary and desirable endeavour. It will enhance cargo handling capabilities, bolster economic growth, and improve logistics efficiency in the City of Johannesburg.

10. THE PERIOD FOR WHICH THE ENVIRONMENTAL AUTHORISATION IS REQUIRED *(CONSIDER WHEN THE ACITIVTY IS EXPECTED TO BE CONCLUDED)*

The authorisation should cater for the commencement of construction within 10 years from the date of authorization and concluded within 10 years. Construction activities on site, must be accompanied by an Environmental Control Officer.

Compliance Monitoring
The Applicant and Contractor(s) will be responsible for monitoring all construction activities on a day-to-day basis to ensure compliance with the EA (if granted) and EMPr throughout the all phase of the proposed activities. ECO Monitoring (i.e., site inspections) should be undertaken once every two weeks, until such time that all construction activities are completed on site. When deemed necessary and at the ECO's discretion, the frequency of the monitoring can be revised, in agreement with the competent authority if necessary.

Environmental Audits
In terms of Regulations 34 of the EIA Regulations, 2014 (as amended) the holder of the EA (if granted) must for the period during which the EA (if granted) and EMPr remain valid, conduct Environmental Audits. The Audit Report must be prepared by an independent person and must contain all the information required in Appendix 7 of the EIA Regulations, 2014 (as amended). It is recommended that an Environmental Audit be undertaken within one months after the completion of all construction on site.

11. ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr) (must include post construction monitoring requirements and when these will be concluded.)
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

SECTION F: APPENDICES

The following appendixes must be attached as appropriate (this list is inclusive, but not exhaustive). It is required that if more than one item is enclosed that a table of contents is included in the appendix.
Appendix A1: Locality plan(s)
Appendix A2: Preferred Township Layout Plan
Appendix A3: GDARD C-Plan of the site
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**

- Terrestrial Biodiversity Assessment
- Heritage Assessment
- Wetland and Hydropedological assessment
- Aquatic Ecosystem Delineation
- Engineering report - Roads and Stormwater
- Engineering Report - water and Sewer
- Stormwater management Plan
- Geotechnical assessment
- Electrical design report
- Traffic Report

Appendix H: EMPr: ***Amended Draft Environmental Management Programme***

Appendix I: Other information

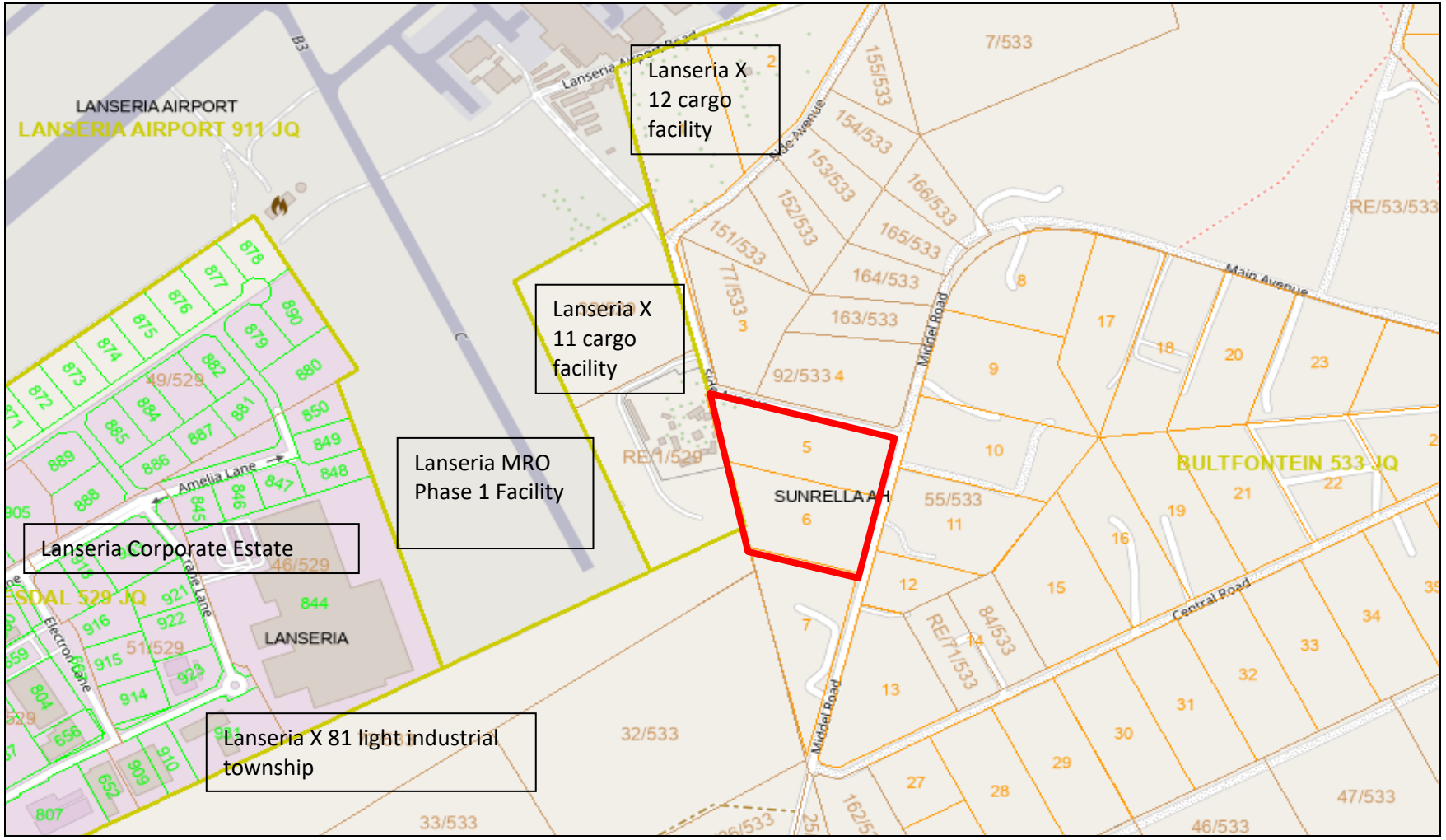
- List of Departments informed of application
- CV of the EAP
- Screening Report
- Water Use Licence received for Bulk water pipeline on P/72 Bultfontein 533JQ

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.

APPENDIX A1: LOCALITY MAPS OF THE SITE




LANSERIA
LANSERIA
LANSERIA AIRPORT
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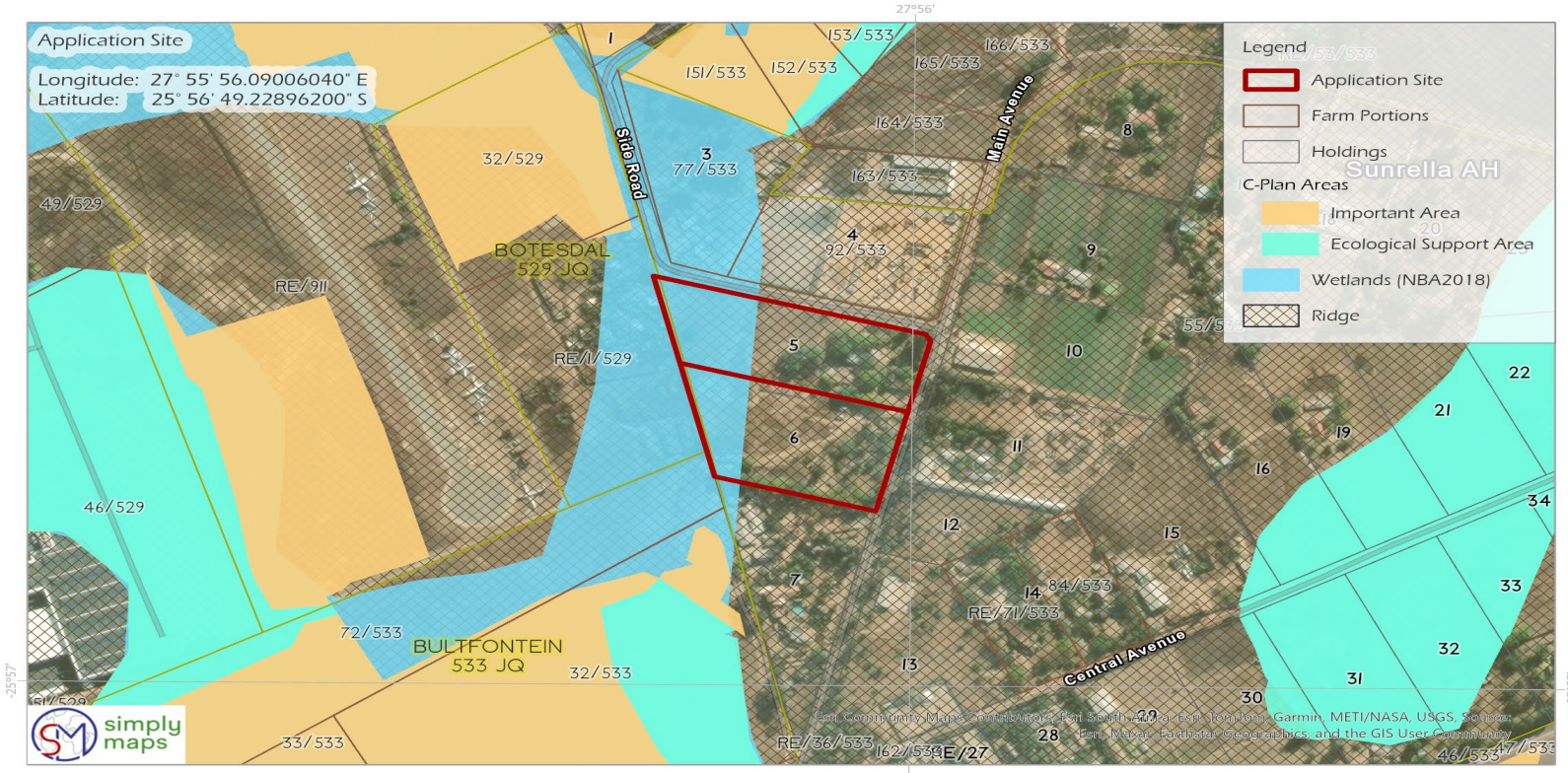
ZWARTKOP OR ROOIWAL 530 JQ
SUNRELLA AH
SUNRELLA AH
Sunrella
BULTFONTEIN 533 JQ
LANSERIA
LANSERIA
LANSERIA
NIETGEDACHT
Nietgedacht
5/530
10/530
3/530
20/530
7/533
RE/53/533
RE/532
RE/911
33/533
32/533
5/533
41/533
RE/64/533
RE/13/535

APPENDIX A2: PREFERRED SITE PLAN OF PROPOSED DEVELOPMENT

APPENDIX A3: SENSITIVITY MAPS OF THE SITE



N
W E
S

1:5 000 (A4)
250 Meters

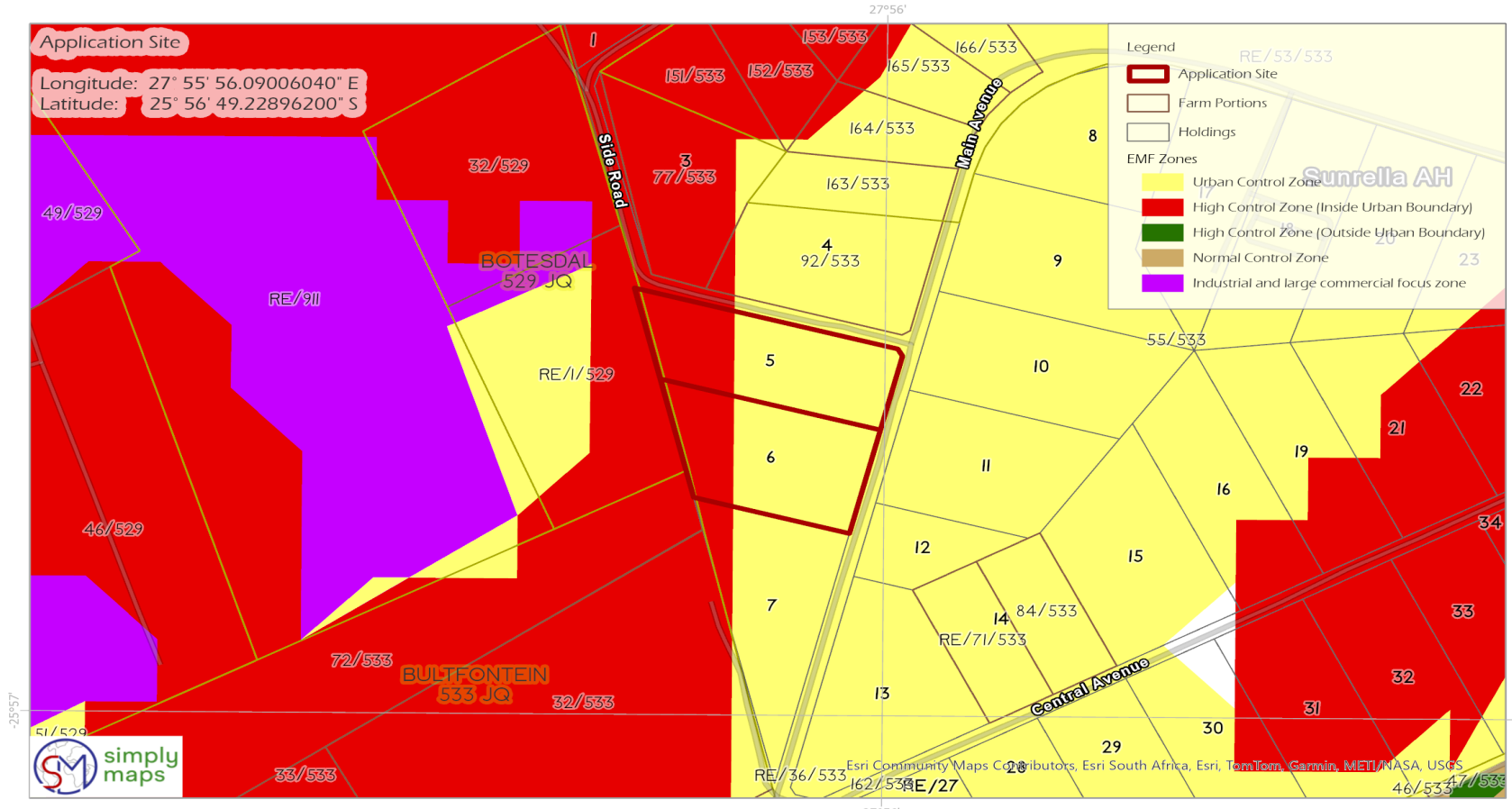
GAUTENG
ENVIRONMENTAL SENSITIVITY

Holdings 5 & 6, Sunrella Agricultural Holdings
(Proposed Lanseria Extension 79)
March 2025

Date created: Thursday, 27 March 2025
Author: philipvijloen@simplymaps.co.za
Geographic Coordinate System: Hartebeesthoek94

The data on the map is sourced from various data custodians. Simply maps is not liable for positioning inaccuracies, subsequent updates, errors, or omissions of data.

Seedcracker environmental consulting cc



GAUTENG
ENVIRONMENTAL MANAGEMENT FRAMEWORK 2021

N
W E
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1:5 000 (A4)
250 Meters

Holdings 5 & 6, Sunrella Agricultural Holdings
(Proposed Lanseria Extension 79)
March 2025

Date created: Thursday, 27 March 2025
Author: philipviljoen@simplymaps.co.za
Geographic Coordinate System: Hartebeesthoek94

The data on the map is sourced from various data custodians. *Simply maps* is not liable for positioning inaccuracies, subsequent updates, errors, or omissions of data.

Seedcracker environmental consulting cc

APPENDIX B: SITE PHOTOGRAPHS

LANSERIA X 79	
	**N**
	**NE**

E

SE

SW

S

	
	**W**

	
	**NW**

APPENDIX C: FACILITY ILLUSTRATIONS

APPENDIX D: ROUTE POSITION INFORMATION

NOT APPLICABLE

APPENDIX E: PUBLIC PARTICIPATION INFORMATION

E1: Proof of Site Notices
E2: Written Notices Issued
E3: Proof of Newspaper Advert
E4: Communication with I&APs
E5: Minutes of Meetings – N/A
E6: Comments and Issues Report – None required
E7: Comments from I&APs on BAR
E8: Comments from I&APs on amended BAR
E9: Copy of Register of I&APs

Appendix E1 - Proof of site notice

Will be included in the Draft BAR to be submitted to GDE

ERF 5
ERF 6

Appendix E2 – Written notices issued to IAP'S, BID

Email sent only

Appendix E3 – Proof of newspaper advertisement of this *Amended* DBAR

WILL BE INCLUDED IN THE DBAR SUBMITTED TO THE GDE

Appendix E4 –Communications to and from IAPS

Begin forwarded message:
From: stephweb@mweb.co.za
Date: 09 April 2025 at 13:51:53 SAST
To: Jürgen Erhart <jerhart@efcon.co.za>
Subject: FW: Lanseria X 79_Background Information Document_EIA

Dear Interested and Affected Party,

NOTICE OF THE BASIC ENVIRONMENTAL IMPACT ASSESSMENT PROCESS - PUBLIC PARTICIPATION PROCESS AND REVIEW OF THE DRAFT BASIC ASSESSMENT REPORT:

for THE PROPOSED LIGHT INDUSTRIAL 3 TOWNSHIP; LANSERIA EXTENSION 79; LOCATED ON ERVEN 5 & 6 SUNRELLA AGRICULTURAL HOLDINGS, CITY OF JOHANNESBURG, GAUTENG, LANSERIA

Please see attached the Background Information Document for the above referenced project.

Seedcracker Environmental consulting (SEC) has been appointed as an independent Environmental Practitioner by Growthpoint Properties Limited to facilitate the Environmental Impact Assessment (EIA) and Public Participation Processes for the Lanseria X 79 development proposal. SEC would like to invite and encourage all interested stakeholders to complete and return the registration sheet and submit it together with any comments to SEC.

The Draft Basic Assessment Report (BAR), and the various specialist studies undertaken as part of the Environmental Assessment process to assess the potential impacts associated with the proposed project, are available for comments on the SEC website: www.seedcrackers.co.za/publications, from 9 April 2025 till 16 May 2025 (WULA till 17 June 2025). Alternatively you can contact me and I will send you the wetransfer link for the complete project folder.

Comments are please to be received no later than 16 May 2025. By registering as an IAP you consent to SEC recording your details and using them to contact you regarding this project, [POPI Act].

Please feel free to contact me for any further information or assistance.

All the best,

STEPHANIE CLIFF
Reg EAP. (EAPASA) 2019/487
BSc (Hons) Animal Science, BSc (Hons) Wildlife Management
Cell: 082 626 4117

Appendix E5 – Minutes of meetings

Not applicable

Appendix E6 - Comments and Responses Report

ERF 5 & 6 SUNRELLA A.H: COMMENTS AND RESPONSE REPORT			
Comments / Issues raised during review of draft Basic Assessment Report			
Issue Raised	**Date and How Issue Was Raised**	**Commentator**	**Response**
See Appendix E7 and E10			

Appendix E7 –Comments from I&APs on Basic Assessment (BA) Report

COMMENTS RECEIVED FROM COJ ENVIRONMENT ON THE MARCH 2025 DRAFT BAR

City of Johannesburg
Environment and Infrastructure Services Department
118 Jorissen Street
Traduna House
Braamfontein
PO Box 1049
Johannesburg
South Africa
2000
Tel +27(0) 11 084 9819
www.joburg.org.za

a world class African city

UNIT: IMPACT MANAGEMENT & COMPLIANCE MONITORING

Our Reference: **EIM 16/04/2025**
Contact: **Katlego Kale**
CoJ Region: **A**
Tel: **(011) 084 9819**

228 Ashwood Drive
Zwartkop Golf Estate Clubview
Pretoria
0157
stephweb@mweb.co.za

Attention: Stephanie Cliff

DRAFT BASIC ASSESSMENT REPORT FOR LIGHT INDUSTRIAL 3 TOWNSHIP ON ERVEN 5 & 6 SUNRELLA AGRICULTURAL HOLDINGS (LANSERIA EXT 79) WITHIN THE CITY OF JOHANNESBURG.

The Draft Basic Assessment Report dated April 2025 bears' reference.

Description of the project:

The proposed development entails establishment of an Industrial 3 township for warehouses and cargo holding areas on the above-mentioned properties. The proposed development will measure 4.2 ha.

Guidelines, by-laws and policies:

The site falls within Region A, Sub Area 1 whose objective is to promote the development of a sustainable long term spatial structure to ensure the efficiency of the sub area in a city and provincial wide context. The City of Johannesburg Spatial Development Framework 2040 states that the natural environment must be considered as an essential structuring asset that must be protected to make surrounding developed parts of the city more sustainable, liveable, and valuable. The study area falls within the consolidation zone as identified in the SDF and the SDF recognizes the Lanseria area as a logistic and airport industry hub which has potential to provide jobs significantly to the surrounding marginalized area. Therefore, the proposed development is in line with the SDF 2040 as the proposed development will

promote infrastructure development, contribute to a sustainable environment, create jobs and encourage economic growth and future sustainability.

Description of alternatives:

The report does not include layout alternatives but includes technology alternatives for construction, energy provision, water and sewer management.

Description and assessment of the identified environmental issues:

The CoJ Wetland Audit layers show that the site is affected by a channelled valley bottom and hillslope seep wetland system. Furthermore, the City's Bioregional Plan shows that the site are mapped as Ecological Support Areas (ESA) which play an important role in supporting the ecological functioning of Critical Biodiversity Area in delivering associated ecosystem services.

Furthermore, the proposed development will require a Water Use Licence in terms of Section 21 (c) (i) and (g) of the National Water Act (Act No. 36 of 1998). An application with the Department of Water and Sanitation must be lodged.

The following reports are included in the BAR:

Terrestrial Biodiversity Assessment

The site falls within the Egoli Granite Grassland which has already been transformed due to development/ demolitions and agriculture. As such, no natural species remain on the site and the sites are dominated by alien species. The study states that the sites have a low ecological sensitivity. The study supports the development subject to mitigation measures being adhered to.

Wetland Assessment and Hydropedological Study

In terms of the City's Catchment Management Policy there should not be development within the wetland and its associated buffer zone or the 1:100-year floodline or whichever is greatest in accordance with the City Catchment Management Policy.

The study found that there are no natural occurring wetland on site. There is a depression on the western boundary of the site, that will have surface flow during high intensity rainfall. The site does however encroach into the 32m buffer of the seep

wetland on the adjacent property. The application is supported subject to mitigation measures.

Stormwater Management

For stormwater management, the report proposed attenuation structures which will discharge to an external stormwater system running then the water will discharge into the natural downstream watercourse. The attenuation pond outlet will include an erosion and energy dissipation structures. The Department supports the proposed stormwater measures.

Sewer Management

There is no existing sewer infrastructure within the area. For this reason, it is proposed to make use of onsite sewer package plants, for the treatment of raw sewer. The sewer will be treated to a standard safe enough for discharging into the downstream watercourse. This approval will be formally addressed with DWS by means of a formal WULA application.

The approval process will also need to be applied for with City of Johannesburg Environment and Infrastructure Services Department as well as Johannesburg Water as the Water Services Authority.

Evaluation and presentation of mitigation measures:

Mitigation measures are proposed for each identified environmental impact and are outlined in Section E of the BAR. The proposed mitigation measures are also included in the Draft EMPr, which is included as Appendix H.

Public Participation:

The Public Participation (PP) undertaken is in line with the requirements as specified in the EIA Regulations, 2014(as amended).

Recommendations:

Having noted the above, the Department has no objection to the proposed activity. The Department requires that the activity be implemented with care and environmental

disturbances during both implementation and operation processes should be kept minimal. Furthermore, the following measures are recommended:

- The applicant needs to apply to Johannesburg Water as well as EISD(Water Management Directorate) for the sewer package plant.
- The recommendations from the specialist's studies and mitigation measures outlined in the EMPr must be implemented.
- Any post development revegetation and landscaping must use local indigenous species to the preferred area. As far as possible, indigenous plants naturally growing along the route but would otherwise be destroyed during construction must be used.
- The EMPr should form part of a site diary and should be maintained on site to monitor and report on the implementation of the plan.

Should you have any queries or require any further information, please do not hesitate to contact the Department.

Regards,

Mashudu Ratshitanga.

Mashudu Ratshitanga
Assistant Director: Environmental Impact Management
Tel: 011 082 7939
Email: MashuduR@joburg.org.za
Date: 15 May 2025

Appendix E8 –Comments from I&APs on *amendments* to the BA report

Pending the review of this Amended BAR

Appendix E9 – Copy of the register of I&APs

Table 1: Commenting Authorities

No:	Surname	Initials	Company/ Farm/ Community	Position	Contact No:
1	Tshimange	Tshilidzi	City of Johannesburg Environment, Infrastructure & Services Department	Reviewing Official	011 802 7945 071 485 5309 TshilidziT@joburg.org.za
3	Siwelane	Lilian	Dept Water and Sanitation	Control Environmental Officer	SiwelaneL@dws.gov.za 012 392 1367 078 421 9386
4	Khoza	Doris	Civil Aviation Authority	Inspector: Obstacles Aerodrome Infrastructure	Tel: +27 11 545 1071 Cell: 083 451 2643 Email:Khozad@caa.co.za
5	Mthembu	Sbusiso	Ward 96 DA Councillor		T) 011 464 5111 C) 071 295 8290 sbusiso1025@gmail.com
8	Mr. Manana	Banele	Gauteng Roads and Transport	Directorate: Transport Infrastructure Planning	Banele.Manana@gauteng.gov.za; 011-3557255 066 472 6403

Table 2: Land Owners notified via Email and Community Forum Whatsapp Group

No:	Name	Land Owner Portion	Contact No:
1	Rampa Rammopa	Lanseria International Airport	rampa@lanseria.co.za
2	Craig Merchie	P 72/ Bultfontein 533 JQ	Craig@hireall.co.za
3	Bothongo Group	P 32/ Bultfontein 533 JQ	lisa@3rdstorey.com
4	Eugene De La Harpe	Portions 10, 11 &12 Bultfontein 533 JQ	083 452 8920 sabresteel@absamail.co.za
5	Jürgen Erhart	Lanseria Corporate Estate	Cell: 082 555 9999 jerhart@efcon.co.za
6	Shara	Portion 92 Bultfontein 533 JQ	060 649 2524
7	Martin Fiebiger	Portion 7 / 533 JQ	fiebiger@iafrica.com

Appendix E10 – Comments from I&APs on the March 2025 BAR

From: Boston Associates <boston@pixie.co.za>
Sent: Thursday, 10 April 2025 14:33
To: stephweb@mweb.co.za
Subject: FW: Lanseria X 79_Background Information Document_EIA

I refer to your email of 10 April 2025 directed to Lanseria Corporate Estate. I act for and on behalf of Lanseria Trust One (Registration Number 4027/1995) and Lanseria Trust Two (Registration Number 4028/1995) the developer of the Lanseria Corporate Estate.

Furter, we wish to in terms of regulation 42(b) of Government Notice R326, to register as an Interested and Affected Party (I&APs).

To enable you to add Lanseria Trust One (Registration Number 4027/1995) and Lanseria Trust Two (Registration Number 4028/1995) to the register, I furnish the following information:

1. Contact details: boston@pixie.co.za

2. Full name: Geza Douglas Nagy

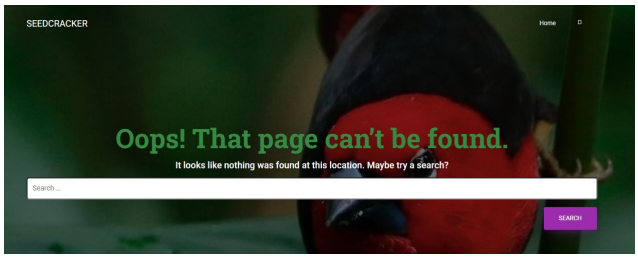
3. Address: 15 Tabit Street, Midstream Ridge, Olifantsfontein, Ekhurhuleni, 1692

4. Postal: Postnet Suite 2078, Private Bag X1007, Lyttleton, 0140

5. Contact number: 083 6000 025

I confirm that I have no direct business, financial, personal or other interest in the approval or refusal of the application.

Please be further advised that the Draft Scoping Report (DSR), as part of the Environmental Impact Assessment process to assess the potential impacts associated with the project, is not available for comments on the SEC website: www.seedcrackers.co.za/publications, as purported, and the message received in this regard is as follows::



Kindly correct and please sent me a wetransfer link for the complete project folder.

Regards

G D Nagy Pr. Pln

BOSTON ASSOCIATES
URBAN PLANNERS

Mobile : +27 83 6000 025
Efax : +27 86 5793 057
Email : boston@pixie.co.za

From: Jurgen Erhart <jerhart@efcon.co.za>
Sent: Thursday, 10 April 2025 13:43
To: Gigs Nagy <boston@pixie.co.za>

Subject: Fwd: Lanseria X 79_Background Information Document_EIA

Kind regards
Jürgen Erhart
Sent from my iPhone

From: stephweb@mweb.co.za <stephweb@mweb.co.za>
Sent: Tuesday, 06 May 2025 10:48
To: 'Hendrik Erasmus \ Fairacres Products (Pty) Ltd' <personnel@fairacres.co.za>
Cc: 'john@fairacres.co.za' <john@fairacres.co.za>
Subject: RE: LANSERIA X 79

Thank you Hendrik,

I have received your request to be registered on the EIA database for the Lanseria X 79 township.

I will keep you informed of the project. Please feel free to contact me at any stage.

All the best,
STEPHANIE CLIFF
Seedcracker Environmental Consulting
Reg EAP. (EAPASA) 2019/487
BSc (Hons) Animal Science, BSc (Hons) Wildlife Management
Cell: 082 626 4117

From: Hendrik Erasmus \ Fairacres Products (Pty) Ltd <personnel@fairacres.co.za>
Sent: Tuesday, 06 May 2025 07:48
To: stephweb@mweb.co.za
Subject: LANSERIA X 79

Hi Stephanie.
We hereby wish to register as an IAP in the Lanseria X 79 project.
Please send all correspondence to the following emails.
personnel@fairacres.co.za
john@fairacres.co.za

Kind regards

Hendrik Erasmus
Fairacres Products (Pty) Ltd
Human Resourses

Tel: +27 (0)11 540 6300 / Direct Line +27 (0)11 540 6331
Fax: +27 (0)11 540 6333
E-mail: personnel@fairacres.co.za
Cell: 083 287 6475

P.O.Box 69386, Bryanston, 2021, South Africa
No. 50 Border Rd / Centaures Ave, Sunrella, Lanseria, 1748 South Africa
GPS 25°56'52.63" S
27°56'40.62" E
Vat N°: 4330116601

APPENDIX G: SPECIALIST STUDIES

TERRESTRIAL BIODIVERSITY ASSESSMENT

WETLAND AND HYDROPEDOLOGICAL ASSESSMENT

AQUATIC ECOSYSTEM DELINEATION

WATER, SEWER, ROADS AND STORMWATER; ENGINEERING REPORTS

TRAFFIC IMPACT ASSESSMENT

ELECTRICAL ENGINEERING SERVICES REPORT

GEOTECHNICAL INVESTIGATION

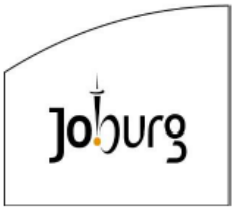
HERITAGE IMPACT ASSESSMENT

APPENDIX H: AMENDED DRAFT ENVIRONMENTAL MANAGEMENT PROGRAMME

APPENDIX I:

AMENDED DRAFT REPORT SUBMITTED TO THE FOLLOWING AUTHORITIES FOR COMMENT:

COJ ENVIRONMENT



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UNIT: IMPACT MANAGEMENT & COMPLIANCE MONITORING

EAP CV

DFFE SCREENING REPORT

WATER USE LICENCE RECEIVED FOR BULK WATER PIPELINE ON P/72 BULTFONTEIN 533JQ