BASIC ASSESSMENT REPORT

FOR THE DEVELOPMENT OF VEHICLE DEALERSHIPS AND FACILITIES ON PORTION 59 OF THE FARM BULTFONTEIN 533 JQ AS WELL AS A BOREHOLE AND CONSERVANCY TANK ON PORTION 168 OF THE FARM BULTFONTEIN 533 JQ

Comment Period: 14 October 2020 to 13 November 2020

Proponent:
4 Wheel Drive Property Holdings (Pty) Ltd
Project Reference:
21860- Ptn 59 Bultfontein 533
Report Date:
October 2020
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21860-BAR-1

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DOCUMENT CONTROL

Project Name	Proposed Development of Vehicle Dealerships and Facilities on Portion 59 of the Farm Bultfontein 533 JQ as well as a Borehole and Sewer Conservancy Tank on Portion 168 of the Farm Bultfontein 533 JQ
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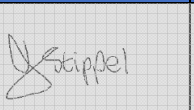
Applicant Name	**4 Wheel Drive Property Holdings (Pty) Ltd**

	Name	Signature	Date
Document Compilation	**Ms. V Stippel** (MSc. Animal, Plant and Environmental Science). | Reg. EAP | Pr.Sci.Nat.		**2020/10**
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Amendments on Document

Date	Report Reference Number		Description of Amendment
12/10/2020	21860-BAR-0	21860-BAR-1	Minor amendments; Finalise report

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EXECUTIVE SUMMARY

1. Overview

4 Wheel Drive Property Holdings (Pty) Ltd proposes to develop and operate facilities for showing, servicing, rental, parking, washing, preparation and administration of vehicles on Portion 59 of the Farm Bultfontein 533 JQ. The relevant services, roads and complementary uses will also be put in place. Sufficient parking will be provided and the site will be landscaped with indigenous trees, shrubs and plants. In addition, a borehole will be used to supplement municipal water supply. Grey water recycling from vehicle wash bays will take place and sewer will be stored in a conservancy tank and collected weekly.

It should be noted that a separate Environmental Authorisation (EA) process was undertaken for the adjacent property (Portion 168) and EA issued on 6 August 2018 (GAUT: 002/17-18/E2160). However, after further investigations into the need for and desirability of the area, 4 Wheel Drive Property Holdings (Pty) Ltd. decided to purchase Portion 59 as additional space was required and needed for access to Portion 168. An amendment of the existing authorisation was not possible as the change (development of Portion 59) constitutes a new listed activity (Activity 4, 10 and 12 of Listing Notice 3). As such a separate EA process is being undertaken.

Figure 1 provides the overall locality of the site and indicates the position of the borehole within Portion 168 (GAUT: 002/17-18/E2160).

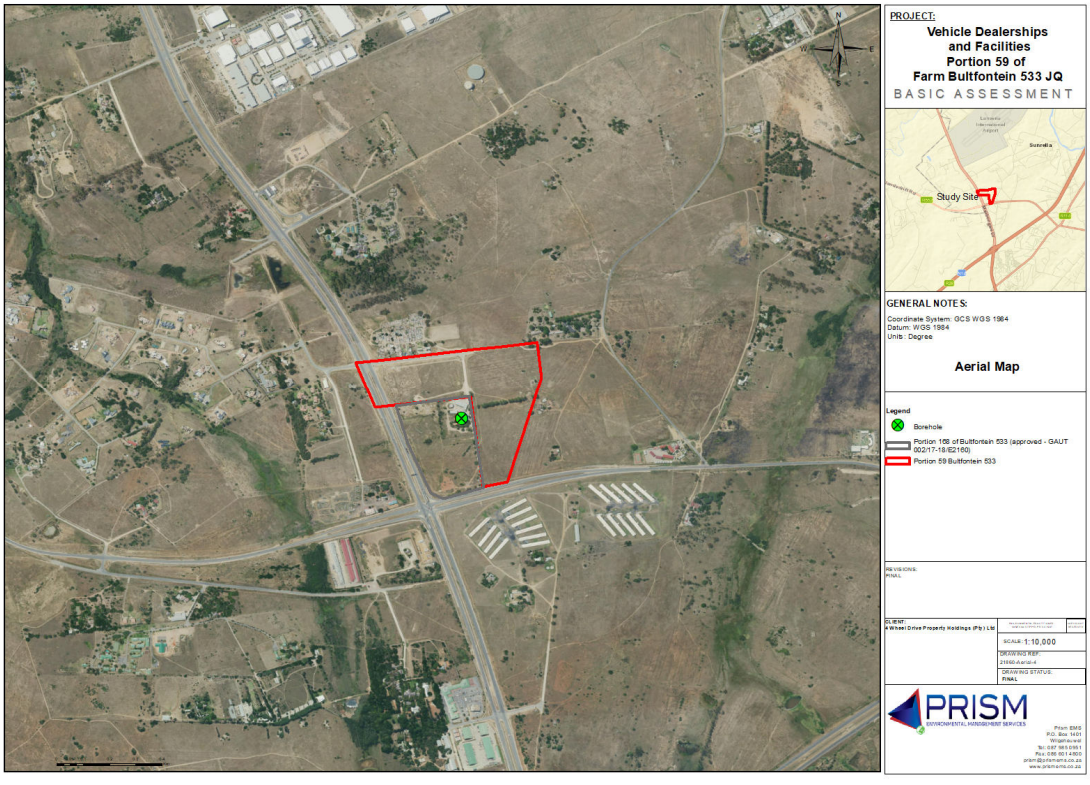

Figure 1: Aerial Locality Map

The development will be phased and not all planned infrastructure and facilities will be constructed during the first phase however the following facilities will be developed throughout all phases:

- Truck Facilities;
- Car Facilities;
- 4x4 Facilities;
- Taxi Show Room;
- Production Centre;
- Panel and Paint Workshop;
- Vehicle Rental facilities; and
- Vehicle Storage Parking.

A summary of the phases are provided below.

1.1. Phase 1:

Phase 1 of the proposed development involves the development of three erven as follows:

- **Erf 1**| Business 1 for a vehicle dealership, workshops, service facility and associated uses.
  - This will involve the development and operation of facilities for new and uses vehicle showing, servicing, rental, parking, washing, preparation and administration of vehicles.
  - The relevant services and roads will be put in place.
  - In addition, complementary uses such as offices, workshops, canteens, change rooms/ablutions, wash bays, spray painting bays, valet stores, guard houses and safety facilities and refuse areas, oil
  - Sufficient formal parking will be provided and the site will be landscaped with indigenous trees, shrubs and plants.
- **Erf 2** | Parking and subservient uses
  - This area will be formalized to provide for formal parking area to support vehicle preparation.
- **Erf 3 |** Agricultural purposes
  - During the first phase, the remainder of the site will not be developed and will be maintained as is.

The layout of the Phase 1 is provided in **Figure 2** below.

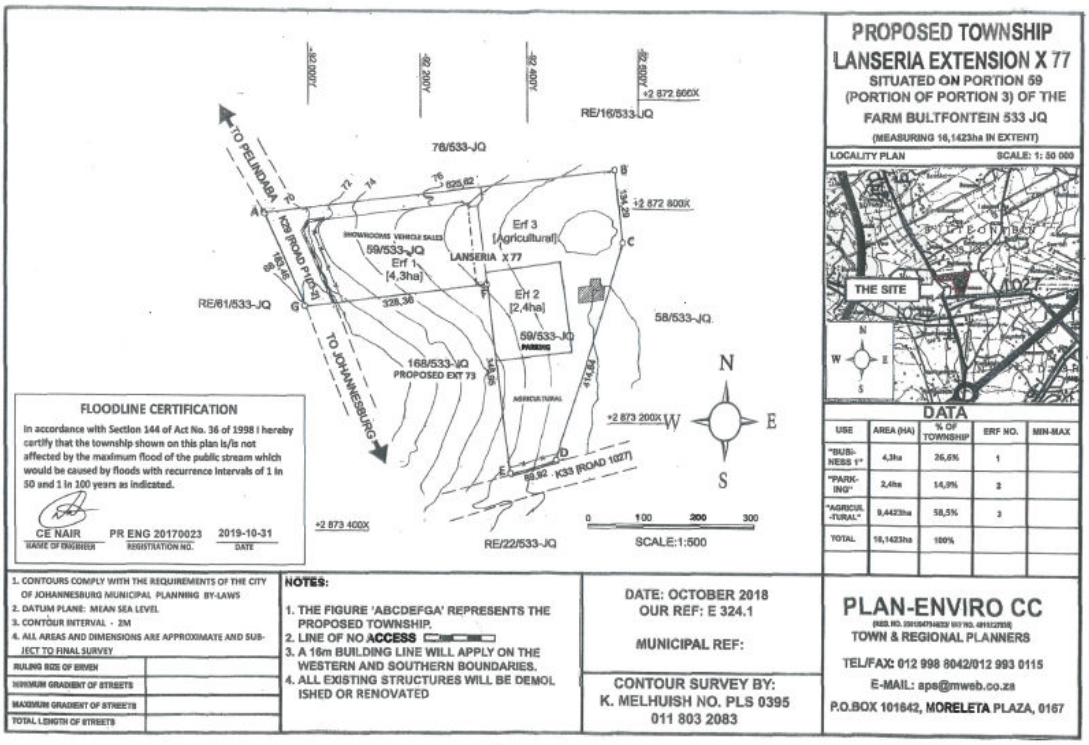

Figure 2: Development Layout

1.2. Phase 2:

The second phase of the development involves the development of a car rental and panel and paint workshop and 4x4 megaworld. These will be developed at a later stage when required. A preliminary site plan is provided in **Figure 3** and shows both phases.

Figure 3: Preliminary Site Plan for both phases

The aim of this preliminary plan is to provide an indication of the development footprint and its relationship to environmental sensitivities. It should however be noted that this SDP can only be finalized during the town planning approval process and once the details of phase 2 are confirmed. ***A copy of the final SDP will then be submitted to GDARD***.

2. Oil Storage

As the dealership and facilities are required for showing, servicing, rental, parking, washing, preparation and administration of vehicles, oil storage will be required. Twelve separate tanks of 5000 l each will therefore be required at the various dealerships.

2. Services

Associated services and access will also be put in place as follows:

- Water will be required to service the proposed site. Water to the new site is proposed to be obtained by teeing off the existing 160 mm dia AC water pipe situated adjacent to the northern boundary of Ptn 59 of the Farm Bultfontein, 533-JQ as well as utilising the water from the existing Bore Hole. This proposed connection would be through a 110mm diameter pipe. Internal reticulation for feeding fire hydrants will also be through 110 mm diameter pipes. Water requirements will be 81.71 kl/day. However, in order to reduce water consumption, Grey water recycling plants are planned for the car wash and truck wash areas. After the initial priming of the system, the total average water demand would reduce to 67,27 kl/d.Construction shall be in accordance with the Johannesburg Water guidelines and the relevant SANS1200 guidelines.
- In terms of Sewer services, the average sewer flow is estimated to be 40.34 kl/day. The buildings will be reticulated with 110 mm pipes which will feed into the main 160 mm pipe, which will connect to the sewer conservancy tank. Construction shall be in accordance with the Johannesburg Water guidelines and the relevant SANS1200 guidelines. The conservancy tank which is designed to have a seven (7) day storage capacity (based on average flow) before requiring emptying. Seven (7) prefabricated plastic conservancy tanks ('Calcamite' or similar approved) are proposed with a combined storage volume of 311.5 kl.
- The Car Wash facility and Truck Wash facility are proposed to have Greywater Recycle Plants. A 10 kl Package Greywater Recycle Plant is proposed at the Car Wash facility ('Calcamite GreyWater 20' or similar approved) and a 5 kl Package Greywater Recycle Plant is proposed at theTruck Wash facility ('Calcamite Grey Water 10' or similar approved). Grey Water is drained via grid inlets at the wash bays and returned into the recycling plant (intercepted by sand oil grease traps).
- In order to ensure water from the truck wash bays is sufficiently dealt with, the water used at the wash bays will be drained via grid inlets at the various locations and is reticulated via 300 mm dia. HD uPVC Class 34 pipes to Prefabricated traps viz. 2 no.

'Calcamite' 3 KL Sand, Grease and Oil Traps (or similar approved) at the Truck Wash Bay.

- In terms of stormwater, bulk drainage is achieved by a network of grid inlets, catchpits and reticulation pipework. The roadways shall be drained by catchpit inlets (Type S2, D3) situated at road edge. The forecourt area shall be drained by grid inlet manholes.
- Bulk stormwater pipes shall be Spigot and Socket Concrete Pipes with rolling rubber rings to ensure watertightness. The intercepted flows are reticulated to the Sand Oil Grease Traps. The concrete pipe sizes vary from 375 mm dia. up to 900 mm dia. depending on the flow accumulation.
- The flow is reticulated into the Sand Oil Grease Traps to filter the stormwater and is then diverted to the attenuation tank. The flow then leaves the attenuation tank and is reticulated to a new stormwater headwall via a 900 mm dia. pipe and discharged overland in a North Westerly direction on to the road surface. The headwall apron slab has splitter blocks and a “stilling basin” is formed with a combination of reno mattresses and gabion boxes to further dissipate the velocity and energy of the flow. These interventions also provide erosion control.

3. Access, Roads and Parking

A Traffic Impact Assessment has been undertaken and provides the detailed requirements for access to the site, parking and necessary intersection upgrades. These include:

- The access is to be used by both light and heavy vehicle’s and should be designed as follows:
  - Two (2) ingress lanes (3,5 m wide lane for light vehicle’s only and a 4,5 m wide lane for both heavy and light vehicle’s).
  - One (1) egress lane (4,5 m wide lane for both heavy and light vehicle’s).
  - The access control device is to be set back at least 30,0 m from the internal road.
  - The bell mouth radii as illustrated on **Figure 4** below.
  - The proposed access is to be designed according to the Johannesburg Roads Agency (JRA) Roads and Stormwater design guidelines together with the Urban Transport Guideline (UTG 10) for the geometric design of commercial and industrial local streets commercial and industrial local streets.
- It is proposed that access road to the site be upgraded as follows:
  - The road pavement is to be surfaced and layer-works designed to accommodate heavy vehicle’s (car carriers)
- The site will be able accommodate 1812 parking bays. The parking bays will be 90 degrees, having dimensions of 5,0 m long by 2,5 m wide and a minimum aisle width of 7,5 m. This is in line with the DOT (1995) parking standards. Safe pedestrian

crossings and walkways should be provided to direct pedestrians between pedestrian accesses, parking areas and the buildings.

- Upgrades to Pelindaba Road and Access Road Intersection (Intersection 1) are also required as follows:
  - A dedicated short right-turn lane (30,0 m) is required at the east approach (access road)
  - The existing lane at the east approach is to be converted to a shared left and through lane
  - A dedicated short right-turn lane (30,0 m) is required at the west approach
  - The existing lane at the west approach is to be converted to a shared left and through lane
- Further, it is proposed that 2,0 m wide paved sidewalk be provided along the site frontage which will ease and formalise the movement of pedestrians between the site access and public transport facilities.

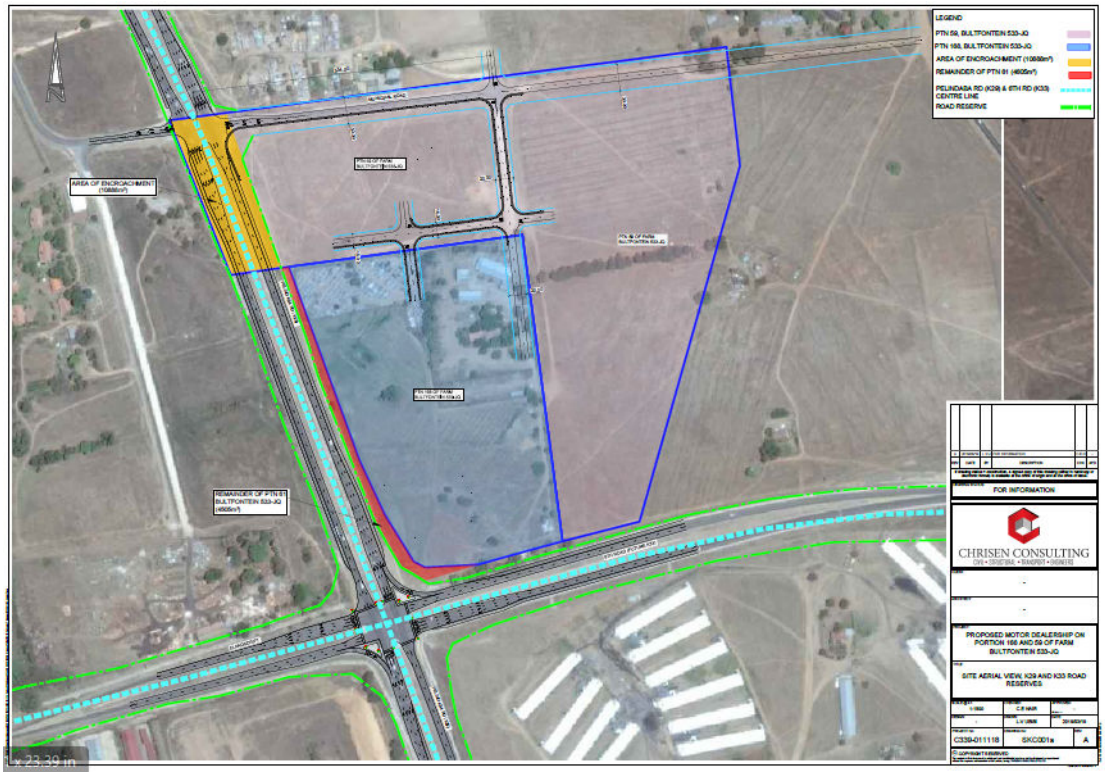

Figure 4: Access

4. Alternatives

Two alternatives are assessed as part of the Basic Assessment Process in addition to the No-Go Alternative. These included:

- Proposal; and
- Alternative 1.

The main differences between the proposal and alternative is erf 1 (the Hino Dealership).

The proposal involves the development of the north-western section of the site with the truck dealership. In the proposal, the dealership buildings and showrooms along the western boundary of the site (parallel to the R512). The aim of this placement is to increase visibility. The parking area is then located towards the back of the development footprint.

The alternative differs the parking area is located along the western boundary and the dealerships are then behind the parking area. This reduces the visibility of the truck dealership and thus has a related negative socio-economic impact.

5. Listed Activities

In terms of the EIA Regulations and Listed Activities, 2014, the activities that are triggered under the Listing Notices for this proposed development are provided in **Table 1.**

Table 1: Listed Activities

Listing Notice and Activity	Description of Listed Activity	Interpretation
GN R 983 4 December 2014 (As amended) 27	*The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous* *vegetation is required for—* *(i) the undertaking of a linear activity; or* *(ii) maintenance purposes undertaken in accordance with a maintenance management plan.*	The proposed development is approximately 16 ha in extent. Whilst the site is degraded and parts have been used for agriculture, more than 1 ha of indigenous vegetation will be cleared.
GN R 983 4 December 2014 (As amended) 28 (i)	*Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian* *purposes or afforestation on or after 01 April 1998 and where such development:* *(i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or* *(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;* *excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.*	The proposed development is approximately 16 ha in extent. Whilst the site is degraded and parts have been used for agriculture, more than 5 ha will be developed (site falls within an urban area).
GN R 985 4 December 2014 4 (c)(iv)(v)(viii)	*The development of a road wider than 4 metres with a reserve less than 13,5 metres.* *(c) Gauteng* *i. A protected area identified in terms of NEMPAA, excluding conservancies;* *ii. National Protected Area Expansion Strategy Focus Areas;* *iii. Gauteng Protected Area Expansion Priority Areas;* *iv. Sites identified as Critical Biodiversity Areas (CBAs) or Ecological Support Areas (ESAs) in*	An access road within the site and to Portion 168 will be put in place and will be 20m and 16m in width but is less than 500m in length. The north eastern section of the site (which is affected by the road) falls within a CBA: Important area. The whole site also falls within the historical extent of a Threatened

Listing Notice and Activity	Description of Listed Activity	Interpretation
	the Gauteng Conservation Plan or in bioregional plans; *v. Sites identified within threatened ecosystems listed in terms of the National Environmental Management Act: Biodiversity Act (Act No. 10 of 2004);* *vi. Sensitive areas identified in an environmental management framework adopted by the relevant environmental authority;* *vii. Sites identified as high potential agricultural land in terms of Gauteng Agricultural Potential Atlas;* *viii. Important Bird and Biodiversity Area (IBA);* *ix. Sites or areas identified in terms of an international convention;* *x. Sites managed as protected areas by provincial authorities, or declared as nature reserves in terms of the Nature Conservation Ordinance (Ordinance 12 of 1983) or the NEMPAA;* *xi. Sites designated as nature reserves in terms of municipal Spatial Development Frameworks; or* *xii. Sites zoned for conservation use or public open space or equivalent zoning*	Ecosystem (Egoli Granite Grassland) and an Important Bird Area.
GN R 985 4 December 2014 Activity 10 (iv)(v)	*The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres.* *Gauteng* *i. A protected area identified in terms of NEMPAA, excluding conservancies;* *ii. National Protected Area Expansion Strategy Focus Areas;* *iii. Gauteng Protected Area Expansion Priority Areas;* *iv. Sites identified as Critical Biodiversity Areas (CBAs) or Ecological Support Areas (ESAs) in the Gauteng Conservation Plan or in bioregional plans;* *v. Sites identified within threatened ecosystems listed in terms of the National Environmental Management Act: Biodiversity Act (Act No. 10 of 2004);* *vi. Sensitive areas identified in an environmental management framework adopted by the relevant environmental authority;* *vii. Sites identified as high potential agricultural land in terms of Gauteng Agricultural Potential Atlas;* *viii. Sites or areas identified in terms of an international convention;* *ix. Sites managed as protected areas by provincial authorities, or declared as nature reserves in terms of the Nature Conservation Ordinance (Ordinance 12 of 1983)*	Oil storage as part of the servicing of cars will be required. This is limited to 60m^3 but over the full site. The north eastern section of the site falls within a CBA: Important area. The whole site also falls within the historical extent of a Threatened Ecosystem (Egoli Granite Grassland)

Listing Notice and Activity	Description of Listed Activity	Interpretation
	or the NEMPAA; *x. Sites designated as nature reserves in terms of municipal Spatial Development Frameworks;* *xi. Sites zoned for conservation use or public open space or equivalent zoning; or* *xii. Important Bird and Biodiversity Areas (IBA).*	
GN R 985 4 December 2014 12 (c)(i)(ii)	*The clearance of an area of 300m^2 or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.* *C. Gauteng* ***i**. Within any critically endangered or endangered ecosystem listed in terms of Section 52 of NEMBA or prior to the publication of such list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment, 2004.* *ii. Within Critical Biodiversity Areas or Ecological Support Areas identified in the Gauteng Conservation Plan or bioregional plans;* *iii. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning.*	The proposed development involves the development of approximately 16 ha. The north eastern section of the site falls within a CBA: Important area. The whole site also falls within the historical extent of a Threatened Ecosystem (Egoli Granite Grassland)

Please note that whilst the stormwater pipelines are greater than 0.36m in diameter, they occur within an urban area (Zone 1 of the Gauteng Provincial Environmental Management Framework – GPEMF) and thus the exclusion applies for Activity 9 of Listing Notice 1 (GN R 983 of 4 December 2014 (As amended)). Further, whilst solar panels may be put in place over parking areas, these occur in an urban area and are thus the exclusion in Activity 1 of listing Notice 1 applies.

6. Other Authorisations required

An integrated Environmental Authorisation and Water Use Licence Application process is required. Table 2 provides an overview of the Section 21 activities requiring licencing in terms of the National Water Act, 1998

Table 2: Activities in terms of Section 21 of the National Water Act

Act	Section 21 uses	Description
National Water Act, 1998 (Act 36 of 1998)	21(a): taking of water from a water resource; and 21(g): disposal of waste in a manner that may detrimentally impact on a water resource.	• A borehole will be used to supplement municipal water supply. • Sewer will be stored in a conservancy tank and collected weekly.

A Heritage Impact Assessment will be undertaken as submitted to the South African Heritage Resources Agency (SAHRA) for comment in terms of Section 38 of National Heritage Resources Act, 1999 (Act No. 25 of 1999).

7. Need and Desirability

In terms of the need and desirability of the project, it should be noted that the proposed development will further the objectives of both the Gauteng Spatial Development Framework and Region A Regional Spatial Development Plan by creating commercial land uses in the Lanseria node.

In addition, market research undertaken by Toyota SA has indicated that there is a need for a dealership of this type in the area. From a socio-economic perspective, the proposed development will benefit the area in by improving the image of the area and increasing the local economy as the development will result in approximately R80 million investment in the area which will have numerous economic multiplier effects that will benefit the region positively.

8. Public Participation

Initial Public Participation was undertaken in terms of the Environmental Impact Assessment (EIA) Regulations, 2014. It should be noted that this public participation process was started in 2019 under the reference number: GAUT 002/18-19/E2365. As part of this, the following has been undertaken:

- A potential I&AP database was compiled and included Adjacent Landowners, Ward Councillors, Authorities and Potential I&APs.
- A Background Information Document (BID) was compiled and included information on the proposed development, services and roads and included a map showing all these components.
- An advert was placed in the Star Newspaper on 2 April 2019 to notify potential Interested and Affected Parties (I&APs) of the project and to request that they register they register their interest in the project.
- Site notices and notification of adjacent landowners and other I&APs also took place via email and hand delivery and the BID was provided as part of this.
- All registered I&APs were added to the I&AP database and all comments received added to the Comments and Responses Report.

However, during this initial notification period, concerns were raised regarding services in the area by Johannesburg Water. This has since been resolved by the engineering team but took considerable time to do so. In addition, the scope of the proposed development was also

updated to take into account the updated footprint. As such, a new application will be registered [1](GAUT 002/20-21/E2591) and initial public participation was redone as follows:

- An updated I&AP database was compiled and includes all registered I&APs from the previous notification period as well as the necessary commenting and competent authorities, ward councillor and adjacent landowners. Adjacent landowners were also contacted telephonically to confirm their details and to determine their preferred means of communication.
- An advert was placed in the Star Newspaper on 12 August 2020 to notify potential I&APs of the project and to request that they register they register their interest in the project.
- Site notices and notification of adjacent landowners and other I&APs also took place via email and the updated BID was provided as part of this.
- There is an informal settlement adjacent to the development: In order to ensure the members of this settlement were adequately informed, the community representative was contacted, and the proposed development was explained to him. A BID was then provided via whatsapp so that it could be circulated to community members. A site notice was also placed at the road entrance to the settlement.

In line with the new Permitting Regulations (GN 650 of 5 June 2020), a Public Participation Plan was compiled and submitted to GDARD on 31 July 2020. The plan was subsequently approved on the same day (refer to Appendix I4). Subsequently, the Country has moved to Level 1 and thus the Directions are no longer applicable. However, all public participation was undertaken in terms of the required safety measures and the approved Public Participation Plan.

In addition to the above, notification of the review of the Basic Assessment Report and WULA Technical Report has been undertaken as follows:

- Emails and/or Whatsapp messages were sent to all the registered I&APs to notify them of the 30-day review period on 14 October 2020.
- Hard copies and/or electronic copies (USB Flash drive) of the BAR were submitted to competent and commenting authorities including the Gauteng Department of Agriculture and Rural Development (GDARD), the City of Johannesburg (CoJ), and Department of Human Settlements, Water and Sanitation (DHSWS) on 14 October 2020.
- A copy has also been uploaded to the South African Heritage Resources Information System (SAHRIS) to facilitate the review and comment by the South African Heritage Resources Agency (SAHRA) and the Provincial Heritage Resources Agency of Gauteng (PHRA-G) on 14 October 2020.

[1] GDARD has previously indicated that they would prefer a new reference number to be used for projects that were initially registered on the EIA Online Portal in 2018/2019 but then only submitted in 2020.

- A 30-day public review has been provided between **14 October 2020 and 14 November 2020.**

The BAR will be updated with comments received during this period and then submitted to GDARD for review and decision making. All registered I&APs will be notified of the decision.

9. Environmental Sensitivity

In order to better understand the environmental sensitivity and the potential impacts related to the development the following specialist studies have been undertaken:

- Baseline Ecological Habitat Assessment; and
- Heritage Impact Assessment.

Copies of the reports are included in Annexure G. In summary, the following was noted:

- **Baseline Ecological Habitat Assessment**
  - From a desktop perspective, the proposed development occurs within the Egoli Granite Grassland (Endangered) vegetation type. According to the Gauteng Conservation Plan, the proposed development footprint traverses a small section of Ecological Support Area and Zone 3 of the GPEMF. As per the protected and conservation area map, the Cradle of Humankind is situated about 6 km northwest of the study area.
  - The site was actively surveyed to determine the current status of the habitats on site. Three main habitat types were identified within the study site, namely:
    - Transformed;
    - Degraded; and
    - Grassland.
  - The habitats identified were identified as having a low-medium to low sensitivity.
  - One Species of Conservation Concern was identified on site, namely *Hypoxis hemerocallidea*. Whilst this species is classified as “Least Concern” in terms of Red Data List, GDARD has confirmed that they should be considered as “Orange List” species in Gauteng due to provincial level pressures. Therefore, in order to mitigate impacts to these species, a Search and Rescue and Relocation Plan has been devised and included in Appendix E of the Baseline Ecological Habitat Assessment. Impacts to these species are expected to be low with the implementation of the necessary mitigation.
  - In conclusion, the specialist noted that the proposed development is unlikely to have a high impact on the study site due to low to low-medium sensitivity on site. Aspects such as human activities in and around the study site, presence of alien invasive species on site, lack of habitat for most fauna species and the presence of feral animals in the area have impacted on the

existing sensitivity. All recommendations and mitigation measures, with regards to the fauna and flora on site, should be well managed pre -, during and post of the construction activities

- Heritage Impact Assessment
  - The study area was assessed both on desktop level and by a field survey. The field survey was conducted as a non-intrusive pedestrian survey to cover the extent of the study area as development plans were not yet available at the time of the survey.
  - One isolated Early Stone Age stone tool was found during the survey; the artefact is out of context, broken by ploughing activities and is of no significance apart from noting its presence in this report.
  - Based on the SAHRIS Paleontological Sensitivity Map, the area is of insignificant paleontological sensitivity and no further mitigation prior to construction is recommended in terms of Section 35 for the proposed development to proceed.
  - In terms of the built environment, one structure (Feature 1) was recorded that could be older than 60 years and would then be protected by the NHRA. If the structure is older than 60 years and impacted on a destruction permit will be required from the PHRAG.
  - In terms of Section 36 of the Act no burial sites were recorded. However, if any graves are identified in future they should ideally be preserved in-situ or alternatively relocated according to existing legislation.
  - No public monuments are located within or close to the study area. The study area is surrounded by industrial, residential and road infrastructure developments and will not impact negatively on significant cultural landscapes or viewscapes.
  - Due to the lack of significant heritage resources in the study area the impact of the proposed project on heritage resources is considered low and impacts can be mitigated to an acceptable level. It is therefore recommended that the proposed project can commence on the condition that the following recommendations are implemented as part of the EMPr and based on approval from SAHRA:
    - Implementation of a chance find procedure;
    - If impacted on the age of Feature 1 should be confirmed and if greater than 60 years of age a destruction permit will be required from the PHRAG

In addition to the above, a Borehole will be used to supplement water supply for the site (and Portion 168) and a sewer conservancy tank will be put in place. As such, a Water Use Licence Application for Section 21 (a) and (g) uses is being undertaken and public participation is integrated with the public participation of the Basic Assessment Report (BAR).

As part of the WULA process, a Baseline Geohydrological Assessment was undertaken to better understand the impact of proposed groundwater use. The study noted that the recommended abstraction rate for the borehole on site is 0.45 L/s, based on a pump schedule of 12 hours. It also however noted that the current abstraction rate is less than 0.02 L/s (or 560 L/month) and the drawdown extent (of less than 0.1 m) will be limited to 80 m. Potential groundwater related impacts are expected to be insignificant with regard to the shallow weathered and fractured aquifers, unlikely to impact third party groundwater users and unlikely to impact groundwater contribution to baseflow.

In addition, a number of technical studies are also included:

- Water and Sanitation Study;
- Stormwater Management Plan; and
- Traffic Impact Assessment.

It should be noted that these studies have been compiled for Portion 59 together with Portion 168 (which is already approved).

10. Impact Assessment

A detailed impact assessment has been undertaken and assessed the types of impact, duration of impacts, likelihood of potential impacts as well as the overall significance of the impact occurring (**Appendix I**). Most impacts have a low significance once mitigation measures were applied.

A detailed Environmental Management Programme (EMPr) has been compiled and is included in **Appendix H**. Mitigation measures recommended by the specialists as well as best practice measures have been included in this document which must be implemented.

11. Recommendation of the Practitioner

Based on the findings of the specialist studies and impact assessment and taking into account the successful implementation of the EMPr, it is felt that the **Proposal should be authorised.** The reasons for this opinion are as follows:

- The proposal involves the development of the truck dealership along Pelindaba Road and thus maximises the socio-economic potential of the proposed development through improved visibility.

The following are recommended conditions for inclusion in the EA:

- The **proposed layout** should be implemented;
- A copy of the Final SDP must be submitted to GDARD once finalised as part of the townplanning process.
- An Environmental Control Officer (ECO) should be appointed to ensure compliance to the authorisation and EMPr. Weekly construction monitoring together with six-monthly full environmental audits is recommended;

- As required by the Baseline Ecological Habitat Assessment, the following should be undertaken:
    - It is recommended that all *Hypoxis hemerocallidea* should be relocated prior to construction activities and either relocated to a similar type of environment or implemented within the landscaping plan of the proposed development. A Search, Rescue and Relocation plan has been compiled as part of the EMPr and Baseline Ecological Habitat Assessment and should be implemented.
    - It is recommended that the construction camp should not be in the low-medium sensitivity area. If not possible, Hypoxis species should be removed prior to clearing of vegetation.
    - Fires shall only be permitted in specially designated areas and under controlled circumstances.
    - Snaring and hunting of fauna by construction workers on or adjacent to the study area are strictly prohibited.
    - Killing of fauna on or adjacent to the study area are strictly prohibited. Should any fauna species be found on site, the ECO should be conducted asap to provide recommendation or mitigation measures.
    - Trenches and other linear barriers should not be kept open for too long, especially not staying open overnight.
    - Construction must be restricted to hours of 07:00 and 17:00. Should construction activities need to continue over a weekend/pubic holiday or is expected to be excessively noisy, all Interested and Affected Parties and the ECO must be notified in advance.
    - Construction must be restricted to hours of 07:00 and 17:00. Should construction activities need to continue after hours is, all Interested and Affected Parties and the ECO must be notified in advance. Excessive lighting during construction should be avoided.
    - Alien, invasive species found within the construction area should be eradicated as far as possible and disposed of at a registered site.
    - Soil disturbance should be kept to a minimum during the construction phase.,
- As required by the Heritage Impact Assessment:
    - Implementation of a chance find procedure;
    - If impacted on the age of Feature 1 should be confirmed and if greater than 60 years of age a destruction permit will be required from the PHRAG
- As required by the Baseline Hydrogeological Baseline Assessment:
    - The recommended maximum abstraction rate for the borehole on site is 0.45 L/s, based on a pump schedule of 12 hours.
    - The existing borehole on site should be monitored for water levels and qualities. The following monitoring frequencies are recommended:
        - Water levels: Monthly
        - Water qualities: Quarterly

- The stormwater management system included in the Stormwater Management Plan must be implemented and maintained;
- A grey water wash bay to recycle water from the vehicle wash bays must be put in place;
- Sand, oil and grease traps must be implemented as noted in the Stormwater Management Plan;
- As per the Water and Sanitation Services Study and the comments received from Johannesburg Water, municipal water supply should be supplemented by abstraction from the existing borehole.
- Sewer conservancy tanks must be installed and maintained as specified by an appropriate engineer or technician.
- The requirements of the Traffic Impact Assessment must be implemented.

GAUTENG PROVINCE
AGRICULTURE AND RURAL DEVELOPMENT
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 (Version 1)

Kindly note that:

1. This **Basic Assessment Report** is the standard report required by GDARD in terms of the EIA Regulations, 2014.

2. This application form is current as of 8 December 2014. It is the responsibility of the EAP to ascertain whether subsequent versions of the form have been published or produced by the competent authority.

3. **A draft Basic Assessment Report must be submitted, 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 (1 hard copy and two CD's) must be submitted, for purposes of comments within a period of thirty (30) days, to a Competent Authority empowered in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended to consider and decide on the application.**

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

6. 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.

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

8. An incomplete report may lead to an application for environmental authorisation being refused.

9. **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 being refused.**

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

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

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

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

DEPARTMENTAL DETAILS

Gauteng Department of Agriculture and Rural Development
Attention: Administrative Unit of the of the Environmental Affairs Branch
P.O. Box 8769
Johannesburg
2000

Administrative Unit of the of the Environmental Affairs Branch
Ground floor Diamond Building
11 Diagonal Street, Johannesburg

Administrative Unit telephone number: (011) 240 3377
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.

Not Applicable.

Is a closure plan applicable for this application and has it been included in this report? N/A

if not, state reasons for not including the closure plan.

Not Applicable

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? ✓

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

If no, state reasons for not attaching the list.

Not Applicable

Have State Departments including the competent authority commented? X

If no, why?

Not yet applicable.

This document constitutes the Basic Assessment Report which will be subjected to 30 days' public participation. As such, comments have not yet received.

All comments received during the public review period will be submitted as part of the final submission of the BAR to GDARD.

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SECTION A: ACTIVITY INFORMATION

1. Proposal or Development Description

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

Proposed Development of Vehicle Dealerships and Facilities on Portion 59 of the Farm Bultfontein 533 JQ as well as a Borehole and Conservancy tank on Portion 168[2] of the Farm Bultfontein 533 JQ

Select the appropriate box

The application is for an upgrade of an existing development		The application is for a new development	✓	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 Licence in terms of Section 21 (a) of the National Water Act, 1998 is required. An application will be submitted on the EWULAAS System. An integrated process will be undertaken and a copy of the WULA Technical Report is included in **Appendix F1** and is available for review and comment. Please note that comment from the South African Heritage Resources Agency (SAHRA) is required in terms of Section 38 of the National Heritage Resources Act however no other authorisations are required.

If yes, have you applied for the authorisation(s)?
If yes, have you received approval(s)? (attach in appropriate appendix)

In progress	
YES	NO ✓

[2] *As noted in the executive summary, development of Portion 168 has been obtained previously. It is noted here only in that it relates to the borehole and sewer conservancy tanks.*

2. Applicable legislation, policies and/or guidelines

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

Title of legislation, policy or guideline:	Administering authority:	Promulgation Date:
National Environmental Management Act, 1998 (Act No. 107 of 1998 as amended).	*National & Provincial*	*27 November 1998*
Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996)	National (DEFF) Provincial (GDARD)	4 December 1996
National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended	National (DEFF) Provincial (GDARD)	18 December 2014
Environmental Impact Assessment Regulations (GN R 982 of 4 December 2014) (as amended by GN 326 of 7 April 2017)	National (DEFF) Provincial (GDARD)	8 December 2014 (as amended on 7 April 2017)
Listing Notice 1 (GN R 983 of 4 December 2014) (as amended by GN 327 of 7 April 2017)	National (DEFF) Provincial (GDARD)	8 December 2014 (as amended on 7 April 2017)
Listing Notice 3 (GN 985 of 4 December 2014) (As amended by GN 324 of 7 April 2017)	National (DEFF) Provincial (GDARD)	8 December 2014 (as amended on 7 April 2017)
Need & Desirability Guideline (Notice 891 of 2014)	National (DEFF) Provincial (GDARD)	20 October 2014
Public Participation Process Guideline (GN R 807 of 10 October 2012)	National (DEFF) Provincial (GDARD)	10 October 2012
National Heritage Resource Act (NHRA), 1999 (Act No. 25 of 1999)	South African Heritage Resources Agency (SAHRA) Provincial Heritage Resources Agency – Gauteng (PHRA-G)	28 April 1999
National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) [as amended] (NEMBA)	DEFF	1 September 2004
Alien and Invasive Species Regulations, 2014	DEFF	1 August 2014
Alien and Invasive Species Lists, 2016	DEFF	29 July 2016
Gauteng Spatial Development Framework (SDF) The Gauteng Spatial Development Framework 2030	GDARD	2011
Gauteng Provincial Environmental Management Framework (EMF) (GN 164 of 2 March 2018)	GDARD	2018
Adoption of the Gauteng Provincial Environmental Framework Standard and Exclusion of Associated Activities from the requirement to obtain environmental authorisation in terms of Section 24(2)(d) and 24(10)(a) Read in conjunction with Section 24(1)(d) of NEMA, 1998 for the implementation of the Gauteng Provincial Environmental Management Framework	GDARD	2018
Notice of the requirements to submit a report generated by the National Web Based Environmental Screening Tool in terms of Section 24(5)(h) of the National Environmental Management Act, 1998 and Regulation 18(1)(b)(v) of the EIA Regulations, 2014 (as amended (GN 960 of 5 July 2019)	DEFF GDARD	2019
GDARD C-PLAN v3	GDARD	-

Legislation, policy of guideline	Description of compliance
Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996)	*Section 24 of the Constitution states that –* *"Everyone has the right to –* *a) an environment that is not harmful to their health or well-being; and* *b) have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that – (i) Prevent pollution and ecological degradation;* *(ii) Promote conservation; and* *(iii) Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development."*

Legislation, policy of guideline	Description of compliance
	• **A Basic Assessment Process including an Impact Assessment has been undertaken to ensure that negative impacts on the environment can be mitigated satisfactorily**
National Environmental Management Act, 1998 (NEMA) (Act No. 107 of 1998), as amended	The NEMA is the umbrella framework for all environmental legislation primarily to assist with implementing the environmental rights of the Constitution. The NEMA provides fundamental principles required for environmental decision making and to achieve sustainable development. It also makes provision for duty of care to prevent, control and rehabilitate the effects of significant pollution and environmental degradation, and prosecute environmental crimes. These principles must be adhered to and taken into consideration during the impact assessment phase. Section 24D and 24(2) of the NEMA makes provision for the publication of list and associated regulations containing activities identified that may not commence without obtaining prior environmental authorisation from the competent authority. The Act also requires that no person may commence an activity listed or specified unless the competent authority has granted an environmental authorisation of that activity. • **A Basic Assessment Process including an Impact Assessment has been undertaken to ensure that negative impacts on the environment can be mitigated satisfactorily. This assessment is in line with the requirements of NEMA and the associated EIA Regulations.** • **Further, other important aspects of NEMA such as sustainability principles such as the "Polluter Pays" and "the Precautionary Principle" have also been considered in the assessment of the impacts of the proposed development.** • **The commencement of the activity will not take place unless authorised by the competent authority.**
EIA Regulations (GN R 982 of 4 December 2014) (as amended by GN 326 of 7 April 2017)	The purpose of the EIA Regulations, 2014 is to regulate the procedure and criteria as contemplated in Chapter 5 of NEMA relating to the preparation, evaluation, submission, processing and consideration of, and decision on, applications for environmental authorisations for the commencement of activities, subjected to environmental impact assessment, in order to avoid or mitigate detrimental impacts on the environment, and to optimise positive environmental impacts. • **The Basic Assessment Process undertaken for the proposed development is in line with the requirements of the EIA Regulations, 2014 (as amended)**
Listing Notice 1 (GN R 983 of 4 December 2014) (as amended by GN 327 of 7 April 2017)	In terms of Listing Notice 1, the proposed development triggers **Activity 27 and 28.** • **In line with the requirements of Listing Notice 1 of the EIA Regulations, 2014 (as**

Legislation, policy of guideline	Description of compliance
	amended), these activities have been included in the Application. • **A Basic Assessment Process in line with the requirements of the EIA Regulations, 2014 (as amended) is being undertaken.**
Listing Notice 3 (GN 985 of 4 December 2014) (As amended by GN 324 of 7 April 2017)	In terms of Listing Notice 3, the proposed development triggers **Activity 4, 10 and 12.** • **In line with the requirements of Listing Notice 3 of the EIA Regulations, 2014 (as amended), these activities have been included in the Application.** • **A Basic Assessment Process in line with the requirements of the EIA Regulations, 2014 (as amended) is being undertaken.** • **Due to the potential sensitivities on site, an Baseline Ecological Habitat Assessment has been undertaken and are included in Appendix G of this Report. The study found that aspects such as human activities in and around the study site, presence of alien invasive species on site, lack of habitat for most fauna species and the presence of feral animals in the area have impacted on the existing sensitivity of the site which is low-medium to low.**
Notice 891 of 2014	The Department of Environmental Affairs, Fisheries and Forestry (DEFF) published a guideline on determining the need and desirability of a proposed development. This document provides information and guidance considering the need and desirability in terms of NEMA, the EIA Regulations, the NEM: AQA, and NEM: WA. It also aims to assist Environmental Assessment Practitioners (EAPs) to prepare a well-structured and complete application and reports in order, and to assist the competent authorities to ensure that need and desirability are given due consideration during every EIA application, to expedite and ensure well-informed decision-making. • **Section E, Part 9 of this report includes an assessment of the need and desirability of the proposed development which takes into account the Guidelines**
GN R 807 of 10 October 2012)	The DEFF also published guidelines for public participation. However, these specifically relate to the EIA Regulations, 2010. • **Section C of this report provides information on the public participation process. Where applicable, the guideline assisted in ensuring all the necessary I&APs were identified. However, as mentioned, these guidelines specifically relate to the EIA Regulations, 2010.**
GN 650 of 5 June 2020	Due to the current Covid-19 pandemic and the associated National State of Disaster, the Department published directions regarding the permitting process that must be followed in regards to Environmental Authorisation processes. In particular, public participation plans must be submitted to the Competent Authority and public participation must be undertaken in a way that limits risk but ensure fair consultation.

Legislation, policy of guideline	Description of compliance
	• **A public participation plan (PP Plan) was submitted to GDARD on 31 July 2020 and was subsequently approved on the same day. A copy of the PP Plan and associated email from GDARD is included in Appendix I4. It should be noted that subsequently, the Country has moved to Alert Level 1 and the Directions are no longer applicable. Public participation however has been undertaken with the greatest attention to safety.**
National Heritage Resource Act (NHRA), 1999 (Act No. 25 of 1999)	The National Heritage Resources Act (25 of 1999) was promulgated for the protection of National Heritage Resources and the empowerment of civil society to conserve their heritage Resources. In terms of Section 38 of this act, certain listed activities require authorisation from provincial agencies including "any development or other activity which will change the character of a site— (i) exceeding 5 000 m^2 in extent.". • **A Heritage Impact Assessment Report has been compiled and is included in Appendix G.** • **A copy of the Basic Assessment Report including the Heritage Impact Assessment has been uploaded on the SAHRIS website for review and comment.**
National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) [as amended] (NEMBA) Alien and Invasive Species Regulations, 2014 Alien and Invasive Species Lists, 2016	NEMBA aims to provide for the management and conservation of South Africa's biodiversity within the framework of the NEMA. The purpose of NEMBA is to protect ecosystems and the species within as well as the promoting of sustainable use of indigenous biodiversity. During any environmental authorisation process the following regulations are considered and researched if at any stage the following regulations are applicable: • *Alien and Invasive Species Regulations, 2014;* • *Alien and Invasive Species List, 2016.* • **In terms of this environmental authorisation process, due to the disturbed nature of the site, measures to control alien and invasive species have been included in the Environmental Management Programme for the construction and operation of the proposed development.** • **In addition, an Ecological Assessment has been undertaken as included in Appendix G. A number of alien and invasive species were identified and an Alien Invasive Species Management Plan will be compiled and implemented as required by the Ecological Specialist.**
Gauteng Spatial Development Framework (SDF) The Gauteng Spatial Development Framework 2030	The Gauteng Spatial Development Framework, 2011 was among others, compiled to specify a clear set of spatial objectives for municipalities to achieve to ensure realisation of the future provincial spatial infrastructure; and to enable and direct growth.

Legislation, policy of guideline	Description of compliance
	The SDF aims to articulate the spatial objectives of the Gauteng Spatial Development Framework (SDF) The Gauteng Spatial Development Framework 2030 The Gauteng Spatial Development Framework, 2011 was among others, compiled to specify a clear set of spatial objectives for municipalities to achieve to ensure realisation of the future provincial spatial infrastructure; and to enable and direct growth. The SDF aims to articulate the spatial objectives of the Gauteng region to assist the alignment of neighbouring municipalities' spatial plans. • **The Gauteng SDF has been considered in Section B9 and E7 of this Basic Assessment Report to ensure that the development is in line with framework**
Gauteng Provincial Environmental Management Framework (GPEMF)	The objective of the GPEMF is to guide sustainable land use management within the Gauteng Province. The GPEMF, inter alia, serve the following purposes: • To provide a strategic and overall framework for environmental management in Gauteng; • Align sustainable development initiatives with the environmental resources, developmental pressures, as well as the growth imperatives of Gauteng; • Determine geographical areas where certain activities can be excluded from an EIA process; and • Identify appropriate, inappropriate and conditionally compatible activities in various Environmental Management Zones in a manner that promotes proactive decision-making. • **As part of the Basic Assessment Process, the site was assessed in terms of the GPEMF, and it was determined that the site falls within Zone 1: Urban Development Zone.** • **The intention with this zone is to streamline urban development activities in it and to promote development infill, densification and concentration of urban development, in order to establish a more effective and efficient city region that will minimise urban sprawl into rural areas.** • **The proposed development therefore in line with the GPEMF.**
Adoption of the Gauteng Provincial Environmental Framework Standard and Exclusion of Associated Activities from the requirement to obtain environmental authorisation in terms of Section 24(2)(d) and 24(10)(a) Read in conjunction with Section 24(1)(d) of NEMA, 1998 for the implementation of the Gauteng Provincial Environmental Management Framework (GN 164 of 2 March 2018)	The GPEMF Standard, 2018 provides for a number of activity exclusions in certain zones (for example, Zone 1 and Zone 5). The aim of this is streamline development in areas that are earmarked for development. In this way, the Standard promotes densification and infill. • **The proposed development occurs within Zone 1 and as such, the GPEMF Standard would apply. However, part of the site was historically identified as CBA area in terms of the Gauteng Conservation Plan as well as Egoli Granite Grassland and as such additional activities within Listing Notice 3 are triggered and a Registration in terms of the GPEMF is not applicable.**

Legislation, policy of guideline	Description of compliance
Notice of the requirements to submit a report generated by the National Web Based Environmental Screening Tool in terms of Section 24(5)(h) of the National Environmental Management Act, 1998 and Regulation 18(1)(b)(v) of the EIA Regulations, 2014 (as amended (GN 960 of 5 July 2019)	GN960 of 5 July 2019 made it compulsory for the report generated on the DEFF online screening tool to be submitted as part of the Application for Environmental Authorisation. The aim of this is to ensure that a certain level of standardized information is provided to the Competent Authorities as well as I&APs. • **As per the requirements of GN 960 of 5 July 2019, a report was generated on the National Screening tool and is submitted in Appendix I.**
C-PLAN v3	Gauteng Conservation Plan (C-Plan) 3.3. is based on the systematic conservation protocol developed by Margules & Pressey (2000) and is based on the principles of complementarity, efficiency, defensibility and flexibility, irreplaceability, retention, persistence and accountability. The main purpose of C-Plan 3.3 is to serve as the primary decision support tool for the biodiversity component of the EIA process, to inform protected area expansion and biodiversity stewardship programmes in the province and to serve as a basis for development of Bioregional Plans in municipalities within the province. According the Gauteng C-Plan, the north western section of the site falls within a CBA: Important Area. . • **In order to determine the impacts of the proposed development. A Baseline Ecological Habitat Assessment has been undertaken. The study found that aspects such as human activities in and around the study site, presence of alien invasive species on site, lack of habitat for most fauna species and the presence of feral animals in the area have impacted on the existing sensitivity of the site which is low-medium to low.**

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

As part of the development planning process for the proposed Truck Dealership, several technical assessments have been undertaken including the following:

- Traffic Impact Assessment Letter;
- Stormwater Management Plan ; and
- Water and Services Letter.

In addition to the above, the clients' requirements in terms of access, parking, visibility etc. were also considered. Based on the outcome of these studies, Boogertman Partners designed a layout for the proposed development. This was workshopped, and an alternative layout was also designed.

Provide a description of the alternatives considered

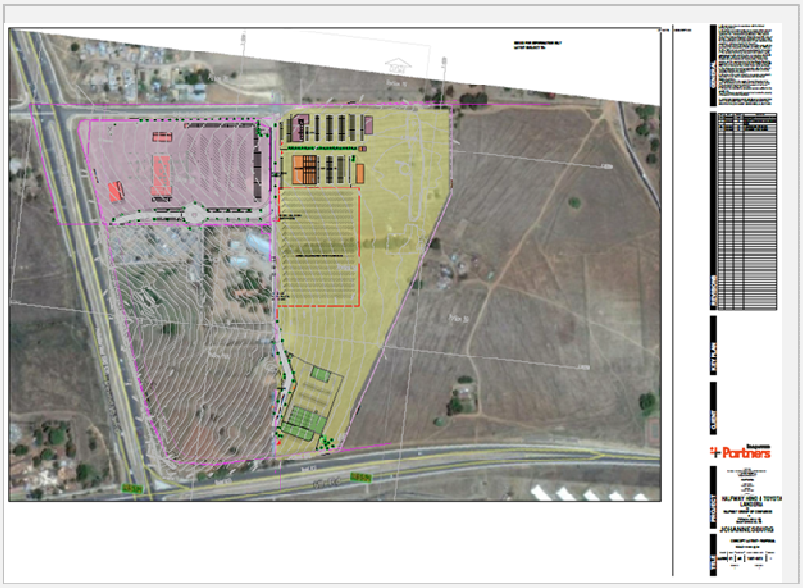
No.	**Alternative type**, either alternative: site on property, properties, activity, design, technology, energy, operational or other(provide details of "other")	**Description**
1	**Proposal**	The main differences between the proposal and alternative is erf 1 (the Truck Dealership to the north west of the site shown in pink below). The proposal involves the development of the truck dealership (and associated workshops) along the western boundary of the site (parallel to the R512). The Car Facilities; 4x4 Facilities; Taxi Show Room; Production Centre; Panel and Paint Workshop; Vehicle Rental facilities; and Vehicle Storage Parking will be developed in the eastern section (shown in yellow).  **Figure 5: Proposed Layout**
2	**Alternative 1**	With the Alternative, the Car Facilities; 4x4 Facilities; Taxi Show Room; Production Centre; Panel and Paint Workshop; Vehicle Rental facilities; and Vehicle Storage Parking will be developed in the eastern section (shown in yellow) will still be developed. However, in Erf 1, the parking will be located to the east of the truck dealership. A map showing the proposal (**Figure 6**) is provided below for context. A3 maps of the alternatives are included in **Appendix A1**.

		 **Figure 6: Alternative Layout**
3	Alternative 2	
	Etc.	

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

Not Applicable.

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 ***(Total environmental (landscaping, parking, etc.) and the building footprint)***	16.1423 ha
Alternatives:	
Alternative 1 (if any)	16.1423 ha
Alternative 2 (if any)	

Ha/ m^2

Please note that this includes the development of internal roads and services.

or, for linear activities:

	Length of the activity:
Proposed activity	
Alternatives:	
Alternative 1 (if any)	
Alternative 2 (if any)	

m/km

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

	Size of the site/servitude:
Proposed activity	16.1423 ha
Alternatives:	
Alternative 1 (if any)	16.1423 ha
Alternative 2 (if any)	

Ha/m^2

5. Site Access

Proposal

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

Describe the type of access road planned:

Access to the site will utilize the existing access road from the R512 to the site (**Figure 7**). Some upgrades and formalisation is required:

- The access is to be used by both light and heavy vehicle's and should be designed as follows:
  - Two (2) ingress lanes (3,5 m wide lane for light vehicle's only and a 4,5 m wide lane for both heavy and light vehicle's).
  - One (1) egress lane (4,5 m wide lane for both heavy and light vehicle's).
  - The access control device is to be set back at least 30,0 m from the internal road.
  - The bell mouth radii as illustrated below.
  - The proposed access is to be designed according to the Johannesburg Roads Agency (JRA) Roads and Stormwater design guidelines together with the Urban Transport Guideline (UTG 10) for the geometric design of commercial and industrial local streets commercial and industrial local streets.
- It is proposed that access road to the site be upgraded as follows:
  - The road pavement is to be surfaced and layer-works designed to accommodate heavy vehicle's (car carriers)
- Upgrades to Pelindaba Road and Access Road Intersection (Intersection 1) are also required as follows:
  - A dedicated short right-turn lane (30,0 m) is required at the east approach (access road)
  - The existing lane at the east approach is to be converted to a shared left and through lane
  - A dedicated short right-turn lane (30,0 m) is required at the west approach
  - The existing lane at the west approach is to be converted to a shared left and through lane
- Further, it is proposed that 2,0 m wide paved sidewalk be provided along the site frontage which will ease and formalise the movement of pedestrians between the site access and public transport facilities.

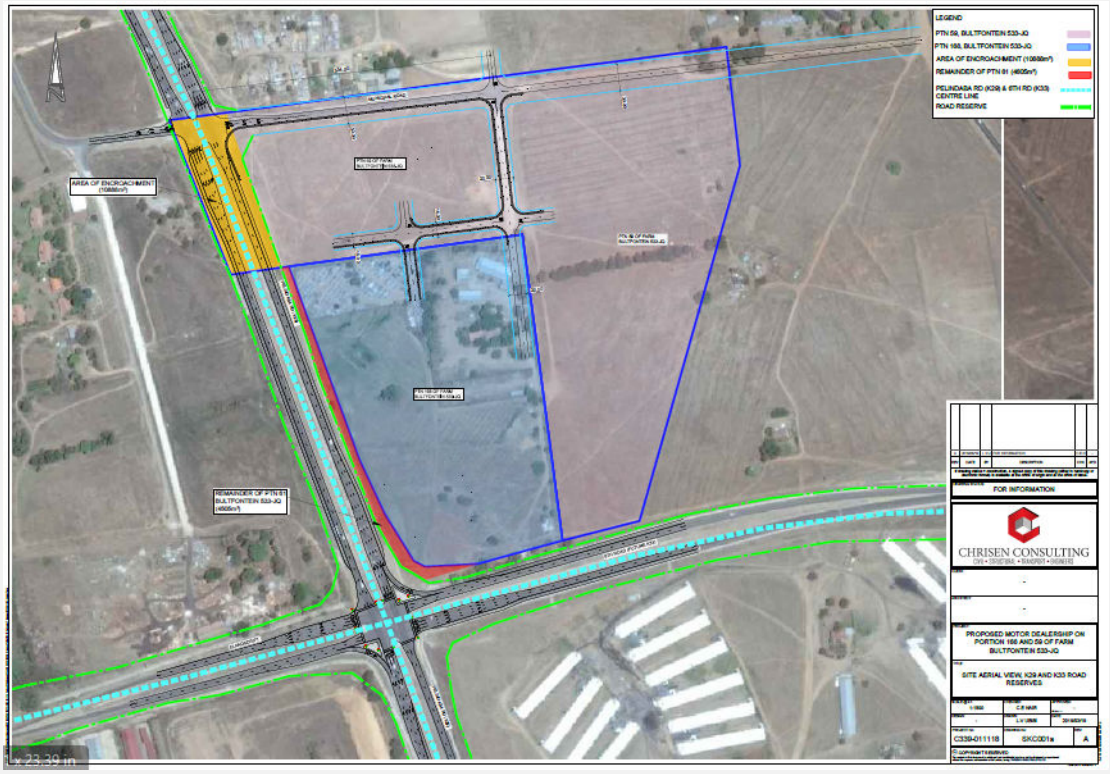


Figure 7: Access

Include the position of the access road on the site plan (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

Alternative 1

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

Describe the type of access road planned:

Both the proposal and alternative layout will utilise the same existing access which will require formalisation. Details of this road are provided above (**Figure 7**).

Include the position of the access road on the site plan. (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

Alternative 2

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

Describe the type of access road planned:

Include the position of the access road on the site plan. (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

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)

The proposal and alternative occur on the same property and as such, duplication of the following items is not required.

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)

Please see **Appendix A1** for a copy of the layout plan for both the proposal and Alternative 1. The site plan is provided in A3 as the development footprint is under 20ha.

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.

Please see **Appendix A2** for a copy of the Locality Map. Please note that a number of maps have been provided at different scales to ensure that all information required is indicated. In addition, a number of sensitivity maps are provided in **Appendix A3**.

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.

Please see **Appendix B** for site photographs.

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.

Please see **Appendix C** for Facility Illustrations.

081 773 2625 -

SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT

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

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

Not Applicable. The proposed development is not a linear activity. Although internal access roads will be undertaken they will be developed within the footprint of the site itself.

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 | 0 | (complete only when appropriate for above)

Section B – Location/route Alternative No. | 0 | (complete only when appropriate for above)

Not Applicable. The alternatives assessed are layout alternatives and therefore occur on the same property.

1. Property Description

Property description: (Including Physical Address and Farm name, portion etc.)	Portion 59 of the Farm Bultfontein 533 JQ

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.

Proposal and Alternative:	**Latitude (S):**	**Longitude (E):**
	-25.964041°	27.921860°

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

PROPOSAL	T	0	J	Q	0	0	0	0	0	0	0	0	0	5	3	3	0	0	0	5	9
ALT. 1	T	0	J	Q	0	0	0	0	0	0	0	0	0	5	3	3	0	0	0	5	9
ALT. 2																					
etc.																					

3. Gradient of the Site

Indicate the general gradient of the site.

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

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

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

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

(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)

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):
°	°

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

The area is characterised by granites and gneiss rock types, typical of the basement rock formation. The term basement rock applies to any hard, crystalline or recrystallised, igneous or metamorphic rock associated with Precambrian Age, including ancient Archaean cratonic rocks (granites, gneisses, greenstones), metamorphic rocks associated with mobile belts (usually deformed and of Proterozoic age) and anorogenic intrusions of variable age (Arcworth 1987; Jones 1985; Wright and Burgess 1992; Key 1992). Granite, from a geological point-of-view, can be considered any intrusive or hypabyssal, felsic, igneous, or metamorphic rock composed of predominantly quartz and feldspar (orthoclase and plagioclase). Igneous granites (granites or granitoid rocks) typically comprise alkali feldspar granite, granite, granodiorite and tonalite (**Figure 8).**

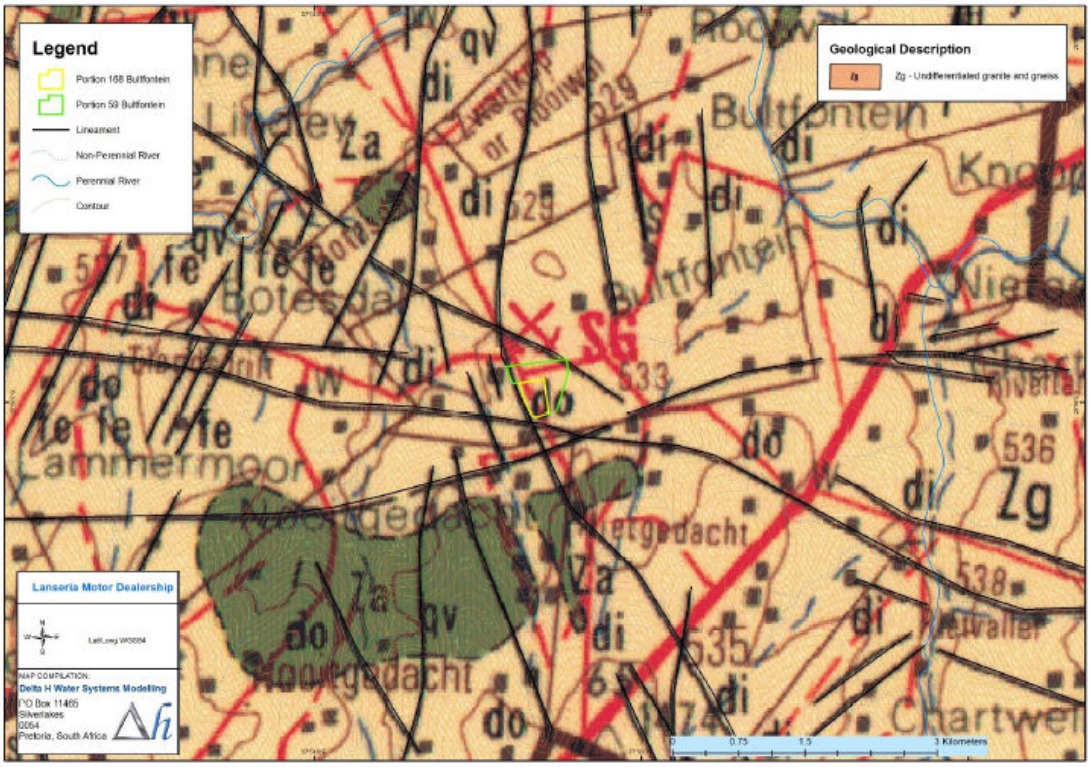


Figure 8: Geology

6. Agriculture

Does the site have high potential agriculture as contemplated in the Gauteng Agricultural Potential Atlas (GAPA 4)?

YES	NO
	✓

The site is a combination of "built up" and "moderate" agricultural potential (**Figure 9**).

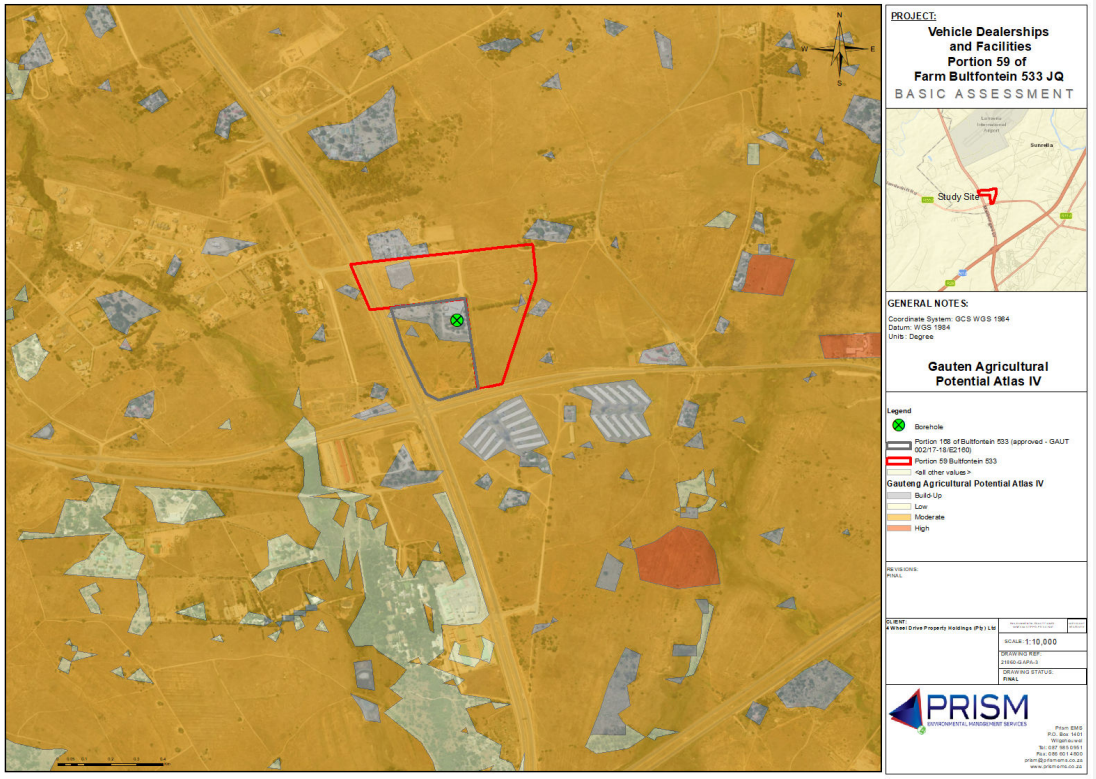


Figure 9: Agricultural Potential

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

7. Groundcover

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

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

Natural veld - good condition % =	Natural veld with scattered aliens % =30% ✓	Natural veld with heavy alien infestation % = 10% ✓	Veld dominated by alien species % = 30% ✓	Landscaped (vegetation) % =
Sport field % =	Cultivated land (historical) % =0	Paved surface (hard landscaping) % =25% ✓	Building or other structure %	Bare soil % = 5% ✓

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?	YES	NO ✓

If YES, specify and explain:

Please note:

No red list endangered or rare flora or fauna species were identified by the Baseline Ecological Habitat Assessment. However, several individual *Hypoxis hemerocallidea* were identified on site. These are identified as least concern on the Red Data list (Williams et al., 2016) but due to medicinal use are known to be decreasing and are thus species of conservation concern. These species will be relocated within the footprint of the development. Specific mitigation measures regarding this are included in the Environmental Management Programme (EMPr) including a Species Search, Rescue and Relocation Plan.

A copy of the study is provided in **Appendix G1**.

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.	YES	NO ✓

If YES, specify and explain:

Not Applicable.

Are there any special or sensitive habitats or other natural features present on the site?	**YES** ✓	NO

If YES, specify and explain:

A Baseline Ecological Habitat Assessment was undertaken by Prism EMS and is included in **Appendix G1**. The study included both a desktop assessment and field assessment of the site.

From a desktop perspective, the study noted that the project area falls within Egoli Granite Grassland which is classified as endangered. The study also noted that the study area falls within a CBA Important Area.

However, the specialist did note the following:

- *From a desktop perspective, the site falls within Egoli Granite Grassland and CBA area. However, the site visit confirmed that the site is not representative of the vegetation due to a variety of historic disturbance such as developments, infrastructure and occurrence of numerous alien invasive species.*
- *The study area has been severely altered both historically and currently. Factors such as human presence, presence of alien invasive species and the compacting of soil. It is, however, recommended that all Hypoxis hemerocallidea on the study area should be removed from the study area and relocated "*

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

If yes complete specialist details

Name of the specialist:	De Wet Botha	A.E. Van Wyk
Qualification(s) of the specialist:	M.A. Env. Man.)(PHED) Member of the International Association for Impact Assessors (IAIAsa)(1653) Member of the Gauteng Wetland Forum Member of the South African Wetland Society SACNASP Registered Scientist – Pr.Sci.Nat. (119979) EAPASA – Registered EAP (1209)	BSc. (Biological Sciences)
Postal address:	PO Box 1401 Wilgeheuwel Johannesburg	
Postal code:	1736	
Telephone:	087 985 0951	Cell: 083 232 3042
E-mail:	dewet@prismems.co.za	Fax: 086 601 4800

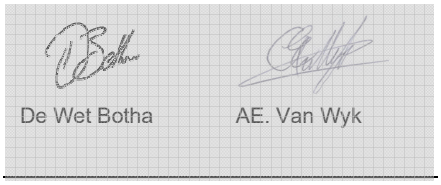
Are any further specialist studies recommended by the specialist?	YES	NO ✓

If YES, specify: Not applicable.

If YES, is such a report(s) attached? Not applicable

If YES list the specialist reports attached below

Not Applicable.

Signature of specialist: 

Date: October 2020

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

8. Land Use Character of Surrounding Area

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

1. Vacant land	2. River, stream, wetland	3. Nature conservation area	4. Public open space	5. Koppie or ridge
6. Dam or reservoir	7. Agriculture	8. Low density residential	9. Medium to high density residential	10. Informal residential
11. Old age home	12. Retail	13. Offices	14. Commercial & warehousing	15. Light industrial
16. Heavy industrial[AN]	17. Hospitality facility	18. Church	19. Education facilities	20. Sport facilities
21. Golf course/polo fields	22. Airport[N]	23. Train station or shunting yard[N]	24. Railway line[N]	25. Major road (4 lanes or more)[N]
26. Sewage treatment plant[A]	27. Landfill or waste treatment site[A]	28. Historical building	29. Graveyard	30. Archeological site
31. Open cast mine	32. Underground mine	33.Spoil heap or slimes dam[A]	34. Small Holdings	
Other land uses (describe):	35. Road (R552) 36. Chicken Battery 37. Road (R512) 38. Shumba Valley Lodge			

NOTE: Each block represents an area of 250m X 250m, if your proposed development is larger than this please use the appropriate number and orientation of hashed blocks

NORTH

1, 8	**1, 37**	**1, 38**	**1**	**1**
1, 8	**1, 8, 37**	**1, 10**	**1**	**1, 19**
1, 2, 9 34	**1, 9, 37**		**1**	**1**
1, 2	**1, 9, 37**	**1, 14, 37**	**1**	**1**
1, 2, 35	**1, 14, 35**	**1, 35, 37**	**1, 35, 36**	**1, 34, 35, 36**

WEST EAST = Site

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

The following environmental specialist studies have been undertaken:

- Baseline Ecological Habitat Assessment; and
- Phase 1 Heritage Impact Assessment.

In addition, the following technical studies have been undertaken:

- Traffic Impact Assessment;
- Water and Sanitation Services Study; and
- Stormwater Management Plan.

In addition, A Baseline Geohydrological Study has also been undertaken as part of the Water Use Licence Application.

These studies are all included in **Appendix G.**

9. Socio-Economic Context

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

The proposed development occurs within the City of Johannesburg in Gauteng. A summary of the socio-economic environment for the City of Johannesburg (obtain from StatsSA) is included below.

The City of Johannesburg Local Municipality is situated in Gauteng province and covers an area of 1 645km^2. The City is the provincial capital of Gauteng, the wealthiest province in South Africa. According to Census 2011 information, the area has a total population of 4,4 million of which 76,4% are black African, 12,3% are white people, 5,6% are coloured people, and 4,9% are Indian/Asian.

Figure 10 below shows that the majority of people in the area have either some primary school education (33.6%) or secondary education (30%). Only 20.8% of the population has completed secondary school and an even smaller percentage (5.3%) have higher education (Stats SA, 2017).

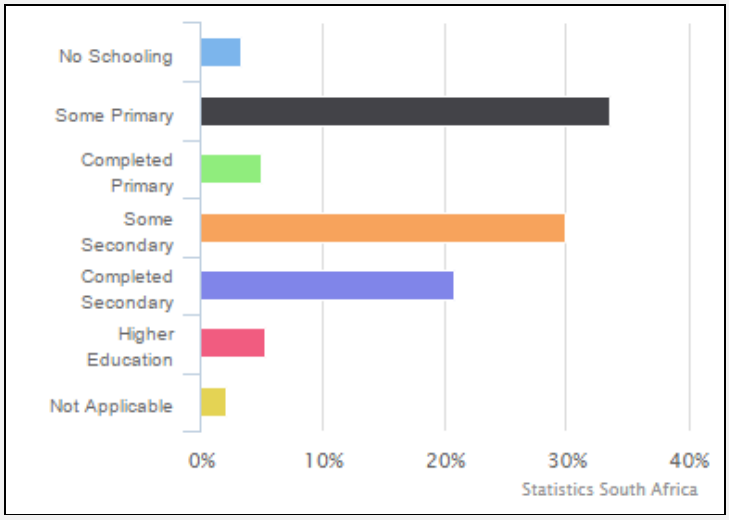


Figure 10: Highest Education Level (All Ages) (Stats SA, 2017).

Approximately 72.7% of the population are at a working age (15-64). Of those, approximately 52.6% (1 696 520 people) are employed (Figure 11). The unemployment rate for the area is 25%. Of the 1 228 666 economically active youth (15–35 years) in the area, 31,5% are unemployed. In terms of living conditions, there is 1 434 856 households in the municipality with an average household size of 2,8 persons per household. 64,7% of households have access to piped water, 26,9% have water in their yard and only 1,4% of households do not have access piped water (Stats SA, 2017).

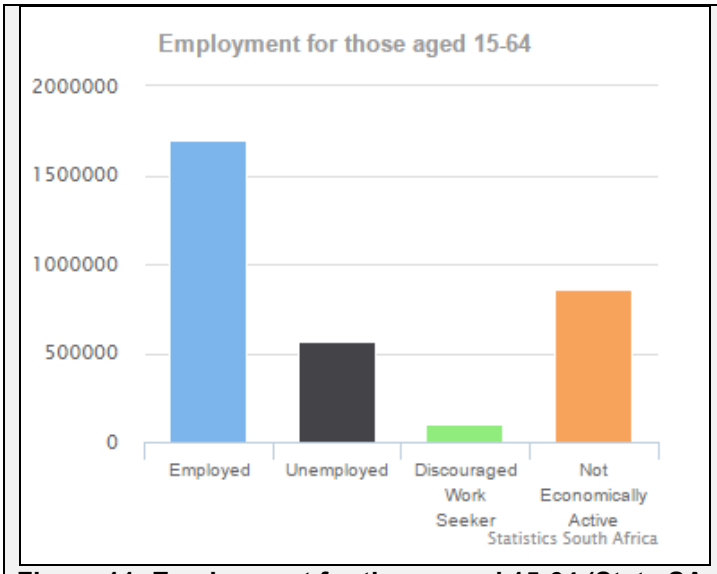


Figure 11: Employment for those aged 15-64 (Stats SA, 2017)

In addition to the above, the following planning documents and frameworks apply to the area and are discussed in more detail in the following subsections:

Regional Spatial Development Framework (RSDF), 2011: Administrative Region A:

The RSDF represents the prevailing spatial planning policy within the City of Johannesburg and is adopted in terms of the Municipal Systems Act, 2000 (Act No. 32 of 2000) as an integral component of the City's Integrated Development Plan (IDP).

Region A is one of seven administrative regions that make up the City of Johannesburg. It is located on the northern periphery of the City of Johannesburg Metropolitan area, bordered by Region C and Region E to the south, Mogale City Local Municipality to the west, City of Tshwane Municipality to the north and City of Ekurhuleni Municipality to the east. The Lanseria area makes up one of the three industrial nodes in the Region.

The proposed study site is situated in Sub-Area 1 of Region A according to the Regional Spatial Development Framework. The key-structuring element within the sub area is the Lanseria speciality node, which is surrounded by agricultural holdings and farm portions. One of the main development objectives in the area is to promote the development of a demarcated specialist node which includes the support of suitable commercial and light industrial land uses. **The proposed development is therefore in line with this development objective.**

Gauteng Spatial Development Framework 2030 (GSDF)

The GSDF is part of the executive authority of the provincial government and an integral component of the governance structure of the province as a whole, and as such must assist in ensuring the realization of national, regional, provincial and local development objectives. Some of the spatial imperatives and opportunities that will support the area include:

- Develop the larger Lanseria node, so that it contributes to spatial transformation.

The proposed development is in line with the concept of developing the Lanseria node.

Socio-Economic Motivation

The proposed development will further the objectives of both the GSDF and Region A Regional Spatial Development Plan by creating commercial land uses in the Lanseria node. In addition, market research by Toyota and Hino have indicated that there is a need for a dealership of this type in the area. From a socio-economic perspective, the proposed development will benefit the area in the following way:

- General improvement of the image of the area;
- Improvement in services in the area including, water, sanitation and road upgrades; and
- Increase in local economy.

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?	YES	NO ✓

If YES, explain:

Not applicable.

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

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

A Heritage Impact Assessment was undertaken HCAC Heritage Consultants. The assessment included both a desktop review as well as field survey. The study found the following:

- *One isolated Early Stone Age stone tool was found during the survey; the artefact is out of context, broken by ploughing activities and is of no significance apart from noting its presence in this report.*
- *Based on the SAHRIS Paleontological Sensitivity Map, the area is of insignificant paleontological sensitivity and no further mitigation prior to construction is recommended in terms of Section 35 for the proposed development to proceed.*
- *In terms of the built environment, one structure (Feature 1) was recorded that could be older than 60 years and would then be protected by the NHRA. If the structure is older than 60 years and impacted on a destruction permit will be required from the PHRAG.*
- *In terms of Section 36 of the Act no burial sites were recorded. However, if any graves are identified in future they should ideally be preserved in-situ or alternatively relocated according to existing legislation.*
- *No public monuments are located within or close to the study area. The study area is surrounded by industrial, residential and road infrastructure developments and will not impact negatively on significant cultural landscapes or viewscapes.*

Due to the lack of significant heritage resources in the study area the impact of the proposed project on heritage resources is considered low and impacts can be mitigated to an acceptable level. It is therefore recommended that the proposed project can commence on the condition that the following recommendations are implemented as part of the EMPr and based on approval from SAHRA:

- *Implementation of a chance find procedure;*
- *If impacted on the age of Feature 1 should be confirmed and if greater than 60 years of age a destruction permit will be required from the PHRAG*

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

If yes, please attached the comments from SAHRA in the appropriate Appendix

Prior to construction, the age of the structures will be determined. Should any building be older than 60 years old, a permit from SAHRA will be obtained. This requirement has been included in the EMPr.

A copy of the Basic Assessment Report had been uploaded to SAHRIS in order to afford SAHRA an opportunity to comment.

SECTION C: PUBLIC PARTICIPATION (SECTION 41)

The Environmental Assessment Practitioner must conduct public participation process in accordance with the requirement of the EIA Regulations, 2014.

Please note that Public participation has been undertaken in line with the requirements of the EIA Regulations, 2014.

Initial Notification

Initial Public Participation was undertaken in terms of the Environmental Impact Assessment (EIA) Regulations, 2014. It should be noted that this public participation process was started in 2019 under the reference number: GAUT 002/18-19/E2365. As part of this, the following has been undertaken:

- A potential I&AP database was compiled and included Adjacent Landowners, Ward Councillors, Authorities and Potential I&APs.
- A Background Information Document (BID) was compiled and included information on the proposed development, services and roads and included a map showing all these components.
- An advert was placed in the Star Newspaper on 2 April 2019 to notify potential Interested and Affected Parties (I&APs) of the project and to request that they register they register their interest in the project.
- Site notices and notification of adjacent landowners and other I&APs also took place via email and hand delivery and the BID was provided as part of this.
- All registered I&APs were added to the I&AP database and all comments received added to the Comments and Responses Report.

However, during this initial notification period, concerns were raised regarding services in the area by Johannesburg Water. This has since been resolved by the engineering team but took considerable time to do so. As such, a new application will be registered [3](GAUT 002/20-21/E2591) and initial public participation was redone as follows:

- An updated I&AP database was compiled and includes all registered I&APs from the previous notification period as well as the necessary commenting and competent authorities, ward councillor and adjacent landowners. Adjacent landowners were also contacted telephonically to confirm their details and to determine their preferred means of communication.
- An advert was placed in the Star Newspaper on 12 August 2020 to notify potential I&APs of the project and to request that they register they register their interest in the project.
- Site notices and notification of adjacent landowners and other I&APs also took place via email and the updated BID was provided as part of this.
- There is an informal settlement adjacent to the development: In order to ensure the members of this settlement were adequately informed, the community representative was contacted, and the proposed development was explained to him. A BID was then provided via whatsapp so that it could be circulated to community members. A site notice was also placed at the road entrance to the settlement.

In line with the new Permitting Regulations (GN 650 of 5 June 2020), a Public Participation Plan was compiled and submitted to GDARD on 31 July 2020. The plan was subsequently approved on the same day (refer to Appendix I4). Subsequently, the Country has moved to Level 1 and thus the Directions are no longer applicable. However, all public participation was undertaken in terms of the required safety measures and the approved Public Participation Plan.

In addition to the above, notification of the review of the Basic Assessment Report and WULA Technical Report has been undertaken as follows:

- Emails and/or Whatsapp messages were sent to all the registered I&APs to notify them of the 30-day review period on 14 October 2020.
- Hard copies and/or electronic copies (USB Flashdrive) of the BAR were submitted to competent and commenting authorities including the Gauteng Department of Agriculture and Rural Development (GDARD), the City of Johannesburg (CoJ), and Department of Human Settlements, Water and Sanitation (DHSWS) on 14 October 2020.
- A copy has also been uploaded to the South African Heritage Resources Information System (SAHRIS) to facilitate the review and comment by the South African Heritage Resources Agency (SAHRA) and the Provincial Heritage Resources Agency of Gauteng (PHRA-G) on 14

[3] GDARD has previously indicated that they would prefer a new reference number to be used for projects that were initially registered on the EIA Online Portal in 2018/2019 but then only submitted in 2020.

October 2020.

- A 30-day public review has been provided between **14 October 2020 and 14 November 2020**.

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):

During the 2019 initial registration period, comments from the City of Johannesburg (CoJ) were received. These comments included a request to register CoJ as an I&AP as well as noted that the site fell within a CBA area. They further requested a copy of the Basic Assessment Report be submitted to CoJ for review and comment when available.

During the more recent 2020 initial registration, they once again registered their interest and noted that the BAR must include proposed impacts and mitigation measures. They also requested proof of the water use licence.

If "NO" briefly explain why no comments have been received or why the report was not submitted if that is the case.

No comments on the Basic Assessment Report have yet been received however, as noted above initial comments were received from CoJ during the initial registration period. These have been included in the Comments and Responses Report.

Further, a copy of this Basic Assessment Report has been submitted to the City of Johannesburg (CoJ) for comment as part of the public participation process. All comments received from the City will be included in the final submission of the Basic Assessment Report.

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):

Initial Notification

As mentioned above, a 30-day registration period was provided to allow I&APs an opportunity to register their interest in the project in 2019. A number of requests for registration/comments were made by the following:

- S Du Plooy (Lead 2 Business) – *Request registration*
- N Mashazi (Eskom) – *Process to be followed for obtaining comments*
- D Hulley (Johannesburg Water) – *Concern regarding availability of sewer services*
- S Van Reenan (Stonehaven Estate) – *Request registration, concerns regarding traffic and noise*
- K Kale (City of Johannesburg) – *Request Registration and impact to CBA*

During the additional registration period provided in August 2020, the following comments were received:

- S Van Reenan (Stonehaven Estate) – *Request registration*
- K Kale (City of Johannesburg) – *Request Registration, Water Use Licence, Impact and Mitigation measures.*
- S Kgetsi (Johannesburg Water) – *Requested information be provided to City of Johannesburg Environmental*
- F Poggenpoel – *Impact to the area*.

All requests for registration/comments are provided in **Appendix E4**. Further, all comments received during both the 2019 and 2020 initial registration periods have been added to the Comments and Responses Report in **Appendix E6**.

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

Not Applicable.

4. 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

Please seen **Appendix E1** for proof of the site notices that were placed during the notification and registration period.

Appendix 2 – Written notices issued as required in terms of the regulations

Please seen **Appendix E2** for proof of the emails and hand delivery of BIDs which took place as part of the notification and registration period.

Appendix 3 – Proof of newspaper advertisements

Please seen **Appendix E3** for proof of newspaper notice which was placed in the Star on newspaper on 2 April 2019 and 12 August 2020.

Appendix 4 –Communications to and from interested and affected parties

Comments received during the initial registration periods are included in **Appendix E4**.

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

Not applicable. public meeting is currently scheduled. Should one become necessary, the minutes will be attached to the final submission of the Basic Assessment Report.

Appendix 6 - Comments and Responses Report

Please seen **Appendix E6** for a copy of the Comments and Responses Report.

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

Not yet applicable. The Basic Assessment Report is currently available for public review. Should any

comments be received, they will be included in the final submission of the Basic Assessment Report to GDARD.

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

Not applicable.

Appendix 9 – Copy of the register of I&Aps

Please seen **Appendix E9** for a copy of the I&AP register.

SECTION D: RESOURCE USE AND PROCESS DETAILS

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

Instructions for completion of Section D for alternatives

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

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

Section D Alternative No.	**0**	(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?	Approximately 100m^3	

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

The building rubble and solid construction waste (such as sand, gravel, concrete and waste material) that cannot be used for filling and rehabilitation and other litter and waste generated during the construction phase will be removed from site and be disposed of safely and responsibly at a licensed landfill site.

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

Waste will be removed by a Certified Waste Management Company and be disposed of at a registered landfill site

Will the activity produce solid waste during its operational phase?	YES ✓	NO
If yes, what estimated quantity will be produced per month?	200 m^3	

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

City of Johannesburg Municipality waste collectors under contract by the municipality will collect the domestic waste on a weekly basis. Recycling will be encouraged whereby paper and other recyclable materials will be stored separately and collected on a weekly basis.

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)?

Not Applicable.

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

All materials that can be recycled will be separated from the general waste and disposed of at recycling facilities. Spoil material which could be used for landscaping purposes will be extracted at kept neatly intact and in a controlled manner as to prevent erosion by the wind and water

Liquid effluent (other than domestic sewage)

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?	YES	NO ✓
If yes, what estimated quantity will be produced per month?	Not Applicable	
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?	Not Applicable	

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

Not Applicable.

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:	Not Applicable.
Contact person:	
Postal address:	
Postal code:	
Telephone:	
E-mail:	

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

The Car Wash facility and Truck Wash facility are proposed to have Greywater Recycle Plants. A 10 kl Package Greywater Recycle Plant is proposed at the Car Wash facility ('Calcamite Grey Water 20' or similar approved) and a 5 kl Package Greywater Recycle Plant is proposed at the Truck Wash facility ('Calcamite Grey Water 10' or similar approved). Grey Water is drained via grid inlets at the wash bays and returned into the recycling plant (intercepted by sand oil grease traps).

Liquid effluent (domestic sewage)

Will the activity produce domestic effluent that will be disposed of in a municipal sewage system?*	YES	NOT DIRECTLY* ✓
If yes, what estimated quantity will be produced per month?	887.48 m^3 (40.34 kl per day x 22 days)	
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

Please note that the technical team has obtained comments on the water and services as part of this, Johannesburg Water has noted the owner must be responsible for the construction and operation of the sanitation system as part of the conditions for approval.

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 off.

*Please note that whilst domestic effluent produced will be stored on site in the appropriate conservancy tank, it will be collected by an appropriate third-party collector and disposed of at a licenced facility. As such, domestic effluent will not be treated or disposed of on site nor will it directly enter a municipal sewage system.

A Water and Sanitation Services Report has been compiled and is included in **Appendix G. The study determined the sewer flow from the development would be approximately 40.34 kl per day (therefore.

887.48 m^3 per month).

The sewer flow shall be reticulated to a conservancy tank which is designed to have a seven (7) day storage capacity (based on average flow) before requiring emptying. Hence, storage volume required = 40.34 kl/d * 7days = 282.38 kl (ie. 282.38 m^3). Hence 7 no. 44.5 kl Prefabricated plastic conservancy tanks ('Calcamite' or similar approved) are proposed with a combined storage volume of 311.5 kl.

As per the requirements of Johannesburg Water, should municipal services become available at a later stage, the development will tie into these.

Emissions into the atmosphere

Will the activity release emissions into the atmosphere?	YES	NO ✓
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:

Please note that dust will be generated during the construction phase and will be regulated under the National Dust Control Regulations, 2013 (GN R 827). The dustfall rate (D) may not exceed 600 $mg/m^2/day$. Dust suppression measures will be stipulated in the EMPr.

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
✓		✓			

Please note as required by the Johannesburg Water, a combination of water sources is required. This includes both municipal water as well as abstraction from the existing borehole on Portion 168. Borehole water will therefore be used to supplement the municipal water.

A Water and Sanitation Services study has been undertaken and included in **Appendix G**. The Study notes that water requirements will be 81.71 kl/day. However, in order to reduce water consumption, Grey water recycling plants are planned for the car wash and truck wash areas. After the initial priming of the system, the total average water demand would reduce to **67,27 kl/d**. This amounts to approximately 1479.94 KL per month.

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:

Maximum 1182.6 KL per month

A Baseline Geohydrological Assessment has been undertaken and includes the following recommendations:

- The recommended abstraction rate for the borehole on site is 0.45 L/s (1182.6 KL per month), based on a pump schedule of 12 hours. However, the current abstraction rate is less than 0.02 L/s (or 52 560 L/month) and the drawdown extent (of less than 0.1 m) will be limited to 80 m.

The maximum volume is therefore included above however it should be noted that actual volumes are likely to be closer to 52 560 L/month (52.6 Kl per month).

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

Please see the Baseline Geohydrological Assessment included in **Appendix G**. This includes the borehole test record and the results of the stepped discharge and recovery. The study found that potential groundwater related impacts are expected to be insignificant w.r.t the shallow weathered and fractured aquifers of the aquifer, unlikely to impact third party groundwater users and unlikely to impact groundwater contribution to baseflow.

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 Licence (WUL) in terms of Section 21 (a) and (g) of the National Water Act, 1998 is required. The application is currently in progress.

	In progress	
If yes, have you applied for the water use permit(s)?	YES	NO ✓
If yes, have you received approval(s)? (attached in appropriate appendix)		

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?

Not applicable.

4. Energy Efficiency

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

The Dealership design has complied with the NHBRC standards for energy efficiency (SANS 10400).

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

The buildings will comply with NHBRC standards (SANS 10400) for energy efficiency. As part of this, the following measures will be put in place: • Energy saving measures for water heating (for example heat pumps or solar); • LED lamps; • General control switching (to minimise use of lights when not needed); and • Energy saving appliances.

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.

During the initial registration period in 2019, the following concerns were noted:

- Availability of sewer services,
- Noise impacts
- Sewer and waste;
- Traffic; and
- Impact to the CBA area.

Re-notification was undertaken in 2020 and the following concern was noted:

- Impacts to the area

COJ also requested information on the WULA as well as impacts and mitigation measures be included.

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 that must be attached to this report):

All comments received to date and responses thereof are included in the Comments and Responses Report in Appendix E6.

In summary, the following has been noted:

- Availability of sewer services –
    - Extensive investigations have been undertaken by the technical team as well as consultations with Johannesburg Water. A formal letter from Johannesburg Water has been received in support of the development. A number of conditions regarding water and sewer for inclusion in the Conditions of Establishment were also provided. This letter is included as part of the Water and Sanitation Services Report in Appendix G.
    - As no sewer services occur in the area at this time, sewer will be dealt with through storage in Conservancy tanks which will be emptied weekly and then disposed of at a licenced and appropriate facility. Connection to the municipal system will be undertaken once services are available in the area.
    - Municipal water is available and will be supplemented with the use of a borehole.
- Noise impacts –
    - Noise impacts have been assessed and numerous mitigation measures incorporated into the EMPr. With the implementation of these measures, it is believed that the significance of this impacts will be low.
- Sewer and waste –
    - Extensive investigations have been undertaken to ensure that sewer and waste will be dealt with appropriately. Mitigation measures have been included in the EMPr.
- Traffic
    - A Traffic Impact Assessment has been undertaken and includes an upgrade to Intersection 1 which is required to ensure that no impacts to the current level of service. Information on the required access is also included in the report.
- Impact to the CBA area
    - A Baseline Ecological Habitat Assessment has been undertaken and noted that the site is no longer representative of a CBA area.
    - The specialist also provided a number of mitigation measures which have been included in the EMPr.
    - Overall, the specialist indicated that the impacts could be suitably mitigated and the development can proceed.
- Impact to the Area:
    - A detailed Impact Assessment has been undertaken and includes the social impacts related to the change in land use. In summary, during construction, the main social impacts will be visual impacts, safety and security, traffic disruptions, loss and loss of sense of place. All these impacts can be successfully mitigated to a low significance. A positive impact related to the change of land use is expected as currently the site is degraded. Further, the development of the site will further the objectives of the GSDF and Regional SDP. During operation, there will be a positive impact related to safety and security as the development of the site is expected to improve safety in the area. All other impacts can be mitigated to a low significance.

- Water Use Licence Application
    - A WULA for Section 21 (a) and (g) uses is in progress and public participation is integrated with the Basic Assessment Process. The application has been registered on the EWULAAS System.
- Impacts and Mitigation Measures
    - A detailed impact assessment has been undertaken and is included in **Appendix I1**. Further a EMPr is provided in **Appendix H**. It includes a number of applicable mitigation measures identified impacts are suitably managed.

2. Impacts that may result from the Construction and Operational Phase

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

Impacts were identified in a number of ways including the following:

- Impacts associated with triggered activities contained in Listing Notice 1 and Listing Notice 3 of the EIA Regulations, 2014 (as amended) for which authorisation has been applied for;
- Impacts identified by specialists;
- An assessment of the project activities and components; and
- Issues highlighted by I&APs (both the general public and authorities).

The significance of the identified impacts was determined using the approach outlined below which is line with the requirements of the EIA Regulations, 2014. Each impact was assessed for both the Proposal as well as Alternative 1.

The **significance** of an impact is defined as the combination of the **consequence** of the impact occurring and the **probability** that the impact will occur. The nature and type of impact may be direct or indirect and may also be positive or negative, refer to **Table 3**: below for the specific definitions.

Table 3: Nature and type of impact.

	Nature and Type of Impact:		
IMPACT	**Direct**	Impacts that are caused directly by the activity and generally occur at the same time and place as the activity	✓/✗
	Indirect	Indirect or induced changes that may occur as a result of the activity. These include all impacts that do not manifest immediately when the activity is undertaken or which occur at a different place as a result of the activity	✓/✗
	Cumulative	Those impacts associated with the activity which add to, or interact synergistically with existing impacts of past or existing activities, and include direct or indirect impacts which accumulate over time and space	✓/✗
	Positive	Impacts affect the environment in such a way that natural, cultural and / or social functions and processes will benefit significantly, and includes neutral impacts (those that are not considered to be negative	✓
	Negative	Impacts affect the environment in such a way that natural, cultural and/or social functions and processes will be comprised	✗

Table 4: presents the defined criteria used to determine the **consequence** of the impact occurring which incorporates the extent, duration and intensity (severity) of the impact.

Table 4: Consequence of the Impact occurring.

CONSEQUENCE		
	Extent of Impact:	
	Site	Impact is limited to the site and immediate surroundings, within the study site boundary or property (immobile impacts)
	Neighbouring	Impact extends across the site boundary to adjacent properties (mobile impacts)
	Local	Impact occurs within a 5km radius of the site
	Regional	Impact occurs within a provincial boundary
	National	Impact occurs across one or more provincial boundaries
	Duration of Impact:	
	Incidental	The impact will cease almost immediately (within weeks) if the activity is stopped, or may occur during isolated or sporadic incidences
	Short-term	The impact is limited to the construction phase, or the impact will cease within 1 - 2 years if the activity is stopped
	Medium-term	The impact will cease within 5 years if the activity is stopped
	Long-term	The impact will cease after the operational life of the activity, either by natural processes or by human intervention
	Permanent	Where mitigation either by natural process or by human intervention will not occur in such a way or in such a time span that the impact can be considered transient
	Intensity or Severity of Impact:	
	Low	Impacts affect the environment in such a way that natural, cultural and/or social functions and processes are not affected
	Low-Medium	Impacts affect the environment in such a way that natural, cultural and/or social functions and processes are modified insignificantly
	Medium	Impacts affect the environment in such a way that natural, cultural and/or social functions and processes are altered
	Medium-High	Impacts affect the environment in such a way that natural, cultural and / or social functions and processes are severely altered
	High	Impacts affect the environment in such a way that natural, cultural and / or social functions and processes will permanently cease

The probability of the impact occurring is the likelihood of the impacts actually occurring and is determined based on the classification provided in **Table 5**.

Table 5: Probability and confidence of impact prediction

PROBABILITY		
	Probability of Potential Impact Occurrence:	
	Improbable	The possibility of the impact materialising is very low either because of design or historic experience
	Possible	The possibility of the impact materialising is low either because of design or historic experience
	Likely	There is a possibility that the impact will occur
	Highly Likely	There is a distinct possibility that the impact will occur
	Definite	The impact will occur regardless of any prevention measures

The **significance** of the impact is determined by considering the consequence and probability without taking into account any mitigation or management measures and is then ranked according to the ratings listed in **Table 6:.** The level of confidence associated with the impact prediction is also considered as

low, medium or high (**Table 7:**).

Table 6: Significance rating of the impact.

SIGNIFICANCE	Significance Ratings:	
	Low	Neither environmental nor social and cultural receptors will be adversely affected by the impact. Management measures are usually not provided for low impacts
	Low-Medium	Management measures are usually encouraged to ensure that the impacts remain of Low-Medium significance. Management measures may be proposed to ensure that the significance ranking remains low-medium
	Medium	Natural, cultural and/or social functions and processes are altered by the activities, and management measures must be provided to reduce the significance rating
	Medium-High	Natural, cultural and/or social functions and processes are altered significantly by the activities, although management measures may still be feasible
	High	Natural, cultural, and/or social functions and processes are adversely affected by the activities. The precautionary approach will be adopted for all high significant impacts and all possible measures must be taken to reduce the impact

Table 7: Level of confidence of the impact prediction

CONFIDENCE	Level of Confidence in the Impact Prediction:	
	Low	Less than 40% sure of impact prediction due to gaps in specialist knowledge and/or availability of information
	Medium	Between 40 and 70% sure of impact prediction due to limited specialist knowledge and/or availability of information
	High	Greater than 70% sure of impact prediction due to outcome of specialist knowledge and/or availability of information

Once significance rating has been determined for each impact, management and mitigation measures must be determined for all impacts that have a significance ranking of Medium and higher in order to attempt to reduce the level of significance that the impact may reflect.

The EIA Regulations, 2014 specifically require a description is provided of the degree to which these impacts:

- can be reversed;
- may cause irreplaceable loss of resources; and
- can be avoided, managed or mitigated.

Based on the proposed mitigation measures the EAP will determined a mitigation efficiency (**Table 8**:) whereby the initial significance is re-evaluated and ranked again to affect a significance that incorporates the mitigation based on its effectiveness. The overall significance is then re-ranked and a final significance rating is determined.

Table 8: Mitigation efficiency

MITIGATION EFFICIENCY	Mitigation Efficiency	
	None	Not applicable
	Very Low	Where the significance rating stays the same, but where mitigation will reduce the intensity of the impact. Positive impacts will remain the same
	Low	Where the significance rating reduces by one level, after mitigation
	Medium	Where the significance rating reduces by two levels, after mitigation
	High	Where the significance rating reduces by three levels, after mitigation
	Very High	Where the significance rating reduces by more than three levels, after mitigation

The reversibility is directly proportional the "Loss of Resource" where no loss of resource is experienced, the impact is completely reversible; where a substantial "Loss of resource" is experienced there is a medium degree of reversibility; and an irreversible impact relates to a complete loss of resources, i.e. irreplaceable (**Table 9:**).

Table 9: Degree of reversibility and loss of resources

DEGREE REVERSABILITY & LOSS OF RESOURCES	**Loss of Resources:**	
	No Loss	No loss of social, cultural and/or ecological resource(s) are experienced. Positive impacts will not experience resource loss
	Partial	The activity results in an insignificant or partial loss of social, cultural and/or ecological resource(s)
	Substantial	The activity results in a significant loss of social, cultural and/or ecological resource(s)
	Irreplaceable	The activity results in the complete and irreplaceable social, cultural and/or ecological loss of resource(s)
	Reversibility:	
	Irreversible	Impacts on natural, cultural and/or social functions and processes are irreversible to the pre-impacted state in such a way that the application of resources will not cause any degree of reversibility
	Medium Degree	Impacts on natural, cultural and/or social functions and processes are partially reversible to the pre-impacted state if less than 50% resources are applied
	High Degree	Impacts on natural, cultural and/or social functions and processes are partially reversible to the pre-impacted state if more than 50% resources are applied
	Reversible	Impacts on natural, cultural and/or social functions and processes are fully reversible to the pre-impacted state if adequate resources are applied

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

Please note that the impact assessment provided below for construction and operational phases separately, and is a summary only and that the full impact assessment is contained in **Appendix I.**

The full impact assessment provides an overview of both the probability of the impact occurring as well as the mitigation efficiency and as such gives an indication of the risk of the impact occurring as well as the risk that the mitigation will not be implemented/or be effective. Impacts associated with the proposal, alternative and no-go alternative are included in one table in order to allow for easy comparison and assessment.

Table 10: Summary Impact Assessment – Construction Phase

	IMPACTS					RANKING WITHOUT MITIGATION	IMPLEMENTATION OF MANAGEMENT MEASURES	RANKING WITH MITIGATION	DEGREE REVERSABILITY & LOSS OF RESOURCE (AFTER MITIGATION)	
	Nature	Description	Alternative	Cumulative	Type	Significance (A + B + C) X P	Description and/or Mitigation and Management Measures (if applicable)	Significance	Loss of Resources	Reversibility
CONSTRUCTION PHASE										
Atmospheric Emissions	Negative	Dust emissions	Proposal	Yes	Direct	*Low*	• A speed limit of 20km/h must be maintained on all dirt roads. • Dust suppression by means of either water or biodegradable chemical agent is required.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Emissions from vehicles and equipment (CO2, NOx, SOx, VOC's etc.)	Proposal	Yes	Direct	*Low*	• In terms of transportation of workers and materials, collective transportation arrangements should be made to reduce individual car journeys where possible. • All vehicles used during the project should be properly maintained and in good working order. • All vehicles and other machinery should comply with road worthy requirements and comply with legislation in terms of allowable emissions. • Preference should be given to local labour so to reduce travel requirements	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Noise	Proposal	No	Direct	*Low*	• Equipment and/or machinery which will be used must comply with the manufacturer's specifications on acceptable noise levels. • Construction activities should be limited to daytime only.	*Low*	*No Loss*	*Reversible*
			Alternative 1	No	Direct	*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
Surface and Ground Water	Negative	Sewage	Proposal	No	Direct	*Low*	• The proposed development is not in close proximity to any watercourses or wetlands as such minimal impacts apply. Further, as a precaution, the following measures should be implemented: • Chemical toilets must be supplied and maintained during the construction phase • Ablution facilities (chemical toilets) are to be provided by the Contractor, at a ratio of 1:10. • Ablution facilities (chemical toilets) must be erected within 100m from all workplaces but within the development footprint. • Toilets are to be secured to the ground, and must have a closing mechanism. • Toilet paper must be provided at these facilities and must be serviced once per week. • Certified contractors to maintain and remove chemical toilets regularly. • The contractor must ensure that spillage does not occur when toilets are cleaned/serviced and contents must be properly stored and disposed of. • Discharge of waste into the environment and/or burial of waste are strictly prohibited. • Sanitary arrangements must be to the satisfaction of the PM, ECO, the local authorities and the applicable legal requirements.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Silt	Proposal	No	Indirect	*Low*	• The proposed development is not in close proximity to any watercourses or wetlands as such minimal impacts apply. Further, as a precaution, the following measures should be implemented: • Instability and erosion of steep slopes must be stabilised immediately. Re-vegetation in consultation with landscape architect and ECO should be done if and where required. • To reduce the loss of material by erosion, disturbance must be kept to a minimum. • Where possible, natural vegetation should be retained to reduce the risk of erosion.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*

		IMPACTS				RANKING WITHOUT MITIGATION	IMPLEMENTATION OF MANAGEMENT MEASURES	RANKING WITH MITIGATION	DEGREE REVERSABILITY & LOSS OF RESOURCE (AFTER MITIGATION)	
	Nature	Description	Alternative	Cumulative	Type	Significance (A + B + C) X P	Description and/or Mitigation and Management Measures (if applicable)	Significance	Loss of Resources	Reversibility
CONSTRUCTION PHASE										
							• Erosion control measures must be implemented.			
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Surface water run-off	Proposal	Yes	Indirect	*Low*	• Storm water management during construction will be implemented however, as the proposed development does not cross any watercourses and is not in close proximity to any wetlands, minimal impacts are expected. Further, as a precaution, the following measures should be implemented: • Increased run-off during construction should be managed using berms, temporary cut-off drains, attenuation ponds or other suitable structures, in consultation with the ECO and resident Engineer. • Stormwater management system is to be installed as soon as possible following site establishment, to attenuate stormwater during the construction phase, as well as during the operational phase. • Surface-water run-off and stormwater must be directed away from trenches and areas of excavation. • The Stormwater Management Plan compiled for the development must be implemented including Grey Water Recycling and grease traps.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Contamination of surface and/or ground water from hazardous substances	Proposal	No	Indirect	*Low*	• The proposed development does not cross any watercourses and is not in close proximity to any wetlands as such minimal impacts apply. Further, the following measures must be implemented: • Drip trays must be placed under all vehicles when immobile for longer than 24 hours. Vehicles suspected of leaking must be monitored and conduct a pre start-up inspection checklist. • Drip trays must be checked and replaced for vehicles standing (parked) for prolonged periods. • Drip trays must be of a sufficient size and volume to collect any hydrocarbon leakages from a stationary vehicle. • Spill kits (absorbent material) must be available on site and in all vehicles that transport hydrocarbons for dispensing to other vehicles on the construction site. • Spilled substances must be contained in impermeable containers for removal to a licensed hazardous waste site. • Significant spills should be reported to the Project Manager or Contractors Manager and ECO who should report this to the relevant authority	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Impact on groundwater availability and flow	Proposal	No	Direct	*Low*	During construction, water will be abstracted from the borehole until such time that the municipal connection is put in place. Geohydrological Baseline Assessment found that impacts are likely to be insignificant w.r.t the shallow weathered and fractured aquifers of the Swazian age rocks/ basement aquifer system, unlikely to impact third party groundwater users, should a 12-hour pump schedule be followed, and based on the expected drawdown extent not likely to impact on groundwater contribution to baseflow. In order to ensure this is the case: '• Enforce water saving strategies. • Environmental awareness training. • 12-hour pump schedule to be adhered to. • Existing borehole on site should be monitored for water levels (monthly) and qualities (quarterly). • Recommended abstraction rate for the borehole should not be exceeded (0.45 L/s)	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
Waste Generation	Negative	Domestic waste	Proposal	Yes	Direct	*Low*	• Waste recycling to be put in place. • Solid waste shall only be stored in the designated general waste storage area which must be enclosed and impermeable. •All solid waste shall be disposed of by a certified contractor, off-site, at an approved landfill site. The Contractor shall supply the ECO with a certificate of disposal for auditing purposes.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*

		IMPACTS				RANKING WITHOUT MITIGATION	IMPLEMENTATION OF MANAGEMENT MEASURES	RANKING WITH MITIGATION	DEGREE REVERSABILITY & LOSS OF RESOURCE (AFTER MITIGATION)	
	Nature	Description	Alternative	Cumulative	Type	Significance (A + B + C) X P	Description and/or Mitigation and Management Measures (if applicable)	Significance	Loss of Resources	Reversibility
CONSTRUCTION PHASE										
Soil Alteration			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Construction waste	Proposal	Yes	Direct	*Low*	• Litter (from outside the camp included) and concrete bags etc. must be collected and put into suitable closed bins on a daily basis. • Construction rubble must be disposed of at a registered site • No Construction rubble may be used for infilling.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Hazardous waste	Proposal	Yes	Direct	*Low*	• The classification of waste determines the handling methods and the ultimate disposal of the material. The contractor shall manage hazardous waste that are anticipated to be generated by his operations as follows: Characterise the waste to determine if it is general or hazardous. Obtain and provide an acceptable container with a label. Place hazardous waste material in the container. Inspect the container on a regular basis Haul the full container to the licenced and correct disposal site. Provide documentary evidence of proper disposal of the waste. • Only temporary storage of waste is allowed (once of storage of waste for a period less than 90 days). The volume of material should be limited to less than 80m3 of hazardous waste. Should this be exceeded the Norms and Standards for the Storage of Waste will need to be complied with.	*Low*	*No Loss*	*Reversible*
			Alternative 1	Yes	Direct	*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Loss of topsoil	Proposal	Yes	Direct	*Medium*	• Top soil should be separated and re-used where possible.	*Low-Medium*	*Partial*	*High Degree*
			Alternative 1			*Medium*		*Low-Medium*	*Partial*	*High Degree*
			No-Go Option	Yes	Direct	*Low*	The site is impacted by historic land use and some sections are bare due to informal roads and pathways, whilst others are vegetated by grassland and disturbed grassland habitat. Some loss of topsoil is likely in the existing bare areas. It is likely that there will be a continued loss of topsoil should the development not proceed as the site will remain in its degraded state.	*Low*	*Partial*	*High Degree*
	Negative	Loss of land capability	Proposal	Yes	Direct	*Medium*	• The proposed site does not have a high agricultural potential nor is currently used for agriculture (although historically it was). Further, the site falls within Zone 1 of the GPEMF and the Lanseria Node of the RSDP and is thus not planned for agriculture. No mitigation measures are therefore recommended or required.	*Medium*	*Partial*	*High Degree*
			Alternative 1			*Medium*		*Medium*	*Partial*	*High Degree*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Alteration of topography	Proposal	No	Direct	*Medium*	Some of the Topography within the development footprint will be altered as part of the development. In order to ensure the change in topography does not impact stormwater, the following must be implemented: • Stormwater management measures must be implemented to ensure these designs do not impact on stormwater.	*Low-Medium*	*Partial*	*High Degree*
			Alternative 1			*Medium*		*Low-Medium*	*Partial*	*High Degree*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Soil pollution	Proposal	No	Direct	*Low*	• Drip trays must be placed under all vehicles when immobile for longer than 24 hours. Vehicles suspected of leaking must be monitored and conduct a pre start-up inspection checklist. '• All vehicle/equipment maintenance and washing must be done in the workshop area, equipped with a bund wall and grease trap oil separator. • Workshop area must be monitored for fuel and oil spills. • Drip trays must be checked and replaced for vehicles standing (parked) for prolonged periods. • Drip trays must be of a sufficient size and volume to collect any hydrocarbon leakages from a stationary vehicle. • Spill kits (absorbent material) must be available on site and in all vehicles that transport hydrocarbons for dispensing to other vehicles on the construction site. • Spilled substances must be contained in impermeable containers for removal to a licensed hazardous waste site. • Significant spills should be reported to the Project Manager or Contractors Manager and ECO who should report this to the relevant authority. • Waste must be managed in line with the requirements of the EMPr (see above).	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*

		IMPACTS				RANKING WITHOUT MITIGATION	IMPLEMENTATION OF MANAGEMENT MEASURES	RANKING WITH MITIGATION	DEGREE REVERSABILITY & LOSS OF RESOURCE (AFTER MITIGATION)	
	Nature	Description	Alternative	Cumulative	Type	Significance (A + B + C) X P	Description and/or Mitigation and Management Measures (if applicable)	Significance	Loss of Resources	Reversibility
CONSTRUCTION PHASE										
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
Resource Consumption	Negative	Electricity consumption	Proposal	Yes	Direct	*Low-Medium*	• Enforce electricity saving strategies. • Environmental awareness training.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low-Medium*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Water consumption	Proposal	Yes	Direct	*Low-Medium*	During construction, water will be abstracted from the borehole until such time that the municipal connection is put in place. Geohydrological Baseline Assessment found that impacts are likely to be insignificant w.r.t the shallow weathered and fractured aquifers of the Swazian age rocks/ basement aquifer system, unlikely to impact third party groundwater users, should a 12-hour pump schedule be followed, and based on the expected drawdown extent not likely to impact on groundwater contribution to baseflow. In order to ensure this is the case: '• Enforce water saving strategies. • Environmental awareness training. • 12-hour pump schedule to be adhered to. • Existing borehole on site should be monitored for water levels (monthly) and qualities (quarterly). • Recommended abstraction rate for the borehole should not be exceeded (0.45 L/s)	*Low*	*Partial*	*High Degree*
			Alternative 1			*Low-Medium*		*Low*	*Partial*	*High Degree*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Fuel consumption	Proposal	Yes	Direct	*Low-Medium*	• Record and monitor fuel consumption regularly • Reduce theft of fuel (increase security)	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low-Medium*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Raw materials consumption	Proposal	Yes	Direct	*Low-Medium*	• Promote effective use of raw material.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low-Medium*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
Effects on Biodiversity	Negative	Loss of Habitat due to loss of vegetation - clearing due to digging and laying foundations	Proposal	Yes	Direct	*Medium*	Both layouts will result in a similar impact. The Ecological Specialist noted the following mitigation measure must be implemented: '•It is recommended that all *Hypoxis hemerocallidea* species should be removed prior to construction activities and either relocated to a similar type of environment or implemented within the landscaping plan of the proposed development.	*Low*	*Partial*	*High Degree*
			Alternative 1			*Medium*		*Low*	*Partial*	*High Degree*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required. However, please note that the site is highly disturbed and developed in parts.	*None*	Not Applicable	Not Applicable
	Negative	Loss of Habitat due to loss of vegetation - construction laydown areas	Proposal	Yes	Direct	*Low-Medium*	Both layouts will result in a similar impact. The Ecological Specialist noted the following mitigation measure must be implemented: '•It is recommended that the construction camp should not be in the low-medium sensitivity area. If not possible, Hypoxis species should be removed prior to clearing of vegetation.	*Low*	*Partial*	*#N/A*
			Alternative 1			*Low-Medium*		*Low*	*Partial*	*#N/A*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Loss of Habitat due to loss of vegetation - stochastic events such as fire	Proposal	Yes	Direct	*Low*	Fires shall only be permitted in specially designated areas and under controlled circumstances	*Low*	*No Loss*	*#N/A*
			Alternative 1			*Low*		*Low*	*No Loss*	*#N/A*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Direct mortality of fauna and flora - Staff	Proposal	No	Direct	*Low*	Snaring and hunting of fauna by construction workers on or adjacent to the study area are strictly prohibited	*Low*	*No Loss*	*#N/A*

	IMPACTS					RANKING WITHOUT MITIGATION	IMPLEMENTATION OF MANAGEMENT MEASURES	RANKING WITH MITIGATION	DEGREE REVERSABILITY & LOSS OF RESOURCE (AFTER MITIGATION)	
	Nature	Description	Alternative	Cumulative	Type	Significance (A + B + C) X P	Description and/or Mitigation and Management Measures (if applicable)	Significance	Loss of Resources	Reversibility
CONSTRUCTION PHASE										
		or construction workers poaching and hunting	Alternative 1			*Low*		*Low*	*No Loss*	*#N/A*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Direct mortality of fauna and flora- Intentional killing of fauna	Proposal	No	Direct	*Low*	Killing of fauna on or adjacent to the study area are strictly prohibited. Should any fauna species be found on site, the ECO should be conducted asap to provide recommendation or mitigation measures.	*Low*	*No Loss*	*#N/A*
			Alternative 1			*Low*		*Low*	*No Loss*	*#N/A*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Direct mortality of fauna and flora- Vegetation and ground clearing resulting in loss of sensitive species	Proposal	Yes	Direct	*Medium*	It is recommended that all Hypoxis hemerocallidea species should be removed prior to construction activities and either relocated to a similar type of environment or implemented within the landscaping plan of the proposed development. No known sensitive fauna were identified on site.	*Low*	*No Loss*	*#N/A*
			Alternative 1			*Medium*		*Low*	*No Loss*	*#N/A*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Disruption of ecological life cycles due to the restriction of species movement - Open trenches and other linear barriers	Proposal	Yes	Direct	*Low*	Trenches and other linear barriers should not be kept open for too long, especially not staying open overnight.	*Low*	*No Loss*	*#N/A*
			Alternative 1			*Low*		*Low*	*No Loss*	*#N/A*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Disruption of ecological life cycles due to the restriction of species movement - Infrastructure	Proposal	Yes	Direct	*Medium*	Stormwater, sewer and road infrastructure should be designed in such a way that it will have minimal impact on the environmental features	*Low*	*No Loss*	*#N/A*
			Alternative 1			*Medium*		*Low*	*No Loss*	*#N/A*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Disruption of ecological life cycles due to noise and lighting - Noise during construction	Proposal	No	Direct	*Low*	Construction must be restricted to hours of 07:00 and 17:00. Should construction activities need to continue over a weekend/pubic holiday or is expected to be excessively noisy, all Interested and Affected Parties and the ECO must be notified in advance.	*Low*	*No Loss*	*#N/A*
			Alternative 1			*Low*		*Low*	*No Loss*	*#N/A*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Disruption of ecological life cycles due to noise and lighting - Lighting during construction	Proposal	Yes	Direct	*Low-Medium*	Construction must be restricted to hours of 07:00 and 17:00. Should construction activities need to continue after hours is, all Interested and Affected Parties and the ECO must be notified in advance. Excessive lighting during construction should be avoided.	*Low*	*No Loss*	*#N/A*
			Alternative 1			*Low-Medium*		*Low*	*No Loss*	*#N/A*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Introduction of alien flora affecting native faunal assemblages - Vehicles and machinery	Proposal	Yes	Direct	*Low*	Alien, invasive species found within the construction area should be eradicated as far as possible and disposed of at a registered site.	*Low*	*No Loss*	*#N/A*
			Alternative 1			*Low*		*Low*	*No Loss*	*#N/A*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Introduction of alien	Proposal	Yes	Direct	*Low-Medium*	Soil disturbance should be kept to a minimum during the construction	*Low*	*Partial*	*Medium Degree*

		IMPACTS				RANKING WITHOUT MITIGATION	IMPLEMENTATION OF MANAGEMENT MEASURES	RANKING WITH MITIGATION	DEGREE REVERSABILITY & LOSS OF RESOURCE (AFTER MITIGATION)	
	Nature	Description	Alternative	Cumulative	Type	Significance (A + B + C) X P	Description and/or Mitigation and Management Measures (if applicable)	Significance	Loss of Resources	Reversibility
CONSTRUCTION PHASE										
		flora affecting native faunal assemblages - Soil Disturbance	Alternative 1			*Low-Medium*	phase	*Low*	*Partial*	*Medium Degree*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
Incidents, accidents and potential emergency situations	Negative	Pollution incidents	Proposal	No	Direct	*Low*	• Spill kits to be located in strategic areas for when needed • Regular site and plant inspection must be conducted • Environmental awareness training	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Health and safety	Proposal	No	Direct	*Low*	• 24 hour security and access control. • Health and Safety awareness training. • Contractor to submit a Health and Safety Plan, prepared in accordance with the Health and Safety Specification, for approval prior to the commencement of work. • A Safety Agent should be appointed • A Dedicated Occupational Health and Safety system to be implemented by Contractor's Safety Officer. To be monitored and audited by the Client's Safety Agent, in terms of the Construction Regulations (2003).	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Storage of hydrocarbons	Proposal	No	Direct	*Low*	• Best practice regarding storage of substances • Spill kits to be located in strategic areas for when needed • Environmental awareness training • Firefighting equipment must be accessible on site at all times. • Display of emergency numbers	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Fire	Proposal	No	Direct	*Low*	• Adhere to the appropriate emergency procedures • Firefighting equipment must be accessible on site at all times. • Display of emergency numbers • In addition, designated smoking areas should be provided and there should be zero tolerance to smoking outside these areas. Cooking over open flames is not allowed.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	No	Direct	*Low*	The site is currently unoccupied but historically an informal settlement occurred on site. Should the develop not take place, the potential for illegal settlements once again occurring is high and may result in fires on site and on neighbouring properties.	*Low*	*No Loss*	*Reversible*
Social	Negative	Visual impact	Proposal	Yes	Direct	*Low*	According to the Heritage Impact Assessment, visual impacts to scenic routes and sense of place are considered low due to the extensive developments that already occur in the area. '• Suitable screening to be put in place during construction to minimise visual impacts. • No littering to be allowed. • Good housekeeping practices to be followed	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Safety and security	Proposal	No	Direct	*Low*	• 24 hour access control to the site and 24 hour security. • Workers found to be engaging in activities such as excessive consumption of alcohol, drug use or selling of any such items on site must be disciplined.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	No	Direct	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Traffic disruptions	Proposal	No	Direct	*Low*	• Traffic calming measures and appropriate signage to be implemented. • Speed limits on all existing roads must be adhered to at all times.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Loss of cultural and palaeontological heritage	Proposal	No	Direct	*Low*	A Heritage Impact Assessment was undertaken and found one isolated Early Stone Age stone tool was found during the survey; the artefact is out of context, broken by ploughing activities and has no significance. Based on the SAHRIS Paleontological Sensitivity Map, the area is of insignificant	*Low*	*Partial*	*High Degree*
			Alternative 1			*Low*		*Low*	*Partial*	*High Degree*

		IMPACTS				RANKING WITHOUT MITIGATION	IMPLEMENTATION OF MANAGEMENT MEASURES	RANKING WITH MITIGATION	DEGREE REVERSABILITY & LOSS OF RESOURCE (AFTER MITIGATION)	
	Nature	Description	Alternative	Cumulative	Type	Significance (A + B + C) X P	Description and/or Mitigation and Management Measures (if applicable)	Significance	Loss of Resources	Reversibility
CONSTRUCTION PHASE										
							paleontological sensitivity and no further mitigation prior to construction is recommended in terms of Section 35 for the proposed development to proceed. In terms of the built environment, one structure (Feature 1) was recorded that could be older than 60 years and would then be protected by the NHRA. If the structure is older than 60 years and impacted on a destruction permit will be required from the PHRAG. The specialist therefore recommended that the proposed project can commence on the condition that the following recommendations are implemented as part of the EMPr and based on approval from SAHRA: • Implementation of a chance find procedure; • If impacted on the age of Feature 1 should be confirmed and if greater than 60 years of age a destruction permit will be required from the PHRAG			
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Loss of sense of place	Proposal	No	Direct	*Low*	According to the Heritage Impact Assessment, visual impacts to scenic routes and sense of place are considered low due to the extensive developments that already occur in the area. '• Suitable screening to be put in place during construction to minimise visual impacts. • No littering to be allowed. • Good housekeeping practices to be followed	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Positive	Change of land use	Proposal	Yes	Direct	*+ Medium*	A Townplanning process is currently being undertaken to change the land use associated with the site. The proposed change in land use is in line with the Region A Spatial Development Plan and the Gauteng Spatial Development Framework. The development of the Lanseria node will assist in the furthering of the objectives of the Gauteng Provincial Government and City of Johannesburg and as such will have a positive impact. No mitigation measures other than the townplanning process is required.	*+ Medium*	*No Loss*	*Reversible*
			Alternative 1			*+ Medium*		*+ Medium*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
Economic	**Positive**	Decline/increase in economy	Proposal	Yes	Direct	*+ Medium*	The proposed CAPEX value of the development is R80 000 000.00. This will have numerous multiplier effects in the local community. In order to ensure that this benefits the local community, it is recommended that local labour and suppliers are used where possible.	*+ Medium*	*No Loss*	*Reversible*
			Alternative 1			*+ Medium*		*+ Medium*	*No Loss*	*Reversible*
	Negative		No-Go Option			*Medium*	Should the development not proceed, the benefits to the local community will be long term and negative. Further, the goals of the GSDF and Regional SDP will also not be met. There are no mitigation measures available,	*Medium*	*Partial*	*High Degree*
	Positive	Decline/increase in property value	Proposal	No	Direct	*+ Medium*	The development of the proposed truck dealership will increase the property value of the site overall. Further, it will have a knock on effect and is likely to increase the value of neighbouring properties as well. No mitigation measures are required.	*+ Medium*	*No Loss*	*Reversible*
			Alternative 1			*+ Medium*		*+ Medium*	*No Loss*	*Reversible*
	Negative		No-Go Option			*Medium*	The site is currently degraded and without development, the property value is likely to decrease. This will have knock on effects on the surrounding properties. No mitigation, save for development of the site, is available.	*Medium*	*No Loss*	*Reversible*
	Positive	Employment	Proposal	Yes	Direct	*+ Medium*	The proposed development will result in approximately 80 construction related employment opportunities for the local community. Local labour should be utilised as far as possible.	*+ Medium*	*No Loss*	*Reversible*
			Alternative 1			*+ Medium*		*+ Medium*	*No Loss*	*Reversible*
	Negative		No-Go Option			*Medium*	Should the development not proceed, the benefits to the local community will be long term and negative as potential employment opportunities will be lost. No mitigation measures are available.	*Medium*	*No Loss*	*Reversible*

Table 11: Summary Impact Assessment – Operational Phase

	IMPACTS					RANKING WITHOUT MITIGATION	IMPLEMENTATION OF MANAGEMENT MEASURES	RANKING WITH MITIGATION	DEGREE REVERSABILITY & LOSS OF RESOURCE (AFTER MITIGATION)	
	Nature	Description	Alternative	Cumulative	Type	Significance (A + B + C) X P	Description and/or Mitigation and Management Measures (if applicable)	Significance	Loss of Resources	Reversibility
OPERATIONAL PHASE										
Atmospheric Emissions	Not Applicable	Dust emissions	Proposal	Not Applicable	Not Applicable	*None*	Impacts not applicable to the operational phase. No mitigation required.	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*		*None*	*No Loss*	*Reversible*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Emissions from vehicles and equipment (CO2, NOx, SOx, VOC's etc.)	Proposal	Yes	Direct	*Low-Medium*	• All vehicles and equipment used by the dealerships should be properly maintained and in good working order. • All vehicles and other machinery should comply with road worthy requirements and comply with legislation in terms of allowable emissions. • Energy efficient measures should be undertaken to reduce electricity consumption (which has indirect benefits in terms of emissions).	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low-Medium*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Noise	Proposal	No	Direct	*Low*	• The dealerships should comply with acceptable noise levels for businesses as required by the Noise Control Regulations of Gauteng, 1999. • Operational activities should be limited to daytime only.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
Impacts to Surface and Ground Water	Negative	Sewage	Proposal	No	Direct	*Low*	• The proposed development is not in close proximity to any watercourses or wetlands as such minimal impacts apply. A Water and Sanitation Services study has been undertaken and noted that sewer will ne reticulated with 110 mm pipes which will feed into the main 160 mm pipe, which will connect to the necessary sewer conservancy tanks which is designed to have a 7 day storage capacity (based on average flow) before requiring emptying. The following mitigation applies: • Management and maintenance of the Sewer Conservancy Tank must be by an experienced and competent person. • Collection and disposal of sewer must be by an appropriate and registered third party collector. • Disposal of sewer collected from the conservancy tank must take place at an appropriate and licenced facility.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Not Applicable	Silt	Proposal	Not Applicable	Not Applicable	*None*	Impacts not applicable to the operational phase. No mitigation required.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*None*		*Low*	*No Loss*	*Reversible*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Surface water run-off	Proposal	Yes	Indirect	*Low-Medium*	• A Stormwater management system to be implemented in line with the requirements of City of Johannesburg and the Stormwater Management Plan.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low-Medium*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Contamination of surface and ground water from hazardous substances	Proposal	No	Indirect	*Low*	• The proposed development does not cross any watercourses and is not in close proximity to any wetlands. An existing borehole is in place. The following measures must be implemented to ensure minimal impacts: • Hazardous substances must be stored and handled in accordance with the appropriate legislation and standards, which include the Hazardous Substances Act (Act No. 15 of 1973), the Occupational Health and Safety Act (No. 85 of 1993), relevant associated Regulations, and applicable SANS and international standards. • Any hazardous materials (apart from fuel) must be stored within a lockable store with a sealed floor. • All storage tanks containing hazardous materials must be placed in bunded containment areas with impermeable surfaces. The bunded area must be able to contain 110% of the total volume of the stored hazardous material. • In the event of spillages of hazardous substances, the appropriate clean up and disposal measures are to be implemented. • Necessary materials and equipment must be available on site to deal with spills of any hazardous materials present.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Not Applicable	Disturbance of natural	Proposal	Not Applicable	Not Applicable	*None*	Impacts not applicable to the operational phase. No mitigation required.	*None*	*No Loss*	*Reversible*

		IMPACTS				RANKING WITHOUT MITIGATION	IMPLEMENTATION OF MANAGEMENT MEASURES	RANKING WITH MITIGATION	DEGREE REVERSABILITY & LOSS OF RESOURCE (AFTER MITIGATION)	
	Nature	Description	Alternative	Cumulative	Type	Significance (A + B + C) X P	Description and/or Mitigation and Management Measures (if applicable)	Significance	Loss of Resources	Reversibility
OPERATIONAL PHASE										
		drainage lines	Alternative 1			*None*		*None*	*No Loss*	*Reversible*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Disturbance/pollution of groundwater	Proposal	No	Indirect	*Low*	The following measures must be implemented: • Hazardous substances must be stored and handled in accordance with the appropriate legislation and standards, which include the Hazardous Substances Act (Act No. 15 of 1973), the Occupational Health and Safety Act (No. 85 of 1993), relevant associated Regulations, and applicable SANS and international standards. • Any hazardous materials (apart from fuel) must be stored within a lockable store with a sealed floor. • All storage tanks containing hazardous materials must be placed in bunded containment areas with impermeable surfaces. The bunded area must be able to contain 110% of the total volume of the stored hazardous material. • In the event of spillages of hazardous substances, the appropriate clean up and disposal measures are to be implemented. • Necessary materials and equipment must be available on site to deal with spills of any hazardous materials present.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Impact on groundwater availability and flow	Proposal	No	Direct	*Low-Medium*	During operation, water will be abstracted from the borehole to supplement municipal water supply. The Geohydrological Baseline Assessment found that impacts are likely to be insignificant w.r.t the shallow weathered and fractured aquifers of the Swazian age rocks/ basement aquifer system, unlikely to impact third party groundwater users, should a 12-hour pump schedule be followed, and based on the expected drawdown extent not likely to impact on groundwater contribution to baseflow. In order to ensure this is the case: '• Enforce water saving strategies. • Environmental awareness training. • 12-hour pump schedule to be adhered to. • Existing borehole on site should be monitored for water levels (monthly) and qualities (quarterly). • Recommended abstraction rate for the borehole should not be exceeded (0.45 L/s)	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low-Medium*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
Waste Generation	Negative	Domestic waste	Proposal	Yes	Direct	*Medium*	• Recyclable waste streams must be separated from other waste streams. Waste to be separated into recyclable and non-recyclable waste. Waste separation needs to occur before waste is collected. • Solid waste shall only be stored in the designated general waste storage area which must be enclosed and impermeable. • All solid waste shall be disposed of by a certified contractor, off-site, at an approved landfill site if no municipal services are available. • Avoidance, reduction, re-use and recycling should be practiced wherever possible.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Medium*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Not Applicable	Construction waste	Proposal	Not Applicable	Not Applicable	*None*	Impacts not applicable to the operational phase. No mitigation required.	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*		*None*	*No Loss*	*Reversible*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Hazardous waste	Proposal	Yes	Direct	*Medium*	• The only hazardous waste expected is empty containers which were used to store hazardous material as well as potentially used parts/oil from car and truck servicing. • All hazardous material will be collected by a third party contractor and disposed of at a licenced hazardous facility. • Any hazardous waste will be stored in a designated waste storage container with appropriate labelling.	*Low*	*No Loss*	*Reversible*
			Alternative 1	Yes	Direct	*Medium*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
Soil Alteration	Negative	Loss of topsoil	Proposal	Not Applicable	Not Applicable	*None*	Impacts not applicable to the operational phase. No mitigation required.	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*		*None*	*No Loss*	*Reversible*
			No-Go Option	Yes	Direct	*Low-Medium*	The site is highly degraded by historic land use. It is likely that there will be	*Low-Medium*	*Partial*	*High Degree*

	IMPACTS					RANKING WITHOUT MITIGATION	IMPLEMENTATION OF MANAGEMENT MEASURES	RANKING WITH MITIGATION	DEGREE REVERSABILITY & LOSS OF RESOURCE (AFTER MITIGATION)	
	Nature	Description	Alternative	Cumulative	Type	Significance (A + B + C) X P	Description and/or Mitigation and Management Measures (if applicable)	Significance	Loss of Resources	Reversibility
OPERATIONAL PHASE										
							a continued loss of topsoil should the development not proceed as the site will remain in its degraded state,			
	Not Applicable	Loss of land capability	Proposal	Not Applicable	Not Applicable	*None*	Impacts not applicable to the operational phase. No mitigation required.	*Medium*	*No Loss*	*Reversible*
			Alternative 1			*None*		*Medium*	*No Loss*	*Reversible*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Not Applicable	Alteration of topography	Proposal	Not Applicable	Not Applicable	*None*	Impacts not applicable to the operational phase. No mitigation required.	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*		*None*	*No Loss*	*Reversible*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Soil pollution	Proposal	No	Direct	*Low*	The site will be paved and as such soil pollution related to the storage of vehicles and trucks will be minimal. No mitigation measures are applicable.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
Resource Consumption	Negative	Electricity consumption	Proposal	Yes	Direct	*Medium*	• Promote effective electricity consumption. The following energy efficient measures in line with SANS 10400 will be implemented: • Energy saving measures for water heating (for example heat pumps or solar); • LED lamps; • General control switching (to minimise use of lights when not needed); and • Energy saving appliances.	*Low-Medium*	*No Loss*	*Reversible*
			Alternative 1			*Medium*		*Low-Medium*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Water consumption	Proposal	Yes	Direct	*Medium*	During operation, water will be abstracted from the borehole to supplement municipal water supply. The Geohydrological Baseline Assessment found that impacts are likely to be insignificant w.r.t the shallow weathered and fractured aquifers of the Swazian age rocks/ basement aquifer system, unlikely to impact third party groundwater users, should a 12-hour pump schedule be followed, and based on the expected drawdown extent not likely to impact on groundwater contribution to baseflow. In order to ensure this is the case: '• Enforce water saving strategies. • Environmental awareness training. • 12-hour pump schedule to be adhered to. • Existing borehole on site should be monitored for water levels (monthly) and qualities (quarterly). • Recommended abstraction rate for the borehole should not be exceeded (0.45 L/s) '• Greywater treatment and reuse in the vehicle washing facilities to be implemented as described in the Water and Sewer Report.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Medium*				
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Fuel consumption	Proposal	Yes	Direct	*Low-Medium*	• Record and monitor fuel consumption regularly • Promote good driving practices (to reduce fuel consumption).	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low-Medium*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Raw materials consumption	Proposal	Yes	Direct	*Low-Medium*	• Promote effective use of raw material.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low-Medium*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
Effects on Biodiversity	Negative	Loss of existing habitat - stochastic events such as fire	Proposal	No	Direct	*Low*	Fire extinguishers must be placed on the property.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Direct mortality of fauna - Intentional killing of fauna	Proposal	Yes	Direct	*Low*	It is not expected that any fauna will be found on site during operation. The Applicant must include the requirement in their rule book that should any be found that the relevant organisation be called to safely remove the species.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Disruption of ecological life cycles due to the restriction of species movement - Infrastructure	Proposal	Yes	Direct	*Low-Medium*	Stormwater, sewer and road infrastructure should be designed in such a way that it will have minimal impact on the environmental features.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low-Medium*		*Low*	*No Loss*	*Reversible*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
Incidents, accidents and potential emergency situations	Negative	Pollution incidents	Proposal	No	Direct	*Low*	• Hazardous substances must be stored and handled in accordance with the appropriate legislation and standards, which include the Hazardous Substances Act (Act No. 15 of 1973), the Occupational Health and Safety	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*

		IMPACTS				RANKING WITHOUT MITIGATION	IMPLEMENTATION OF MANAGEMENT MEASURES	RANKING WITH MITIGATION	DEGREE REVERSABILITY & LOSS OF RESOURCE (AFTER MITIGATION)	
	Nature	Description	Alternative	Cumulative	Type	Significance (A + B + C) X P	Description and/or Mitigation and Management Measures (if applicable)	Significance	Loss of Resources	Reversibility
OPERATIONAL PHASE										
							Act (No. 85 of 1993). • Sewer Conservancy Tank must be operated by a skilled and experienced operator and in line with the design requirements.			
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Health and safety	Proposal	No	Direct	*Low*	• 24 hour security and access control. • Health and Safety awareness training. • Health and Safety Policy to be put in place and implemented.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Storage of hydrocarbons	Proposal	No	Direct	*Low*	• Best practice regarding storage of substances • Spill kits to be located in strategic areas for when needed • Environmental awareness training • Firefighting equipment must be accessible on site at all times. • Display of emergency numbers	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Fire	Proposal	No	Direct	*Low*	• Adhere to the appropriate emergency procedures • Firefighting equipment must be accessible on site at all times. • Display of emergency numbers	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	No	Direct	*Low*	The site is currently unoccupied but historically an informal settlement occurred on site. Should the develop not take place, the potential for illegal settlements once again occurring is high and may result in fires on site and on neighbouring properties.	*Low*	*No Loss*	*Reversible*
Social	Negative	Visual impact	Proposal	Yes	Direct	*Low*	According to the Heritage Impact Assessment, visual impacts to scenic routes and sense of place are considered low due to the extensive developments that already occur in the area. As the development is in line with the development goals of the area, no mitigation measures are required or recommended.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Positive	Safety and security	Proposal	No	Direct	***+Low***	Due to the development of the site, safety and security in the area is likely to improve. In addition, the following will be implemented which will assist with this: '• 24 hour access control to the site and 24 hour security.	***+Low***	*No Loss*	*Reversible*
			Alternative 1			***+Low***		***+Low***	*No Loss*	*Reversible*
	Negative		No-Go Option	No	Direct	*Low*	The site is currently unoccupied but historically an informal settlement occurred adjacent to site. Should the develop not take place, the potential for illegal settlements once again occurring is high and may result in further safety and security issues in the area.	*Low*	*No Loss*	*Reversible*
	Negative	Traffic disruptions	Proposal	No	Direct	*Low-Medium*	• Road upgrades to ingress and egress lanes as discussed in the Traffic Impact Assessment to be implemented.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low-Medium*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Not Applicable	Loss of cultural heritage	Proposal	Not Applicable	Not Applicable	*None*	Impacts not applicable to the operational phase. No mitigation required.	*None*	*No Loss*	*Reversible*
			Alternative 1			*None*		*None*	*No Loss*	*Reversible*
			No-Go Option			*None*	None required	*None*	Not Applicable	Not Applicable
	Negative	Loss of sense of place	Proposal	No	Direct	*Low*	According to the Heritage Impact Assessment, visual impacts to scenic routes and sense of place are considered low due to the extensive developments that already occur in the area. As the development is in line with the development goals of the area, no mitigation measures are required or recommended.	*Low*	*No Loss*	*Reversible*
			Alternative 1			*Low*		*Low*	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
	Positive	Change of land use	Proposal	Yes	Direct	***+ Medium***	A Townplanning process is currently being undertaken to change the land use associated with the site. The proposed change in land use is in line with the Region A Spatial Development Plan and the Gauteng Spatial Development Framework. The development of the Lanseria node will assist in the furthering of the objectives of the Gauteng Provincial Government and City of Johannesburg and as such will have a positive impact. No mitigation measures other than the townplanning process is required.	***+ Medium***	*No Loss*	*Reversible*
			Alternative 1			***+ Medium***		***+ Medium***	*No Loss*	*Reversible*
			No-Go Option	Not Applicable	Not Applicable	*None*	None required	*None*	Not Applicable	Not Applicable
Economic	**Positive**	Decline/increase in economy	Proposal	Yes	Direct	***+ Medium- High***	Once operational the proposed dealership will result in new business in the area bringing customers and contributing to the development of the Lanseria node. This will have an economic multiplier effect in the local community. No mitigation measures are required. The proposal is preferred	***+ Medium- High***	*No Loss*	*Reversible*

	IMPACTS					RANKING WITHOUT MITIGATION	IMPLEMENTATION OF MANAGEMENT MEASURES	RANKING WITH MITIGATION	DEGREE REVERSABILITY & LOSS OF RESOURCE (AFTER MITIGATION)	
	Nature	Description	Alternative	Cumulative	Type	Significance (A + B + C) X P	Description and/or Mitigation and Management Measures (if applicable)	Significance	Loss of Resources	Reversibility
OPERATIONAL PHASE										
							as it maximises the visibility of the truck dealership and thus has more of economic benefit.			
			Alternative 1			+ Medium	The alternative is not preferred as it does not maximise the visibility of both dealerships.	+ Medium	No Loss	Reversible
	Negative		No-Go Option			Medium	Should the development not proceed, the benefits to the local community will be long term and negative. Further, the goals of the GSDF and Regional SDP will also not be met. There are no mitigation measures available,	Medium	Partial	High Degree
	Positive	Decline/increase in property value	Proposal	No	Direct	+ Medium	The development of the proposed truck and car dealership will increase the property value of the site overall. Further, it will have a knock on effect and is likely to increase the value of neighbouring properties as well. No mitigation measures are required.	+ Medium	No Loss	Reversible
			Alternative 1			+ Medium		+ Medium	No Loss	Reversible
	Negative		No-Go Option			Medium	The site was previously used as an informal settlement. It is degraded and without development, the property value is likely to decrease. This will have knock on effects on the surrounding properties. No mitigation, save for development of the site, is available.	Medium	No Loss	Reversible
	Positive	Employment	Proposal	Yes	Direct	+ Medium	The proposed development will result in approximately 20 permanent full time operation related employment opportunities for the local community. Local labour should be utilised as far as possible.	+ Medium	No Loss	Reversible
			Alternative 1			+ Medium		+ Medium	No Loss	Reversible
	Negative		No-Go Option			Medium	Should the development not proceed, the benefits to the local community will be long term and negative as potential employment opportunities will be lost. No mitigation measures are available.	Medium	No Loss	Reversible

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

The following specialist studies were utilized in the compilation of the impact assessment:

- Baseline Ecological Habitat Assessment by Prism EMS (**Appendix G1**);
- Heritage Impact Assessment by HCAC Heritage Consultants (**Appendix G2**); and
- Baseline Geohydrological Assessment by Delta-H (**Appendix G3**).

In addition to the environmental specialist studies above, the following technical studies were also undertaken and informed the assessment of impacts:

- Traffic Impact Assessment Letter (**Appendix G4**);
- Water and Sanitation Services Report (**Appendix G4**); and
- Stormwater Management Plan (**Appendix G5**).

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

The following gaps and/or assumptions were associated with the specialist studies.

Baseline Ecological Habitat Assessment:

- The aim of this study was to undertake a desktop description of the baseline receiving environment to identify and potentially sensitive receptors from an ecological perspective. This was followed by a short site assessment to confirm desktop information. This, specifically to inform the BA process and Water Use Registration for the proposed activities.

Heritage Impact Assessment:

- The authors acknowledge that the brief literature review is not exhaustive on the literature of the area.
- Due to the subsurface nature of archaeological artefacts, the possibility exists that some features or artefacts may not have been discovered/recorded during the survey and the possible occurrence of unmarked graves and other cultural material cannot be excluded. Similarly, the depth of the deposit of heritage sites cannot be accurately determined due its subsurface nature. This report only deals with the footprint area of the proposed development and consisted of non-intrusive surface surveys.
- This study did not assess the impact on medicinal plants and intangible heritage as it is assumed that these components would have been highlighted through the public consultation process if relevant. It is possible that new information could come to light in future, which might change the results of this Impact Assessment.

3. Impacts that may result from the Decommissioning 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.

It is not expected that the proposed development will be decommissioned. As such, impacts related to decommissioning and closure are not applicable.

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.

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:

Cumulative impacts are those impacts that are created as a result of the combination of impacts of the proposed project, with impacts of other projects or operations, to cause related impacts, as well as a single impact over a certain time period which then results in the accumulation of negative/ positive impacts making the significance higher. These impacts occur when the incremental impact of the project, combined with the effects of other past, present and reasonably foreseeable future projects, are cumulatively considered.

Cumulative impacts are included in the detailed impact assessment included in **Appendix I** but in summary, the following impacts have been considered as cumulative for each phase of development:

Construction Phase:

- Dust emissions
- Emissions from vehicles and equipment (CO2, NOx, SOx, VOC's etc.)
- Surface water run-off
- Domestic Waste
- Construction waste
- Hazardous Waste
- Loss of topsoil
- Loss of land capability
- Electricity consumption
- Water consumption
- Fuel consumption
- Raw materials consumption
- Loss of habitat
- Loss of flora
- Loss of fauna
- Degradation of ecological systems
- Disruption of natural corridors
- Decline/increase in property value
- Decline/increase in economy
- Employment

Operational Phase:

- Emissions from vehicles and equipment (CO2, NOx, SOx, VOC's etc.)
- Domestic Waste
- Hazardous Waste
- Electricity consumption
- Water consumption
- Fuel consumption
- Raw Material Consumption
- Visual Impact
- Change of Land Use
- Decline/increase in economy
- Employment

It should be noted that even considering their cumulative nature, these impacts could be satisfactorily mitigated.

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

The proposal involves the development of the truck dealership (and associated workshops) along the western boundary of the site (parallel to the R512). The Car Facilities; 4x4 Facilities; Taxi Show Room; Production Centre; Panel and Paint Workshop; Vehicle Rental facilities; and Vehicle Storage Parking will be developed in the eastern section.

The proposal is preferred from a business perspective as it maximises the use of the site and the visibility of vehicle dealership and thus improves the socio-economic benefits associated with the development.

Based on the findings of the specialist studies and impact assessment and taking into account the successful implementation of the EMPr, it is felt that the Proposal should be authorised. The reasons for this opinion are discussed in more detail in the following subjections:

1. Need for the Project

The proposed development will further the objectives of both the GSDF and Region A Regional Spatial Development Plan by creating commercial land uses in the Lanseria node. In addition, market research by Toyota and Hino have indicated that there is a need for a dealership of this type in the area. From a socio-economic perspective, the proposed development will benefit the area in the following way:

- General improvement of the image of the area;
- Improvement in services in the area including, water, sanitation and road upgrades; and
- Increase in local economy.

2. Sensitivity

In order to better understand the environmental sensitivity and the potential impacts related to the development the following specialist studies have been undertaken:

- Baseline Ecological Habitat Assessment; and
- Heritage Impact Assessment.

In summary, the Baseline Ecological Habitat Assessment found that from a desktop perspective, the proposed development occurs within the Egoli Granite Grassland (Endangered) vegetation type. According to the Gauteng Conservation Plan, the truck dealership and internal access traverses a section of CBA: Important Area. The study however found that the project area has been severely altered (historically and currently). The intensive human presence, litter, alien vegetation and the trampling effect on the soil has had a negative impact on the condition of the vegetation in these areas. The study also noted that whilst the north western section of the site was classified as CBA, is no longer in a state to represent a CBA due to the extent of the various impacts. A number of mitigation measures were recommended and have been included in the Environmental Management Programme. Overall, the study did not find any reasons that the development should not proceed.

In addition, a Heritage Impact Assessment was undertaken. The study area was assessed both on desktop level and by a field survey. The field survey was conducted as a non-intrusive pedestrian survey to cover the extent of the study area as development plans were not yet available at the time of the survey. One isolated Early Stone Age stone tool was found during the survey; the artefact is out of context, broken by ploughing activities and is of no significance apart from noting its presence in this report. Based on the SAHRIS Paleontological Sensitivity Map, the area is of insignificant paleontological sensitivity and no further mitigation prior to construction is recommended in terms of Section 35 for the proposed development to proceed. In terms of the built environment, one structure (Feature 1) was recorded that could be older than 60 years and would then be protected by the NHRA. If the structure is older than 60 years and impacted on a destruction permit will be required from the PHRAG. In terms of Section 36 of the Act no burial sites were recorded. However, if any graves are identified in future they should ideally be preserved in-situ or alternatively relocated according to existing legislation. No public monuments are located within or close to the study area. The study area is surrounded by industrial, residential and road infrastructure developments and will not impact negatively on significant cultural landscapes or viewscapes. Due to the lack of significant heritage resources in the study area the impact of the proposed project on heritage resources is considered low and impacts can be mitigated to an acceptable level. It is therefore recommended that the proposed project can commence on the condition that the recommendations are implemented as part of the EMPr and based on approval from SAHRA.

In addition to the above, a Borehole will be used to supplement water supply for the site (and Portion 168) and thus a Water Use Licence Application for Section 21 (a) uses is being undertaken and public participation is integrated with the public participation of the Basic Assessment Report (BAR). As part of the WULA process, a Baseline Geohydrological Assessment was undertaken to better understand the impact of proposed groundwater use. The study noted that the recommended abstraction rate for the borehole on site is 0.45 L/s, based on a pump schedule of 12 hours. It also however noted that the current abstraction rate is less than 0.02 L/s (or 560 L/month) and the drawdown extent (of less than 0.1 m) will be limited to 80 m. Potential groundwater related impacts are expected to be insignificant with

regard to the shallow weathered and fractured aquifers, unlikely to impact third party groundwater users and unlikely to impact groundwater contribution to baseflow.

3. Impact Assessment

A detailed impact assessment has been undertaken and assessed the types of impact, duration of impacts, likelihood of potential impacts as well as the overall significance of the impact occurring (**Appendix I**). Most impacts have a low significance once mitigation measures were applied (please see **Table 9** below for the impact summary for the proposal). The following can be noted:

- During construction, dust emissions and emissions from vehicles will occur but will be of a low significance. A number of mitigation measures will be implemented and will further reduce the intensity of these impacts. During operation, no dust emissions are expected. Vehicle emissions will however occur but can be reduced to a low significance
- Noise impacts will occur throughout construction but will be of a low significance. Mitigation measures will further reduce the significance of this impact. Noise impacts during operation will occur however the dealership will adhere to noise limits set by Noise Control Regulations of Gauteng, 1999.
- The proposed development does not cross any watercourses or occur in close proximity to any wetlands and as such minimal impacts to surface water applies. All impacts can be mitigated, and overall impacts assessed were found to have a low significance. During operation, the only potential impacts will be related to surface water run-off. As stormwater will be managed through a proper stormwater management system, related impacts such as contamination from hazardous substances and contamination of groundwater will be mitigated. Further, whilst groundwater will be abstracted for use during construction, this will be in line with current use and will not negatively impact surrounding users or the groundwater flow. These impacts are expected to have a low significance. During operation, the abstraction of water is expected to increase however it will be in line with the recommended abstraction volumes from the Geohydrological Study and impacts to surrounding groundwater users and groundwater flow is not expected.
- Waste in the form of domestic waste, hazardous waste and construction waste will be generated. However, the impacts related to this can be mitigated to 'low' with the implementation of a number of mitigation measures. During operation, domestic waste will be generated. Very small volumes of hazardous waste may also be generated. Impacts related to waste generation can be mitigated to a low significance.
- Whist, soil alteration impacts such as loss of topsoil, loss of land capability, alteration of topography, soil erosion and soil pollution will occur and have a medium to low-medium significance before mitigation, these are not felt to be significant due to the currently degraded nature of the site. Where possible, mitigation measures have been suggested to reduce the significance of the impacts to low-medium. During operation, the only applicable impact will be soil pollution. Soil pollution will only occur should incidents or accidents occur and will thus be incidental in nature. Thus, impacts will be of a low significance.
- In terms of resource consumption, some electricity usage is expected during construction. Further, in terms of water consumption, fuel consumption and raw material consumption, impacts can be considered to be of a low-medium significance. Conservation measures should be implemented where possible and environmental education should be undertaken. Impacts after mitigation are expected to be low. During operation, electricity, fuel and raw material consumption will take place but will be of a low-medium to low significance after mitigation. In terms of water consumption in particular, municipal water will be supplemented by borehole water but within the limits recommended by the Baseline Geohydrological Assessment. Impacts to groundwater users and flow is not expected. Further, in order to reduce water consumption, grey water recycling will take place and will reduce the water requirements of the development.
- Impacts related to effects on biodiversity were also assessed. These included Loss of Habitat due to loss of vegetation, Direct mortality of fauna and flora, Disruption of ecological life cycles due to the restriction of species movement, Disruption of ecological life cycles due to noise and lighting and Introduction of alien flora affecting native faunal assemblages. Based on the Baseline Ecological Habitat Assessment which found that the study site was disturbed and developed in parts, the significance of these impacts was found to be low after mitigation. A number of mitigation measures have been included in the EMPr. During operation, the following impacts were identified: Loss of existing habitat due to loss of vegetation, Direct mortality of fauna and Disruption of ecological life cycles due to the restriction of species movement. These impacts were identified as medium to low-medium to low significance but in all cases, the specialist noted that impacts could be satisfactorily reduced to low levels. Mitigation measures have been included in the EMPr and will be implemented.
- Potential impacts related to pollution incidents, health and safety, storage of hydrocarbons and fire may occur during construction but can be mitigated through the implementation of the site specific EMPr and will thus have a low significance. During operation, some pollution incidents may still occur however these will have a low significance. Health and safety impacts may still occur when vehicle preparation activities take place. These can be mitigated through the

proper safety measures are put in place prior to these activities taking place. Fire is a possible impact during operation but would be incidental in nature. Overall the significance of this expected to be low.

- During construction, the main social impacts will be visual impacts, safety and security, traffic disruptions, loss and loss of sense of place. All these impacts can be successfully mitigated to a low significance. A positive impact related to the change of land use is expected as currently the site is degraded. Further, the development of the site will further the objectives of the GSDF and Regional SDP. During operation, there will be a positive impact related to safety and security as the development of the site is expected to improve safety in the area. All other impacts can be mitigated to a low significance.
- During construction and operation, a number of positive economic impacts will occur relating to an increase in economy and increased employment. These have a medium level of significance after mitigation. These economic impacts are more significant for the proposal as it maximises the visibility of both the truck and car dealership.

Based on the impact assessment undertaken as well as the findings of the specialist studies and the need for the project, it is the opinion of the EAP, that the impacts related to the proposed development can be satisfactorily mitigated and that **the Proposal be approved**.

Alternative 1

With the Alternative, the Car Facilities; 4x4 Facilities; Taxi Show Room; Production Centre; Panel and Paint Workshop; Vehicle Rental facilities; and Vehicle Storage Parking will be developed in the eastern section (shown in yellow) will still be developed. However, in Erf 1, the parking will be located to the east of the truck dealership. The Alternative is therefore not preferred as it reduces visibility of the dealership and thus decreases the potential socio-economic benefits of the development.

1. Need for the Project

The need for both alternatives is the same and thus the full discussion provided above is not repeated here. In summary, the development is in line with the objectives of both the GSDF and Regional A SDP. It will have a positive economic effect in the area (although not to the same extent as with the proposal as it does not maximise visibility of both dealerships).

2. Sensitivity

As mentioned in the previous Impact Statement, an Baseline Ecological Habitat Assessment and Heritage Impact Assessment were undertaken and found that the site was disturbed by previous activities. A number of mitigation measures were recommended and have been included in the EMPr. A Baseline Geohydrological Assessment was also undertaken and noted that significant groundwater impacts are not expected.

3. Impact Assessment

A detailed impact assessment has been undertaken for Alternative 1 and assessed the types of impact, duration of impacts, likelihood of potential impacts as well as the overall significance of the impact occurring (**Appendix I**). Based on the impact assessment, Alternative 1 is **not preferred** for the following reason:

- The layout of the alternative is such that it does not maximise visibility of both the development and therefore reduces potential positive socio-economic impacts.

Please see **Table 10** below for the impact summary for Alternative 1.

Based on the impact assessment undertaken as well as the findings of the specialist studies, it is the opinion of the EAP, that Alternative 1 **NOT BE AUTHORISED.**

Alternative 2

No-go (compulsory)

The No-Go option involves the option of not developing a vehicle dealerships and associated uses on Portion 59 of Farm Bultfontein 533 JQ. Instead the site will remain vacant and its current degraded and disturbed state.

1. Need for the Project

Should the No-go Option be selected, the objectives of both the GSDF and Region A Regional Spatial Development Plan will not be met on the specific property. Further, there will be a loss of positive

benefits associated with the development including the general improvement of the area, improvements related to services and increases in the local economy. Therefore, from a needs perspective, the No-go option is **NOT** preferred.

2. Impact Assessment

A detailed impact assessment has been undertaken for No-Go Alternative and assessed the types of impact, duration of impacts, likelihood of potential impacts as well as the overall significance of the impact occurring (**Appendix I**).

Based on the impact assessment, the no-go option is **not preferred** for a number of reasons.

- Firstly, and most importantly, the no-go option will result in a loss of the social and economic benefits associated with the proposed development. This **cannot be mitigated to a satisfactory level.**
- Secondly, as the site is vacant and is adjacent to an informal settlement, the option of not developing the site may result in additional safety and security impacts should the site once again be invaded. This would have additional effects on fire safety, property value, soil erosion etc.

Based on the impact assessment undertaken as well as the need for the project, it is the opinion of the EAP, that the No-Go Option **NOT BE AUTHORISED.**

6. Impact Summary of the Proposal or Preferred Alternative

For proposal:

Please see **Table 9** for a summary of the impact assessment undertaken. In general, most negative impacts from both construction and operation could be mitigated to a low significance with the implementation of the proposed mitigation measures which are included in the EMPr. Further, numerous social and economic benefits are related to proposal which have a medium to medium-high significance. **For this reason, the Proposal is preferred.**

Table 12: Impact Summary for the Proposal

Impacts	Comment
Atmospheric Emissions	During construction, dust emissions and emissions from vehicles will occur but will be of a low significance. A number of mitigation measures will be implemented and will further reduce the intensity of these impacts. During operation, no dust emissions are expected. Vehicle emissions will however occur but can be reduced to a low significance.
Noise	Noise impacts will occur throughout construction but will be of a low significance. Mitigation measures will further reduce the significance of this impact. Noise impacts during operation will occur however the dealership will adhere to noise limits set by Noise Control Regulations of Gauteng, 1999.
Impacts to surface and ground water	The proposed development does not cross any watercourses or occur in close proximity to any wetlands and as such minimal impacts to surface water applies. All impacts can be mitigated, and overall impacts assessed were found to have a low significance. During operation, the only potential impacts will be related to surface water run-off. As stormwater will be managed through a proper stormwater management system, related impacts such as contamination from hazardous substances and contamination of groundwater will be mitigated. Further, whilst groundwater will be abstracted for use during construction, this will be in line with current use and will not negatively impact surrounding users or the groundwater flow. These impacts are expected to have a low significance. During operation, the abstraction of water is expected to increase however it will be in line with the recommended abstraction volumes from the Geohydrological Study and impacts to surrounding groundwater users and groundwater flow is not expected.
Waste Generation	Waste in the form of domestic waste, hazardous waste and construction waste will be generated. However, the impacts related to this can be mitigated to 'low' with the implementation of a number of mitigation measures. During operation, domestic waste will be generated. Very small volumes of hazardous waste may also be generated. Impacts related to waste generation can be mitigated to a low significance.

Soil Alteration	Whist, soil alteration impacts such as loss of topsoil, loss of land capability, alteration of topography, soil erosion and soil pollution will occur and have a medium to low-medium significance before mitigation, these are not felt to be significant due to the currently degraded nature of the site. Where possible, mitigation measures have been suggested to reduce the significance of the impacts to low-medium. During operation, the only applicable impact will be soil pollution. Soil pollution will only occur should incidents or accidents occur and will thus be incidental in nature. Thus, impacts will be of a low significance.
Resource Consumption	In terms of resource consumption, some electricity usage is expected during construction. Further, in terms of water consumption, fuel consumption and raw material consumption, impacts can be considered to be of a low-medium significance. Conservation measures should be implemented where possible and environmental education should be undertaken. Impacts after mitigation are expected to be low. During operation, electricity, fuel and raw material consumption will take place but will be of a low-medium to low significance after mitigation. In terms of water consumption in particular, municipal water will be supplemented by borehole water but within the limits recommended by the Baseline Geohydrological Assessment. Impacts to groundwater users and flow is not expected. Further, in order to reduce water consumption, grey water recycling will take place and will reduce the water requirements of the development.
Effects on Biodiversity	Impacts related to effects on biodiversity were also assessed. These included Loss of Habitat due to loss of vegetation, Direct mortality of fauna and flora, Disruption of ecological life cycles due to the restriction of species movement, Disruption of ecological life cycles due to noise and lighting and Introduction of alien flora affecting native faunal assemblages. Based on the Baseline Ecological Habitat Assessment which found that the study site was disturbed and developed in parts, the significance of these impacts was found to be low after mitigation. A number of mitigation measures have been included in the EMPr. During operation, the following impacts were identified: Loss of existing habitat due to loss of vegetation, Direct mortality of fauna and Disruption of ecological life cycles due to the restriction of species movement. These impacts were identified as medium to low-medium to low significance but in all cases, the specialist noted that impacts could be satisfactorily reduced to low levels. Mitigation measures have been included in the EMPr and will be implemented
Incidents, accidents and potential emergency situations	Potential impacts related to pollution incidents, health and safety, storage of hydrocarbons and fire may occur during construction but can be mitigated through the implementation of the site specific EMPr and will thus have a low significance. During operation, some pollution incidents may still occur however these will have a low significance. Impacts related to the storage of hydrocarbons may also occur but are expected to be of a low significance should all necessary protocols be adhered to. Health and safety impacts may still occur when vehicle preparation activities take place These can be mitigated through the proper safety measures are put in place prior to these activities taking place. Fire is a possible impact during operation but would be incidental in nature. Overall, the significance of this expected to be low.
Social	During construction, the main social impacts will be visual impacts, safety and security, traffic disruptions, loss and loss of sense of place. All these impacts can be successfully mitigated to a low significance. A positive impact related to the change of land use is expected as currently the site is degraded. Further, the development of the site will further the objectives of the GSDF and Regional SDP. During operation, there will be a positive impact related to safety and security as the development of the site is expected to improve safety in the area. All other impacts can be mitigated to a low significance.
Economic	During construction and operation, a number of positive economic impacts will occur relating to an increase in economy and increased employment. These have a medium level of significance after mitigation. These economic impacts are more significant for the proposal as it maximises the visibility of both the proposed development.

For alternative:

A detailed impact assessment has been undertaken for Alternative 1 and assessed the types of impact, duration of impacts, likelihood of potential impacts as well as the overall significance of the impact occurring (Appendix I). Based on the impact assessment, Alternative 1 is not preferred for a number of reasons:

- Firstly, and most importantly, the no-go option will result in a loss of the social and economic benefits associated with the proposed development. This **cannot be mitigated to a satisfactory level.**
- Secondly, as the site is vacant and was previously home to an informal settlement, the option of not developing the site may result in additional safety and security impacts should the site once again be invaded. This would have additional effects on fire safety, property value, soil erosion etc.

Table 10 below provides a summary of the impacts assessed.

Table 13: Impact Summary for Alternative 1

Impacts	Comment
Atmospheric Emissions	As with the proposed alternative, Alternative 1 will have similar atmospheric emissions: • During construction, dust emissions and emissions from vehicles will occur but will be of a low significance. A number of mitigation measures will be implemented and will further reduce the intensity of these impacts. • During operation, no dust emissions are expected. Vehicle emissions will however occur but can be reduced to a low significance
Noise	As with the proposed alternative, Alternative 1 will have similar noise impacts which will occur throughout construction but will be of a low significance. Mitigation measures will further reduce the significance of this impact. Noise impacts during operation will occur however the dealership will adhere to noise limits set by Noise Control Regulations of Gauteng, 1999.
Impacts to surface and groundwater	Similar to the proposal, Alternative 1 does not require any water crossings and is not in close proximity to any wetlands and as such minimal impacts to surface water applies. All impacts can be mitigated, and overall impacts assessed were found to have a low significance. During operation, the only potential impacts will be related to surface water run-off. As stormwater will be managed through a proper stormwater management system, related impacts such as contamination from hazardous substances and contamination of groundwater will be mitigated. Further, whilst groundwater will be abstracted for use during construction, this will be in line with current use and will not negatively impact surrounding users or the groundwater flow. These impacts are expected to have a low significance. During operation, the abstraction of water is expected to increase however it will be in line with the recommended abstraction volumes from the Geohydrological Study and impacts to surrounding groundwater users and groundwater flow is not expected.
Waste Generation	As with the preferred alternative, waste in the form of domestic waste, hazardous waste and construction waste will be generated. However, the impacts related to this can be mitigated to 'low' with the implementation of a number of mitigation measures. During operation, domestic waste will be generated. Very small volumes of hazardous waste may also be generated. Impacts related to waste generation can be mitigated to a low significance
Soil Alteration	As with the proposal, whist, soil alteration impacts such as loss of topsoil, loss of land capability, alteration of topography, soil erosion and soil pollution will occur and have a medium to low-medium significance before mitigation, these are not felt to be significant due to the currently degraded nature of the site. Where possible, mitigation measures have been suggested to reduce the significance of the impacts to low-medium. During operation, the only applicable impact will be soil pollution. Soil pollution will only occur should incidents or accidents occur and will thus be incidental in nature. Thus, impacts will be of a low significance
Resource Consumption	In terms of resource consumption, the usage between the proposal and alternative are expected to be similar. As noted, some electricity usage is expected during construction. Further, in terms of water consumption, fuel consumption and raw material consumption, impacts can be considered to be of a low-medium significance. Conservation measures should be implemented where possible and environmental education should be undertaken. Impacts after mitigation are

	expected to be low. During operation, electricity, fuel and raw material consumption will take place but will be of a low-medium to low significance after mitigation. In terms of water consumption in particular, municipal water will be supplemented by borehole water but within the limits recommended by the Baseline Geohydrological Assessment. Impacts to groundwater users and flow is not expected. Further, in order to reduce water consumption, grey water recycling will take place and will reduce the water requirements of the development.
Effects on Biodiversity	Impacts related to effects on biodiversity were also assessed. The impact of the alternative was the same as the proposal. Impacts included Loss of Habitat due to loss of vegetation, Direct mortality of fauna and flora, Disruption of ecological life cycles due to the restriction of species movement, Disruption of ecological life cycles due to noise and lighting and Introduction of alien flora affecting native faunal assemblages. Based on the Baseline Ecological Habitat Assessment which found that the study site was disturbed and developed in parts, the significance of these impacts was found to be low after mitigation. A number of mitigation measures have been included in the EMPr. During operation, the following impacts were identified: Loss of existing habitat due to loss of vegetation, Direct mortality of fauna and Disruption of ecological life cycles due to the restriction of species movement. These impacts were identified as medium to low-medium to low significance but in all cases, the specialist noted that impacts could be satisfactorily reduced to low levels. Mitigation measures have been included in the EMPr and will be implemented
Incidents, accidents and potential emergency situations	The Potential impacts related to pollution incidents, health and safety, storage of hydrocarbons and fire may occur during construction but can be mitigated through the implementation of the site specific EMPr and will thus have a low significance. These are the same as the proposal. During operation, some pollution incidents may still occur however these will have a low significance. Health and safety impacts may still occur when vehicle preparation activities take place. These can be mitigated through the proper safety measures are put in place prior to these activities taking place. Fire is a possible impact during operation but would be incidental in nature. Overall the significance of this expected to be low. In all cases, there is no difference between the proposal and the alternative.
Social	As with the proposal, during construction, the main social impacts will be visual impacts, safety and security, traffic disruptions, loss and loss of sense of place. All these impacts can be successfully mitigated to a low significance. A positive impact related to the change of land use is expected as currently the site is degraded. Further, the development of the site will further the objectives of the GSDF and Regional SDP. During operation, there will be a positive impact related to safety and security as the development of the site is expected to improve safety in the area. All other impacts can be mitigated to a low significance.
Economic	During construction, a number of positive economic impacts will occur relating to an increase in economy and increased employment. Both these have a medium-high significance after mitigation. However, due to the fact that the alternative layout results in poor visibility for the dealership, the positive impacts related to local economy will not be as great. It is for this reason that **Alternative 1 is not preferred.**

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.

When assessing the alternatives, the following was assessed:

- The results of the impact assessment; and
- The need for the project.

Taking into account the findings of the specialist study, a detailed impact assessment was undertaken for both the Proposal and the alternative (Alternative 1) as well as the No-Go Option. A summary of the findings is provided in **Table 9** and **Table 10** above. They show that the following impacts were expected to be similar for both the alternative and the proposal:

- Atmospheric Emissions;
- Noise;
- Discharge to Water;
- Waste Generation;
- Soil Alteration;
- Resource Consumption;

- Effects on Biodiversity;
- Incidents, accidents and potential emergency situations; and
- Social.

Where impacts differed was in the economic sense in that due to the poorer visibility of the truck dealership associated with Alternative 1, there was a less positive benefit to the local economy.

Therefore, based on the findings of the specialist study and impact assessment and taking into account the successful implementation of the EMPr, it is felt that <u>Proposal should be authorised.</u>

7. Spatial Development Tools

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

The following spatial development tools were applied and/or considered:

- The GDARD C-PLAN and environmentally sensitive layers were utilized during the compilation of this report to identify biodiversity specialist reports as well as possible sensitive areas within the area. The north-eastern section of the site falls within CBA: Important Area. The Baseline Ecological Habitat Assessment however was undertaken and noted that the site is degraded and therefore no longer representative of CBA area..
- The South African National Biodiversity Institute (SANBI) provides a database, namely the Botanical Database of Southern Africa (BODATSA) which was used by the Ecological specialist to determine sensitive flora species on site.
- Data from the South African Bird Atlas Project (SABAP2 was also utilized to identify potentially occurring bird species in and around the site.
- The FitzPatrick Institute of African Ornithology - Virtual Museum website was also utilized.
- The Gauteng Provincial Environmental Management Framework was utilized in the compilation of this report. The site falls within Zone 1 – Urban Development Zone and is thus intended for streamlining of development and densification.
- The City of Johannesburg Spatial Development Framework 2040 was consulted as Spatial Development Tool and it was found that the area occurs within a Consolidation zone.
- The Reginal Spatial Development Plan was also assessed. The proposed development falls within the Lanseria node which is prioritized for development.

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	NO
✓	

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

Not applicable.

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:

The following are recommended conditions for inclusion in the EA:

- The **<u>proposed layout</u>** should be implemented;
- A copy of the Final SDP must be submitted to GDARD once finalised as part of the townplanning process.
- An Environmental Control Officer (ECO) should be appointed to ensure compliance to the authorisation and EMPr. Weekly construction monitoring together with six-monthly full environmental audits is recommended;
- As required by the Baseline Ecological Habitat Assessment, the following should be undertaken:
  - It is recommended that all *Hypoxis hemerocallidea* should be removed prior to construction activities and either relocated to a similar type of environment or implemented within the landscaping plan of the proposed development. A Search,

Rescue and Relocation plan has been compiled as part of the EMPr and should be implemented.
  - The grassland areas surrounding the project area should be declared 'no-go' area's during the construction and operational phases and all efforts must be made to prevent access to this area from construction workers, machinery and the general public.
  - All laydown, storage areas etc should be restricted to within the project area and all access roads must be kept within this area or from existing access roads;
  - Areas of indigenous vegetation should be delineated, and rehabilitation measures implemented in areas where the indigenous community is still present but degraded;
  - Areas that are denuded during construction need to be re-vegetated with indigenous vegetation to prevent erosion during flood events. This will also reduce the likelihood of encroachment by alien invasive plant species;
  - Compilation of and implementation of an alien vegetation management plan for the entire site.
  - Waste management must be a priority and all waste must be collected and stored adequately. It is recommended that all waste be removed from site on a weekly basis to prevent rodents and pests entering the site;
  - No trapping, killing or poisoning of any wildlife should be allowed on site;
  - Adequate signage should be erected that raises awareness about possible fauna in the area (e.g. amphibians (especially Giant Bullfrogs)) and speed bumps should be put in place to reduce speeding and faunal road mortalities;
  - Further, whilst no Giant Bullfrogs were encountered on site, chance find procedures for dealing with possible Giant Bullfrog finds as included in the EMPr must be implemented.
  - Staff should be educated about the sensitivity of faunal species and measures should be put in place to deal with any species that are encountered during the construction process. The intentional killing of any animals including snakes, insects, lizards, birds or other animals should be strictly prohibited; and
  - All domesticated animals are forbidden within the entire project area (especially feral cats) during both the construction and operational phases.
- As required by the Heritage Impact Assessment:
  - Implementation of a chance find procedure;
  - If impacted on the age of Feature 1 should be confirmed and if greater than 60 years of age a destruction permit will be required from the PHRAG
- As required by the Baseline Hydrogeological Baseline Assessment:
  - The recommended maximum abstraction rate for the borehole on site is 0.45 L/s, based on a pump schedule of 12 hours.
  - The existing borehole on site should be monitored for water levels and qualities. The following monitoring frequencies are recommended:
    - Water levels: Monthly
    - Water qualities: Quarterly
- The stormwater management system included in the Stormwater Management Plan must be implemented and maintained;
- A grey water wash bay to recycle water from the vehicle wash bays must be put in place;
- Sand, oil and grease traps must be implemented as noted in the Stormwater Management Plan;
- As per the Water and Sanitation Services Study and the comments received from Johannesburg Water, municipal water supply should be supplemented by abstraction from the existing borehole.
- Management and maintenance of the Sewer Conservancy Tank must be by an experienced and competent person.
- Collection and disposal of sewer must be by an appropriate and registered third party collector.
- Disposal of sewer collected from the conservancy tank must take place at an appropriate and licenced facility.
- The requirements of the Traffic Impact Assessment must be implemented.
- Hazardous substances must be stored and handled in accordance with the appropriate legislation and standards, which include the Hazardous Substances Act (Act No. 15 of 1973), the Occupational Health and Safety Act (No. 85 of 1993), relevant associated Regulations, and applicable SANS and international standards.
- Any hazardous materials (apart from fuel) must be stored within a lockable store with a sealed floor.
- All storage tanks containing hazardous materials must be placed in bunded containment areas with impermeable surfaces. The bunded area must be able to contain 110% of the total volume of the stored hazardous material.
- In the event of spillages of hazardous substances, the appropriate clean up and disposal measures are to be implemented.
- Necessary materials and equipment must be available on site to deal with spills of any hazardous materials present.

DESIRABILITY

9. The Needs and Desirability of the Proposed Development (As Per Notice 792 Of 2012, or the updated version of this Guideline)

The need and desirability of the proposed development was assessed in terms of Notice 891 of 2014 which is the updated guideline available regarding need and desirability. In line with this, the consideration of "need and desirability" included consideration of the strategic context of the proposed development along with the broader societal needs and the public interest.

The RSDF represents the prevailing spatial planning policy within the City of Johannesburg and is adopted in terms of the Municipal Systems Act, 2000 (Act No. 32 of 2000) as an integral component of the City's Integrated Development Plan (IDP). The proposed study site is situated in Sub-Area 1 of Region A according to the Regional Spatial Development Framework. The key-structuring element within the sub area is the Lanseria speciality node, which is surrounded by agricultural holdings and farm portions. One of the main development objectives in the area is to promote the development of a demarcated specialist node which includes the support of suitable commercial and light industrial land uses. **The proposed development is therefore in line with this development objective.**

The GSDF is part of the executive authority of the provincial government and an integral component of the governance structure of the province as a whole, and as such has to assist in ensuring the realization of national, regional, provincial and local development objectives. Some of the spatial imperatives and opportunities that will support the area include:

- Develop the larger Lanseria node, so that it contributes to spatial transformation.

The proposed development is in line with the concept of developing the Lanseria node.

Based on the above, the proposed development will further the objectives of both the GSDF and Region A Regional Spatial Development Plan by creating commercial land uses in the Lanseria node. In addition, market research by Toyota and Hino have indicated that there is a need for a dealership of this type in the area. From a socio-economic perspective, the proposed development will benefit the area in the following way:

- General improvement of the image of the area;
- Improvement in services in the area including, water, sanitation and road upgrades; and
- Increase in local economy.

Further, a detailed impact assessment process including specialist assessment has been undertaken and shows that impacts related to the proposed development can be satisfactorily mitigated. In addition, the construction of the proposed development will result in employment opportunities in the area. The following questions have also been addressed in line with the Guideline for Need and Desirability (Notice 891 of 2014).

Table 14: Need and Desirability

Question from the Need and Desirability Guideline	Response
Securing ecological sustainable development and use of natural resources	
How will this development (and its separate elements / aspects) on the ecological integrity of the area?	A Baseline Ecological Status Assessment was undertaken and did not envision significant negative impacts due to existing disturbed nature of the site. Therefore, it is not expected that the proposed development will negatively impact on the ecological integrity of the area as the site is not pristine and has been degraded by historical use..
How were the following ecological integrity considerations taken into account? • Threatened Ecosystems • Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands, and similar systems require specific attention in	A desktop assessment of sensitivity was undertaken initially to identify listed activities and determine necessary specialist studies. This included an assessment of the following: • Threatened ecosystems; • CBAs and ESAs;

management and planning procedures, especially where they are subject to significant human resource usage and development pressure, • Critical Biodiversity Areas ("CBAs") and Ecological Support Areas ("ESAs") • Conservation targets, • Environmental Management Framework, • Spatial Development Framework, and • Global and international responsibilities relating to the environment (e.g. RAMSAR sites, Climate Change, etc.	• Sensitive features such as wetlands; and • Agricultural Potential. Based on this, a Baseline Ecological Habitat Assessment was undertaken and included in the BAR. The study did not envision significant negative impacts due to existing disturbed nature of the site. Further, an Search, Rescue and Relocation Plan is included in the EMPr.
How will this development disturb or enhance ecosystems and / or result in the loss or protection of biological impacts that could not be avoided altogether, what measures were explored to minimize and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	A Baseline Ecological Status Assessment was undertaken and did not envision significant negative impacts due to existing disturbed nature of the site. Further, mitigation measures suggested by the specialists have been incorporated into the EMPr.
How will this development pollute and/or degrade the biophysical environment? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimize and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	Potential pollution has been assessed as part of the impact assessment and is not expected to be significant in either the construction or operation phase.
What waste will be generated by this development? What measures were explored to firstly avoid waste, and where waste could not be avoided altogether, what measures were explored to minimize, reuse and/or recycle the waste? What measures have been explored to safely treat and/or dispose of unavoidable waste?	During construction, construction waste will be produced whilst during operation, domestic waste related to the proposed development will be produced. The EMPr includes a waste management plan that aims to ensure measures to minimize, reuse and/or recycle the waste are incorporated into the development.
How will this development use and/or impact on non-renewable natural resources? What measures were explored to ensure responsible and equitable use of the resources? How have the consequences of the depletion of the non-renewable natural resources been considered? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimize and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	The proposed development does not involve the mining of non-renewable resources. However, some natural resources will be required during construction. A detailed impact assessment was undertaken and did not find significant impact to natural resources.
How will this development use and/or impact on renewable natural resources and the ecosystem of which they are part? Will the use of the resources and/or impact on the ecosystem jeopardize the integrity of the resource and/or system taking into account carrying capacity restrictions, limits of acceptable change, and thresholds? What measures were explored to firstly avoid the use of resources, or if avoidance is not possible, to minimize the use of resources? What measures were taken to ensure responsible and equitable use of the resources? What measures were explored to enhance positive impacts? • Does the proposed development exacerbate the increased dependency on increased use of resources to maintain economic growth or does it	A Baseline Ecological Status Assessment was undertaken and did not envision significant negative impacts due to existing disturbed nature of the site. The location of the site is in line with the GPEMF, RSDP, and COJ SDF for the area. Further, energy saving measures will also be incorporated at the detailed design phase to minimise energy requirements. Buildings must comply with NHBRC requirements

reduce resource dependency (i.e. de-materialized growth)? (note: sustainability requires that settlements reduce their ecological footprint by using less material and energy demands and reduce the amount of waste they generate, without compromising their quest to improve their quality of life) • Does the proposed use of natural resources constitute the best use thereof? Is the use justifiable when considering intra- and intergenerational equity, and are there more important priorities for which the resources should be used (i.e. what are the opportunity costs of using these resources this the proposed development alternative?). • Do the proposed location, type and scale of development promote a reduced dependency on resources?	
How were a risk-averse and cautious approach applied in terms of ecological impacts? • What are the limits of current knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)? • What is the level of risk associated with the limits of current knowledge? • Based on the limits of knowledge and the level of risk, how and to what extent was a risk-averse and cautious approach applied to the development?	A risk-averse and cautious approach has been undertaken. The following has reference: • The specialist studies will identify gaps which will then be noted in both the specialist report and BAR. • The impact assessment which was undertaken will specifically deal with gaps identified by specialists and/or lack of information through the assessment of 'Level of Confidence'. • The EMPr provides numerous mitigation measures to ensure that impacts identified to be a 'low' risk can be further mitigated.
How will the ecological impacts resulting from this development impact on people's environmental right in terms following: • Negative impacts e.g. access to resources, opportunity costs, loss of amenity (e.g. open space), air and water quality impacts, nuisance (noise, odour, etc.), health impacts, visual impacts, etc. What measures were taken to firstly avoid negative impacts, but if avoidance is not possible, to minimize, manage and remedy negative impacts? • Positive impacts: e.g. improved access to resources, improved amenity, improved air or water quality, etc. What measures were taken to enhance positive impacts?	A detailed impact assessment was undertaken and did not identify any significant impacts to people's environmental rights. Whilst part of the site falls within a CBA Area, the site is degraded and is no longer representative.
Describe the linkages and dependencies between human wellbeing, livelihoods and ecosystem services applicable to the area in question and how the development's ecological impacts will result in socio-economic impacts (e.g. on livelihoods, loss of heritage site, opportunity costs, etc.)?	A detailed impact assessment was undertaken and did not identify any significant impacts to ecosystem services as the site is historically disturbed. A Heritage Impact Assessment was also undertaken and did not identify any heritage on site. A Baseline Geohydrological Assessment also noted that no significant negative impacts are expected. Lastly, there will be positive economic impacts related to the development.

Based on all of the above, how will this development positively or negatively impact on ecological integrity objectives/targets/considerations of the area?	It is not expected that the development will negatively impact on the ecological integrity objectives of the area. The site is degraded and is not sensitive. Whilst some part of the site is classified as a CBA Important area, the site itself is degraded and is no longer sensitive. More information is provided in the specialist studies and impact assessment.
Considering the need to secure ecological integrity and a healthy biophysical environment, describe how the alternatives identified (in terms of all the different elements of the development and all the different impacts being proposed), resulted in the selection of the "best practicable environmental option" in terms of ecological considerations?	Two alternatives are assessed as part of the Basic Assessment Process in addition to the No-Go Alternative. These included: • Proposal; and • Alternative 1. The main differences between the proposal and alternative is erf 1 (the Hino Dealership). The proposal involves the development of the north-western section of the site with the truck dealership. In the proposal, the dealership buildings and showrooms along the western boundary of the site (parallel to the R512). The aim of this placement is to increase visibility. The parking area is then located towards the back of the development footprint. The alternative differs the parking area is located along the western boundary and the dealerships are then behind the parking area. This reduces the visibility of the truck dealership and thus has a related negative socio-economic impact. These alternatives were assessed and the Proposal has been identified as the Best Practicable Environmental Option as it improves the socio-economic benefits associated with the development. Both the proposal and alternative had similar impacts in terms of other aspects which were assessed.
Promoting justifiable economic and social development	
What is the socio-economic context of the area, based on, amongst other considerations, the following considerations? • The IDP (and its sector plans' vision, objectives, strategies, indicators and targets) and any strategic plans, frameworks of policies applicable to the area, • Spatial priorities and desired spatial patterns (e.g. need for integrated of segregated communities, need to upgrade informal settlements, need for densification, etc.). • Spatial characteristics (e.g. existing land uses, planned land uses, cultural landscapes, etc.), and • Municipal Economic Development Strategy ("LED Strategy").	The proposed development will further the objectives of both the GSDF and Region A Regional Spatial Development Plan by creating commercial land uses in the Lanseria node. In addition, market research by Toyota and Hino have indicated that there is a need for a dealership of this type in the area. From a socio-economic perspective, the proposed development will benefit the area in the following way: • General improvement of the image of the area; • Improvement in services in the area including, water, sanitation and road upgrades; and • Increase in local economy.
Considering the socio-economic context, what will the socio-economic impacts be of the development (and its separate elements/aspects), and specifically also on the socio-economic objectives of the area? • Will the development complement the	

local socio-economic initiatives (such as local economic development (LED) initiatives), or skills development programs?	
How will this development address the specific physical, psychological, developmental, cultural and social needs and interests of the relevant communities?	
Will the development result in equitable (intra- and inter-generational) impact distribution, in the short- and long-term? Will the impact be socially and economically sustainable in the short- and long-term?	A detailed impact assessment has been undertaken and all identified impacts can be satisfactorily mitigated. Significant inequitable (intra- and inter-generational) impacts are not expected.
In terms of location, describe how the placement of the proposed development will: • Result in the creation of residential and employment opportunities in close proximity to or integrated with each other • Reduce the need for transport of people and goods • Result in access to public transport or enable non-motorized and pedestrian transport (e.g. will the development result in densification and the achievement of thresholds in terms public transport), • Compliment other uses in the area • Be in line with the planning for the area, • for urban related development, make use of underutilized land available with the urban edge • optimize the use of existing resources and infrastructure, • opportunity costs in terms of bulk infrastructure expansions in non-priority areas (e.g. not aligned with the bulk infrastructure planning for the settlement that reflects the spatial reconstruction priorities of the settlement), • discourage "urban sprawl" and contribute to compaction/densification, • contribute to the correction of the historically distorted spatial patterns of settlements and to the optimum use of existing infrastructure in excess of current needs, encourage environmentally sustainable land development practices and processes, take into account special locational factors that might favour the specific location (e.g. the location of a strategic mineral resource, access to the port, access to rail, etc.), • the investment in the settlement or area in question will generate the highest socio=economic returns (i.e an area with high economic potential), • impact on the sensitivities of the area, and • in terms of the nature, scale and location of the development promote or act as a catalyst to create a more integrated settlement?	The location of the proposed development considered a number of aspects including: • Available land; and • Alignment to various planning documents GPEMF, RSDP and COJ SFP. • Linkages to existing approved projects on the adjacent property. . The following can also be noted: • The site is disturbed by historic uses. • A Heritage Impact Assessment was also undertaken to ensure the proposed development does not impact on the sense of history, sense of place and heritage of the area and the socio-cultural and cultural-historic characteristics of the site. No significant heritage resources were identified on site. • The proposed development will create employment during construction and operation. • It also compliments other land uses in the area including the approved development which is adjacent to the site.
How were a risk-averse and cautious approach applied in terms of socio-economic impacts? • What are the limits of current	Other than the Heritage Impact Assessment, no social or economic specialist studies were triggered and are required. However, a risk-

knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)? • What is the level of risk (note: related to inequality, social fabric, livelihoods, vulnerable communities, critical resources, economic vulnerability and sustainability) associated with the limits of current knowledge? • Based on the limits of knowledge and the level of risk, how and to what extent was a risk-averse and cautious approach applied to the development?	averse and cautious approach has been undertaken. The following has reference: • The Heritage Impact Assessment identified gaps which have been noted in both the specialist report and BAR. • The impact assessment specifically deals with gaps identified by specialists and/or lack of information through the assessment of 'Level of Confidence'. • The EMPr provides numerous mitigation measures to ensure that impacts identified to be a 'low' risk can be further mitigated.
How will the socio-economic impacts resulting from this development impact on people's environmental right in terms following: • Negative impacts: e.g. health (e.g. HIV-Aids), safety, social ills, etc. What measures were taken to firstly avoid negative impacts, but if avoidance is not possible, to minimize, manage and remedy negative impacts? • Positive impacts. What measures were taken to enhance positive impacts?	A detailed impact assessment has been undertaken and it is not expected that there will be negative socio-economic impacts associated with the development. Instead, the CAPEX value of the project is about R80 million and will create numerous multiplier effects in the area. Further, approximately 80 construction-related and 50 operation-related jobs will be created.
Considering the linkages and dependencies between human wellbeing, livelihoods and ecosystem services, describe the linkages and dependencies applicable to the area in question and how the development's socio-economic impacts will result in ecological impacts (e.g. over utilization of natural resources, etc.)?	A detailed impact assessment was undertaken and included an assessment of social and economic impacts as well as ecological impacts. Based on the type of proposed development, it is not expected that the socio-economic impacts will result in significant ecological impacts.
What measures were taken to pursue the selection of the "best practicable environmental option" in terms of socio-economic considerations?	Two alternatives are assessed as part of the Basic Assessment Process in addition to the No-Go Alternative. These included: • Proposal; and • Alternative 1. These alternatives were assessed and the Proposal has been identified as the Best Practicable Environmental Option due to improved visibility and associated socio-economic impacts. .
What measures were taken to pursue environmental justice so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons (who are the beneficiaries and is the development located appropriately)? Considering the need for social equity and justice, do the alternatives identified, allow the "best practicable environmental option" to be selected, or is there a need for other alternatives to be considered?	A detailed BAR process is currently being undertaken. This includes the assessment of alternatives, compilation of a detailed impact assessment and undertaking relevant specialist studies. Two alternatives are assessed as part of the Basic Assessment Process in addition to the No-Go Alternative. These included: • Proposal; and • Alternative 1. These alternatives were assessed and the Proposal has been identified as the Best Practicable Environmental Option due to improved visibility and associated socio-economic impacts.
What measures were taken to pursue equitable access to environmental resources, benefits and services to meet basic human needs and ensure	A number of specialist studies have been undertaken to ensure that the proposed development is sustainable and does not result

human wellbeing and what special measures were taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination?	any negative impacts to disadvantaged persons.
What measures were taken to ensure that the responsibility for the environmental health and safety consequences of the development has been addressed throughout the development's life cycle?	In identifying the potential impacts associated with the development, the full lifecycle was assessed as well as the findings of specialist studies. Further, the full EMPr includes the roles and responsibilities for the development and ensures that the responsibility of the implementation of the EMPr falls to the developer.
What measures were taken to: • ensure the participation of all interested and affected parties, • provide all people with an opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation • ensure participation by vulnerable and disadvantaged persons, • promote community wellbeing and empowerment through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means, • ensure openness and transparency, and access to information in terms of the process, • ensure that the interests, needs and values of all interested and affected parties were taken into account, and that adequate recognition were given to all forms of knowledge, including traditional and ordinary knowledge, and • ensure that the vital role of women and youth in environmental management and development were recognized and their full participation therein were promoted?	A detailed public participation process is being undertaken as part of the BAR process. As part of this, a detailed Interested and Affected Party (I&AP) Database was compiled and included City of Johannesburg Department of Water and Sanitation, and Gauteng Department of Agriculture and Rural Development (GDARD). In addition, the I&AP database included the affected ward councillor of the area. These I&APs have been notified of the BAR process and provided with an opportunity to comment on the Report. Due to the current COVID-19 pandemic and associated State of Emergency, I&APs were contacted telephonically to confirm their preferred communication methods (including site notices, adverts, email/sms delivery of BIDs) are being employed, and it is felt that public participation has been such to ensure participation by all potentially interested or affected people.
Considering the interests, needs and values of all the interested and affected parties, describe how the development will allow for opportunities for all the segments of the community (e.g. a mixture of low- middle-, and high-income housing opportunities) that is consistent with the priority needs of the local area (or that is proportional to the needs of an area)	The proposed development will further the objectives of both the GSDF and Region A Regional Spatial Development Plan by creating commercial land uses in the Lanseria node. In addition, market research by Toyota and Hino have indicated that there is a need for a dealership of this type in the area. From a socio-economic perspective, the proposed development will benefit the area in the following way: • General improvement of the image of the area; • Improvement in services in the area including, water, sanitation and road upgrades; and • Increase in local economy.
What measures have been taken to ensure that current and / or future workers will be informed of work that potentially might be harmful to human health or the or the environment or of dangers associated with the work, and what measures have been taken to ensure that the right of workers to refuse such work will be respected and protected?	A site specific EMPr has been compiled and includes include an Environmental Awareness Plan. As part of this, workers will be informed of their rights to refuse work that might be harmful to human health or the environment.

Describe how the development will impact on job creation in terms of, amongst other aspects: • the number of temporary versus permanent jobs that will be created, • whether the labour available in the area will be able to take up the job opportunities (i.e. do the required skills match the skills available in the area), • the distance from where labourers will have to travel, • the location of jobs opportunities versus the location of impacts (i.e. equitable distribution of costs and benefits); and • the opportunity costs in terms of job creation (e.g. a mine might create 100 jobs, but impact on 1000 agricultural jobs, etc.)	A detailed impact assessment has been undertaken and it is not expected that there will be negative socio-economic impacts associated with the development. Instead, the CAPEX value of the project is about R80 million and will create numerous multiplier effects in the area. Further, approximately 80 construction-related and 50 operation-related jobs will be created. The following can be noted in regards to this: • The EMPr includes the requirement that local employment should be encouraged to promote skills transfer and development. This will enhance the general area and provide job opportunities to potential job seekers and manage it in the best suitable way. • An assessment of the social environment of the area suggests that there is labour available in the area. • The proposed development occurs in close proximity to numerous residential developments and thus, the distance labourers will have to commute is not expected to be significant. • The proposed development will not result in any losses of any jobs and job-related opportunity costs are not expected.
What measures were taken to ensure: • That there were intergovernmental coordination and harmonization of policies, legislation and actions relating to the environment, and • That actual or potential conflicts of interest between organs of state were resolved through conflict resolution procedures?	National Legislation i.e. NEMA, NWA, NHRA, NEM:BA were consulted in the preparation of this BAR Report. Provincial guidelines also formed part of the literature review. Spatial development tools also aided the EAP to assess and provide information pertaining to the proposed development. Any comments received from I&APs or organs of state are included in the comments and response register.
Are the mitigation measures proposed realistic and what long-term environmental legacy and managed burden will be left?	The site specific EMPr includes realistic and achievable mitigation measures which aim to reduce any negative impacts as well as to enhance any positive benefits associated with the project.
What measures were taken to ensure that the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimizing further pollution, environmental damage or adverse health effects will be paid for by those responsible for harming the environment?	The site specific EMPr includes detailed roles and responsibilities. In addition, a penalty system for contractors will be included.
Considering the need to secure ecological integrity and a healthy bio-physical environment, describe how the alternatives identified (in terms of all the different impacts being proposed), resulted in the selection of the best practicable environmental option in terms of socio-economic considerations?	Two alternatives are assessed as part of the Basic Assessment Process in addition to the No-Go Alternative. These included: • Proposal; and • Alternative 1. A detailed assessment of alternatives was undertaken and took into account the following: • The findings of the specialist studies; • The results of the impact assessment; and • The need for the project.

10. The Period for which the Environmental Authorisation is Required (Consider when the Activity is Expected to be Concluded)

The proposed period for which the environmental authorization should be valid prior to operation is 8 years with an option to extend if necessary. Should construction not commence within this period, the authorization will lapse, and new authorization process would be required.

However, once the project has commenced, it cannot be seen to have an expiry date (i.e. during the operational phase), because of the nature of the project and because the project is intending to construct permanent infrastructure on the proposed 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: APPENDIXES

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 A: Site plan(s) – (must include a scaled layout plan of the proposed activities overlain on the site sensitivities indicating areas to be avoided including buffers)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Route position information

Appendix E: Public participation information

Appendix E1 – Proof of site notice
Appendix E2 – Written notices issued as required in terms of the regulations
Appendix E3 – Proof of newspaper advertisements
Appendix E4 –Communications to and from interested and affected parties
Appendix E5 – Minutes of any public and/or stakeholder meetings
Appendix E6 - Comments and Responses Report
Appendix E7 –Comments from I&APs on Basic Assessment (BA) Report
Appendix E8 –Comments from I&APs on amendments to the BA Report
Appendix E9 –I&AP Database

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

Appendix F1: WULA Technical Report

Appendix G: Specialist reports

Appendix G1: Baseline Ecological Habitat Assessment
Appendix G2: Heritage Impact Assessment
Appendix G3: Baseline Geohydrological Assessment
Appendix G4: Traffic Impact Assessment
Appendix G5: Water and Sanitation Services Study
Appendix G6: Stormwater Management Plan

Appendix H: EMPr

Appendix I: Other information

Appendix I1: Impact Assessment
Appendix I2: Curricula Vitae and Company Profile
Appendix I3: Application form
Appendix I4: Public Participation Plan and approval

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.