SITE SENSITIVITY VERIFICATION REPORT

PROPOSED TURNKEY BOREHOLE EXPLORATION AND DRILLING PROJECT IN THE NELSON MANDELA BAY MUNICIPALITY AREA (BEAD), EASTERN CAPE – MALABAR



Report Prepared by: Engineering Advice & Services (Pty) Ltd

Report Prepared for: Nelson Mandela Bay Municipality

April 2025

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Nelson Mandela Bay Municipality

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EAS Project Number: 2291

Date: April 2025

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Our Ref: F:\2200-2299\2291\Environmental\Reports\BAR Report\Draft\dBAR NMBM Sites - 02\2291 - Appendix G 2 - Site Sensitivity Verification Report (Malabar).docx			

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INTRODUCTION & BACKGROUND

In 2017, a State of Disaster was declared in Nelson Mandela Municipality in terms of Section 55 (1) of the Disaster Management Act No. 57 of 2002. Nelson Mandela Bay Municipality has suffered from periodic droughts, which are a threat to the Metro's water security. The NMBM's water supply network is predominantly reliant on surface water sources, particularly from local rivers, dams, and the Orange River/ Gariep Dam. The management of these resources is crucial for ensuring a sustainable and reliable water supply for the metro's population. This is essential for sustaining the municipal's population and supporting local industries, for both current needs and future demands.

In an effort to increase the Metro's overall water supply, Engineering Advice and Services (EAS) has been appointed by Coega Development Corporation (CDC) on behalf of the Nelson Mandela Bay Municipality (NMBM), the applicant, to undertake a Basic Assessment application for the groundwater exploration process of potential borehole sites located at Aspen Heights and Malabar within the Sarah Baartman District, Eastern Cape. The proposed project will take place in two phases:

- Phase 1: Exploration phase undertake the required feasibility studies which include yield and quality testing of the identified potential borehole sites and use this data to identify the locations, layouts, and infrastructure requirements for the proposed wellfields. Before this exploration can be conducted, an Environmental Authorisation as per the NEMA regulations will be required.
- Phase 2: Environmental Impact Assessment Phase Undertake EIA studies including all specialist studies as well as the Water Use License Application (WULA) for the identified wellfields.

Area of Exploration

Malabar is a north-western suburb of Gqeberha in Nelson Mandela Bay Municipality. This area is primarily residential. The proposed Malabar site is on vacant and undeveloped NMBM land. The Godetia Road is located east of the site which connects Malabar to Linton Grange. The parcel of land where exploration will occur is owned by the NMBM:

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Only one borehole site will be explored in Malabar. The terrestrial biodiversity specialist suggested that the Malabar exploration site be relocated 5m to the west (33°55'28.71" S 25°31'0.99" E), and only the access road shown in **Figure 2** be used due to the high degree of disturbance that already exists. The position of the borehole site is shown in **Figure 1**.



Figure 1. Explorations points in Malabar



Figure 2. Proposed access route along existing track with a high degree of disturbance (illegal solid waste disposal)

Malabar is situated east of the city center of Gqeberha. This area is primarily residential. The proposed Malabar site is vacant and undeveloped. Illegal dumping of general waste and concrete rubble was observed on the site.

The purpose of Phase 1 is to ascertain whether or not these areas/positions will provide adequate groundwater to be confirmed by yield and quality tests. Once these results are obtained the final planning and design of the project can go forward. No infrastructure such as access roads, pipelines, or pumps will be constructed or installed in Phase 1. Access to the site will be via existing roads, disturbed servitudes, and/or driving over vegetation only if necessary. The proposed groundwater exploration will entail the following activities on the site:

- Site preparation will include disturbing (not clearing) the area for drilling. No more than 10m² per drilling site will be disturbed;
 - Driving over vegetation (only where required) with high-clearance vehicles to get to the exploration positions.
- Drilling boreholes at selected sites to access groundwater;
- Yield testing to determine the yield of the boreholes;
- Water quality sampling;

This approach will be conducted in accordance with an approved EMP and an onsite ECO to help ensure that the necessary data is collected efficiently and with minimal environmental impact, paving the way for the next phases of the project.

RECEIVING ENVIRONMENT

Hydrogeology

According to the geohydrological desktop study done by GHT Consulting Scientists (2024), the identified area has a medium to high potential for groundwater exploration. The target aquifer is the deep-seated TMG quartzites.

Aquifer Classification	Poor
Aquifer Susceptibility	Least
Aquifer Type and Yield	Fractured 0.5 – 2.0 l/s
Aquifer Vulnerability	Least
Depth to Groundwater	21 - 30 mbgl
Aquifer Recharge	21 - 25 mm/a
Groundwater Quality	150 - 370 mS/m

Table 1. Aquifer information for Malabar (GHT Consulting Scientists, 2024)

Biodiversity

In 2019, Dr Grobler completed an assessment of nine sites along the Moregrove Fault Zone. The aim was to confirm the presence or absence of an undescribed *Aspalathus sp* at the borehole sites. The proposed Malabar site falls within the area that was assessed. Surveyed boreholes are indicated by yellow squares, while yellow stars indicate other sites where *Aspalathus sp*. was recorded. The species appears to occur throughout the grassy fynbos in the north-western areas of Port Elizabeth between Cotswold and Schauderville in the east and westward to at least Groot Kloof.



Figure 3. Current known distribution of Aspalathus sp. around the north-western suburbs of Port Elizabeth (red overlay) (Dr Grobler, 2019)

According to the National Vegetation Map of Southern Africa (2018), the vegetation cover of the Malabar site comprises Algoa Sandstone Fynbos (Critically Endangered), and Bethelsdorp Bontveld (Least Concern) (see **Figure 4**). Localised encroachment by the alien shrub *Acacia saligna* was noted on site.

The NMBM Bioregional Plan indicates that Malabar Grassy Fynbos and Bethelsdorp Bontveld are present on the site which have a conservation status of Least Concern and Endangered respectively. According to the NMBM Bioregional Plan CBA Map (2015), the eastern side of the site falls within a CBA. The NMBM Bioregional Plan is aimed at conserving biodiversity at a regional level and is primarily concerned with guiding land use planning and decision-making through improving the legal standing and consideration of Biodiversity/Conservation areas by all organs of the state (NMBM, 2015).

The STEP Vegetation types and Corridors indicate that Algoa Grassy Fynbos and Bethelsdorp Bontveld are present on the site which all have a conservation status of Vulnerable. The vegetation present within the site does indicate features characteristic of the fynbos which is designated to the area. According to the DFFE National Screening Tool, the proposed site falls within the National Protected Areas Expansion Strategy (NPAES) (refer to

Figure 5). There are no Nature Reserves within 5 km of the site and no National Parks or World Heritage Sites within 10 km of the site.



Figure 4. National VegMap (2018) – Malabar



Figure 5. National Protected Area Expansion Strategy (NPAES) - Malabar

Rivers and Watercourses

According to the Aquatic Compliance statement (Colloty, 2025), the proposed site falls within 100m of two mainstream watercourses and 500m of the following delineated freshwater systems:

- valley bottom,
- seepage areas, and
- endorheic pans.

The current state of these systems includes dense alien vegetation, illegal dumping, vehicle tracks, and grazing. These systems are rated with very high sensitivity.



Figure 6. Results of the specialist assessment and the confirmed sensitivity of the observed aquatic systems within the Malabar site

The proposed project (Phase 1) is therefore supported in terms of aquatic biodiversity considerations, on the condition that all of the proposed infrastructure:

- Will remain outside of the delineated freshwater feature footprints, especially where no impacts or previous disturbances occur).
 - These systems which were mostly wetlands (as shown in the Screening Tool), must therefore be avoided by any drilling activities inclusive of access.
 - Access along existing tracks/roads (e.g. Godetia Drive) within these systems is allowable assuming that no additional road upgrades will be required.
- All works within the regulated area of a watercourse are suitably authorised under the National Water Act (No. 36 of 1998), as relevant and applicable, prior to the commencement of explorations (Applications are in process).

Geology & Topography

According to the <u>Council for Geoscience Interactive Web Portal</u>, the Malabar site falls within the Peninsula, Pakhuis, and Cedarberg Formations with pebbly quartz arenite, diamictite, minor conglomerate, mudrock, siltstone, and shale lithologies.

ACCESS

The terrestrial biodiversity specialist suggested that the Malabar exploration only has one access road used due to the high degree of disturbance that already exists on the access road.



Figure 7. Proposed access route along existing track with a high degree of disturbance (illegal solid waste disposal)

Climate

Nelson Mandela Bay receives an average annual rainfall of 453 mm, with rainfall occurring throughout the year, where the lowest rainfall occurs in January and the greatest in October (meteoblue.com).

The site is located within the bimodal rainfall region of South Africa, with a Mean Annual Precipitation (MAP) for the coastal region at ca. 680 mm per annum. Annual average temperatures range between 7.6 and 250 C, with frost a rare occurrence of no more than 3 days per year (Mucina & Rutherford, 2007).

SPECIALIST INPUT

Aquatic Compliance Statement

The following points were recommended in the Aquatic Compliance Statement (Colloty, 2025):

The proposed project (Phase 1) is therefore supported in terms of aquatic biodiversity considerations, on the condition that all of the proposed infrastructure:

- Will remain outside of the delineated freshwater feature footprints
 - These systems should be avoided by any drilling activities inclusive of access
 - Access along existing tracks within these systems is allowable assuming that no additional road upgrades will be required.
- All works within the regulated area of a watercourse are suitably authorised under the National Water Act (No. 36 of 1998), as relevant and applicable, prior to the commencement of explorations (Applications are in process).

Terrestrial Impact Assessment

The following points were recommended by the Terrestrial Impact Assessment Specialist (Colloty, 2025):

During this assessment, several sensitive habitats were observed associated described vegetation units known in the region and as anticipated contained most of the listed and or protected species associated with these habitats. Habitat that in themselves is listed or are considered Vulnerable. Although there is a close similarity in the delineation the DFFE rated systems when compared to the actual extent of the observed systems, a finer rating of the drilling site and potential accessed was needed. The current site and several access options are located in areas that would result in the disturbance of near natural areas with a number of listed and protected species.

Only one borehole site will be explored in Malabar. The terrestrial biodiversity specialist suggested that the Malabar exploration site be relocated 5m to the west, making the new position -33.9246422 S 25.5169408 E, and only the access road (refer to **Figure 2**) be used due to the high degree of disturbance that already exists.

NEED AND DESIRABILITY

Water Security:

The infrastructure is urgently needed, as the lingering effects of the drought remain, and the municipality cannot afford to delay implementing solutions to safeguard its water resources. The Nelson Mandela Bay Municipality (NMBM) faces periodic droughts and relies heavily on surface water sources. The project seeks to alleviate these water shortages by finding alternative water sources through borehole exploration. Groundwater exploration can help diversify and secure the water supply, enhancing resilience against water shortages. Exploring groundwater may uncover sources of high-quality water that can supplement or enhance the existing treatment systems, leading to improved drinking water security for residents. The project seeks to alleviate these water shortages by finding alternative of the exploration.

Growing Demand:

The primary objective is to increase the municipality's overall water supply, which is essential for sustaining its population and supporting local industries. The population of NMBM continues to grow, increasing the demand for reliable water resources. By diversifying water sources, the project can help reduce the over-reliance on specific surface water bodies, allowing them to recover as well as maintain ecological integrity. Groundwater can supplement existing supplies to meet both current and future needs.

Climate Adaptation:

As climate variability leads to more frequent droughts, finding alternative water sources becomes critical for sustainability and community well-being. Establishing groundwater resources can serve as a contingency plan during extreme drought conditions, ensuring that the municipality can respond effectively to emergencies. By increasing the water supply through boreholes, the region's dependence on traditional surface water sources will decrease. This diversification of water sources is key to ensuring long-term water sustainability.

Socio-Economic Stability:

A consistent water supply is essential for supporting local industries and agriculture, which are vital to the region's economy. The exploration project can also create jobs in various sectors, including engineering, environmental science, and construction, contributing to local economic growth. Improved water availability can enhance the quality of life for residents and support local businesses, fostering economic development.

Environmental Management:

Borehole exploration and development, if done properly, is an environmentally friendly approach to water sourcing compared to other large-scale interventions. This project aligns with the municipality's long-term goals of sustainable water management. Properly managed groundwater resources can reduce the pressure on surface water systems, helping to maintain ecological balance in local rivers and wetlands. Groundwater management can promote sustainable practices, ensuring that water resources are used responsibly and preserved for future generations. By relieving pressure on surface water sources, the project can help protect local ecosystems and

their biodiversity, contributing to broader conservation efforts in the region. Exploring groundwater aligns with sustainable water management practices, promoting the responsible use of natural resources.

Technological Advancements:

Utilizing modern exploration techniques can yield valuable data on groundwater availability and quality, informing future water management strategies.

THE ONLINE DEA SCREENING TOOL

On 20 March 2020 the Minister of Forestry, Fisheries and the Environmental published the general requirements for undertaking site sensitivity verification for environmental themes for activities requiring environmental authorisation (Government Gazette No. 43110). In terms of these requirements, prior to commencing with a specialist assessment, the current land use and environmental sensitivity of the site under consideration by the screening tool must be confirmed by undertaking a site sensitivity verification (DEDEAT).

In accordance with the Notice of the requirement to submit a report generated by the national web-based environmental screening tool in terms of section 24(5)(h) of the NEMA, 1998 (Act No 107 of 1998) and regulation 16(1)(b)(v) of the EIA regulations, 2014, as amended, a screening tool was generated and identified specific site sensitivities and themes to be assessed for this specific project. The following specialist themes were identified:

Site Sensitivities identified (Screening Tool)

Table 2. Screening tool sensitivity (DFFE)

Category	Screening Tool Sensitivity
Agriculture Theme	High
Animal Species Theme	High
Aquatic Biodiversity Theme	Very High
Archaeological and Cultural Heritage Theme	Low
Civil Aviation Theme	High
Defense Theme	Medium
Paleontology Theme	High
Plant Species Theme	Medium
Terrestrial Biodiversity Theme	Very High

Specialist assessments identified

Based on the above environmental sensitivities, as well as initial site investigations for the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report by the screening tool.

- 1. Landscape/Visual Impact Assessment
- 2. Archaeological and Cultural heritage Impact Assessment
- 3. Paleontology Impact Assessment
- 4. Terrestrial Biodiversity Impact Assessment
- 5. Aquatic Biodiversity Impact Assessment
- 6. Hydrology Assessment
- 7. Socio-Economic Assessment
- 8. Plant species Assessment
- 9. Animal species Assessment

Therefore, this site sensitivity verification report is compiled to determine whether Specialist Assessments or Compliance Statements for the abovementioned specialist studies are required for the proposed development.

Site Sensitivity Verification Methodology

The site sensitivity verification report compiled by Engineering Advice and Services (represented by Ms Lea Jacobs) is based on:

- A site investigation undertaken on 20 August 2024.
- A desktop investigation using biodiversity and land-use mapping tools such as inter alia ArcGIS and;
- Information recorded in Screening Report
- Information derived from available specialist assessment reports.

DESKTOP ANALYSIS OF SITE

The proposed exploration site is located in between Malabar and Linton Grange in the northwestern suburbs of Gqeberha. The area receives an average annual rainfall of 453 mm, where the lowest rainfall occurs in January and the greatest in October.

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Feature	Description	Implications/Notes
Vegetation Unit (NBA, 2018)	Algoa Sandstone Fynbos Bethelsdorp Bontveld	Critically Endangered Least Concern
Critically Endangered and Endangered Ecosystems ECB CA (2007)	CBA 2 and CBA 3	Sites are located within a CBA 2 and CBA 3 area according to the ECBCA (2007) Database
Nelson Mandela Bay Bioregional Plan (NMB BP, 2015) Vegetation Type	Malabar Grassy Fynbos Bethelsdorp Bontveld	Vulnerable Endangered
Nelson Mandela Bay Bioregional Plan (NMB BP, 2015) CBA	СВА	Portion of the exploration site is within the NMBBP, 2015 Critically Biodiversity Area
STEP Vegetation types and Corridors	Algoa Grassy Fynbos Bethelsdorp Bontveld	Vulnerable Vulnerable
River or watercourses	Non-perennial drainage lines present	Exploration may occur near drainage lines and hence the NWA may be applicable.
32 m Buffer of Rivers or watercourses	Non-perennial drainage lines present	Exploration may occur near drainage lines
100 m Buffer of Rivers	Non-perennial drainage lines present	Exploration may occur near drainage lines
Wetlands	Depression Wetlands	Exploration may occur near wetlands
500 m Buffer of Wetlands	Exploration area falls within 500m of a wetland	Exploration may occur near wetlands
Protected areas	None	None
Protected area buffers (5 km)	None	None
Conservation Areas (CA)	None	None

The latest Eastern Cape Biodiversity Conservation Plan (2019) screening does not cover the Nelson Mandela Bay Metropolitan Municipality; however, the Nelson Mandela Bay Municipality Bioregional Plan (2015) indicates that the exploration area does include sensitive Critically Biodiversity Areas:

Table 4. Nelson Mandela Bay Bioregional Plan (NMB BP, 2015)

Feature	Description	Implication
Nelson Mandela Bay Bioregional Plan (NMB BP, 2015)	CBA	All Critically Endangered habitats, ecological process areas, ecological corridors, habitats for Species of Special Concern, and some Endangered, Vulnerable or Least Threatened habitats. Such areas must be managed for biodiversity conservation purposes and incorporated into the protected area system

DISCUSSION OF IDENTIFIED SPECIALIST ASSESSMENTS

1. Landscape/Visual Impact Assessment

A Landscape/Visual Impact Assessment will not be required for the exploration of groundwater in Malabar due to several key factors. The exploration phase primarily involves activities like drilling boreholes and conducting yield tests, which typically have limited visual impact compared to larger construction projects or developments that alter the landscape significantly. The Malabar site is primarily vacant and undeveloped, meaning that any changes made during the exploration phase may not introduce new visual elements that would be considered disruptive or detrimental to the landscape. The presence of illegal dumping and existing disturbances in the area may already compromise the visual quality of the site, making any additional impacts less significant in the overall visual context. Since no new infrastructure, access roads, or major land alterations will be constructed during the exploration phase, the visual impact is expected to be negligible.

2. Archaeological and Cultural Heritage Impact Assessment

An Archaeological and Cultural Heritage Impact Assessment (ACHI) will not be required for the Malabar groundwater exploration for several reasons. According to the DFFE National Screening Tool, the site falls in a low-sensitivity theme area. Additionally, the exploration phase mainly involves drilling boreholes and conducting yield and water quality tests. These activities will only disturb small areas and do not usually involve extensive excavation or land alteration that could impact archaeological or cultural resources. The site is already characterized by illegal dumping and previous disturbances, which may have compromised the integrity of any potential archaeological deposits. Therefore, it was not beneficial to undertake a full phase 1 archaeological impact assessment from a specialist.

3. Paleontology Impact Assessment

The current phase only entails drilling and testing the groundwater quality of the exploration sites. The drilling activities primarily impact only the upper layers of soil and rock, reducing the likelihood of disturbing significant paleontological resources or strata where significant fossils are found. Only drilling will occur for this phase and no development will be built. Therefore, it was not beneficial to undertake a full phase 1 paleontology impact assessment from a specialist.

4. Terrestrial Biodiversity Assessment

Malabar has been classified as having a very high terrestrial biodiversity sensitivity according to the National Screening Tool Report. A biodiversity specialist was appointed to undertake a Terrestrial Impact Assessment to establish the status of the present terrestrial biodiversity consisting of flora and fauna species and assess the potential impact of the proposed exploration activities on the biophysical environment. The study area

spans two vegetation The vegetation types defined by Mucina and Rutherford (2007), as amended in the National Vegetation Map 2012 and 2017/18 spatial information, as Algoa Sandstone Fynbos (FFs 29), a form of Algoa Grassy Fynbos and is listed as Critically Endangered. Therefore, considered a Threatened Ecosystem, as per the National Environmental Management: Biodiversity Act.

According to the NMBM Bioregional Plan, the exploration site falls within the Malabar Grassy Fynbos. Species associated with this unit and observed on site included *Themeda triandra, Berkheya heterophylla, Passerina rigida, Leucospermum cuneiform, Aspalathus setacea, Syncarpa argentea, Euryops imbricatus.* Dense stands of *Bobartia orientalis* were also evident within the proposed site. Additional species observed on site included several Erica species as identified by the screening tool, as well as several Watsonias. All of which are protected by Provincial law.

A number of sensitive plant species were observed on site which have been highlighted in the terrestrial specialist report. No other animals were observed within the site, but it can be assumed that Snakes, Mongoose and various mice/rats, would be present.

In closing, the specialist concluded that the initial location of the exploration site and several access options are located in areas that would result in the disturbance of near natural areas with a number of listed and protected species. For this reason, it was recommended that the site be relocated 5m to the west giving the new location -33.9246422 S 25.5169408 E, and only using one access road that already has a high degree of disturbance.

5. Aquatic Biodiversity Assessment

The site has a very high aquatic biodiversity sensitivity according to the Screening Tool Report due to it being located in an aquatic ESA 1, CBA 2 area, and being within a 500m buffer of the Eastern Fynbos-Renosterveld Bioregion (Seep) wetland. Three Eastern Fynbos-Renosterveld Bioregion (Depression) wetlands fall within the exploration site. For the current phase, however, the only activities that will be done include drilling, groundwater yield and quality testing. Groundwater exploration involves minimal surface-water interaction and no drilling will occur within the wetlands. Any disturbance will be limited to driving over vegetation where existing access routes are unavailable to get to exploration positions which will allow vegetation to recover thereafter. Due to the fact that the activities associated with the exploration phase are primarily linked to triggering listing notices related to aquatic environments the only specialist input required is an Aquatic Biodiversity Compliance Statement as all be the the aquatic disturbance very low.

6. Hydrology Assessment

A hydrological assessment of the area has already been conducted for the exploration phase of the project to determine the groundwater potential.

7. Socio-Economic Assessment

The exploration phase of the project will not change the land use cover of this proposed area. The groundwater exploration phase is a preliminary phase that will focus primarily on technical feasibility rather than large-scale development, which will limit socio-economic implications. The development will provide much-needed relief such as improved water supply and increased resilience to drought. A Socio-economic Impact Assessment is not deemed necessary for the exploration phase of the project in Malabar due to the project's alignment with the existing socio context and its expected benefits.

8. Plant Species Assessment

Exploration activities are primarily confined to previously disturbed jeep tracks and foot paths, and the likelihood of impacting plant species may be minimal. Driving over vegetation where existing access routes are unavailable may occur in order to get to exploration positions. By only driving over the vegetation with high clearance vehicles, it will allow vegetation to recover thereafter. Groundwater exploration involves drilling, which will not significantly alter the vegetation or require extensive land clearing. The exploration phase will be temporary, and any effects on plant species will be short-lived and not warrant a detailed assessment.

9. Animal Species Assessment

Exploration activities are confined to previously disturbed pathways, and the likelihood of impacting animal species may be minimal. Groundwater exploration involves drilling, which may not significantly disrupt habitats or lead to changes in local animal populations. The exploration phase will be temporary, and any effects on animal species will be short-lived and not warrant a detailed assessment.

CONCLUSION OF SITE SENSITIVITY VERIFICATION REPORT

Engineering Advice and Services (EAS) has been appointed by Coega Development Corporation (CDC) on behalf of the Nelson Mandela Bay Municipality (NMBM), the applicant, to undertake a Basic Assessment application for the groundwater exploration process of potential borehole sites located in Aspen Heights, Malabar, and Driftsands, within the Sarah Baartman District, Eastern Cape. The proposed project will take place in two phases:

- Phase 1: Exploration phase undertake the required feasibility studies which include yield and quality testing of the identified potential borehole sites and use this data to identify the locations, layouts, and infrastructure requirements for the proposed wellfields.
- Phase 2: Environmental Impact Assessment Phase Undertake EIA studies including all specialist studies as well as the Water Use License Application (WULA) for the identified wellfields.

The purpose of Phase 1 is to ascertain whether or not these areas will provide adequate groundwater in the form of yield and quality tests. Once these results are obtained the final planning and design of the project can go forward. No access roads will be constructed and no pipelines will be installed in this phase. Access to the site will be through one access road that already has a high degree of disturbance (refer to **Figure 2**). The proposed groundwater exploration will entail the following activities on the site:

- Site preparation will include disturbing (not clearing) the area for drilling. No more than 10m2 of the drilling site will be disturbed;
 - Driving over vegetation (only where required) with high-clearance vehicles to get to the exploration positions
- Drilling boreholes at selected sites to access groundwater;
- Yield testing to determine the yield of the boreholes;
- Water quality sampling;

This approach will be conducted in accordance with an approved EMP and an onsite ECO to help ensure that the necessary data is collected efficiently and with minimal environmental impact, paving the way for the next phases of the project.

In accordance with the Notice of the requirement to submit a report generated by the national web-based environmental screening tool in terms of section 24(5)(h) of the NEMA, 1998 (Act No 107 of 1998) and regulation 16(1)(b)(v) of the EIA regulations, 2014, as amended, a screening tool was generated and identified specific site sensitivities and themes to be assessed for this specific project. On 20 March 2020, the Minister of Forestry, Fisheries, and the Environment published the general requirements for undertaking site sensitivity verification for environmental themes for activities requiring environmental authorisation (Government Gazette No. 43110). In terms of these requirements, prior to commencing with a specialist assessment, the current land use and environmental sensitivity of the site under consideration by the screening tool must be confirmed by undertaking a site sensitivity verification. This report is regarded as the Site Sensitivity Verification Report and should guide and

motivate the reasons for not including certain specialist assessments that were indicated by the screening tool as required specialist assessments.

In the current phase (Exploration Phase), the primary objective is to ascertain whether or not the exploration site in Malabar will provide adequate groundwater in the form of yield and quality tests. Depending on the potential yield of the exploration site, the borehole that is deemed viable for groundwater abstraction will be equipped to augment the water supply to the bulk water infrastructure of NMBM. It is crucial to point out that during the exploration phase, no access roads will be constructed and no pipelines will be installed.

Minimal vegetation will be disturbed and no vegetation will be cleared. The exploration site will be accessed through one existing road that is already highly degraded according to the terrestrial specialist input.

PHOTOGRAPHIC EVIDENCE

