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ENVIRONMENTAL CONSULTING

City of Cape Town

DRAFT SCOPING REPORT

THE PROPOSED HOUSING DEVELOPMENT ON ERF RE/18370 AND ERF RE/18332, KHAYELITSHA, CITY OF CAPE TOWN, WESTERN CAPE

SEC REFERENCE: 020052

SEPTEMBER 2021

Executive Summary

Introduction

Sillito Environmental Consulting ("SEC") has been appointed by the City of Cape Town: Human Settlements to undertake the necessary environmental application in terms of the National Environmental Management Act ("NEMA"), Act No. 107 of 1998, for the proposed Enkanini Residential Development, located on Erf RE/18370 and Erf RE/18332, Khayelitsha, City of Cape Town (CoCT) Metropolitan.

The proposed residential development measures approximately 100.38ha in extent and will be situated within the Cape Flats area along the False Bay coastline, with Baden Powell Drive to the south, Oscar Mpetha Road to the west and Mew Way to the north and east.

The current appointment includes the provision of services up to land use approval and is limited to conceptual design phase and civil and electrical design. Given the fast pace of land invasion on the proposed site for development, the current proposal will also include Temporary Relocation Areas (TRAs). As such the level of detail that will be included as part of this application will be of a conceptual design nature and will include details on the location, size, and amount of different land uses (e.g., public facilities, residential erven, stormwater, and other civil and engineering facilities etc.) but will not include the design and detail for top structures.

The development aims to provide for approximately 5800 serviced sites with the associated educational, community and commercial uses.

Figure I. Aerial view of proposed site for development. Source: Drone Imagery obtained from CoCT Human Settlements Directorate (March 2021).

Upon consultation with the NEMA Environmental Impact Assessment (EIA) Regulations 2014 (as amended), as well as consultation with the Department of Environmental Affairs & Development Planning (DEA&DP), it has been ascertained that a Scoping/EIA Application in terms of the Listing Notice 2 of the NEMA EIA Regulations 2014 must be followed and submitted to the DEA&DP for their final decision.

Application Requirements

The EIA Regulations 2014, under the National Environmental Management Act, Act No. 107 of 1998, as amended (NEMA), has been consulted. The Scoping/EIA process is strictly prescribed by the EIA Regulations, which appear in Government Notice No.982 of 2014

The Purpose of This Scoping Report

The process of "Scoping", as required by the EIA Regulations, is one of carefully reviewing background information on the proposed activity, as well as the receiving environment (social, economic, and bio-physical) where the activity is to take place. On the basis of this review, environmental impacts possibly associated with the activity which may cause significant harm or benefit to the receiving environment, are identified for further investigation and assessment during the Environmental Impact Assessment phase of the process. This phase of the process includes the compilation and submission of the Draft Environmental Impact Report (EIR) for comment and the Final EIR (to be submitted to the competent authority) for decision-making.

On the basis of these potentially significant impacts identified, alternative means of meeting the general requirements of the activity must also be identified. Alternatives can include different sites where the activity can take place; different technologies for undertaking the activity; or even identifying an entirely different activity which could meet the purpose of the application.

The purpose of identifying alternatives is to try and include in the application alternatives which will have the most benefit and/or cause the least harm to the receiving environment. Ideally, the Scoping/EIA process should identify the Best Practicable Environmental Option (BPEO) for achieving the purpose of the activity given the context of the receiving environment. BPEO is defined as "the option that provides the most benefit or causes the least damage to the environment as a whole, at a cost acceptable to society, in the long term as well as in the short term".

POTENTIALLY SIGNIFICANT IMPACTS IDENTIFIED

HERITAGE

An NID was submitted to HWC by City Environmental Resource Management (ERM) and a response was received from HWC, as included in ***Appendix D1****, confirming that no further work is required in terms of heritage impacts.*

Regional Geology

The site is likely to be covered by a layer of Aeolian sand. The thickness of the Aeolian sand is likely to vary depending on the height and extent of the former sand dunes. It is expected that the Aeolian sand thickness is likely to be in the order of 1 m to 2 m (dependant on the nature of the former sand dunes).

In general, the soil profile is likely to be characterised by an upper layer of fine-to-medium sand of Aeolian origin (windblown). The Aeolian sand is likely to be underlain by a thin layer of clayey fine sand (inferred to be reworked Malmesbury clay). With increasing depth, the underlying soil is expected to comprise of clayey silt derived from the in-situ weathering/decomposition of Malmesbury Group shale. No rock outcrop is expected to be present at the site, and it is unlikely that bedrock will be present within 3 m of the surface.
The near-surface soils are likely to consist of granular fine-to-medium sand of Aeolian origin.

ECOLOGICAL ASPECTS

Freshwater

The Freshwater Site Scan (May 2021) conducted by the Freshwater Consulting Group (FCG) concluded that all areas mapped as wetlands are located outside the proposed site for development, with the exception of an artificial wetland on the eastern border of the site (due to previous clearing activities that took place as part of the establishment of the Temporary Relocation Area (TRA) (please refer to Section 2.1, p.12 of this Scoping report for details on the TRA)]

An existing storm water polishing pond/wetland of the CoCT Water & Sanitation directorate have however been identified on the site. This has been included as part of this larger development site but will not be developed and only formalised as a Utility zoned area.

A full Freshwater Impact Assessment, as well as a Water Use License Application (WULA) will be commissioned in order to assess the impacts that the development will have on these wetland systems. This will be undertaken to obtain the necessary licensing from the Department of Water Affairs and Sanitation (DWS).

The Freshwater Impact Assessment will be included in the EIA phase.

Botanical

The study area is located within the Cape Flats Dune Strandveld, an Endangered vegetation type. Over half of the study area has been disturbed and at least half has been lost to the establishment of informal housing and associated activities (highly degraded habitat). Other areas have been disturbed by dumping, sand mining, animals grazing, and most significantly – the clearing of vegetation for the establishment of housing. These areas are Degraded but have good rehabilitation potential and are of Medium sensitivity. There are two large areas within the site that contain semi-intact vegetation which are of conservation-worthy condition and have a High sensitivity. However, these areas are still under pressure from further illegal occupation.

Under other circumstances, any of the Medium or High sensitivity areas at this site would be No-Go areas. However, given the nature of the illegal land occupation and the projected future scenario of further occupation, mitigation options for the site are limited. A 15 m buffer along the north edge of Baden Powell Drive/south edge of the development is proposed as a buffer for the vegetation to the south of the road. However, this may not be practically feasible to implement or maintain.

Given that the both the No-Go scenario and the development scenario are likely to result in the loss of almost all the vegetation on the site and result in a High or Very High negative impact, the development scenario and associated offset are supported. The exclusion of the buffer area from the development footprint, and an offset for the remaining area lost, are seen as the best-case scenario from a botanical perspective.

Biodiversity Offset Investigation

As already stated within the Botanical Screening Report, desktop information (e.g., the CoCT's Biodiversity GIS layers) shows that the proposed site for development is located within the Cape Flats Dune Strandveld (CFDS) vegetation type. This vegetation type is listed as Endangered under Criterion B1 and B2 in the 2018 National Biodiversity Assessment (NBA) and is important for its threatened plant species associations. The affected vegetation on Erf 18332 has been mapped as 'unselected' CFDS in the City's 'Southeast Strandveld Conservation Implementation Plan' (CIP1). On Erf 18370, a portion of the vegetation is mapped as 'unselected' strandveld while a large portion in the west of the site is mapped as 'priority' CFDS.

There have been several discussions and exchanges between the City's Human Settlements (HS) Department (project proponent), the City's Biodiversity Management Branch (BMB), and Sillito Environmental Consulting with respect to the location of the sites, their conservation significance, the relevance of the CIP in this context, and the likely requirements for environmental authorization, including biodiversity offsets (please refer to email correspondence, dated 29 May 2020, and subsequent correspondence, dated 9 November 2020, as included in ***Appendix F****).*

Initially, the Enkanini Residential Development was planned to affect only areas of 'unselected' Strandveld, as the adjacent area of 'priority' strandveld to the west was intended for formal protection and inclusion into the City's conservation estate. However, a sudden, very recent increase in the level of land invasion and informal settlement on this priority area has led to the BMB withdrawing its application to have the area reserved for biodiversity management purposes (refer to email by Clifford Dorse dated 6 October 2020, as included in ***Appendix F)****, potentially freeing it up for housing development.*

Based on the information above, a biodiversity offset will be required for the predicted residual loss of CFDS vegetation on the development sites, which are owned by the CCT. Where the affected vegetation is mapped as 'unselected' strandveld in the CIP, a streamlined process is suggested by City officials whereby offset requirements are met through the use of the Macassar Dunes East Conservation Landbank (Oxtoby, Dorse & Wood, 2019). Land for this conservation bank has been reserved for conservation (i.e., it has been vested in the City's Biodiversity Management Branch) and the BMB plans to apply for its declaration as a S 23 Nature Reserve in terms of the NEM Protected Areas Act.

In general, where CFDS other than 'unselected' areas are affected by a proposed development, as in the case of 'priority' strandveld on the western portion of Erf 18370, or

where the land in question is not owned by the CCT, a regular offset process involving the identification of a bespoke offset (not part of the Landbank) needs to be followed.

Alternatives Identified and Investigated

According to the Western Cape Department of Environmental Affairs and Development Planning's Guideline on Alternatives (October 2011), alternatives in relation to a proposed activity includes different means of meeting the general purposes and requirements of the activity.

The types of alternatives which can be considered include, for example, alternative locations for the activity and alternative layouts and designs to be used in the activity.

The rationale behind investigating alternatives is to try and ascertain ways of fulfilling the general purpose of an activity, whilst at the same time ensuring that the possible impacts on the receiving environment (social, economic, and bio-physical) associated with the proposed activity are avoided altogether, or at least minimised to acceptable levels.

A thorough investigation and assessment of alternatives should result in the identification of the Best Practicable Environmental Option (BPEO), which is defined as "the option that provides the most benefit or causes the least damage to the environment as a whole, at a cost acceptable to society, in the long term as well as in the short term".

In accordance with the NEMA EIA Regulations contained in Government Notice No. R543 of 2010, read together with the DEA&DP's Guideline on Alternatives, this Scoping Report must contain a detailed investigation of alternatives identified. The investigation must include potential advantages and disadvantages which the identified alternatives may have for the receiving environment.

Based on this investigation, reasonable and feasible alternatives will be identified, with only these alternatives taken forward and comparatively assessed during the EIA phase. This is because the competent, decision-making authority can grant authorisation of an alternative as if it has been applied for.

The investigation and assessment of alternatives must, in accordance with the EIA Regulations, include the "No-Go Option" as a baseline against which all other alternatives are assessed.

LAYOUT/DESIGN ALTERNATIVES

ALTERNATIVE 1: First draft concept block layout (no sensitive area)

This alternative was the initial concept block layout plan proposing development for the entire subject property, excluding the Biodiversity Management Branch area. As this plan was conceptual the areas and numbers are only estimated.

The number of residential units for this layout is proposed to be approximately 3500 units which gives a gross density of 68 units per hectare.

ALTERNATIVE 2: Second draft concept block layout (excluding the no-go sensitive area)

This alternative is a concept block layout plan proposing development for the entire subject property excluding the entire no-go sensitive area as earmarked by the botanist towards the east of the site of approximately 9,6 ha leaving a developable area of 90.7 ha. As this plan was conceptual the areas and numbers are only estimated.

The number of residential erven for this alternative is proposed to be approximately 5130 units which gives a gross density of 57 units per hectare.

ALTERNATIVE 3 (Current proposed Preferred Alternative): Excluding the no go area and including a proposed offset area

Given the current extent of illegal land occupation taking place on site, the dire need for housing in the country and the complications associated with successfully cordoning off and protecting sections of no-go areas in the long term; it was recommended that an offset be identified for the sensitive areas identified on site and that the no-go buffer area towards the eastern boundary of the site are no longer required. The layout was thus revised to include the area previously excluded; thus the entire subject property area is now available for urban development.

The total amount of residential erven proposed for this layout is 5700 units on a 100.38ha area. This amounts to a gross density of 57 units per hectare.

No-Go Alternative

The no-go option entails the maintaining of the status quo of the site. In this case, the no-go option would mean that the development will not take place and that there will consequently be no clearance of vegetation for the sake of development. The site will remain as is, undeveloped.

The no-go alternative will fail to address the dire need for housing in the Cape Flats area – as well as larger City of Cape Town area. Given the scale of the proposed housing development, a considerable economic contribution to the local community in the form of employment opportunities will also be foregone should the development not take place.

Should the property remain vacant it will also most likely be completely occupied and degraded by illegal land invasion thereby compromising the safety and environmental quality of the area.

Pros and Cons of the No-Go Alternative

a) *The No-Go alternative will likely result in the gradual decline and degradation of the vegetation on site unless access control, ongoing clearing of invasive alien plants as well as regular maintenance is undertaken on the site.*

PUBLIC PARTICIPATION

A key component of the Scoping process – i.e. where possible impacts associated with the proposed activity are identified – is public participation. Public participation allows stakeholders to assist in identifying issues or concerns around the activity which may need further investigation or assessment. In this way, stakeholders can also contribute to the identification of alternatives for achieving the Best Practicable Environmental Option.

The identification of potential stakeholders; the process whereby these stakeholders are notified of the Scoping/EIA application process; providing stakeholders with an opportunity to register as "Interested and Affected Parties" (I&APs) and to comment on all reports published during the process; the requirement for the Environmental Assessment Practitioner and the project team to address any and all issues raised by registered I&APs; and the requirement that the applicant notifies registered I&APs of the decision which the DEA&DP reaches on the Scoping/EIA application, are all strictly prescribed by the regulations contained in Chapter 6 of the EIA Regulations (contained in Government Notice No. R543 of 2010) and Government Notice No. R982 of 2014.

WAY FORWARD

A Scoping/EIA process is a two-stage process: this Scoping phase identifies issues, concerns and possible impacts which may be associated with the proposed housing development.

The Scoping process also generates alternatives which may upon further investigation be preferable for avoiding or minimising the impacts potentially associated with the activity (or maximising the benefits potentially associated).

The second phase is the EIA (Environmental Impact Assessment) phase. This phase entails a rigorous assessment of the activity and any alternatives identified to the activity or any aspects thereof. The purpose of the assessment is to determine whether there are any impacts associated with the activity or identified alternatives, which may cause significant harm or benefit to the receiving social, economic and bio-physical environment.

Specialist input will guide the impact assessment process, as well as inform required mitigation measures to avoid, minimise or offset detrimental impacts, or maximise benefits, associated with the activity.

From the EIA process, preferred alternatives will be determined based on their lesser detrimental impact on the environment, and/or their greater benefit for the environment. The findings of the EIA process will provide the information on which the DEA&DP will base their decision whether to authorise the proposed housing development.

A Plan of Study for EIA has been compiled, which has been attached as ***Appendix E****. The Plan of Study outlines in detail the process and methodology which the EIA phase will follow and can be referred to for more information.*

Structure of the Scoping Report

Section 1 provides details on the professional competence and independence of the Environmental Assessment Practitioner, SEC.

Section 2 provides an introduction including a brief project background and history; and the legal context.

Section 3 provides the regional planning context for the facility; as well as an investigation on the Need and Desirability of the activity, i.e. whether the activity is appropriate given the regional planning and environmental management imperatives for the area.

Section 4 provides a description of the receiving social, economic and bio-physical environment in which the activity takes place.

Section 5 provides a description of the social, economic and bio-physical impacts which have been identified as potentially associated with the activity.

Section 6 provides an investigation of the alternatives which have been identified for meeting the general purpose and requirements of the application.

Section 8 provides detail on the public participation process which will be undertaken during this Scoping/EIA process.

Section 9 provides a brief conclusion and discussion of the way forward for the application process.

DRAFT SCOPING REPORT

SCOPING/EIA APPLICATION FOR THE PROPOSED ENKANINI HOUSING DEVELOPMENT, ERF RE/18370 AND ERF RE/18332, KHAYELITSHA, CAPE TOWN

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SCOPING/EIA APPLICATION FOR THE PROPOSED ENKANINI HOUSING DEVELOPMENT, ERF RE/18370 AND ERF RE/18332, KHAYELITSHA, CAPE TOWN

1 DETAILS OF ENVIRONMENTAL ASSESSMENT PRACTIONERS

This report was authored by Chantel Müller and edited by Adrian Sillito of SEC. Chantel has over 10 years' experience in EIA's and environmental management. Her qualifications include a BA Social Dynamics and an MPhil Environmental Management at the University of Stellenbosch which she obtained in October 2008.

Adrian is a certified environmental assessment practitioner (CEAPSA), Professional Natural Scientist (Pr.Sci.Nat.) and a member of the South African branch of the International Association for Impact Assessment (IAIAsa).

SEC has extensive experience in the field of environmental management and has completed many thousands of applications in terms of the relevant environmental legislation and regulations in most provinces of South Africa since 1998. SEC does not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and 2014 and any specific environmental management Act; and does not have and will not have any vested interest in the proposed activity proceeding.

2 INTRODUCTION

SEC has been appointed by City of Cape Town: Informal Settlements, Human Settlements to undertake the necessary environmental application in terms of the National Environmental Management Act No. 107 of 1998 for the proposed Enkanini residential development, Erf RE/18370 and Erf RE/18332, Khayelitsha, City of Cape Town.

The subject property is located directly opposite the Monwabisi coastal resort on the northern side of Baden Powell Drive in Khayelitsha. The subject property is bounded by Mew Way to the North and East, Baden Powell Drive to the south and Oscar Mpetha Road to the west.

A Scoping/EIA process will be undertaken to apply for environmental authorisation in terms of Listing Notices, 1, 2, and 3 of the NEMA EIA Regulations 2014.

2.1 Project background and description of the activity

The subject property is a total of 100.38ha in extent and the associated project, named the Enkanini South UISP (Upgrade of Informal Settlement Pipeline) development, is primarily required as a relocation area for the Enkanini Phase 2 UISP development, located northeast of the subject property.

The City of Cape Town's Department of Informal Settlements initiated Enkanini Phase 2 in 2014 and ultimately obtained planning approval in March 2020 for a residential township consisting of 6800 medium density serviced sites with associated urban infrastructure and services. Consultants for the implementation of Enkanini Phase 2 have been appointed, but onsite activities will most likely only commence in 2022.

Enkanini Phase 2 is the largest informal settlement in the City of Cape Town, with approximately 1100 dwellings, which will require a substantial relocation of approximately 50% of the units in order to ensure implementation. Accordingly, the need to develop the Enkanini South development on the subject property was identified by the City of Cape Town's Informal Settlement Department.

For the most part the subject property is a greenfield site besides a Transitional Relocation Area of approximately 1,5ha and consisting of 407 sites which was approved in mid-2020 and for which civil works have commenced in early 2021 already. The aforementioned TRA is to be occupied by settlers that have invaded a dune area on the Enkanini Phase 2 area that requires urgent relocation due to the fact that they cannot be serviced in their current location. The subject property is also currently progressively being invaded by

informal settlers since the start of the pandemic. The current appointment includes the provision of services up to land use approval and is limited to conceptual design phase and civil and electrical design. Given the fast pace of land invasion on the site, the current proposal will also include Temporary Relocation Areas (TRAs).

As such the level of detail that will be included as part of this application will be of a conceptual design nature and will include details on the location, size, and amount of different land uses (e.g., public facilities, residential erven, stormwater, and other civil and engineering facilities etc.). The development aims to provide for approximately 5800 serviced erven.

According to the Mucina and Rutherford's Vegetation Map of South Africa, Lesotho and Swaziland, the site falls within an area where Cape Flats Dune Strandveld is the predominant indigenous vegetation type which is endemic to the area. These are thus likely to occur on any untransformed land in the area.

Figure 1: Site location, CoCT March 2021 Drone Imager. Please refer to Appendix A1 for additional Locality Maps.

2.2 Legal Framework

In consultation with the DEA&DP, it has been ascertained that a Scoping/EIA Application in terms of Listing Notice 2 of the NEMA EIA Regulations 2014 must be followed and will be submitted to the DEA&DP for their final decision.

The proposed housing development will entail the clearance of approximately 100.38ha of indigenous vegetation on site. As such the following listed activities will apply:

Government Notice No. 327 of the EIA Regulations 2017, Listing Notice 1:

- **Activity 19:** *The infilling, depositing of any material of more than 10m3 into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10m3 from a watercourse*

Government Notice No. 325 of the EIA Regulations 2017, Listing Notice 2:

- **Activity 15**: *The clearance of an area of 20 hectares or more of indigenous vegetation, excluding 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.

Government Notice No. 324 of the EIA Regulations 2017, Listing Notice 3:

- **Activity 12:** *The clearance of more than 300m2 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.*
  (i) *Western Cape*
  i. Within any critically endangered or endangered ecosystem listed in terms of section 52 f NMEA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment of 2004.

3 REGIONAL PLANNING CONTEXT AND NEED AND DESIRIBILITY OF THE ACTIVITY

According to the Western Cape Department of Environmental Affairs and Development Planning's *Guideline on Need and Desirability* (October 2011), the need and desirability of a development proposal relates to the most ***sustainable*** use of the land in question.

According to the Guideline, the "need" for a development relates to whether the development is needed at this point in time; whilst the desirability of the development relates to the location or the receiving environment in which the development is situated; i.e. "is this the right time and is it the right place for locating the type of land-use/activity being proposed"?

The concept of ***sustainable development*** is thus the cornerstone of any investigation into the need and desirability of a development proposal. Sustainable development is commonly defined as "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*" (Our Common Future, WCED, 1987).

Guiding legislation and policy for determining the need and desirability of the proposed include the following:

The National Environmental Management Principles contained in Chapter 1 of the NEMA, which include the following:

- "Environmental Management must place people and their needs at the forefront of its concern and equitably serve their interests."
- "Environmental Management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the Best practicable environmental option."
- "Environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person."
- "Decisions must take into account the interests, needs and values of all interested and affected parties."

- "The Environment is held in public trust for the people; the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage."

The Western Cape Provincial Spatial Development Framework (2014) (PSDF), which requires "the integration of social, economic and ecological factors into planning, decision-making and implementation so as to ensure that development serves present and future generations."

National Framework for Sustainable Development (2008), which states that "sustainable development is about enhancing human well-being and quality of life for all over time, in particular those most affected by poverty and inequality". The NFSD goes on to state that "fundamental to understanding sustainable development is recognising the interdependence between the way in which we devise and manage our economic, social and environmental systems".

The Western Cape Department of Environmental Affairs and Development Planning's Guideline on Need and Desirability, October 2011

The DEA&DP's *Guideline on Need and Desirability* poses a series of questions, the answers to which will determine whether the housing development is necessary and desirable given the broader planning and environmental management imperatives, policies and plans (such as those detailed above) which relate to the area.

These questions have been addressed below:

1. ***Is the development permitted in terms of the property's existing land use rights?***

No, the subject property is currently zoned as Limited Use (LU) in terms of the City of Cape Town's Development Management Scheme (DMS). In terms of the LU zoning the only primary uses permitted are limited to lawful uses existing at the commencement date of the DMS. No existing lawful uses exist on the property and therefore any development rights can only be obtained by a rezoning application to an appropriate zone in terms of the DMS.

2. Will the development be in line with the following?

(a) Provincial Spatial Development Framework ("PSDF").

Yes. One of the key goals included in the PSDF is the inclusion of sustainable development which involves the integration of social, economic, and ecological factors into planning, decision making, and implementation so as to ensure that the development serves present and future generations.

The proposed development addresses the dire need for housing within this specific region as well as within the broader Western Cape and is thus in line with the PSDF's priority of socio-economic integrated development.

From a spatial planning perspective, it is intended by the PSDF that the broad spatial planning categories be refined at the detailed level by district and local SDFs which must be consistent with the policies and requirements of the PSDF. The PSDF also supports the spatial proposals of the Municipal Spatial Development Framework (MSDF). The proposed development therefore adheres to these proposals.

According to PSDF: City of Cape Town Sprawl Threats Map the area is indicated as "Urban Development" and situated within a Combined Road / Rail Infrastructure Corridor. Therefore, the proposed development is in line with the PSDF.

(b) Urban edge / edge of built environment for the area.

Yes. The site is located within the urban edge. The current Khayelitsha/Mitchells Plain/Greater Blue Downs District Plan designates the subject property as New Urban Infill/Core 1 / Mixed use intensification / Open Space and confirms its location within the urban edge. The aforementioned District Plan is being reviewed and will result in a District Spatial Development Framework (which should be finalised by the end of 2021). In the aforementioned Draft DSDF the subject property is also located inside the Urban and Coastal Edge and designated for urban infill purposes.

(c) Integrated Development Plan and Spatial Development Framework of the Local Municipality (e.g., would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).

The proposed development is in line with the City of Cape Town's Integrated Development Plan (IDP) goal of "provi*ding a housing market for which a specific need exists that has been neglected in the past, being the affordable market*." In terms of the City of Cape Town Municipal Spatial Development Framework the subject property is designated as part of the Incremental Growth and Consolidation Area. Consolidation Areas are areas where the City is committed to servicing existing communities and where new development will be subject to infrastructure capacity.

(d) An Environmental Management Framework ("EMF") adopted by this Department. For example, would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?

The Cape Town Bioregional Plan was adopted as City Policy in July 2015. It comprises a biodiversity profile for the bioregion, the Biodiversity Network and management guidelines.

According to the BioNet (Holmes & Pugnalin 2017) almost the entire study area is a CBA 1b site. One small area is classified as an Other Ecological Support Area (OESA) and two small sections are excluded based on the transformation of habitat in those sites. Note that according to the BioNet CBA1b sites are considered to be 100% irreplaceable.

The botanical assessment indicates that while most of the site has been subjected to a high degree of disturbance, intact and semi-intact vegetation patches remain.

(e) Any other Plans [e.g., Integrated Waste Management Plan (for waste management activities), etc.)].

Yes.

The City of Cape Town Urban Design Policy

The Urban Design Policy was approved by the City of Cape Town in September 2013 to guide the design process and formulation of development proposals to make Cape Town safer, more prosperous, and more inclusive. The Urban Design Policy is guided by three overarching principles which inform nine objectives. The proposed development layout was presented to the COCT internal branches and amendments have been made to the layout proposal where relevant in order to ensure the development proposal is in line with the above policy document.

The City of Cape Town Densification Policy

The Densification Policy was approved by the City of Cape Town in 2012 and developed a number of policy statements that should guide all density-related land use decisions. The development proposal is for a medium-density residential development and as such will be in line with this policy.

Khayelitsha, Mitchells Plain & Greater Blue Downs District Plan

The proposed development is directly consistent with the Khayelitsha, Mitchells Plain & Greater Blue Downs District Plan with specific reference to the following: *The current Khayelitsha/Mitchells Plain/Greater Blue Downs District Plan designates the subject property as New Urban Infill/Core 1/Mixed use intensification/Open Space*. The aforementioned District Plan is being reviewed and will result in a District Spatial Development Framework. This process should be finalised by the end of 2021. In the aforementioned Draft DSDF the subject property is located inside the Urban and Coastal Edge and designated for urban infill purposes.

3. *Is the land use (associated with the project being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (in other words, is the proposed development in line with the projects and programmes identified as priorities within the credible IDP?*

Yes. The PSDF includes as one of the key goals the inclusion of sustainable development encompassing the integration of social, economic, and ecological factors into planning, decision making, and implementation so as to ensure that development serves present and future generations.

The proposed development addresses the dire need for housing within this specific region as well as within the broader Western Cape and is thus in line with the PSDF's priority of socio-economic integrated development.

From a spatial planning perspective, it is intended by the PSDF that the broad spatial planning categories be refined at the detailed level by district and local SDFs which must be consistent with the policies and requirements of the PSDF. The PSDF also supports the spatial proposals of the MSDF. The proposed development adheres to these proposals.

According to PSDF: City of Cape Town Sprawl Threats Map the area is indicated as "Urban Development" and situated within a Combined Road / Rail Infrastructure Corridor. Therefore, the proposed development is in line with the PSDF.

The proposed development is in line with the City of Cape Town's Integrated Development Plan (IDP) goal of "*providing a housing market for which a specific need exists that has been neglected in the past, being the affordable market*."

4. Should development, or if applicable, expansion of the town/area concerned in terms of this land use (associated with the activity being applied for) occur on the proposed site at this point in time?

Yes. The proposed development site is located/designated within the urban edge which implies that it is suitably located for urban land uses.

*5****. Does the community/area need the project and the associated land use concerned (is it a societal priority)? This refers to the strategic as well as local level (e.g., development is a National Priority, but within a specific local context it could be inappropriate.)***

Yes. The proposed development addresses the dire need for housing within this specific region as well as within the broader Western Cape and is thus in line with the PSDF's priority of socio-economic integrated development.

6. ***Are the necessary services available together with adequate unallocated municipal capacity (at the time of application), or must additional capacity be created to cater for the project?***

Yes. To be confirmed.

7. ***Is this project provided for in the infrastructure planning of the municipality and if not, what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)?***
Yes. Same as the above.

8. ***Is this project part of a national programme to address an issue of national concern or importance?***
No.

9. ***Do location factors favour this land use (associated with the development proposal and associated listed activity(ies) applied for) at this place? (This relates to the contextualisation of the proposed land use on the proposed site within its broader context.)***

Regardless of the fact that the site is not currently appropriately zoned for the proposed land use, the development is regarded to be in line with the surrounding land uses as the site is bounded by formal residential land uses to the north and east and informal settlements to the west.

10. ***Will the development proposal or the land use associated with the development proposal applied for, impact on sensitive natural and cultural areas (built and rural/natural environment)?***

Yes

Ecological aspects

Freshwater

The Freshwater Site Scan (May 2021) conducted by the Freshwater Consulting Group (FCG) concluded that all areas mapped as wetlands are located outside the proposed site for development, with the exception of an artificial wetland on the eastern border of the site (due to previous clearing activities that took place as part of the establishment of the Temporary Relocation Area (TRA) (please refer to Section 2.1, p.12 of this Scoping report for details on the TRA)]

An existing storm water polishing pond/wetland of the CoCT Water & Sanitation directorate have however been identified on the site. This has been included as part of this larger development site but will not be developed and only formalised as a Utility zoned area.
A full Freshwater Impact Assessment, as well as a Water Use License Application (WULA) will be commissioned in order to assess the impacts that the development will have on these wetland systems. This will be undertaken to obtain the necessary licensing from the Department of Water Affairs and Sanitation (DWS).

The Freshwater Impact Assessment will be included in the EIA phase.

Botanical

The study area is located within the Cape Flats Dune Strandveld, an Endangered vegetation type. Over half of the study area has been disturbed and at least half has been lost to the establishment of informal housing and associated activities (highly degraded habitat). Other areas have been disturbed by dumping, sand mining, animals grazing, and most significantly – the clearing of vegetation for the establishment of housing. These areas are Degraded but have good rehabilitation potential and are of Medium sensitivity. There are two large areas within the site that contain semi-intact vegetation which are of conservation-worthy condition and have a High sensitivity. However, these areas are still under pressure from further illegal occupation.

Under other circumstances, any of the Medium or High sensitivity areas at this site would be No-Go areas. However, given the nature of the illegal land occupation and the projected future scenario of further occupation, mitigation options for the site are limited. A 15 m buffer along the north edge of Baden Powell Drive/south edge of the development is proposed as a buffer for the vegetation to the south of the road. However, this may not be practically feasible to implement or maintain.

Given that the both the No-Go scenario and the development scenario are likely to result in the loss of almost all the vegetation on the site and result in a High or Very High negative impact, the development scenario and associated offset are supported. The exclusion of the buffer area from the development footprint, and an offset for the remaining area lost, are seen as the best-case scenario from a botanical perspective.

Biodiversity Offset Investigation

As already stated within the botanical screening report, desktop information (e.g. the City's biodiversity GIS layers) shows that Cape Flats Dune Strandveld (CFDS) occurs on the proposed development sites. This vegetation type is listed as Endangered under Criterion B1 and B2 in the 2018 National Biodiversity Assessment (NBA) and is important for its threatened plant species associations. The affected vegetation on Erf 18332 has been mapped as 'unselected' CFDS in the City's 'Southeast Strandveld Conservation Implementation Plan' (CIP1). On erf 18370, a portion of the vegetation is mapped as

‘unselected’ strandveld while a large portion in the west of the site is mapped as ‘priority’ CFDS.

There have been several discussions and exchanges between the City’s Human Settlements (HS) Department, which is the project proponent, the City’s Biodiversity Management Branch (BMB) and Sillito Environmental Consulting with respect to the location of the sites, their conservation significance, the relevance of the CIP in this context and the likely requirements for environmental authorization, including biodiversity offsets (Refer to email correspondence dated 29 May 2020 and subsequent correspondence dated 9 November 2020, as included in Appendix D).

Initially, the Enkanini housing development was planned to affect only areas of ‘unselected’ strandveld, as the adjacent area of ‘priority’ strandveld to the west was intended for formal protection and inclusion into the City’s conservation estate. However, a sudden, very recent increase in the level of land invasion and informal settlement on this priority area has led to the BMB withdrawing its application to have the area reserved for biodiversity management purposes (refer to email by Clifford Dorse dated 6 October 2020, as included in Appendix D), potentially freeing it up for housing development.

Based on the information above, a biodiversity offset will be required for the predicted residual loss of CFDS vegetation on the development sites, which are owned by the CCT. Where the affected vegetation is mapped as ‘unselected’ strandveld in the CIP, a streamlined process is suggested by City officials whereby offset requirements are met through the use of the Macassar Dunes East Conservation Landbank (Oxtoby, Dorse & Wood, 2019). Land for this conservation bank has been reserved for conservation (i.e. it has been vested in the City’s Biodiversity Management Branch) and the BMB plans to apply for its declaration as a S 23 Nature Reserve in terms of the NEM Protected Areas Act.

In general, where CFDS other than ‘unselected’ areas are affected by a proposed development, as in the case of ‘priority’ strandveld on the western portion of erf 18370, or where the land in question is not owned by the CCT, a regular offset process involving the identification of a bespoke offset (not part of the Landbank) needs to be followed.

Historical aspects

An NID was submitted to HWC by City Environmental Resource Management and a response was received from HWC, as included in ***Appendix D1***, confirming that no further work is required in terms of heritage impacts.

11. *Will the development impact on people's health and well-being (e.g., in terms of noise, odours, visual character and 'sense of place', etc.)?*

No. Impacts on people's health and well-being due to the proposed development are unlikely. The construction phase will inevitably involve impacts in terms of noise, dust, visual, heritage and traffic. These impacts will however be assessed as part of this EIA and mitigation of these impacts will be addressed by means of the Environmental Management Programme (EMPr).

POTENTIAL VISUAL IMPACTS

The proposed development will have potential visual impacts during the construction and operation phase of the development. The nature of the impact will include the visual effect (i.e., aesthetics) the activity would have on the receiving environment.

Construction phase:

- Visual scarring during the process of vegetation clearing and levelling of dunes to prepare the area for development.

Operation Phase:

- Change from an undeveloped site to a developed site.
- The vacant site becoming a built site.

Although the change from a vacant site to a built-up site can be regarded as a visual impact, it must be noted that the site is currently somewhat visually unappealing given the illegal dumping, sand mining and cattle grazing that is undertaken on the site. It must also be noted that land uses associated with the area surrounding the proposed development include residential uses varying from low to high density residential developments. It is

thus noted that the proposed housing development will be in line with the “sense of place” of the surrounding area.

POTENTIAL HERITAGE IMPACTS

The NID was submitted to HWC, and a response was received from HWC confirming that no further work is required in terms of heritage impacts (**Appendix D1)**.

DUST AND NOISE IMPACTS

As a result of the construction phase of this development, noise and dust impacts are expected to occur in the area due to an increase in construction vehicle and truck traffic for the duration of the construction phase while materials are being transported to the site, excavations are being made and vegetative groundcover is being removed.

TRAFFIC, SAFETY AND ACCESS IMPACTS

As a result of the construction phase of this development, traffic impacts are expected to occur in the area due to an increase in construction vehicle and truck traffic in the area for the duration of the construction phase while materials are being transported to the site. Road safety impacts and road condition impacts could also occur.

12. *Will the proposed development or the land use associated with the proposed development applied for, result in unacceptable opportunity costs?*

The development will result in the permanent loss of endangered vegetation and CBA areas.

The Preferred Alternative however takes into consideration both socio-economic and ecological concerns with the utilisation of the entire site for the development of housing whilst at the same time proposing an offset area to successfully mitigate the permanent loss of endangered vegetation.

a) The dire need to service the needs of communities with housing.

b) A responsibility to ensure persistence of critical habitats.

13. What will the cumulative impacts (positive and negative) of the proposed land use associated with the development proposal and associated listed activity(ies) applied for, be?

CUMULATIVE IMPACTS ON VEGETATION

The naturally occurring vegetation, Cape Flats Dune Strandveld is an ENDANGERED D1 vegetation type. The development will entail the loss of more than 20ha of intact and semi-intact vegetation of this vegetation type. This vegetation loss adds to the continued loss of small portions of this endangered vegetation type in this area and is therefore regarded as a cumulative impact.

14. *Is the development the best practicable environmental option for this land/site?*

Regardless of the fact that the site is not currently appropriately zoned for the proposed land use, the development is regarded to be in line with the surrounding land uses as the site is surrounded by residential land uses.

As per question 13 above, the most prominent impact from an environmental perspective is the permanent loss of endangered vegetation. Considering the current (i) housing demand and (i) state of land invasion within the City of Cape Town, and social ills such as dumping, livestock grazing (and trampling), and sand mining, the integrity of the small patches of intact vegetation on site cannot be guaranteed. Edge effects, associated with the existing residential areas surrounding the proposed site for development also results in the degradation of intact areas of vegetation.

The Preferred Alternative takes into consideration both socio-economic and ecological concerns with the utilisation of the entire site for the development of housing whilst at the same time proposing an offset area to successfully mitigate the permanent loss of endangered vegetation, namely:

a) The dire need to service the needs of communities with housing.
b) A responsibility to ensure persistence of critical habitats.

15. *What will the benefits be to society in general and to the local communities? Please explain*

There is a dire need for housing in the South African context. The development will provide/ promote employment opportunities during the construction phase of the development. The development will also provide for general business and retail opportunities during the operational phase of the proposed development.

16. *Any other need and desirability considerations related to the proposed development?*

Please refer to responses to questions above.

17. ***Describe how the general objectives of Integrated Environmental Management as set out in Section 23 of the NEMA have been taken into account:***

The site has been assessed using a range of specialist studies to determine the environmental sensitivity of the site and appropriate mitigation measures. The DEA&DP's Guideline on Public Participation (March 2013) have been consulted for this EIA process. The relevant Organs of State will be provided with an opportunity to review and comment on the Scoping/EIA reports. Thus, there is an opportunity for environmental considerations to be included in decision-making by these Organs of State as well as adequate Public Participation.

18. *Describe how the principles of environmental management as set out in Section 2 of the NEMA have been taken into account:*

The investigation of the development and its associated impacts has considered the possible benefits of the development for the receiving social, economic, and biophysical environment; as well as the possible harm that may result to the environment as a result of the development.

The impacts associated with the proposed development on the receiving environment have been considered without favouring any particular aspect of the receiving environment over another aspect.

All interested and affected parties identified as possibly impacted (or benefited) by the development will be given the opportunity to participate in the Scoping/EIA process through public participation activities that will be undertaken in accordance with Chapter 6 of the NEMA EIA Regulations contained in GN No. R326 of 2017.

The identification of any possible negative environmental impacts associated with the development have led to the recommendation of suitable design, layout, and operational mitigation measures to either avoid any such impacts altogether; or to ensure that such impacts remain at an acceptable level without adversely impacting the environment.

The most reasonable and feasible alternatives in relation to the proposed activity, the necessary mitigation measures for implementation during the life cycle of the development, are considered by the EAP to represent the Best Practicable Environmental Option for land use at the site.

4 DESCRIPTION OF RECEIVING ENVIRONMENT

4.1 Introduction

Site Description

The proposed residential development measures approximately 100.38ha in extent and will be situated within the Cape Flats area along the False Bay coastline, with Baden Powell Drive to the south, Oscar Mpetha Road to the west and Mew Way to the north and east. The property is largely undeveloped but is quite significantly impacted by illegal land occupation and associated anthropogenic activites.

According to Mucina and Rutherford's Vegetation Map of South Africa, Lesotho and Swaziland, the site is situated within the Cape Flats Dune Strandveld, an Endangered vegetation type which is endemic to the area. Areas of vegetation characteristic of this vegetation type are likely to occur on any untransformed land.

Figure 2: ***Aerial view of proposed site for development. Source: Drone Imagery obtained from CoCT Human Settlements Directorate (March 2021).***

Climate

Cape Town experiences a moderate Mediterranean climate with hot dry summers and cool wet winters. Average rainfall in Khayelitsha amounts to approximately 653 mm/annum, most of which is recorded between the months of May and October. The prevailing wind direction during summer is south-easterly, but switches to north-westerly during winter.

5 IMPACTS IDENTIFIED AS POTENTIALLY ASSOCIATED WITH THE HOUSING DEVELOPMENT

The impact of any activity on the receiving environment where the activity is to be established or is to take place is dependent on the nature of the activity, together with the nature of the receiving environment.

Cultural Landscape

Refer to Heritage Western Cape (HWC) response letter to the Notice of Intent to Develop, City of Cape Town Environmental Resource Management, as included in Appendix D

An NID was submitted to HWC by City Environmental Resource Management. A response was received from HWC, confirming that no further work is required in terms of heritage impacts (**Appendix D1)**.

Botanical Features

Refer to Botanical Assessment, Greg Nicholson – Capensis as included in Appendix C1

Vegetation type and Conservation status

The study area contains Cape Flats Dune Strandveld, an Endangered vegetation type. Over half of the study area has been disturbed and at least half has been lost to the establishment of informal housing (Highly degraded habitat) (Figure 3). Other areas have been disturbed by dumping, sand mining, animals grazing and most significantly clearing of vegetation for housing.. These areas are Degraded but have good rehabilitation potential and are of Medium sensitivity. There are two large areas within the site that contain Semi-intact vegetation. However, these areas are still under pressure from further illegal occupation. These areas are in a conservation-worthy condition and have High sensitivity.

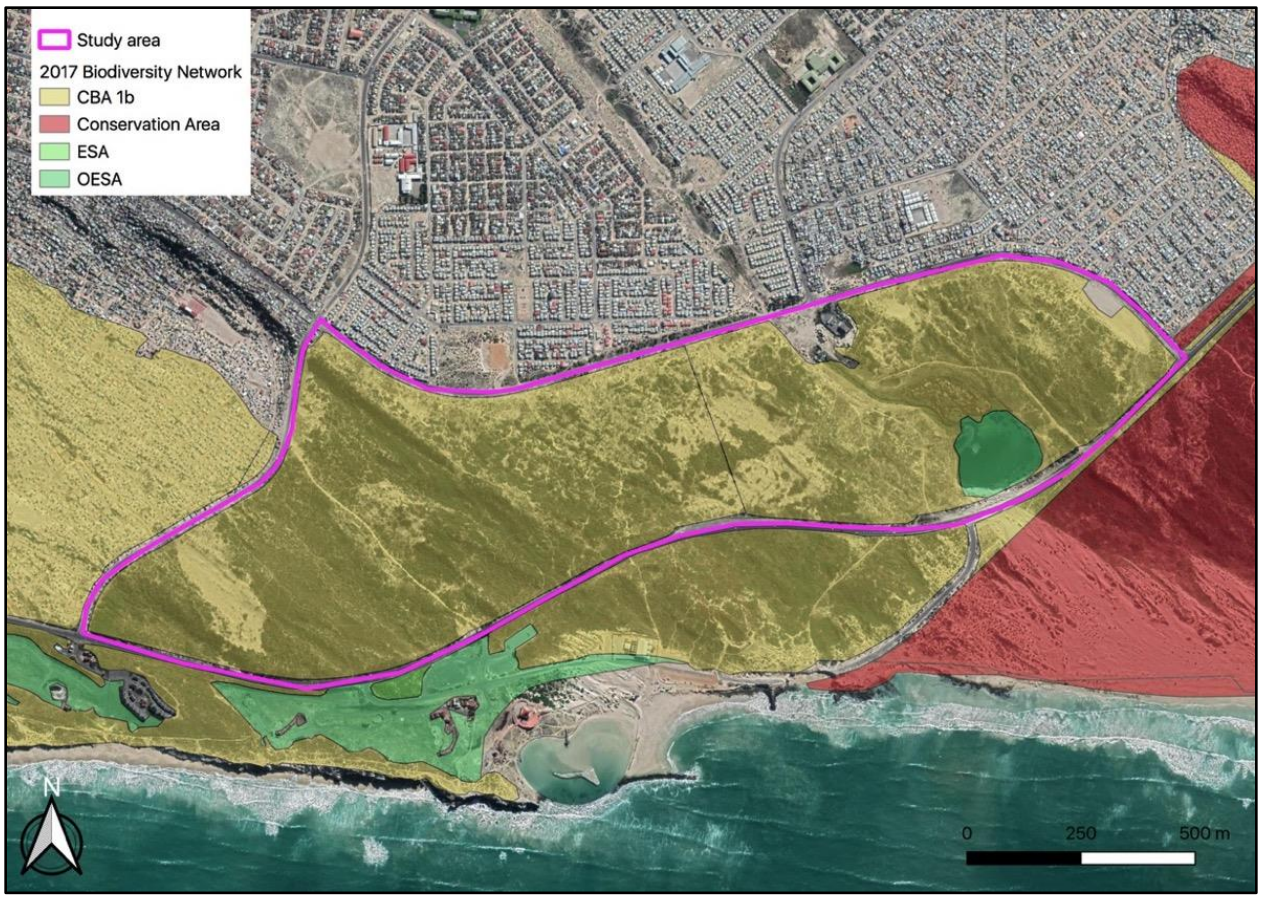

Figure 3: Vegetation Map, Capensis, May 2021

Under other circumstances, any of the Medium or High sensitivity areas (Figure 4 and Figure 5) at this site would be considered as No-Go areas. However, given the nature of the illegal land occupation and the projected future scenario of further occupation, mitigation options for the site are very limited. A 15 m buffer along the north edge of Baden Powell Drive/south edge of the development is proposed as a buffer for the vegetation to the south of the road. However, this may not be practically feasible to implement or maintain.

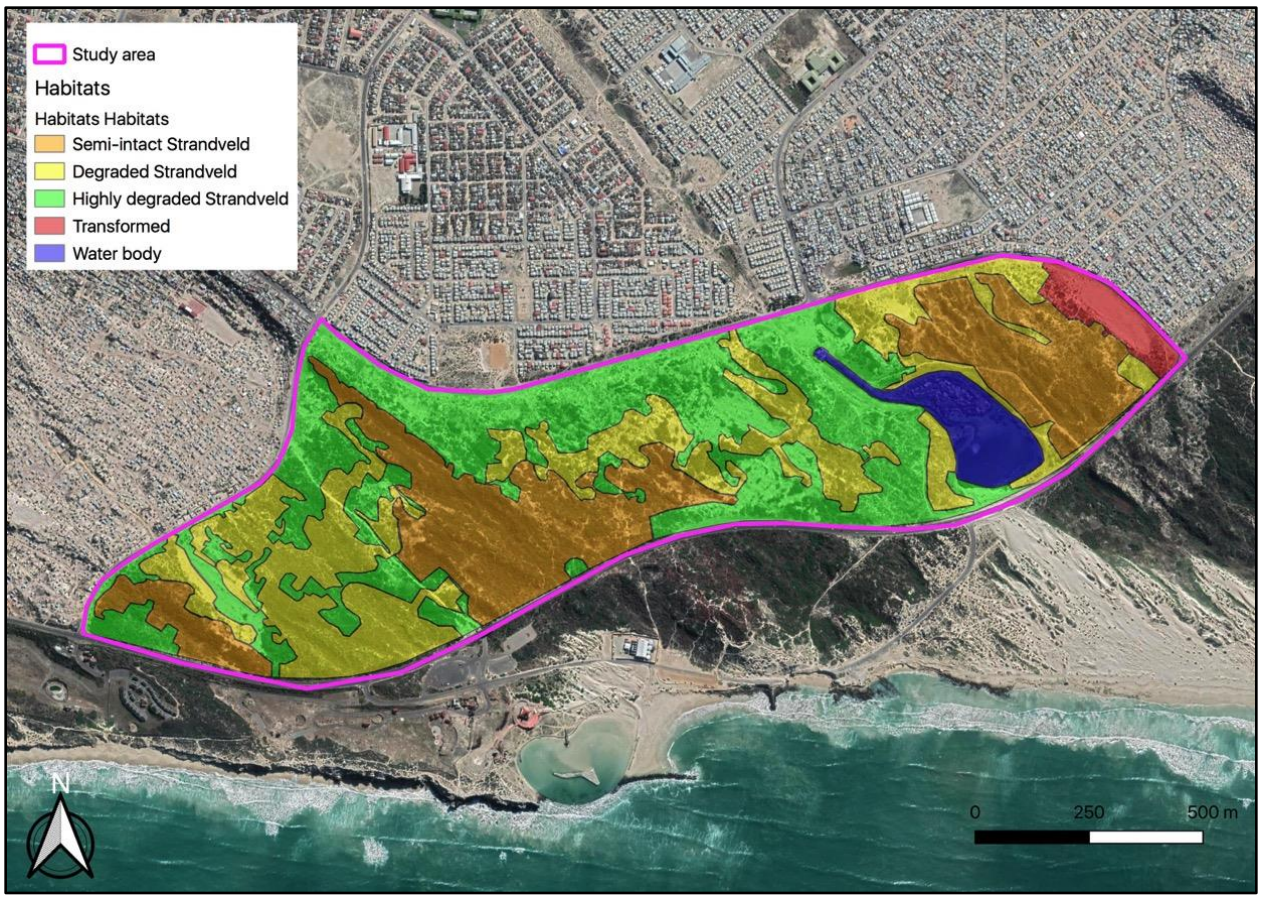

Figure 4: Habitat map showing varying degrees of sensitivity of the habitats mapped on the site, Capensis (May 2021).

Given that the both the No-Go scenario and the development scenario are likely to result in the loss of almost all the vegetation on the site and result in a High or Very high negative impact, the development scenario and associated offset are supported. The exclusion of the buffer area from the development footprint and an offset for the remaining area lost are seen as the best-case scenario from a botanical perspective.

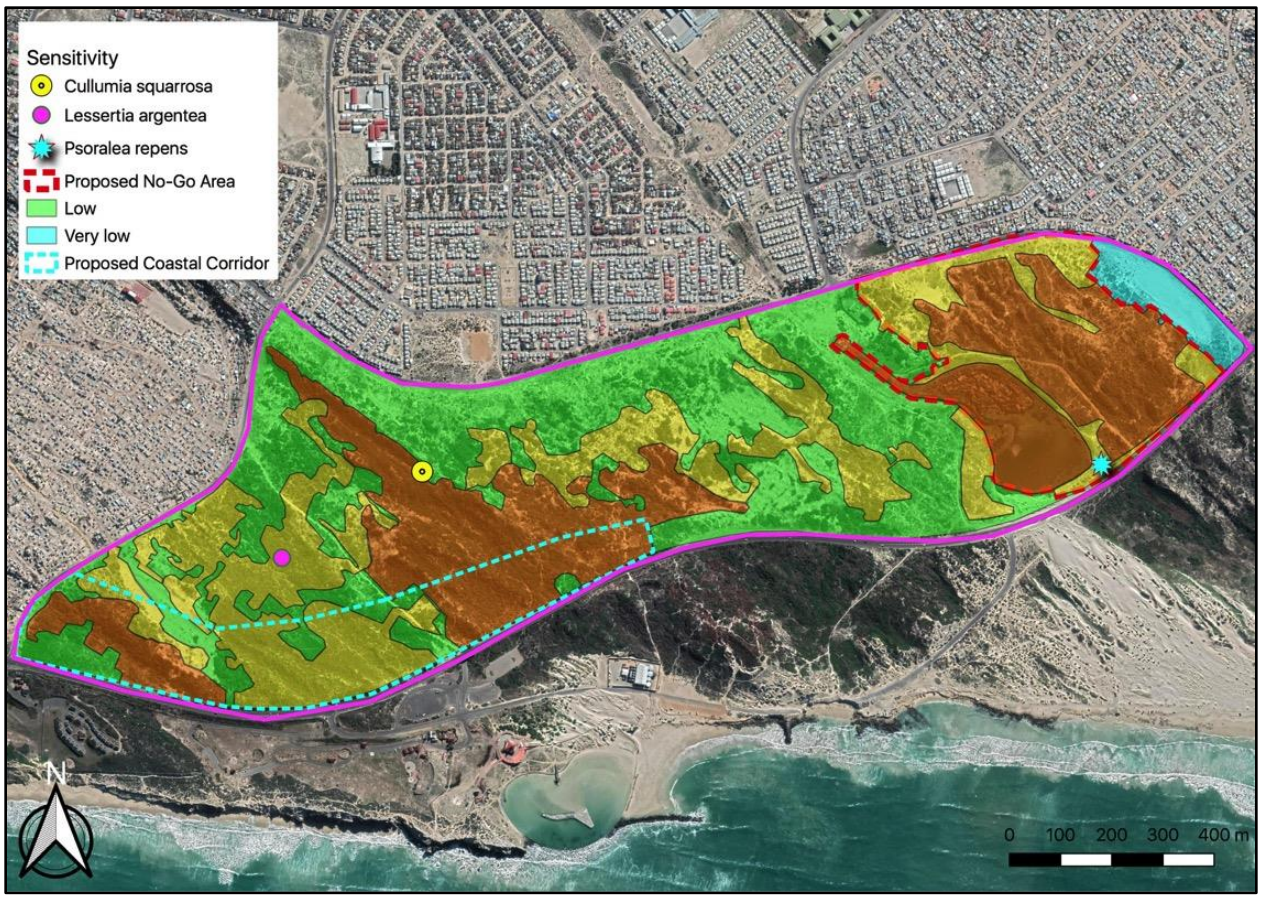

Figure 5 : SENSITIVITY MAP: Google Earth™ aerial image showing the sensitivities, SCC and proposed corridor and No-Go areas mapped within the Study area, Capensis (May 2021).

Biodiversity Offset Investigation

As already stated within the botanical screening report, desktop information (e.g. the City's biodiversity GIS layers) shows that Cape Flats Dune Strandveld (CFDS) occurs on the proposed development sites. This vegetation type is listed as Endangered under Criterion B1 and B2 in the 2018 National Biodiversity Assessment (NBA) and is important for its threatened plant species associations. The affected vegetation on Erf 18332 has been mapped as 'unselected' CFDS in the City's 'Southeast Strandveld Conservation Implementation Plan' (CIP1). On Erf 18370, a portion of the vegetation is mapped as 'unselected' strandveld while a large portion in the west of the site is mapped as 'priority' CFDS.

There have been several discussions and exchanges between the City's Human Settlements (HS) Department (project proponent), the City's Biodiversity Management Branch (BMB), and

Sillito Environmental Consulting with respect to the location of the sites, their conservation significance, the relevance of the CIP in this context, and the likely requirements for environmental authorization, including biodiversity offsets (please refer to email correspondence, dated 29 May 2020, and subsequent correspondence, dated 9 November 2020, as included in **Appendix D**).

Initially, the Enkanini Residential Development was planned to affect only areas of 'unselected' Strandveld, as the adjacent area of 'priority' Strandveld to the west was intended for formal protection and inclusion into the City's conservation estate. However, a sudden, very recent increase in the level of land invasion and informal settlement on this priority area has led to the BMB withdrawing its application to have the area reserved for biodiversity management purposes (refer to email by Clifford Dorse dated 6 October 2020, as included in **Appendix D)**, potentially freeing it up for housing development.

Based on the information above, a biodiversity offset will be required for the predicted residual loss of CFDS vegetation on the development sites, which are owned by the CCT. Where the affected vegetation is mapped as 'unselected' Strandveld in the CIP, a streamlined process is suggested by City officials whereby offset requirements are met through the use of the Macassar Dunes East Conservation Landbank (Oxtoby, Dorse & Wood, 2019). Land for this conservation bank has been reserved for conservation (i.e., it has been vested in the City's Biodiversity Management Branch) and the BMB plans to apply for its declaration as a S 23 Nature Reserve in terms of the NEM Protected Areas Act.

In general, where CFDS other than 'unselected' areas are affected by a proposed development, as in the case of 'priority' Strandveld on the western portion of Erf 18370, or where the land in question is not owned by the CCT, a regular offset process involving the identification of a bespoke offset (not part of the Landbank) needs to be followed.

Hydrology and Geology

Refer to Freshwater Sensitivities Map, Dean Ollis – Freshwater Consulting Group, May 2021, as included in Appendix C2

Freshwater and natural drainage features

The Freshwater Site Scan (May 2021) conducted by the Freshwater Consulting Group (FCG) concluded that all areas mapped as wetlands are located outside the proposed site for development, with the exception of an artificial wetland on the eastern border of the site (due to previous clearing activities that took place as part of the establishment of the Temporary Relocation Area (TRA) (please refer to Section 2.1, p.12 of this Scoping report for details on the TRA)]. As such, no wetlands have been identified on the site. Wetland features have however been identified on the CoCT Water and Sanitation Erf, which is not included as part of this development. Please refer to Figure 6 below for the CoCT's wetland map.

A Freshwater Impact Assessment, as well as a Water Use License Application (WULA) will be commissioned in order to assess the impacts that the development will have on these wetland systems. This will be undertaken to obtain the necessary licensing from the Department of Water Affairs and Sanitation (DWS).

The Freshwater Impact Assessment will be included in the EIA phase.

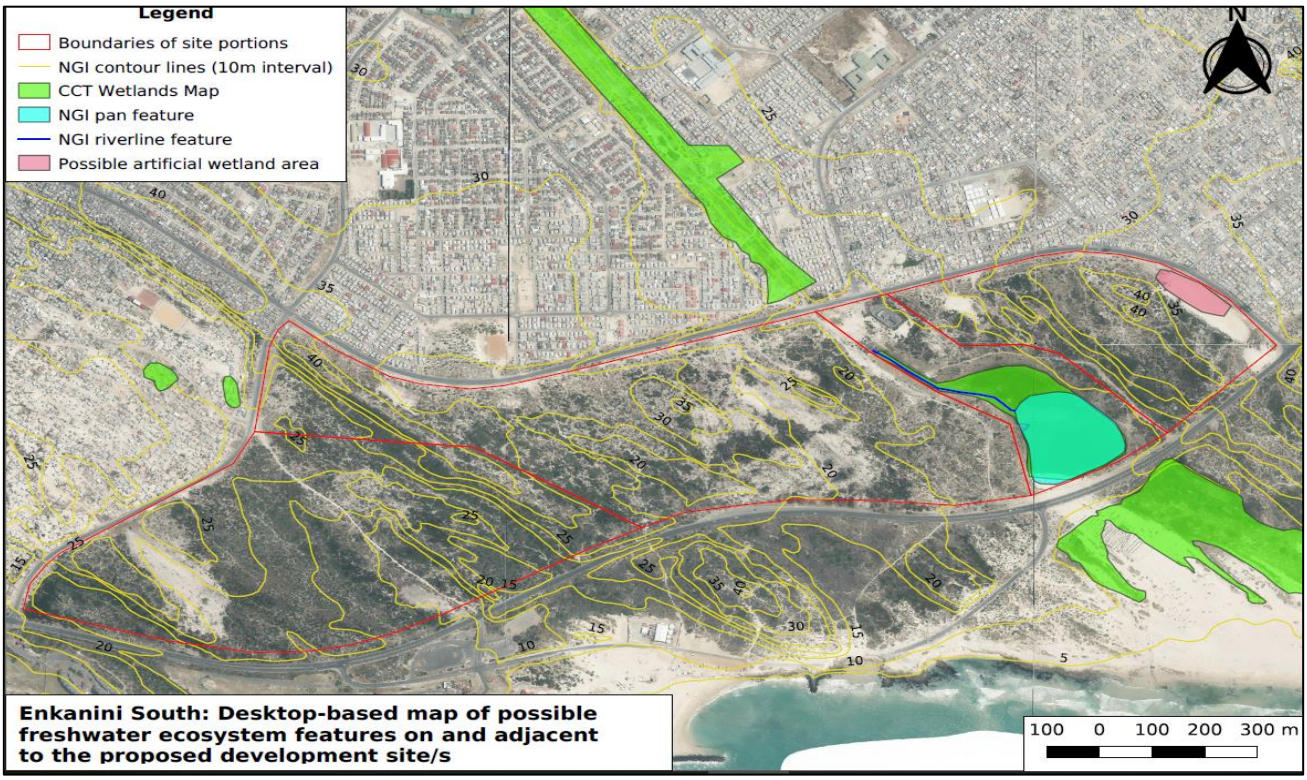

Figure 6: City of Cape Town Wetlands Map.

Regional Geology

The site is likely to be covered by a layer of Aeolian sand. The thickness of the Aeolian sand is likely to vary depending on the height and extent of the former sand dunes. It is expected that the Aeolian sand thickness is likely to be in the order of 1 m to 2 m (dependant on the nature of the former sand dunes).

In general, the soil profile is likely to be characterised by an upper layer of fine-to-medium sand of Aeolian origin (windblown). The Aeolian sand is likely to be underlain by a thin layer of clayey fine sand (inferred to be reworked Malmesbury clay). With increasing depth, the underlying soil is expected to comprise of clayey silt derived from the in-situ weathering/decomposition of Malmesbury Group shale. No rock outcrop is expected to be present at the site, and it is unlikely that bedrock will be present within 3 m of the surface.

The near-surface soils are likely to consist of granular fine-to-medium sand of Aeolian origin.

Geology and Hydrology Summary and Recommendations

This will be addressed in the Draft EIR phase.

Heritage

Cultural Landscape

Refer to Heritage Notice of Intent to Develop, City of Cape Town Environmental Resource Management, as included in Appendix D1

An NID was submitted to HWC by City Environmental Resource Management and a response was received from HWC, confirming that no further work is required in terms of heritage impacts (Appendix D1).

6 METHODOLOGY TO BE ADOPTED IN THE ASSESSMENT OF POTENTIAL IMPACTS DURING THE ENVIRONMENTAL IMPACT PHASE

The assessment of the potential impacts will be based on extensive experience related to environmental impact assessment as well as specialist assessment and input, where applicable. Impact assessment will also be coupled with input and comment from stakeholders. The potential impacts will be assessed after review by the professional team, including specialists, and on the basis of professional judgement.

In the EIA Report, it is proposed that the types of potential impact(s) (direct, indirect, and cumulative) be considered along with the nature, extent, and location of the potential impacts.

A prediction will be made of the timing and duration of the potential impact. A prediction will also be made of the likelihood or probability of the impact occurring. As a product of the defining characteristics of the impact described above, an estimation of the significance of the potential impact will be determined.

Mitigation measures will be identified that could be implemented to lessen the potential impacts and an evaluation of the predicted significance of residual impacts after mitigation is put into place, will be made. The assessment of the potential impacts will be carried out in accordance with the relevant *DEA and DEA&DP Guideline documents and Impacts in Support of the EIA Regulations, 2017.*

The mitigation hierarchy will also be considered when determining potential impacts and mitigation measures. The mitigation hierarchy is comprised of four actions which are designed which are typically implemented sequentially[1], namely (1) avoidance, (2) minimization, (3)

[1] Arlidge, W.N., Bull, J.W., Addison, P.F., Burgass, M.J., Gianuca, D., Gorham, T.M., Jacob, C., Shumway, N., Sinclair, S.P., Watson, J.E. and Wilcox, C., 2018. A global mitigation hierarchy for nature conservation. *BioScience*, 68(5), pp.336-347.

rehabilitation, and (4) offset (if required) which will be applied in the context of this environmental process to promote the best feasible environmental option:

(1) Avoidance: avoiding impacts on biodiversity within the proposed site of development and surrounding area and includes identifying potential risks and investigating alternatives[2].

(2) Minimize potential impacts: mitigation measures and recommendations will be incorporated into the Draft EIR and EMPr, to be implemented during the construction and operational phases of the proposed development.

(3) Rehabilitation: as per item 2 above, mitigation measures, including the need to rehabilitate areas (which also aids in reducing erosion during the operational phase) outside the construction footprint will be considered;

(4) Offset: Based on aforementioned information, a biodiversity offset will be required for the predicted residual loss of CFDS vegetation on the development sites, which are owned by the CCT. Where the affected vegetation is mapped as 'unselected' Strandveld in the CIP, a streamlined process is suggested by City officials whereby offset requirements are met through the use of the Macassar Dunes East Conservation Landbank (Oxtoby, Dorse & Wood, 2019). Land for this conservation bank has been reserved for conservation (i.e., it has been vested in the City's Biodiversity Management Branch) and the BMB plans to apply for its declaration as a S 23 Nature Reserve in terms of the NEM Protected Areas Act. In general, where CFDS other than 'unselected' areas are affected by a proposed development, as in the case of 'priority' Strandveld on the western portion of Erf 18370, or where the land in question is not owned by the CCT, a regular offset process involving the identification of a bespoke offset (not part of the Landbank) needs to be followed.

More details regarding the methodology to be adopted in the assessment of potential impacts during the EIA phase are contained in the Draft Plan of Study for EIA (**Appendix E**).

[2] Phalan, B., Hayes, G., Brooks, S., Marsh, D., Howard, P., Costelloe, B., Vira, B., Kowalska, A. and Whitaker, S., 2018. Avoiding impacts on biodiversity through strengthening the first stage of the mitigation hierarchy. *Oryx*, 52(2), pp.316-324.

7 INVESTIGATION OF ALTERNATIVES FOR MEETING THE GENERAL PURPOSE AND REQUIREMENTS OF THE APPLICATION

7.1 Introduction

According to the Western Cape Department of Environmental Affairs and Development Planning's Guideline on Alternatives (October 2011), alternatives in relation to a proposed activity includes different means of meeting the general purposes and requirements of the activity.

The types of alternatives which can be considered include, for example, alternative locations for the activity and alternative layouts and designs to be used in the activity.

The rationale behind investigating alternatives is to try and ascertain ways of fulfilling the general purpose of an activity, whilst at the same time ensuring that the possible impacts on the receiving environment (social, economic, and bio-physical) associated with the proposed activity are avoided altogether, or at least minimised to acceptable levels.

A thorough investigation and assessment of alternatives should result in the identification of the Best Practicable Environmental Option (BPEO), which is defined as "the option that provides the most benefit or causes the least damage to the environment as a whole, at a cost acceptable to society, in the long term as well as in the short term".

In accordance with the NEMA EIA Regulations contained in Government Notice No. R543 of 2010, read together with the DEA&DP's Guideline on Alternatives, this Scoping Report must contain a detailed investigation of alternatives identified. The investigation must include potential advantages and disadvantages which the identified alternatives may have for the receiving environment.

Based on this investigation, reasonable and feasible alternatives will be identified, with only these alternatives taken forward and comparatively assessed during the EIA phase. This is because the competent, decision-making authority can grant authorisation of an alternative as if it has been applied for.

The investigation and assessment of alternatives must, in accordance with the EIA Regulations, include the "No-Go Option" as a baseline against which all other alternatives are assessed.

LAYOUT/DESIGN ALTERNATIVES

ALTERNATIVE 1: First draft concept block layout (no sensitive area) (**Figure 7**)

This alternative was the initial concept block layout plan proposing development for the subject property, excluding the area towards the southwest of the development, reserved by City of Cape Town Biodiversity Management Branch (BMB) (which was later withdrawn by BMB to for reservation for biodiversity management purposes). As this plan was conceptual the areas and numbers are only estimated.

The number of residential units for this layout is proposed to be approximately 3500 erven which gives a gross density of 68 erven per hectare.

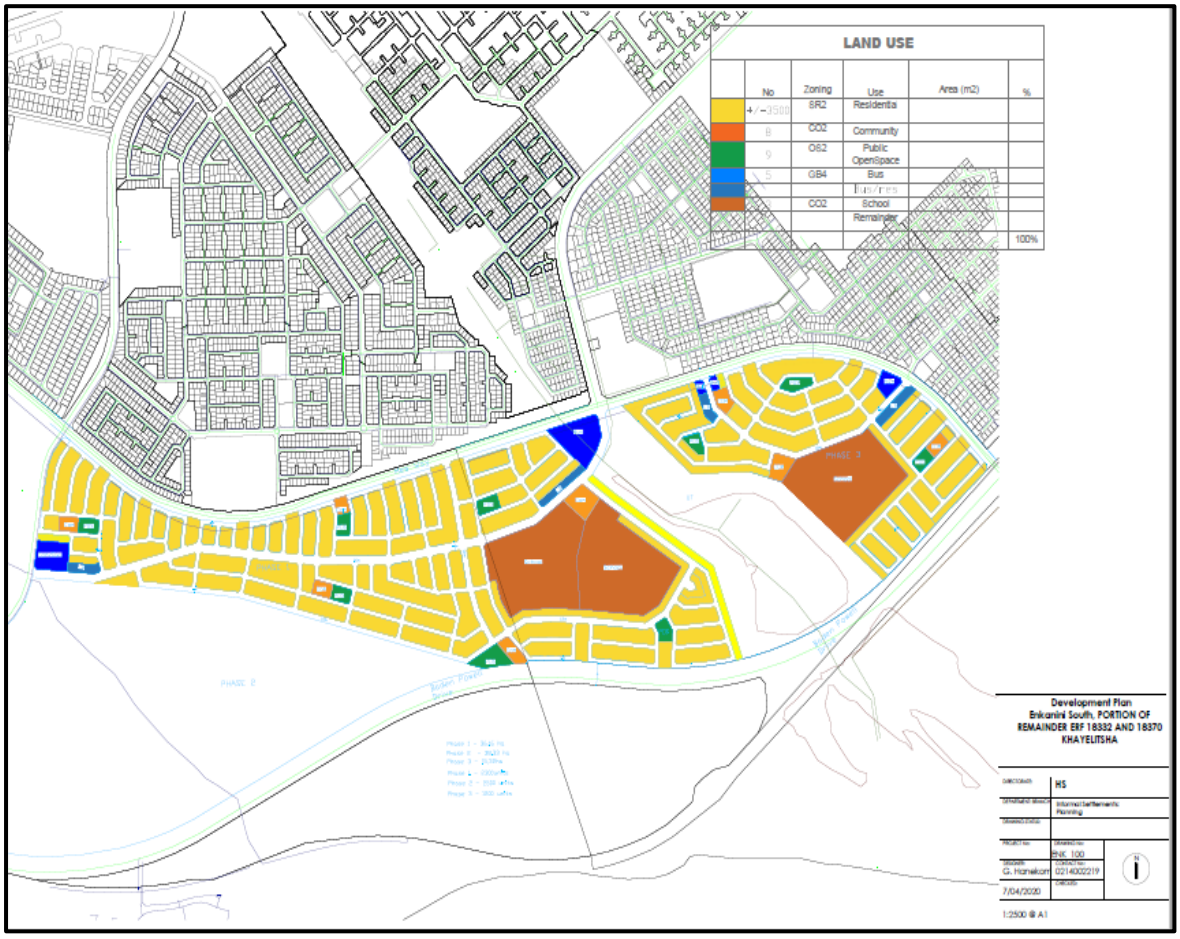

Figure 7: Concept layout for alternative 1, excluding the BMB area.

ALTERNATIVE 2: Second draft concept block layout (excludes the no-go sensitive area)

This alternative was proposed as a possible alternative by the botanist and excludes the entire no-go sensitive area from the development footprint as earmarked by the botanist towards the east of the site.

The botanist has however indicated in the screening report that both the No-Go scenario and development on the site are likely to result in the loss of almost all the vegetation on the site and result in a High or Very high negative impact. The exclusion of the no go sensitive area from the development footprint and an offset for the remaining area lost are seen as the best-case scenario from a botanical perspective.

This alternative is a concept block layout plan proposing development for the entire subject property excluding the entire no-go sensitive area as earmarked by the botanist towards the east of the site of approximately 9.6 ha leaving a developable area of 90.7 ha. As this plan was conceptual the areas and numbers are only estimated.

The number of residential erven for this alternative is proposed to be approximately 5130 units which gives a gross density of 57 residential erven per hectare.

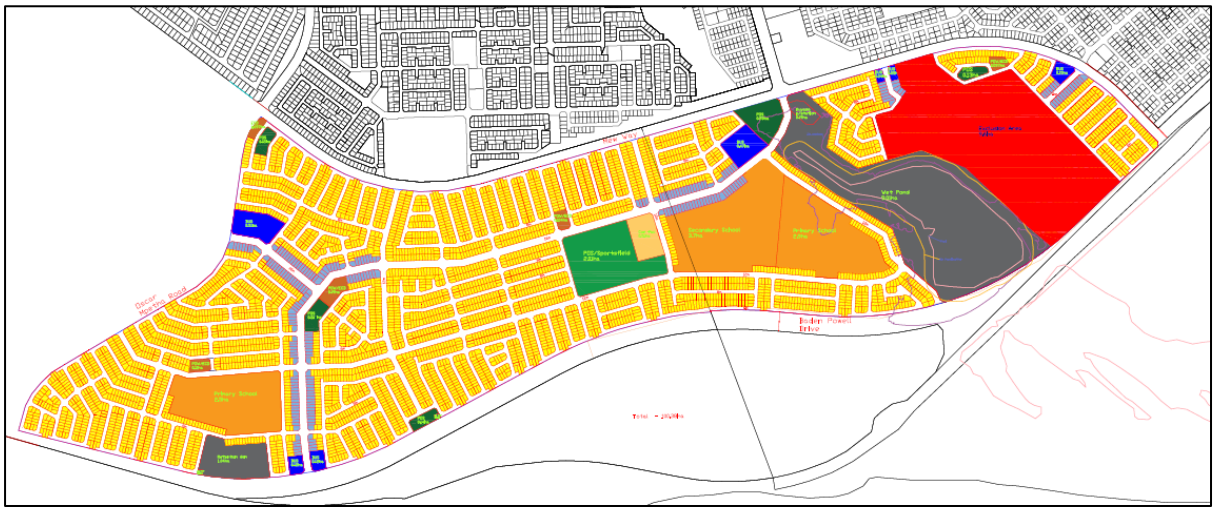

Figure 8: Map from Capensis indicating the proposed no-go areas.

ALTERNATIVE 3 Current proposed Preferred Alternative: Including the no go area, a proposed offset area and the BMB area previously earmarked for biodiversity conservation purposes.

Given the current extent of illegal land occupation taking place on site and the complications associated with successfully cordoning off and protecting sections of No-Go areas in the long term; it was recommended that an offset be identified for the sensitive areas identified on site and that the no-go buffer area towards the eastern boundary of the site are no longer required. The layout was thus revised to include the area previously excluded; thus the entire subject property area is now available for urban development.

The total amount of residential erven proposed for this layout is 5700 residential erven on a 100.38ha development area. This amounts to a gross density of 57 residential erven per hectare.

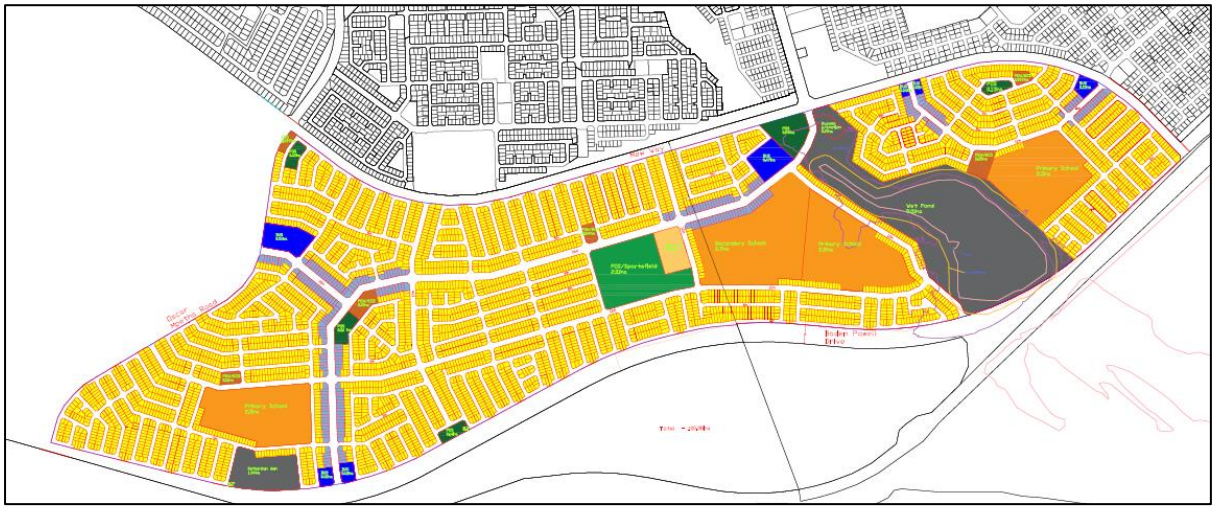

Figure 9: Preferred Alternative Concept Layout

No-Go Alternative

The no-go option entails maintaining the status quo of the site. In this case, the no-go option would mean that the development will not take place and that there will consequently be no clearance of vegetation for the sake of development. The site will remain as is, undeveloped.

The no-go alternative will fail to address the dire need for housing in the Cape Flats area – as well as larger City of Cape Town area. Given the scale of the proposed housing development, a considerable economic contribution to the local community in the form of employment opportunities will also be foregone should the development not take place.

Should the property remain vacant it will also most likely be completely occupied and degraded by illegal land invasion thereby compromising the safety and environmental quality of the area.

Pros and Cons of the No-Go Alternative

a) The No-Go alternative will likely result in the gradual decline and degradation of the vegetation on site unless access control, ongoing clearing of invasive alien plants as well as regular maintenance is undertaken on the site.

8 PUBLIC PARTICIPATION PROCESS

8.1 Identification of and Communication with Stakeholders

A public participation process is an essential component of the Scoping/EIA process. Through public participation, possible issues and concerns around the proposed activity – the proposed housing development – can be raised and addressed by the project team during the Scoping/EIA process. Public participation can also assist with the identification of alternative means of fulfilling the general purpose of the application.

The public participation process is rigorously prescribed by the regulations contained in Chapter 6 of the 2017 NEMA EIA Regulations. These regulations have and will continue to govern the public participation process for this application.

In accordance with the requirements of the EIA Regulations, possible Interested and Affected Parties (I&APs) were identified. These I&APs will be notified of the application process and provided with an opportunity to formally register as I&APs. Notification, including a brief Background Information Document, will be undertaken by registered letter, fax or email.

The identified I&APs include landowners or occupants of land adjacent to the site; and State Departments and Organs of State including the City of Cape Town; the Department of Water Affairs; and the Western Cape Department of Environmental Affairs and Development Planning.

In addition, community representatives in the form of the ward councillor and community organisations such as ratepayers' associations will also be notified.

In addition to notifications to be sent out, advertisements will also be placed in two local newspapers. A site notice will also be erected, at the entrance to the site.

All identified I&APs will be given a minimum of 30 days in which to register as an I&AP and lodge with SEC their comments, issues or suggestions pertaining to the application. At the same time, the Draft Scoping Report (this report) will be made available to identified I&APs for review and comment.

Appendix B1 contains the details of all identified I&APs who will be notified of the public participation process.

8.2 Issues Raised by Interested and Affected Parties

Comments raised by I&AP's during the review period for the Draft Scoping Report, as well as responses to these comments by the project team, will be included in a Comments and Responses Report to be appended to the Final Scoping Report. The Comments and Responses Report will include a summary of the key issues and concerns raised and the manner in which the project team proposes to address them.

Where issues and concerns relate to substantive components of the project proposal, the contents of the Final Scoping Report will be amended to address these where relevant. The Final Scoping Report will then be submitted for review by registered stakeholders before being submitted to the DEA&DP.

The DEA&DP will then make a decision whether all potential impacts and issues associated with the proposed development have been satisfactorily "scoped" or investigated. The DEA&DP will also decide whether the Plan of Study for EIA describes an EIA process which will effectively determine the significance of the impacts associated with the various reasonable and feasible alternatives; and whether the EIA process will effectively determine what is the "Best Practicable Environmental Option" for the site.

9 CONCLUSION AND WAY FORWARD

The Scoping process for the proposed housing development was undertaken in order to identify possible environmental impacts associated with the development. These identified impacts will be assessed further during the EIA phase of this application process.

From these impacts identified, alternative means of fulfilling the purpose of the application – which is the development of housing in the Khayelitsha area - were identified as possibly necessary for the avoidance or minimisation of any potentially significant associated impacts. These alternatives have been investigated to ascertain which may be reasonable and feasible

for meeting the purposes of the application. The alternatives found to be reasonable and feasible will be comparatively assessed during the EIA phase.

The impact assessment process will follow the methodology described in detail in the Plan of Study for EIA attached in **Appendix E**. The assessment will be guided by independent specialist input where necessary.

The EIA process will also be used to identify various mitigation measures which may be necessary for the avoidance or at least the minimisation of possible impacts associated with development (please refer to mitigation hierarchy – page 40). These mitigation measures will be included in an Environmental Management Programme (EMP), which will govern the life cycle of the development.

Report compiled by:	**Report reviewed by:**
 Chantel Müller MPhil Environmental Management	 Adrian Sillito *Pr. Sci.Nat Registration Number 400046/93*