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August 2016



Executive Summary

Final Scoping Report: Seaview Low Income Housing Development, Port Elizabeth

1. Introduction

The Nelson Mandela Bay Municipality (NMBM) proposes to construct a low cost housing development and associated facilities in Seaview (see locality in Figure 2). The development will primarily cater for the communities currently living in Zweledinga and New Rest informal settlements in Seaview.

SRK Consulting (SRK) has been appointed by the NMBM, as the independent consultants, to conduct the Environmental Impact Assessment (EIA) in terms of the National Environmental Management Act 107 of 1998 (NEMA), as amended, and the Environmental Impact Assessment (EIA) Regulations, 2010, for the proposed housing development.

In July 2014 an application to commence the current EIA process was submitted to the Department of Economic Affairs, Environmental Affairs and Tourism (DEDEAT) and the project was assigned the reference number **ECm1/C/LN2/M/01-2014**.

2. Approach to the Study

The proposed development is subject to environmental authorisation from DEDEAT in terms of the NEMA. As such, an EIA is required and this Final Scoping Report (FSR) presents an important milestone in the EIA process.

The first step of the EIA process (see Figure 1) is the Scoping Study. The Scoping process is aimed at identifying the issues and/ or impacts that may result from the proposed activities, including the concerns of Interested and Affected Parties (IAPs), in order to inform the Impact Assessment phase of the EIA process. The Final Scoping Report (FSR) will form the basis of the Terms of Reference (ToR) for specialist studies, and it is therefore important that all issues and potential impacts that may be associated with the proposed development be identified and recorded.

The EIA process thus far has focussed on developing a more detailed description of the development proposal, and on identifying the issues and concerns of stakeholders and IAPs. IAPs are encouraged to review the FSR to ensure that their comments have been accurately recorded and understood.

The following activities have been completed as part of the Scoping Study in accordance with the requirements of the NEMA EIA regulations:

- Advertisement of the proposed development in “The Herald” newspaper on 5 March 2014;
- Distribution of the Background Information Document (BID) commencing on 6 March 2014 to identified Interested and Affected Parties (IAPs), stakeholders and neighbouring residents.;
- Collation of public and IAP comments on the BID and advert, including responses to these issues;
- Inclusion of original correspondence from IAPs in the Draft Scoping Report;
- Preparation of a Draft Scoping Report including a Plan of Study for EIA;
- Distribution of the Draft Scoping Report to public venues, and making it available on SRK’s website, for review by IAPs for a 40 day comment period, and submission to relevant authorities;
- Distribution of the Executive Summary to all IAPs registered for this process.
- Placement of on-site posters, advertising the EIA process;
- Collation of public and IAP comments on the DSR, and incorporation of these into the Final Scoping Report (this report);

- Distribution of the FSR to public venues, and making it available on SRK's website, for review by IAPs for a 21 day comment period; and
- Informing the new ward councillor of the project.

The activities that must still be conducted as part of the Scoping process are described below:

- Consultation with recipient communities via a public meeting;
- Submission of the FSR to DEDEAT for approval of the Plan of Study for EIA and a decision regarding authorisation to proceed to the Impact Assessment phase of the EIA; and
- Collation of public and IAP comments on the FSR, and incorporation of these into the Draft Environmental Impact Report (DEIR).

An overview of the EIA process being followed, indicating opportunities for public comment, is provided below.

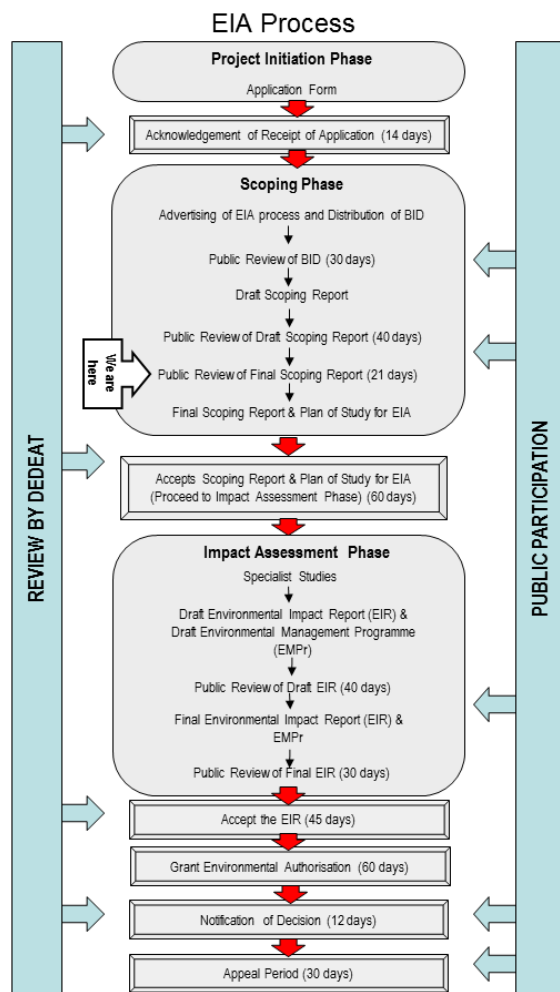


Figure 1: EIA Process

3. Motivation for the Proposed Development

Housing and service delivery is also a key challenge facing the Nelson Mandela Bay Municipality (NMBM). According to the NMBM's Integrated Development Plan (2015/16 – 14th edition, adopted 18 June 2015) the NMBM has a housing backlog of 72,411 units (49,000 backyard shacks and 23,411 units in informal settlements) and identified the provision of quality housing and the structured upgrading of informal settlements as one of their main objectives. Their aim is to upgrade and eliminate all informal settlements by 2018, and provide basic sanitation to all communities in the NMBM by 2016. The proposed provision of housing for residents of informal settlements in the Seaview area is also listed as one of the priority projects for Ward 40 in the IDP.

The NMBM has identified five potential sites to provide housing for the informal settlements of Zweledinga and New Rest which are located to the north and north-west of Seaview. The Municipality is focused on the provision of sustainable integrated human settlements, which means the provision of housing must be accompanied by the provision of other services and amenities required to improve the socio-economic conditions of the residents of that area (i.e. access to community facilities such as educational, entertainment, cultural, health, sports and welfare services). Therefore, the focus of this project is on creating an integrated sustainable settlement which reflects the vision of new initiatives in the NMBM.

4. Development Proposal

The Nelson Mandela Bay Municipality (NMBM) proposes to develop low cost residential units and associated infrastructure in Seaview. The development will provide formal housing for the residents of Zweledinga and New Rest informal settlements located on erven 590 238 and 240. Two development options are provided, option 1 entailing development of approximately 400 units on non-forested patches on these erven as well as portion 10 of farm 28, Seaview, and option 2 involving development of up to approximately 1000 units on portion 1 of farm 28. On-site sanitation is also proposed for both options.

Housing and associated land uses

Beneficiaries will receive a fully state subsidised formal structure (Free basic house/RDP) of 45 m². Beneficiaries will depend entirely on being housed by the state without any expectation of making financial contributions towards the house/services/ transfer/ registration costs for the property to be received. Houses will be typical RDP structures on a minimum erf size of 250 m² to accommodate the sanitation services on each erf. The houses will consist of one shower and sink per dwelling (no bath).

The proposed development will include areas zoned as public open space (both parks and natural/ indigenous vegetation), as well as community zoning to make provision

for uses such as a crèche or church. Special Purpose zoning would be a zoning for an integrated use such as a community facility or a waste transfer station etc.

Development Options

As the majority of land falls within the DAFF forestry layer, development is likely to be constrained to the transformed areas. Option 1 therefore proposes the utilisation of the disturbed areas on Erf 590, Erf 238, Erf 240 and portion 10 of Farm 28 for the development of formal housing in order to meet the required number of houses. It is therefore proposed that the development be split between these properties.

The second option under consideration is the purchase of Portion 1 of Farm 28 which contains approximately 75 ha of previously transformed land to the east of the property. The transformed area will be sufficient to contain the entire development, and provide capacity for future expansion to accommodate community growth. A preliminary layout for the proposed development of this site is not yet available but will be based on the footprint area assessed and proposed for residential development through the EIA previously conducted on the site (CEN, 2012). Based on this EIA, indications are that this portion of the site is suitable for residential development from a biophysical perspective, however there are cost implications as the property is privately owned.

Sanitation Options

Two alternatives exist for the provision of sanitary services on Portion 1 of Farm 28. Either a package Wastewater Treatment Plant or Low Volume Flush Toilets with leach pits. The latter option is proposed for Option 1.

Low Volume Flush Toilets will be drained to a leach pit located on each property. Special modifications will be made to the leach pit to accommodate additional water from the sink and the shower and will comprise dual pits. Community institutions will be provided with low volume flush toilets connecting, depending on size of institution, to either a small septic tank discharging to a soak pit or to a conventional septic tank discharging to a French drain. The acceptability of this option from a groundwater contamination perspective will be investigated as part of this EIA.

The proposed package plant includes a head of works, reactor, clarifier, chlorination, sludge lagoons and a reed bed. An updated review of the sizing requirements and most viable technological option for the package plant, taking the changes to the type and number of housing units proposed for the site (mid-upper income low density units to higher density free basic housing) has not yet been conducted. Further detail on this will be provided in future reports as part of this EIA.

Water

The development will connect onto the proposed Seaview bulk water supply scheme, which is intended to augment water supply for the broader area. Application for

environmental authorisation for this project is currently in progress separately to this EIA process, a DEDEAT reference number for which will be provided once this is available.

Electricity

Off grid PV systems have been installed by the NMBM on the individual informal structures in Seaview. This system provides a lighting and cell phone charging facilities to the informal homes. With the development of formal housing, electricity will be supplied from the Seaview sub-station by means of an overhead power line, and the housing design will include the NMBM standard specifications for low cost housing such as solar geysers. Due to load growth in the Seaview area the Nelson Mandela Bay Municipality will upgrade the line to a 22kV underground cable which will be sufficient to supply the power requirements for Seaview, including the proposed development. Where possible other energy saving technologies (such as solar street lighting) will be installed.

Waste

Solid waste generated by individual households in operational phase will be collected as per the NMBM's waste collection schedule. A new waste transfer station for the area will be required and provision for this is made in layout option 2. Due to space limitations, this provision is not currently available in layout option 1.

5. Potential impacts

The following potential impacts have been identified based on SRK's understanding of the receiving environment, typical impacts associated with developments of this nature, and concerns raised by IAPs:

Impacts on Heritage Resources: Damage or destruction to archaeological resources on the site may occur due to earthworks and excavations during construction.

Terrestrial Ecological Impacts: Indigenous vegetation will need to be cleared for the development, resulting in loss of habitat and possibly species of special concern. This is however largely limited to previously transformed areas, but as layout Option 1 entails pockets of development between patches of forest and / or other indigenous vegetation, impacts on connectivity and movement of fauna between patches may result.

Edge effects on the bordering vegetation and habitat resulting from disturbance, littering, alien invasive vegetation, and hunting or bush cutting, are could also potentially result from this development option, both during construction and operation, and may displace and disturb local fauna. Clearing and disturbance of the soil during construction may also promote the growth and spread of invasive alien vegetation on the site.

Socio-economic Impacts: The proposed project will impact positively on the current housing shortfall experienced in the Nelson Mandela Metropolitan area. Provision of formal housing as well as services will improve

the standard of living of the beneficiaries currently living in the informal settlements of Zweledinga and New Rest. Construction of the housing development will also result in short term employment for semi-skilled workers.

Concern has been raised by surrounding communities regarding potential negative impacts on property values, influx and social ills such as crime and noise disturbance that may result from the proposed development.

Traffic Safety Impacts: As the development proposal for layout option 1 consists of pockets of development along and on both sides of Seaview road, it is anticipated that movement of pedestrians between the various sites may result in traffic safety impacts and that specific management measures will be required to manage this.

In the event that Portion 10 of Farm 28 is developed, the access road will join up with Aliwal Road, increasing the volume of traffic usually experienced along this road. Pedestrian traffic in these areas could also be expected to increase.

Impacts on Aquatic environments: Due to the undulating nature of the terrain, it is possible that wetlands may be present within and close to the development area. Contaminated runoff or wastewater from construction activities (e.g. cement wastewater, fuel spills etc.) and sedimentation may lead to pollution of any water resources present in site. Stormwater runoff from the housing development that is polluted with litter or other contaminants may lead to pollution of downstream water resources. Levelling of the site and changes to the stormwater regime of the area may also lead to changes to the hydrology of any wetlands.

Impacts on Groundwater: Although soil percolation tests are believed to have confirmed the suitability of such infrastructure, seepage of leachate from the leach pits and septic tanks proposed for sanitation could potentially result in impacts on groundwater quality, which is understood to be an existing concern in the area (due to septic tanks). A specialist assessment is therefore proposed to confirm compliance with DWS's minimum standards in this regard.

Stormwater and Erosion Impacts: Vegetation clearing and disturbance of soils during construction will leave them vulnerable to erosion by water and wind. This could lead to increased sediment load in stormwater runoff, potentially clogging the receiving stormwater infrastructure. Loss of topsoil and erosion will also limit the potential for vegetation growth in these areas, leading to further erosion.

Waste management Impacts:

Lack of adequate waste management during construction and operation could result in spread of litter, illegal dumping, contamination of soil and water resources, and increased prevalence of scavengers at the site.

Visual Impacts: Portions of Erf 590, 240 and 238 are currently occupied by informal houses which border the Seaview Road. As the proposed development (option 1) will take place in transformed /previously occupied areas

which are visible from the Seaview Road it is anticipated that the construction of formal houses (or in the case of option 2, management of these areas to prevent additional in-migration) will have a positive visual impact. The development will however be provided with lighting which may be perceived negatively by residents of Seaview who are situated at a lower elevation than the proposed development sites.

Impacts Related to Construction: Impacts during the construction phase may potentially include the following:

- Sanitation and water supply;
- Nuisance dust impacts;
- Noise impacts;
- Safety and security;
- Chemical pollution of soils and stormwater due to spills or leaks;
- Damage to other infrastructure (e.g. underground cables and pipelines);
- Veld fires and fire management; and
- Interruption to services supply

Fire Safety Risks

As the development will entail the clearing and development of areas currently interspersed with invasive alien trees (which are prone to burning), the risk of veld fires in the area is anticipated to decrease. This is further supported by the fact that the proposed houses will be electrified and wood or paraffin will therefore not be the main energy source.

6. Draft Plan of Study for EIA

The following specialist studies are proposed in order to investigate the potential environmental impacts associated with the proposed development:

- Updated Forestry Survey (for option 1):
 - Ground truth the transformed areas/forest edge on all even as captured in the preliminary site layouts;
 - Compile a list of dominant forest tree species observed;
 - Provide a map indicating the extent of the ground truthed forest;
 - Demarcate the location of protected species listed in terms of the National Forest Act (NFA);
 - Recommend mitigation measures to manage impacts
- Archaeological Impact Assessment:
 - Conduct a literature review of known archaeological resources within the area with a

- view to determining which of these resources are likely to occur within the development footprint;
 - Comment on potential impacts on these resources resulting from the development; and
 - Make recommendations regarding the mitigation of any damage to the archaeological resources identified; or that may be identified during the construction phase.
- Palaeontological Impact Assessment:
 - Conduct a literature review of known palaeontological resources within the area with a view to determining which of these resources are likely to occur within the development footprint;
 - Comment on potential impacts on these resources resulting from the development; and
 - Make recommendations regarding the mitigation of any damage to any palaeontological resources identified; or that may be identified during the construction phase.
- Ecological Impact Assessment:
 - Review previous ecological studies and provide updates as required;
 - Describe the biodiversity in the vicinity of the study area in terms of: Vegetation types/ habitats, including their ecosystem threat status; Ecological processes; Critical Biodiversity Areas and Critical Ecosystem Support Areas in terms of the relevant systematic biodiversity plans, especially the Nelson Mandela Bay Municipality Final Bioregional Plan (SRK Consulting, 2014); and Flora and fauna species of special concern (including Red List status, species that are protected in terms of legislation, and the endemism status of species) and threatened or protected fauna (if necessary).
 - Assess the condition of the vegetation in the study area;
 - Assess risks on surrounding sensitive habitats or protected areas (such as the Island Nature Reserve);
 - Identify No-Go/ Non-development areas in terms of significant terrestrial biodiversity features (vegetation types, species and ecological processes);
 - Provide recommendations for rehabilitation of currently occupied areas (should development option 2 be authorised); and
 - Provide recommendations for possible measures to mitigate ecological impacts.
- Wetland and aquatic environment Impact Assessment:
 - Identify and delineate any riparian and wetland areas on and within 500 m of any of the development areas;
 - Assess the Present Ecological State (PES) of any wetland identified;
 - Comment on potential impacts on water resources resulting from the development; and
 - Make recommendations regarding the mitigation of any potential damage to wetlands.
- Groundwater Impact Assessment:
 - Conduct a desktop assessment of the geology and hydrogeology within a radius of approximately 1 km of the proposed Site. This will include an assessment of the geological, hydrogeological and topographical maps; and the National Groundwater Archives (NGA) - a database of the Department of Water and Sanitation (DWS);
 - Undertake a hydrocensus of boreholes at properties neighbouring the current proposed sites. The hydrocensus will be limited to identifying existing boreholes and recording any available information of this borehole, including its position, depth, water level, water pH and conductivity. Existing potential contamination sources will also be recorded;
 - Drilling of boreholes in order to establish the thickness of the unsaturated zone, the materials constituting the unsaturated zone, and the depth to groundwater table within the area. It is proposed that ten boreholes be drilled, spaced out approximately 500 m from each other across the proposed sites, in areas that are accessible to a drilling rig. An average depth of 10 m bgl is proposed. Should the water level not be reached by 10 m bgl, then the borehole will be stopped, the soils logged, and the borehole backfilled;
 - Sieve Analysis on selected samples from the boreholes to determine the specific soil types below the surface; and
 - Report on the results of the investigation
- Socio-economic Impact Assessment:
 - Describe the baseline socio-economic conditions of Seaview
 - Review and update the baseline socio-economic condition assessment previously undertaken of the communities of Zweledinga and New Rest;
 - Review the available literature and assess the potential impacts of the development proposal on socio-economic conditions including: Provision of housing and amenities for beneficiary communities; The effect on property value of communities neighbouring the proposed

development; The projected effect on security, crime, noise / disturbance and social ills in adjacent neighbourhoods; Estimate the job creation potential of the proposed development, Comment on the appropriateness of the location of the development in light of the social and economic differences of the area, as well as policy and other relevant considerations;

- Address comments raised by IAPs from surrounding areas relating to the above, including visual impacts (resulting in impacts on property values), influx, social ills, crime, safety.
- Make recommendations regarding enhancement and mitigation measures for identified impacts
- **Traffic Impact Assessment:**
 - Determine the spatial scope of the assessment (the "zone of influence") using professional judgement and industry norms;
 - Establish baseline traffic volumes on roads that may be affected by the proposed development;
 - Estimate the additional traffic volumes from the proposed development (including peak volumes);
 - Evaluate the adequacy of the existing roads to accommodate increased traffic volumes and types resulting from the proposed development. Such evaluation to include all intersections within the surrounding roads, and comment on existing and proposed road design; and
 - Make recommendations and provide advice to the team regarding appropriate management of the traffic flows and safety measures that may be required, and how best to incorporate these into the proposed development.

It is noted that a number of specialist studies have already been conducted for some of the sites under consideration (notably but limited to Farm 28/1 as part of the previous

EIA process for this site). Where appropriate, the findings of these studies will be used, and updated as required.

1.6.1 Additional information

The following information will also be included as part of the DEIR, and where relevant will inform the impact assessment and mitigation measures required:

- Bulk Services Engineering report; and
- Public Open Space Management Plan

7. Way Forward

The public participation programme has given IAPs an opportunity to assist with the identification of issues and potential impacts.

The Final Scoping Report (FSR), including the Plan of Study for EIA, has been submitted to DEDEAT for approval. DEDEAT will evaluate the FSR, including comments from Interested and Affected Parties (IAPs), and either approve the Plan of Study for EIA (PoSE), or specify changes that need to be addressed in the Environmental Impact Report (EIR). After this, a Draft EIR, incorporating the findings of the identified specialist studies, will be produced and distributed for further comment by IAPs.

The Executive Summary (this report) of the Final Scoping Report has been distributed to all registered IAP's for a further 21 day comment period. A printed copy of the report will be made available at **Walmer Public Library** (Main Road, Walmer, Port Elizabeth). The report can also be accessed as an electronic copy on SRK Consulting's webpage via the 'Public Documents' link: <http://www.srk.co.za/en/page/za-public-documents>

Written comment on this FSR should be sent by **17h00 on 16 September 2016** to:

SRK Consulting

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Fax: (041) 509 4850

Table 1: Estimated target dates for key activities in the EIA process

Stage / Activity	Target Dates	
	Start	End
Distribution of the Final Scoping Report for public comment and submission to DEDEAT	26 August 2016	16 September 2016
DEDEAT approval of Plan of Study for EIA (potentially including recommendations)	16 September 2016	28 October 2016
Conduct Specialist Studies and Compile Draft EIR	26 August 2016	19 December 2016
Public Comment Period for Draft EIR (40 days)	6 January 2017	15 February 2017
Prepare Final EIR	15 February 2017	27 February 2017

Stage / Activity	Target Dates	
	Start	End
Public Comment Period for Final EIR (30 days)	27 February 2017	29 March 2017
Submit Final EIR to DEDEAT for a decision	29 March 2017	

Table 2: Comments and Responses Table on the DSR

Commentator & comment no.	Issues raised	Response (SRK unless otherwise specified)
Comments relating to the process		
C van Eekelen (65)	Lack of consultation all round.	Several opportunities are provided throughout the process to comment as per the EIA regulations. Refer to Figure 1-2 and Section 4.2 in the FSR.
E Hill (66)	Lack of consultation as only information received has been via printed media.	
A Merrick (61)	How can this development be approved if it was denied to prior developers wanting to erect upmarket houses and complexes?	It is unclear which particular project(s) is / are being referred to, however it is noted that each environmental authorisation process is considered separately on its own merits and therefore cannot be assumed to have any bearing on the authorisation prospects for the current proposal.
DEDEAT (63)	It is contradictory that it is stated that a separate application is underway for the Seaview Bulk Water Supply and the indication that water supply has not been included in the scope of this assessment even though it is mentioned that authorisation may be dependent on authorisation of the water supply project.	The NMBM confirmed that the proposed Seaview Bulk Water Supply project, for which the Basic Assessment is currently in the pre-application stage, is planned to supply the Seaview housing project (see letter in Appendix J). The NMBM has also confirmed that no other options for water supply are available for the project. Based on the screening work conducted in the pre-application phase of that assessment, and to a lesser extent the lapsed environmental authorization for an earlier design of the same bulk water supply project, SRK is of the view that environmentally acceptable alternatives have been identified and that bulk water supply via these pipelines is environmentally feasible.
DEDEAT (63)	The process flow diagram does not indicate a PPP for the FEIR. An acceptable timeframe for the Department is 30 days.	Noted and amended to include a 30 day comment period.
DEDEAT (63)	Page 49 of the DSR indicates a 14-day comment period which is in contradiction with Figure 1-2 whereby a 21 day comment period is indicated. The Department requires a minimum period of 21 days for commenting on the FSR.	Noted and amended in the FSR. A 21 day comment period will be provided on the FSR.

DEDEAT (63)	No formal PPP has been conducted by SRK with the residents of New Rest and Zwelendinga. Such must be conducted throughout the remainder of the assessment process.	<p>Consultation with the affected communities will be undertaken as part of the EIA process during the public review period of the FSR, and reported in the DEIR. This consultation will be facilitated by a Community Liaison Officer, who the NMBM is in the process of appointing.</p> <p>In addition to this, outside of the EIA process, it is noted that the NMBM has engaged with the beneficiaries regarding the proposed project over the last few years. It is also noted that the project is in response to pressure from these communities for formal housing and services.</p>
DEDEAT (63)	The proposal for rehabilitation plans for the areas currently occupied by the informal settlements should option 2 be the preferred option to be authorised, must be included in the FSR and Plan of Study for the EIR	Should Option 2 be authorised, all existing shacks and infrastructure will be removed from these settlement areas as residents are relocated. The Terms of Reference for the Ecological Study makes provision for the preparation of recommendations for rehabilitation of existing development footprints in the event of Option 1 not being authorised (see Section 6.4.4 of the FSR).
DEDEAT(63)	The Plan of Study for the EIR must include a Bulk Services Report addressing water sewerage, stormwater management, waste management, electricity supply etc.	Compilation of a bulk services report addressing the aspects mentioned is in progress and a copy of the report will be provided as part of the EIR. Letters confirming capacity from the various municipal departments are included in Appendix J.
DEDEAT (63)	Public open space management, as well as management of community facilities including the provision of schools, a clinic and community centre is also to be included in the plan of study.	<p>The management of public open spaces and community facilities will be reported on in the EIR and measures will be captured in the EMP, based on municipal policies and standards for the management of public open spaces and community facilities. The Plan of Study for EIA includes provision of a management plan for public open space.</p> <p>[NMBM] Provision and maintenance of schools and community facilities is not within the NMBM's mandate, however provision has been made in the layout for such facilities, which would be developed and maintained by the relevant provincial department. The NMBM will however at all times endeavour to secure the timeous development of community facilities.</p>

DWS (68)	The following development activities may trigger a water use authorisation: Upgrade of existing bulk water services; Installation of new sanitation services; Installation of 22 kV underground cabling; Construction of a 12 m road reserve to connect the development with Aliwal Road; and Any other associated infrastructure or structures that forms part of the development.	The requirement for Water Use License applications (WULAs) will be confirmed during the wetland and aquatic ecology specialist study (see ToR in Section 6.4.5 of the FSR), and the relevant WULAs will be secured prior to any development taking place.
DWS (68)	List provided of all information that should be submitted as part of the water use application.	Should WULAs be required, this information will be included in the applications.
Comments relating to design		
A Topliss (58)	Is the Applicant aware of the double storied fireproof houses being built in Pretoria? They are R100,000 cheaper than the present RDP houses.	[NMBM] The NMBM is not aware of such products but are continuously seeking alternative solutions to provide housing alternatives that are acceptable to beneficiary communities. The comment is noted and will be investigated.
Comments relating to the environment		
N Littleton (59)	With the exception of site 28, all proposed sites are covered with endangered and protected vegetation. An objection has already been lodged with DAFF. They would be concerned about the integrity of the Baviaans Island Reserve.	DAFF has been notified and been provided with the opportunity to comment (see list of IAPs in Table 4.1). A forest survey is proposed (see ToR in Section 6.3.1 of the FSR) to ensure that the housing layout avoids forest areas. SRK have to date not identified potential risks to the Island Nature Reserve that would occur over and above those that already exist, due to the proposed development. Nevertheless, the ecological specialist will be required to assess reasonably foreseeable risks, assess their significance, and recommend management measures.
C Fehrsen (64)	Damage to the Coastal Forest Belt, the current affected areas where damaged by the proposed recipients themselves.	The development is planned to take place on portions of land where the forest has been transformed by previous activities. Refer to Figure 3.6 which shows the transformed areas.
Comments relating to social impacts		
N Littleton (59)	Indigent and unemployed population will bring in many social evils not currently in the area. Is the city prepared to ensure that the Seaview Police Station will be adequately staffed?	The development proposal is to accommodate residents already living in informal settlements in the area. Increased negative socio-economic impacts on surrounding areas relative to the current situation are therefore considered to be unlikely, but will be assessed through a socio-economic study (see draft ToR in Section 6.4.7 of the FSR). It is also noted that social evils cannot necessarily be categorically linked to indigent communities.

C Fehrsen (64)	Presence of shebeens with new housing.	[NMBM] The establishments of all liquor outlets, including taverns are highly regulated in terms of the Liquor Act, as well as the NMBM Liquor Outlet Policy and will apply to the proposed development.
C Fehrsen (64)	Additional dwellings will be erected resulting in an unplanned increase in population. Building directorate cannot enforce building law in such areas.	[NMBM] Building plans will have to be submitted and approved in terms of Section 7 of the Building Standards Act prior to commencement of construction on site. These designs will have to comply with SANS 10400 as well as SANS 204. The Building Inspectorate will have to commence the project, and once completed issue an occupation certificate prior to the building being handed over to the owner's, in terms of Section 14 of the Act..
Comments relating to the economy		
E Gerber (57) N Littleton (59) L Denny (60) D Visser (62) C Fehrsen (64)	Proposed project will have a negative impact on house market values as the area will be undesirable. Will the government have funds available to pay the shortfall? What options are available as recourse should values decrease as a direct proven result?	Potential impacts on surrounding property values and security will be assessed via a socio-economic study as part of the EIA (see ToR in Section 6.4.7). [NMBM] There is currently no documented and empirical evidence of lower-income residential developments negatively impact on surrounding property values. Research in this regard has recently started, but the associated reports and findings are not available to the NMBM at this stage. The NMBM is not obligated to provide reimbursement for depreciation in property value.
N Littleton (59) A Merrick (61)	Where are all the residents going to find employment?	The proposed project is aimed at the improvement of the living conditions and quality of life of residents living in existing informal settlements and is not intended as a destination area for people living in other parts of the city. It will at most accommodate some of the other smaller settlements in the immediate surrounds of Seaview/ Clarendon Marine.
N Littleton (59)	Extra funds will have to be spent on private security costs.	Social surveys conducted in the two informal settlements in Seaview have shown that an average of approximately 55% of the residents are employed within 14km of their place of residence. These results will be reviewed as part of the current EIA. There is no empirical evidence that the formalisation of informal settlements contributes to increases in crime and consequential increases in private expenditure on security. The beneficiary community are already living in the area.
Comments relating to safety concerns		

E Gerber (57)	Danger of residents rioting.	As the proposal is to provide housing and services to these residents, it is anticipated that service delivery protests will be reduced.
L Denny (60)	Danger of protestors sealing off all access routes. Saying that the proposed project will solve the protesting issue is naïve.	
E Gerber (57) A Merrick (61) D Visser (62)	Crime in the area has increased to a dangerous level and the proposed project will exacerbate it.	Crime is linked to broader socio-economic problems that are difficult to assess or mitigate within the scope of the EIA. As the development proposal is to provide formal housing and services for informal residents in the area, an increase in crime is not expected to result specifically as a result of the provision of houses. This potential impact will be investigated as part of the proposed socio-economic study (see ToR in Section 6.4.7).
Comments relating to health concerns		
N Littleton (59)	A septic tank system for a large population with poor herd immunity on a confined area on a sloped sand dune is going to cause major community health issues.	The sanitation solutions proposed are discussed in Section 2.2.2, and potential impacts on groundwater will be assessed as part of the EIA through a groundwater specialists study (see ToR in Section 6.4.6), which will confirm whether the proposed sanitation option (leach pits / septic tanks) will be acceptable from a water quality perspective. It is our assumption is that providing the DWS's on-site sanitation protocols are adhered to, which would be the subject of the proposed groundwater study, that secondary impacts on community health from this source would be addressed.
E Hill (66)	With the properties footprint being small and the proposed location of the tanks to be in a similar position on each plot, the ground area will become saturated and a mess. No mention is made of the emptying of the tanks and who bears the responsibility and cost.	
DWS (68)	The expected impact(s) cause by existing and proposed septic tank French drain system for sanitation purposes will be cumulative and long term on both the surface and groundwater. The soil percolation assessment / geotechnical report must be developed to provide accurate impacts caused by such infrastructure on the water source. The chances of pollution of water resources will be higher if this system is utilised.	
DWS (68)	The Department does not support the proposed sanitation system of a septic tank, leaching into the ground, but rather the alternative of a package plant system.	
L Denny (60)	The proposed development will cause sand and dust to come across to suburb.	Impacts relating to dust will be assessed in the DEIR and management measures proposed in the EMPr.
L Denny (60)	Are there legal remedies should health and stress issues occur as a result of any factor relating to the housing development e.g. dust, sewerage, noise pollution?	Potential impacts relating to the concerns mentioned will be assessed as part of the EIR (see Sections 5.6, 5.9 & 5.10 of the FSR), and mitigation measures will be provided, which may become conditions of any authorization provided for the project. The relevant municipal bylaws will also apply to the proposed development.

DWS (68)	Integrated waste management must be dealt with in accordance with the NEM:WA (59 of 2008)	Waste impacts will be assessed as part of the EIR (see Section 5.8 of the FSR). The NMBM's integrated waste management plan will apply. Input has also been received from the NMBM's Waste Management department regarding waste removal (see Appendix J).
Comments relating to pollution		
E Gerber (57) L Denny (60) C Fehrsen (64)	Proposed project will lead to increased noise pollution, disturbance of the peace and tranquillity.	Noise impacts relating to construction will be assessed as part of the EIA. During operation, the relevant NMBM noise control bylaws will apply.
C Fehrsen (64)	Hovering smoke in the air through burning of tyres, wood for heating purposes (coastal forest belt will supply such needs).	The development will include electrical connections which would reduce the use of fire for cooking and heating, and it is therefore anticipated that impacts relating to burning of wood and tyres will decrease, and it is not proposed that these specific impacts will be assessed in the EIA.
C van Eekelen (65)	Increase of rubbish and health issues due to presence of taxi ranks.	The development proposal will be subject to waste management as per the NMBM's integrated waste management plan. Waste management impacts will be assessed as part of the EIR (see Section 5.8 of the FSR). Sanitation solutions proposed are discussed in Section 2.2.2.
DWS (68)	The report states that there is a possibility of wetlands present and/or close to the development areas and activities such as contaminated run-off, waste water from construction activities, sedimentation etc. may lead to pollution of these water bodies.	A wetland/aquatic specialist study is proposed to determine the presence of any water courses on or close to the site, and assess potential impacts in this regard (see ToR for the study in Section 6.4.5 of the FSR). Mitigation measures will be included in the DEIR to manage the potential pollution impacts of the development.
DWS (68)	Any oil or grease (including petroleum products) spillage on site, must be properly managed to prevent any contamination of water resources. An emergency response protocol must be developed to ensure that such spillages are immediately attended to and the site properly rehabilitated.	Mitigation measures for the management and prevention of spills will be included in the DEIR, and potential impacts resulting from spills will be assessed.
Comments relating to infrastructure		
DEDEAT (63)	The provision of bulk services must be proven (capacity vs demand, as well as plans for augmentation or expansion) and cannot be part of any "Assumptions and Limitations".	Supporting letters confirming capacity from the relevant NMBM departments are provided in Appendix J. Those that are not currently available will be provided in the DEIR
DEDEAT (63)	Further alternatives for sewage treatment as proposed should option 2 be the preferred site for the development must be included in the FSR. The leach pits and their impact with a high density residential low-cost housing development have not been suitably explained.	The option of a package plant is discussed as an alternative for development option 2 under Section 2.3.3. Impacts relating to the proposed leach pits will be assessed as part of the EIR, taking into account the findings of the groundwater specialist study (Section 6.4.5 of the FSR).

DWS (68)	All details of sewer infrastructure such as sewer lines, sewer manholes and connections as well as any sewer pump stations must be properly investigated and assessed to assist in decision on the type of sewer infrastructure suitable.	The Plan of Study for the EIA includes the development of a bulk services report, which will cover the infrastructure requirements. Note that as the proposed development includes on-site wastewater treatment, connection to bulk sewer infrastructure will not be required.
DEDEAT (63)	Could the NMBM not confirm that solar geysers will be provided for each unit as well as a rainwater tank with sufficient capacity, and with the required plumbing to supply each unit with water for flushing toilets etc. in order to begin reducing the impacts on services of such low cost housing projects?	[NMBM] solar geysers are standard design inclusions on NMBM low cost housing projects
E Gerber (57)	Everyone has to travel to where they want to be, so the concept of people staying close to their workplace is not appropriate.	Disagree. It makes sense from a town planning, socio- economic, and environmental sustainability perspective to locate people close to their work places.
A Merrick (61)	The proposed entrance to the development cannot handle the amount of traffic in and out of the development, as well as noise factor.	It is unclear as to which development option this refers to. Four entrances to Development option 1 are proposed. It is proposed that a traffic impact assessment will be undertaken as part of the EIA (see ToR in Section 6.4.8 of the FSR).
N Littleton (59) L Denny (60)	The Seaview road connecting it to the N2 will need to be upgraded and broadened to cope with extra traffic.	It is proposed that impacts on traffic will be assessed by a specialist as part of the EIA (see ToR in Section 6.4.8 of the FSR).
C Fehrsen (64) C van Eekelen (65)	Existing road infrastructure of Seaview Village does not suit heavy vehicles such as refuse removal, busses, human waste removal trucks and cannot cope with additional traffic.	The proposed road design will be sized to accommodate the required waste removal and public transport vehicles. This will be confirmed in the traffic impact assessment (see ToR in Section 6.4.8 of the FSR).
N Littleton (59)	Probable that unexpected influx of residents will overwhelm the infrastructure and social structures.	Houses are allocated to beneficiaries according to the NMBM's housing policy. It is generally agreed that the provision of housing is a relatively insignificant contributing factor, whereas job opportunities are a more significant driver, for the influx of people to an area. Impacts relating to potential influx will be assessed as part of the socio-economic assessment in the EIA (see ToR in Section 6.4.7 of the FSR).
C van Eekelen (65)	Suburb are all without street lights and visibility will be poor.	Street lighting will be provided as per the NMBM's standard for housing developments.
N Littleton (59)	An urban powerline will have to be created as Seaview is still reliant on a farm line, creating frequent power outages.	Power supply for the proposed development will be via a connection as described in Section 2.2.2 of the FSR (see letter confirming this in Appendix J).

N Littleton (59)	Increased water supply will have to be required with more piping being laid down from the current reservoir. Possible a larger reservoir will need to be created.	It is proposed that water supply to the development will be supplied via the proposed Seaview Bulk Water Supply project, as described in Section 2.2.2 of the FSR (see letter confirming this in Appendix J).
N Littleton (59)	Proposed project will require an exclusive sewerage line with pump stations to be erected.	On site sanitation is proposed as described in Section 2.3.3.
C van Eekelen (65)	Mention of solar panels, however an increase in residents in the low income housing development leads to cable theft as well as illegal electricity connections.	Electrical connection will be provided as discussed in Section 2.2.2. Error! Reference source not found.. (see letter confirming this in Appendix J).
Comments relating to visual impact		
L Denny (60)	I object to option 2 as it will destroy the view from my back deck and therefore affect the property values	Potential impacts on property values that may result from visual impacts will be assessed as part of the socio-economic study in the EIA (see ToR in Section 6.4.7 of the FSR).
Comments relating to suggested alternatives		
E Gerber (57) L Denny (60)	The residents should be relocated to an area where the peace and safety of local rate paying residents will not be interrupted.	[NMBM] The relevant municipal bylaws and other public safety measures will apply, as they do to any development. As the housing recipients already reside in informal settlements in the area and as the proposed development entails improvement of living conditions of existing informal settlement, this impact is considered to be unlikely, but will be assessed as part of the socio-economic study as part of the EIA (see ToR in Section 6.4.7 of the FSR).
A Topliss (58)	The Beachview Resort is unused and has sufficient infrastructure, dwellings and cleared vegetation. This would be the ideal location to place rdp houses. The applicant should utilise what it already has and save time and money. Should the Applicant choose not to use the Beachview Resort on permanent basis, it should be used on a temporary basis to house residents while their shacks are being demolished and removed, giving greater control over the process.	[NMBM] Utilisation of the Beachview resort is currently under legal review and at this stage cannot be considered as an alternative within the project implementation timeframes.
N Littleton (59)	Most logical, cost-effective and practical solution is to build the housing estate in Greenbushes.	The need for providing formal housing in the Seaview area is so that residents in the existing informal settlements are not relocated elsewhere.
Comments of a general nature		

DEDEAT (63))	Comment regarding resettlement planning will be required from the NMBM.	The NMBM's standard relocation procedure will be followed (see Appendix K) and will be communicated to the affected communities beforehand via the channels set up for this purpose.
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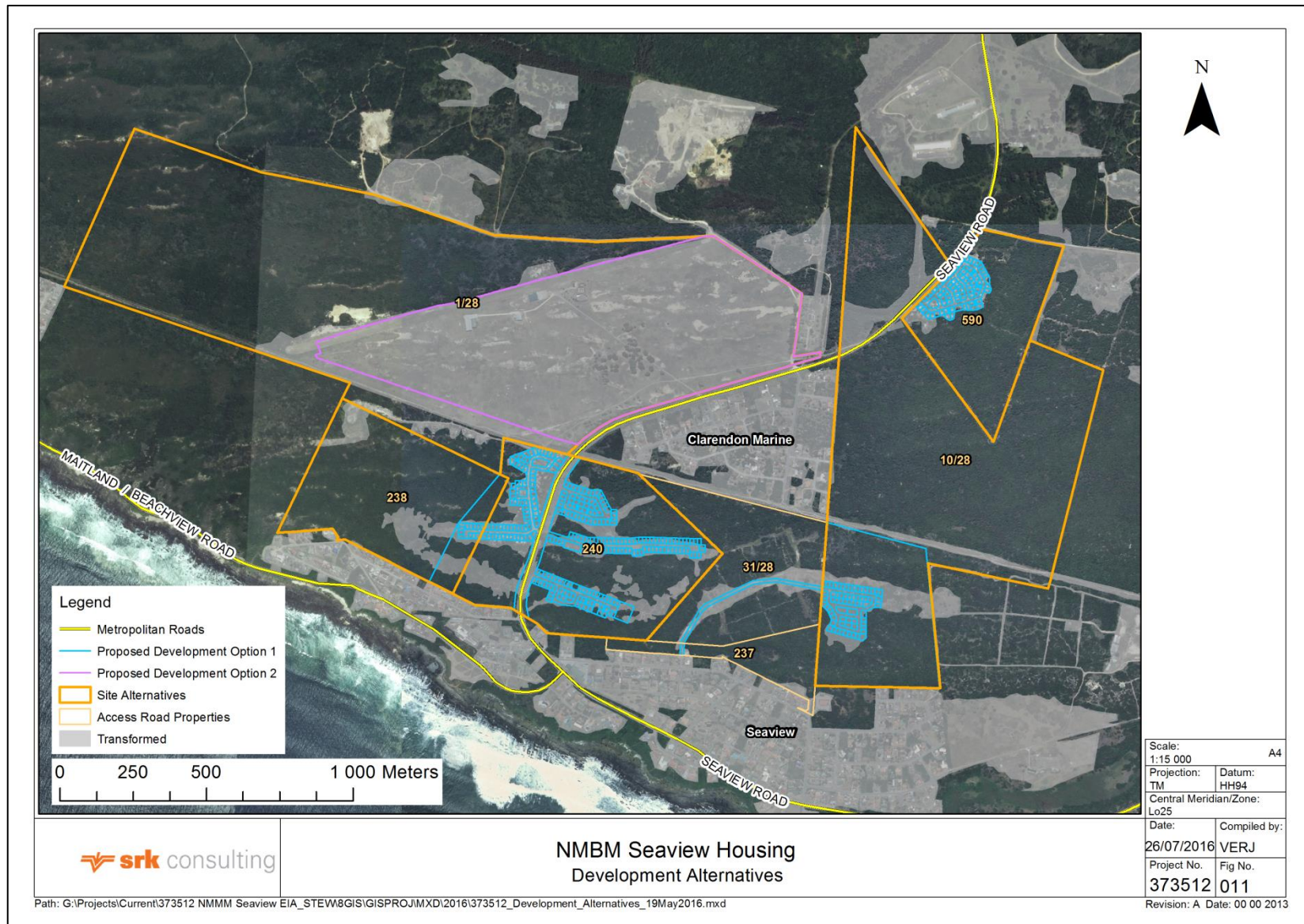


Figure 2: Site locality map indicating the two proposed development options