



KING SABATA DALINDYEBO MUNICIPALITY BREAKING NEW GROUND PROJECT

ENVIRONMENTAL SCREENING REPORT
FOR HOUSING PROJECT AREAS A, B & C



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DOCUMENT CONTROL SHEET

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KSD BNG PROJECT ENVIRONMENTAL SCREENING REPORT PROJECT AREAS A, B & C

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1. INTRODUCTION

1.1. Project Background

The King Sabata Dalindyebo Municipality has embarked on a massive integrated development project called the Breaking New Ground Project, which in essence involves a number of stakeholders including the Department of Human Settlement as well as other funding agencies, coming together to facilitate, the development, construction and commissioning of sustainable human settlements within KSD Municipality. This is in terms of the Breaking New Ground (BNG) housing policy, which calls for the provision of people with a whole range of economic and social services that are required to enable and empower them to “be the best they can be”, including sustainable housing, water, sanitation and other services.

Stedone Developments was appointed the KSD Municipality as the lead consultants and project managers to facilitate the KSD BNG Project. As part of their consulting, USK Consulting are responsible for the Environmental Services for project.

1.2. Scope of Work for Environmental Services

The scope of work for the environmental services for the KSD BNG Project, includes the following:

1. To undertake environmental feasibility assessments or studies of each of the proposed developments or projects within the overall KSD NBG Project.
2. Providing the necessary environmental management advise, review and oversight for the project to ensure that the project is undertaken with due compliance to all applicable environmental legislation within the framework of South African Environmental Law.
3. To assess the environmental legal requirement for the KSD BNG Projects.
4. To undertake all the necessary environmental studies required prior to the authorization of the developments within the KSD BNG Project.
5. To submit applications for authorizations for the developments within the KSD BNG Project.
6. To undertake the necessary environmental auditing, and assessment of performance against the environmental authorization and ensure compliance to the EA and the Environmental Management plans of the various developments within the KSD BNG Projects.

Given that the projects and developments within the KSD BNG Project are phased, the environmental services shall also run in phases in step within the various overall project phases, however they shall commence as the initial studies due to the fact the environmental authorization form a critical path to the overall project.

1.3. Purpose of this Document

The purpose of this document is to serve as a screening report for the planning and packaging of projects phase of the KSD BNG HOUSING PROJECTS A, B, & C which will focus on the development 6500 erven and subsequent construction of human settlement housing on these erven. The projects are located within Mthatha Town (KSD Municipality) as indicated on the Appended Maps.

1.3.1. Scope of Work

The project scope of work for this phase is focused on three (3) primary parcels of land which are owned by the KSD Municipality within Mthatha, which are intended for development and subsequent construction of approximately 6500 sites. The 3 project areas initially referred to a 1, 2 and 3, but later called A, B & C are packaged as three projects for funding and implementation as follows:

| Project Name | Area Location on initial plan | Land ownership | Potential Yield |
|--------------|-------------------------------|------------------|-----------------|
| Project A | 5 | KSD Municipality | ≈ 1700 sites |
| Project B | 9, 10, 11 and 12 | KSD Municipality | ≈ 2100 sites |
| Project C | 14, 16 and 17 | KSD Municipality | ≈ 2400 sites |

The Environmental screening study for this phases therefore was intended to:

- Undertake a desktop screening environmental scan of the proposed development site, and generate a sensitivity map showing the developable areas and no-go areas where applicable;
- Review environmental legal issues that are likely to influence the proposed development;
- Crucially we determine the need and extent of the environmental authorisation process.
- Consultation with the environmental authorities to confirm requirements and negotiate timeframes for the above work.

2. ASSESSMENT OF PROJECT AREAS

2.1. Criteria for Environmental Screening

The environmental screening assessment criteria conducted for Project Areas A, B and C for the King Sabata Dalindyebo Municipality Breaking New Ground Project is summarized as follows:

- Biophysical or Ecological Environment
- Social and Economic Environment
- Built or Engineered Infrastructural Environment
- Legal and Planning Requirements

2.2. Ecological Characteristics of the Sites and Surrounds

2.2.1. Land Uses

The subject project study Area (A, B, and C) is located in an increasingly mixed land use area, with existing developments in the immediate surrounding area comprising of community facilities, residential properties of varying densities and small businesses.

2.2.2. Vegetation and Landcover

The natural vegetation of the area has been largely transformed due to past farming and urban development activities. Visual analysis of mapping shows that the groundcover on the 3 development sites, appear mainly to be highly transformed grasses either due to burning, overgrazing and other poor historical agricultural practices. The does not appear to have a significant ecological value, although there are some drainage areas on the sites, which probably continue to play some aquatic ecological function, though may be not so significant.

2.2.3. Rare or Endangered Species

A review of Quarter degree data did not reveal any potential for presence of rare or endangered flora and fauna species in the study area of the proposed development site. The mapping and visual aids used also did not reveal any such species on site, however will be confirmed by a site visit during later phases of the project.

2.2.4. Hydrology

The project area in general is drained by the Mthatha River Catchment, with a number of small watercourses and drainage systems running through the site. These watercourses and drainage sites have been identified and flagged with appropriate buffer areas around them as NO – GO areas for the proposed development. However it should be noted that this is not seen as significant setback for the development.

2.3. Social Characteristics of the Sites and Surrounds

2.3.1. Archaeological, Cultural and Historical Values

- A part from a large cemetery within project area B, there are no other known sites of archaeological, cultural and heritage importance are found on or in the immediate surroundings of the property.
- However this will be further confirmed by a phase 1 heritage impact assessment during the later phases of the project.
- Note should be taken that the Cemetery has been identified and flagged as No – Go area for development.
- The proposed activity will not in any way impact directly on the cultural, historical and/or religious values of the communities.

2.3.2. Socio-Economic Impact of development

- No significant negative impacts of a social or economic nature are foreseen as a direct result of the proposed development.
- A number of positive impacts can be identified as a result of the proposed activity, Positive benefits, in terms of better housing and services for all, higher standards of living and quality of life, job creation opportunities and increased economic activity during construction and operation etc.
- The project will comply with existing development trends in the area and the Spatial Development Framework, land use management, and Integrated Development Plan for KSD Municipality.
- Social impacts in terms of residential densification have been acknowledged and will be mitigated through site development plan and the spatial plan for the project.
- Any other potential social and economic impacts typical for development of housing projects, will have to be managed through appropriate social compact agreements, environmental management plans and effective project social facilitation and public participation.
- Other site specific potential impacts e.g. safe and adequate road access will be addressed by the engineering services report of the development prepared by the project engineer. Any recommendations contained in the report will be included in the Environmental Management Plan (EMP) for the project.

2.4. Built and Engineered Bulk Services Infrastructure

Although this component will be addressed in detail by the Engineering report, it is a key criterion, for environmental assessment due to potential indirect and residual impacts the bulk services infrastructure or the lack thereof, may have on the receiving environment.

The study area is located in an area that should be seen being within the urban edge of Mthatha Town, and where municipality should seek to provide high levels of bulk services and infrastructure.

2.4.1. Solid Waste

- The primary solid waste produced will be domestic refuse. The proposed development will generate a significant amount of domestic general waste with estimated quantities of the domestic refuse to be generated will be up the tune of 29.25 tons/day. This will have a direct impact on the municipality's capacity to collect and dispose this waste appropriately. In order to mitigate this, innovative ways to reduce waste and create jobs out of waste recycling may need to be incorporated into the site development plan and proposal.

2.4.2. Wastewater Treatment /Sanitation

- The proposed development will result in a huge increase in the average dry weather flow and capacity requirements for the primary wastewater treatment facilities and associated infrastructure in Mthatha. This means that integral to this project must be the concurrent consideration and planning for the upgrade of the current system.

2.4.3. Water Supply

- **Water Supply** The proposed development will result in a huge increase in the demand for portable water supply and capacity requirements for the water treatment facilities and associated infrastructure in Mthatha. This means that integral to this project must be the concurrent consideration and planning for the upgrade of the current system.

2.4.4. Electricity and other services

- **Electricity** The proposed development will result in a huge increase in the demand for electricity and capacity requirements for the substation and powerlines in Mthatha. It is assumed that ESKOM shall be in position to supply or increase the capacity to cope with the development.
- Other infrastructure e.g. roads and stormwater management etc, will be addressed in detail by the engineering report.

2.5. Environmental Legal Requirements

Given the above visual description existing pipeline route and summary of some of the environmental constraints facing the decommissioning of the existing Bulk water pipeline and construction of the new, there is a number of environmental legal requirements which must be satisfied prior to the authorization and commencement of the projects. These requirements are summarized as follows:

2.5.1. National Environmental Management Act – EIA Regulations, 2010

Given the nature of the development, especially its extent in size, an environmental application accompanied by a Scoping/EIA will be required prior to authorization of the development. This requires that an Environmental Impact Assessment, In terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) [NEMA] -Environmental Impact Assessment (EIA) Regulations August 2010, the proposed development constitutes a listed activity identified under the Environmental Impact Assessment Regulations Listing Notice 2 published in Government Notice (GN) No R. 545 as follows: **Activity 15 “The physical alteration of undeveloped, vacant or derelict land to-residential, retail, commercial, recreational, industrial or institutional use, where the total area to be transformed is more than 20 hectares.”**

Note: Although each projects A, B & C may technically constitute a separate EIA application, motivation will be made the Department of Environmental Affairs to combine the project into one authorization.

2.5.2. Planning Requirements

A professional town planner has addressed the planning requirements for the proposed development in a separate report.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1. Conclusions

The following conclusions are hereby made:

3.1.1. Environmental Sensitivity Mapping

See Attached Appendix for mapping showing the above described characteristics and the No Go Areas and developable areas.

3.1.2. Mitigation of Environmental Impacts

The potential impacts on the environment identified in the screening phase are generic construction related impacts and these can be easily mitigated through an adequate site specific environmental management plan.

3.1.3. Assessment of Alternative Sites

From an environmental point of view the development site is appropriate for a denser residential development, because of existing development trends in the area. Ownership of the site is already vested with the applicant, and this is compounded by land tenure problems in the region and therefore the assessment of other site alternatives does not seem feasible or more attractive.

3.1.4. Significance of Potential Environmental impact of Project

The proposed development is not anticipated to have any significant environmental impacts (or fatal flaws) and is in line with development trends in the area. The proposed development will have an overall positive impact in terms of socio-economic benefits and level of service.

The following summarizes our preliminary overall rating of potential negative Environmental Impacts.

| IMPACTS | RATING WITHOUT MITIGATION | RATING WITH MITIGATION |
|------------------------------|---------------------------|------------------------|
| Biophysical /Ecological | (L) LOW | VL (VERY LOW) |
| Social | (L) LOW | VL (VERY LOW) |
| Economic | (L) LOW | VL (VERY LOW) |
| Bulk Services/Infrastructure | M – H (MEDIUM – HIGH) | (L – M) LOW – MEDIUM) |
| Legal and Planning | (L) LOW | VL (VERY LOW) |
| Overall Weighting | (L) LOW | (L) LOW |

3.2. Recommendations

- During our meeting with the regulating authorities, the Department of Environmental Affairs, the regulator pledged that they would prioritize these projects, and dedicate an Environmental Officer to handle these applications to ensure that they are fast tracked within the reasonable timeframes of the legal process.
- The regulator therefore advised that the necessary Environmental Studies should commence with immediate effect, to ensure that they are handled as a priority.
- USK Consulting also commits to dedicate a senior Environmental Scientists to prepare the necessary reports and applications to ensure that the process moves as quickly as possible. This will also mean working in some usual time schedules as per our agreement with the department in order to fast track the authorization process.

3.3. Closing Remarks

At USK Consulting we are excited and please part of this ground breaking project, and certainly believe that our expertise, track record in the region, and local knowledge of the study area, will bear huge benefits to the successful and speedy completion of the project.

We look forward to commencing with the actual environmental studies and preparation of the applications for the authorization of the project. Our staff are readily available and will be prepared to commence with immediate effect on receipt of an official go ahead to commence the studies.

Yours truly,



KS Kalule (MIES)
Senior Consultant/Environmental Specialist
Director Environmental Sciences Division
USK Consulting

KSD MUNICIPALITY HOUSING PROJECT

Project 1
Critical Biodiversity Areas

Legend

Housing Project Boundary

- Project 1
- Project 2
- Project 3

Road Network

- National Road
- Trunk Road
- Main Road
- District Road
- Other
- Water

CBA 2

- Designated T1
- T2

Scale 1:100000
UTM 36Q UTM Zone 36Q



1:100000



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01/2023

Project 1: Critical Biodiversity Areas

KSD MUNICIPALITY HOUSING PROJECT

Project 2
Critical Biodiversity Areas

Legend

Housing Project Boundary

- Project 1
- Project 2
- Project 3

Road Network

- National Road
- Trunk Road
- Main Road
- District Road
- Other
- Water

CBA 2

- Designated T1
- T2

Map Data Source Coordinates:
10° 50' 00" S 30° 00' 00" E



1:100000



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Project 2: Critical Biodiversity Areas

KSD MUNICIPALITY HOUSING PROJECT

Project 3
Critical Biodiversity Areas

Legend

Housing Project Boundary

- Project 1
- Project 2
- Project 3

Road Network

- National Road
- Trunk Road
- Main Road
- District Road
- Other
- Water

CBA 2

- Designated T1
- T2

Scale 200m Grid Coordinates:
Easting: 307 80 76, 77 4 307 80 76, 77 5



1:100000



USK Consulting
Sustainable Infrastructure Solutions

01/2020

Project 3: Critical Biodiversity Areas

KSD MUNICIPALITY HOUSING PROJECT

Project 1
Sensitivity Areas

Legend

Housing Project Boundary

- Project 1
- Project 2
- Project 3

Road Network

- National Road
- Trunk Road
- Main Road
- District Road
- Other
- Water

UTM Grid

- 2200 and 2300 line
- 2200 line
- 2300 line

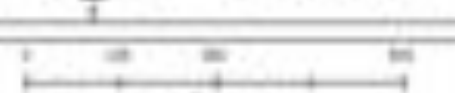
Sensitivity Areas

- Developable Areas
- No-Go Areas

Scale 1:50,000
UTM Zone 48Q UTM 48Q UTM 48Q



1:50,000



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01/2018

Project 1 - Sensitivity Areas

KSD MUNICIPALITY HOUSING PROJECT

Project 2
Sensitivity Areas

Legend

Housing Project Boundary

- Project 1
- Project 2
- Project 3

Road Network

- National Road
- Trunk Road
- Main Road
- District Road
- Other
- Water

UTM Grid

- 2200 and 2200 line
- 2200 line
- 2200 line

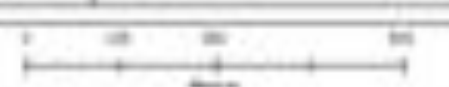
Sensitivity Areas

- Developable Areas
- No-Go Areas

Scale 20m Grid Coordinates:
40° 00' 00" N 10° 00' 00" E



1:100000



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01/2018

Approved for Release to Public

KSD MUNICIPALITY HOUSING PROJECT

Project 3
Sensitivity Areas

Legend

Housing Project Boundary

- Project 1
- Project 2
- Project 3

Road Network

- National Road
- Trunk Road
- Main Road
- District Road
- Other
- Water

GRID

- 220V and 230V line
- 220V line
- 230V line

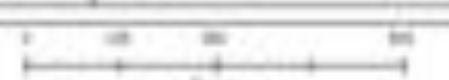
Sensitivity Areas

- Developable Area
- No-Go Areas

Scale 1:50,000
UTM Zone 36Q UTM 4 36Q 40 36Q 41



1:50,000



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Project 3 - Sensitivity Areas