APPENDIX 7:

DRAFT REPORT:
PRE-APPLICATION ENVIRONMENTAL SCREENING

Buffalo City Municipality

DRAFT REPORT

Pre-application Environmental Screening
Mount Ruth Nodal Precinct
Buffalo City

Assisted by:

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BACKGROUND

The Buffalo City Municipality (BCM) is in the process of planning the development of the Mount Ruth Nodal Precinct in the vicinity of the Mount Ruth station in Mdantsane and west of Newlands along the N2 between East London and King William's Town. The Mount Ruth Development Node was identified in the BCM Integrated Development Plan (IDP) and specifically in the Mdantsane - East London Development Framework (MELD) as an area with very high potential for development as a mixed land use node due to its accessibility by rail, road and proximity to Mdantsane CBD (Highway Centre) and Newlands.

The current study constitutes a pre-application screening assessment of the various proposed activities associated with the proposed Mount Ruth Nodal Precinct development.

1. APPROACH

1.1. Pre-application screening

In terms of Integrated Environmental Management (IEM), pre-application screening is the process whereby key environmental and broader sustainability issues associated with a proposed development are anticipated at the earliest opportunity and are considered as an integral part of the pre-feasibility investigation. Questions relating to the need for and the desirability of the proposed development must be considered and issues such as technology and location of alternatives need to be addressed. Significant environmental and sustainability impacts also need to be anticipated and so that mitigatory options may be accommodated in initial development designs.

An important aim of the pre-application screening is to establish whether there are aspects of the proposal that are either technically flawed or have the potential to give rise to significant or un-acceptable environmental consequences – the identification of potential "fatal flaws".

The identification of fatal flaws should include an analysis of the following:

- Technical fatal flaws – identify and evaluate technical or infrastructural components of the proposal
- Financial fatal flaws – identify and evaluate the financial feasibility of a project, including wider social, economic and environmental external costs and benefits.
- Ecological fatal flaws – identify and evaluate the ecological assets of the target area and predict the consequences and impacts of the proposed development on these assets.

In addition to establishing whether the proposal is technically, economically or environmentally flawed, the pre-application screening should determine:

- Whether the proposal needs to be authorized by the lead regulatory agent;
- Whether the proposal requires an environmental assessment;
- The level of the environmental assessment;
- The responsibilities of different involved parties; and
- Legal and other regulatory requirements or constraints.

It must be emphasised that the current pre-application screening assessment is **not a detailed review of all environmental, technical, social and economic issues** associated with the proposed establishment of the Mount Ruth project. It is rather a high-levelled identification and assessment of significant issues to:

- determine any fatal flaws concerning the likely success of the projects
- provide guidance concerning the likely scope of future work.

1.2. Site inspection

A site inspection of the area at Mount Ruth proposed for development was conducted on the 16th September 2004.

1.3. Meetings attended

The site visit on the 16th September 2004 was followed by an informational session and workshop comprising many affected BCM departments and other stakeholders such as taxi associations, community representatives, specialist consultants, etc.

A further workshop of key specialist consultants and BCM personnel was held on the 5th October 2004, where a more inputs from the first workshop were discussed and a more detailed concept plan was developed.

1.4. Consultations

The following people were consulted as part of the pre-feasibility analysis:

- Shirley Fergus – BCM Integrated Environmental Management Unit
- Gerry Pienaar – Department of Economic Affairs, Environment and Tourism (DEAET)

2. DRAFT LAYOUT AND CONSOLIDATED CONCEPT PLAN

In terms of the draft layout and consolidated concept plan for the Mount Ruth Nodal Precinct, the following activities are envisaged (refer Draft Consolidated Concept plan at Appendix B):

- Social housing
- Park area (green area)
- Playing fields
- Petrol station
- Light industrial park
- Office and retail area
- Parking areas
- Cultural centre
- Bus rank
- Taxi rank
- Fresh produce area
- Municipal office area

- Retail leisure and entertainment area
- Community facilities
- Area for traditional ceremonies

3. EXISITNG LAND USE

The existing land use of the area in question is either undetermined or land administered by the Department of Land Affairs. In practice, the land currently appears to being used for agriculture (grazing) purposes, while some areas are currently also used for recreational purposes (informal football fields).

4. ENVIRONMENTAL ASSESSMENT

4.1. Land degradation

The land in question does not appear to be of high conservation importance. Most of the existing undeveloped area consists of grassland with occasional pockets of thicket. Much of the area is disturbed and, as indicated above, used for grazing and recreational purposes.

We do not believe that there are any fatal flaws with respect to potential impacts of the proposed activities on the land in question.

However, the following issues will need to be considered:

- Identifying alternative recreational areas or incorporating these into the development plan (as is currently proposed).
- Possibly having to identify alternative grazing areas.
- There could be existing contamination of ground in the vicinity of the station resulting from years of oil, diesel and other spillages along the rail tracks.
- Any disturbed construction areas must be properly rehabilitated after construction.
- Urban greening should be promoted
- Visual impacts of proposed structures should be considered

4.2. Water courses and quality

The existing undeveloped area generally slopes toward the N2 and has relatively minor existing water courses and dams which do not appear to be of high conservation importance. The catchment area appears to be relatively small and stream flow requirements are probably minimal.

We do not believe that there are any fatal flaws with respect to potential impacts of the proposed activities on water resources.

However, the following issues will need to be considered:

- There could be existing contamination of groundwater resources resulting from years of oil, diesel and other spillages along the rail tracks.

- Appropriate measures must be taken to manage storm water run-off and potential flooding.
- The provision of adequate water supply and sewage infrastructure.
- Existing water resources (streams and dams) could be incorporated into the design of the project).

4.3. Air quality

There do not appear to be any existing air quality issues at the proposed Mount Ruth site and there are currently no apparent fatal flaws with respect to air quality issues.

However, once the development is completed, the following air quality issues may need to be considered:
- Increased traffic congestion especially from busses and taxis could contribute to a significant decline in air quality.
- Prospective occupants of the proposed light Industrial park will need to consider air quality issues.

4.4. Noise pollution

There do not appear to be any existing significant noise pollution issues at the proposed Mount Ruth site and there are currently no apparent fatal flaws with respect to noise.

However, the following noise related issues may need to be considered:
- Increased noise pollution resulting from greater traffic congestion especially from busses and taxis.
- Prospective occupants of the proposed light Industrial park will need to consider noise pollution issues.

4.5. Waste management

Waste management issues will need to be considered in the construction and operational phases of the Mount Ruth development and should be included in an Environmental Management Plan (EMP) and should include the following:

- Construction building debris and any resultant hazardous waste will need to be properly disposed of in a licensed landfill.
- During the operational phase, hazardous waste generated by light industry and other non-hazardous waste will need to be properly disposed of in a licensed landfill.
- Consideration should also be given to recycling of paper, glass, metals, etc.

4.6. Green procurement policy

The sourcing of materials for construction should consider a green procurement policy, where materials are sourced from suppliers with an environmental policy/plan or ISO14001 certified.

4.7. Energy consumption

The design phase of the Mount Ruth development should consider energy efficient technologies where feasible, such as:

- Renewable energy (solar power/heating)
- Efficient t energy consumption (fluorescent lighting)

4.8. Environmental Management Plan (EMP)

An Environmental Management Plan (EMP) should be developed to mitigate the potential generic and site specific environmental risks associated with the Mount Ruth development. The EMP(s) should cover design, construction, operational and site closure phases.

5. FINANCIAL ASSESSMENT

A financial feasibility study of the proposed Mount Ruth development has not been conducted. It should be noted that financial feasibility is a prerequisite in terms of the principles of sustainable development. It is assumed that an appropriate financial feasibility analysis will be conducted.

The financial sustainability of the project is **critical** and must still be determined before the project is initiated.

6. SOCIAL ASSESSMENT

An analysis of the social implications of the proposed Mount Ruth development has not been conducted. Again it should be noted that an assessment of the social aspects is a prerequisite in terms of the principles of sustainable development. It is assumed that an appropriate social assessment will be conducted.

The social sustainability and local buy-in to the proposed Mount Ruth project is **critical** and must still be determined before the project is initiated.

7. TECHNICAL ASSESSMENT

Technical details concerning the development have are not yet available. However, it is not envisaged that there are any technical issues that cannot be resolved or that represent fatal flaws to the project.

8. ALTERNATIVES

Identifying and evaluating alternative site or activities is an integral element of the Environmental Impact Assessment process. As indicated in the introduction, the selection of the Mount Ruth site as a location as a Development Node was identified in the BCM Integrated Development Plan (IDP) and specifically in the Mdantsane - East London Development Framework (MELD) as an area with very high potential for development as a

mixed land use node due to its accessibility by rail, road and proximity to Mdantsane CBD (Highway Centre) and Newlands. We are not aware whether any alternative sites have been identified.

Nevertheless, the EIA process will need to consider alternatives sites and activities, including the possibility that the development at Mount Ruth should not proceed. However, there are no obvious existing issues that would preclude the consideration of Mount Ruth as a site for locating an Urban Node.

9. REGULATORY ASSESSMENT

We do not envisage any fatal flaws in terms of the environmental regulatory requirements. The points described below, however, need to be borne in mind.

9.1. Relevant environmental legislation and policy

The planned activities of the proposed Mount Ruth development need to be compliant with an array of relevant environmental legislation and policy. The following legislation and policy is directly relevant:

National Legislation

- The Constitution
- Environmental Conservation Act
- National Environmental Management Act (NEMA)
- National Environmental Management: Biodiversity Act
- National Environmental Management: Air Quality Bill
- National Water Act (NWA)
- National Heritage Act
- Minerals Act
- Water Services Act
- Municipal Systems Act

National Policy

- White Paper on Environmental Management Policy
- White Paper on Integrated Pollution and Waste Management (2000)

Other National Guidance

- National Waste Management Strategy

9.2. Key legislation and policy

The following key legislation and policy is applicable:

9.2.1. The Constitution

Section 24 of the Constitution guarantees everyone the right:

a) to an environment that is not harmful to their health or well being; and

b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:
   i) prevent pollution and ecological degradation;
   ii) promote conservation; and
   iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

9.2.2. National Environmental Management Act (NEMA)

The National Environmental Management Act (NEMA) provides broad environmental management principles that should be considered:

Some relevant principles include:
- People and their needs at the forefront.
- Sustainable development
- Pollution and environmental degradation is to be avoided, minimized and remedied.
- Equitable access to resources
- Participation of all interested and affected parties.
- International responsibilities to be discharged.
- Costs of remedying pollution, environmental degradation etc. to be borne by those responsible for harming the environment.

9.2.3. Environmental Conservation Act (3 of 1989)

Listed activities appear in Appendix A under the Environment Conservation Act. With respect to the proposed Mount Ruth activities, the following activities may be applicable and would thus normally require a full Environmental Impact Assessment (EIA) (i.e. at least a Scoping Report):

1. The construction, erection or upgrading of:
   a. Facilities for commercial electricity generation and supply;
   b. roads, railways, airfields and associated structures and activities outside the borders of town planning schemes;
   c. reservoirs for public water supply;
   d. schemes for the abstraction or utilisation of ground or surface water for bulk supply;
   e. public and private resorts and associated infrastructure; and
   f. Sewage treatment plants and associated infrastructure.

2. The change of land use from:
   a. Agriculture or undetermined use to any other land use;
   b. Zoned open space to any other land use.

9.3. Waste management

Improper waste management practices can lead to pollution of air, water and land resources and cause human health risks. The Department of Environmental Affairs and Tourism's (DEAT) White Paper on Integrated Pollution and Waste Management (IP&WM)

provides the national policy for waste management where one of the strategic goals is given as: “Pollution prevention, waste minimization, impact management and remediation” with the objective of: “Resource recovery, recycling and reuse mechanisms including the reduction in the waste stream by ensuring an economic environment which favours recycled materials”.

The IP&WM policy also imposes the responsibility on local municipalities to implement and enforce appropriate waste minimization and recycling initiatives as part of its broader waste management responsibilities. The National Waste Management Strategy (NWMS) provides further guidance on waste minimization at the local government level.

9.4. Regulatory responsibilities

The following environmental authorizations are currently envisaged for the Mount Ruth development:

- Compliance with Buffalo City Environmental Policy – BCM Integrated Environmental & Sustainable Development Unit
- Compliance with EIA Regulations (Rezoning) – DEAET
- Light industrial complexes (effluent and air quality) – BCM Pollution Control, Health Services and/or Scientific Services Department.

9.5. Scope of Environmental Impact Assessment

Based on our previous experience, we envisage that rezoning of the land earmarked for development at Mount Ruth will require at least a Scoping Report in terms of the EIA regulations. At this stage, a report requiring specialist input is not envisaged, although this possibility cannot be entirely excluded.

It should also be noted that a full public participation exercise is envisaged in terms of the Environmental Impact Assessment requirements.

10. OVERALL CONCLUSIONS

In terms of the draft layout and consolidated concept plan for the Mount Ruth Nodal Precinct, proposed activities range from Social housing to playing fields to a light industrial park. Existing land uses are either undetermined or land administered by the Department of Land Affairs. In both instances, rezoning to any other usage will require an Environmental Impact Assessment consisting of at least a Scoping Report. A full public participation exercise is envisaged in terms of the Environmental Impact Assessment requirements

Although no fatal flaws are anticipated with respect to environmental management issues, the following higher priority issues will need to be considered:

- Identifying alternative recreational areas or incorporating these into the development plan (as is currently proposed).
- There could be existing contamination of ground in the vicinity of the station resulting from years of oil, diesel and other spillages along the rail tracks.
- There could be existing contamination of groundwater resources resulting from years of oil, diesel and other spillages along the rail tracks.
- Appropriate measures must be taken to manage storm water run-off and potential flooding.
- The provision of adequate water supply and sewage infrastructure.
- Existing water resources (streams and dams) could be incorporated into the design of the project).
- Construction building debris and any resultant hazardous waste will need to be properly disposed of in a licensed landfill.
- During the operational phase, hazardous waste generated by light industry and other non-hazardous waste will need to be properly disposed of in a licensed landfill.
- Consideration should also be given to:
    - Opportunities for recycling.
    - Green procurement policy
    - Reducing energy consumption

An Environmental Management Plan (EMP) should be developed to mitigate the potential generic and site specific environmental risks associated with the Mount Ruth development. The EMP(s) should cover design, construction, operational and site closure phases.

In terms of overall sustainability it is also **critical** that the financial and social sustainability of the projects are determined before the project is initiated.

APPENDIX A: PHOTOS

A: View of railway station area where ground and groundwater contamination is probable.

B: Concept model of the proposed Mount Ruth Nodal Precinct.

Photo C: composite photo of the Mount Ruth site from the bridge at the station toward Newlands.

APPENDIX B

Mount Ruth Nodal Precinct Draft Consolidated Concept Plan