



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

12527
Emansomini EA

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KWAZULU NATAL REGION

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The Director
SiVest Environmental
P.O. Box 1899
UMHLANGA ROCKS
4320

ATTENTION: LUVANYA NAIDOO

Dear Sir/Madam

RE: PROPOSED EMANSOMINI PEDESTRIAN BRIDGE, ETHEKWINI MUNICIPALITY, KWAZULU-NATAL.

Reference is made to the above-mentioned Report received by this Office on 29 October 2015.

This Department has the following comments with regard to the proposed development:

1. SEWAGE AND WASTEWATER MANAGEMENT

- 1.1. The use of temporary chemical toilets during the construction phase of the development must not cause any pollution to water resources as well as pose a health hazard. The contents of these toilets must be emptied and safely disposed of. In addition, these toilets must be situated out of the 1:100 year floodline of a watercourse or outside 100 metres from the riparian zone, whichever is greatest distance.
- 1.2. It is also this Department's experience that projects of this nature may result in small volumes of water containing waste being generated during the construction phase. In this instance, the following is applicable:
 - Water containing waste must not be discharged into the natural environment.
 - Measures to contain the water containing waste and the safe disposal of it must be implemented.
- 1.3. There must be no unacceptable health hazards or impacts arising from the disposal of sewage and wastewater during and post construction.

2. WATER RESOURCES, WATER USE AND AUTHORISATIONS

- 2.1. It is noted from the Report that water for construction will be obtained from the municipality. Please note that the abstraction of water from a water resource constitutes a water use in terms of Section 21(a) of the National Water Act, 1998 (Act 36 of 1998) (NWA) and must be authorised as such. Should the Applicant wish to take water from a water resource for use during construction, this Department must be informed in writing of the volumes, and rate and period of abstraction in order to determine the applicable water use authorisation required prior to use.

- 2.2. Construction occurring within a 500 metre radius from the boundary of a wetland constitutes a water use in terms of Section 21(c) and (i) of the NWA (i.e. 'impeding or diverting the flow of water in a watercourse' and 'altering the bed, banks, course or characteristics of a watercourse' respectively) and as such requires a water use licence.
- 2.3. The insertion of crossings; bridges; culverts or any other structures of similar functionality in a watercourse also constitute water uses in terms of Section 21 (c) & Section 21(i) of the NWA and must be authorised as such.
- 2.4. It is the responsibility of the Applicant to identify all water uses, arising from the proposed project, in terms of Section 21 of the National Water Act, 1998 (Act 36 of 1998). These water uses are listed in Table 1.

Table 1: Water uses requiring authorisation

s21(a)	taking water from a water resource;
s21(b)	storing water;
s21(c)	impeding or diverting the flow of water in a watercourse;
s21(d)	engaging in a stream flow reduction activity (currently only commercial afforestation);
s21(e)	engaging in a controlled activity – activities which impact detrimentally on a water resource (activities identified in s37(1) or declared as such under s38(1)) namely: <ul style="list-style-type: none"> ➤ irrigation of any land with waste or water containing waste which is generated through an industrial activity or a waterwork; ➤ an activity aimed at the modification of atmospheric precipitation; ➤ a power generation activity which alters the flow regime of a water resource; or ➤ intentional recharge of an aquifer with any waste or water containing waste
s21(f)	discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit;
s21(g)	disposing of waste or water containing waste in a manner which may detrimentally impact on a water resource;
s21(h)	disposing in any manner of water which contains waste from, or has been heated in, any industrial or power generation process;
s21(i)	altering the bed, banks, course or characteristics of a watercourse;
s21(j)	removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people; and
S21(k)	using water for recreational purposes

- 2.5. The Applicant must delineate all watercourse and riparian habitats and indicate the proposed project route in relation to the riparian area, the 1:50 and 1:100 year floodlines on a map of appropriate scale. The Applicant will require an authorisation from the Department for any activity within the riparian habitat or 1:100 year floodline, whichever is the greatest distance from the watercourse.
- 2.6. Please note that if one or more of the water uses for the project requires a water use licence authorisation then by default all other water uses for the project, even those that are within the ambit of a General Authorisation, must be all applied for in a single Integrated Water Use Licence (IWUL) application.
- 2.7. Ms. Coleen Moonsamy (031 336 2700/2836) of this Department's Water Use Authorisation Section must be contacted for a pre-application meeting to determine the type of authorisations required and the requirements thereof. The onus is on the Applicant to timeously submit a complete water use licence application to this Department for water uses as stipulated under Section 21 of the NWA in time to avoid unnecessary delays.
- 2.8. Adequate measures must be put in place to protect any water resource(s) that flow, adjacent to, as well as through the proposed project area from being polluted and/or degraded. Visible markings showing/demarcating the buffers must be provided on site

during the construction phase. If pollution of any surface or groundwater occurs, it must be immediately reported to this Department and the appropriate mitigation measures must be employed.

- 2.9. The Report titled '*Proposed Mbokodweni River Pedestrian Bridge between Emansomini and Umlazi Y Section in Umlazi, eThekweni Municipality, KwaZulu-Natal: Wetland and Riparian Zone Assessment Report*', dated 18 November 2014, is acknowledged. The mitigation measures proposed therein are noted.

3. SOLID WASTE MANAGEMENT

- 3.1. All waste areas must be demarcated and the waste must be stored within a designated waste collection/storage area. Access control to this area must be properly managed and the removal and disposal of the waste to a permitted waste disposal site must be carried out by a certified waste contractor or the eThekweni Municipality.
- 3.2. Should the Applicant wish to make use of a private contractor to dispose of the waste generated from the project, the following would apply:
 - 3.2.1. The details of the contractor must be made available to this Department.
 - 3.2.2. Safe disposal certificates from a permitted waste disposal site must be kept at hand and must be furnished to this Department when requested.
- 3.3. Contaminated/hazardous materials are to be disposed of at a permitted hazardous landfill site that is authorised to accept such waste material.
- 3.4. All waste generated at the proposed development should be disposed of in a suitable manner so as not to cause any surface and groundwater pollution or a health hazard.
- 3.5. The recycling of suitable material (i.e. glass, paper, plastic, etc.) is encouraged by this Department, provided it is properly managed.

4. STORMWATER MANAGEMENT

- 4.1. It is vitally important that stormwater is managed on site both during and after construction. The development and implementation of a stormwater management plan will facilitate this. The eThekweni Municipality must be consulted for the approval of the stormwater management. Proof of such consultation must be provided to this Office.
- 4.2. The stormwater drainage network system must be kept separate from the waste water (water containing waste) system.
- 4.3. After construction, the site should be contoured to ensure free flow of runoff and to prevent the ponding of water.
- 4.4. Drainage must be controlled to ensure that runoff from the site will not culminate in off-site pollution or result in damage to properties downstream of any stormwater discharge.
- 4.5. The Report titled '*Mbokodweni River Floodline at the Proposed Emansomini Pedestrian Bridge*', dated 03 July 2015, is acknowledged.

5. EROSION

- 5.1. Potential sources of sediment must be minimised from the outset. Extra precautions must be taken in areas where soils are deemed as highly erodable. This means limiting

the extent (area) and duration (time) of land disturbance to the minimum needed to protect these surface areas once they are exposed.

- 5.2. Erosion control measures to be implemented in areas sensitive to erosion such as near water supply points, edges of slopes, etc. These measures could include the use of sand bags, hessian sheets, retention or replacement of vegetation.
- 5.3. Stockpiling of soil or any other materials used during the construction phase must not be allowed on or near steep slopes of a water resource. This is to prevent pollution or the impediment of surface runoff. The Applicant must control and establish suitable mitigation measures to prevent the erosion of the stockpiles.
- 5.4. The Report titled '*Geotechnical Assessment of Founding Conditions for Proposed Pedestrian Bridge, Mbokodweni River, Umlazi*', dated 03 September 2015, is hereby acknowledged.

6. GENERAL

- 6.1. No form of secondary pollution should arise from the disposal of sewage and refuse. All pollution problems arising from the above development are to be addressed immediately by the Applicant.
- 6.2. The storage of materials, chemicals, fuels etc. to be used during the construction phase must not pose a risk to the surrounding environment. Such storage areas must be located out of the 1:100 year floodline of any water resource and unauthorised access to these areas must be controlled. Temporary bunds must be constructed around chemical or fuel storage areas to contain possible spillages.
- 6.3. It is important that all significant spillages of chemicals, fuels, etc. during the construction phase are reported to this Office and other relevant authorities. In the event of a spill, the following steps can be taken:
 - Stop the source of the spill
 - Contain the spill
 - All significant spills must be reported to this Department and other relevant authorities
 - Remove the spilled product for treatment or authorised disposal
 - Determine if there is any soil, groundwater or other environmental impact
 - If necessary, remedial action must be taken in consultation with this Department
 - Incident must be documented
- 6.4. The development must comply with all relevant local municipal plans and Bylaws.
- 6.5. An Environmental Management Programme (EMPr) must be developed for the project. Compliance to the final approved EMPr must be audited regularly by the designated Environmental Control Officer (ECO). Although Page 37 of the BAR makes reference to Appendix F: Draft EMPr, no EMPr was provided on the compact disc containing Appendices of the Report.
- 6.6. Notwithstanding the above, the responsibility rests with the Applicant to identify all sources or potential sources of pollution from his undertaking and to take appropriate measures to prevent any pollution of the environment. Failure to comply with the requirements of the National Water Act, 1998 (Act 36 of 1998) could lead to legal action being instituted against the Applicant.

This reply does not grant any exemption from the requirements of any applicable Act, Ordinance, Regulation or Bylaw.

Please do not hesitate to contact this Office should you have any concerns, comments or queries.

Yours faithfully

A handwritten signature in black ink, appearing to be 'Pongola', written over a horizontal line.

for Acting CEO: Pongola-Umzimkulu Proto-CMA

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